

June 12, 2024

Dear Board Secretary Golden:

Solar Landscape respectfully offers comments to Docket No. QO24020126., regarding the 2024 Energy Master Plan (“EMP”). Solar Landscape is a vertically integrated solar company headquartered in Asbury Park, New Jersey. Specializing in community solar on commercial and industrial rooftops, we develop, design, construct, own, operate, and subscribe community solar projects. Solar Landscape is proud to own and operate the nation’s largest portfolio of community solar projects serving low/moderate-income (LMI) households, the majority of which are based here in New Jersey.

Solar Landscape applauds the Murphy Administration in its commitment to a clean energy future and for its goal for New Jersey to generate 100% of its electricity from clean energy resources by 2035. By making these commitments, not only are we meeting the current moment of the climate crisis, but we are also providing family-sustaining jobs and creating a new clean energy workforce in the process. Our comments will address questions posed from strategies that were proposed in the 2019 EMP.

Strategy 1 of the 2019 EMP:

What could the evolution of transportation electrification incentives look like? On which sectors should the State focus for spurring electrification (for instance, used EVs, medium- and heavy-duty vehicles, and/or ports)? Where will incentives no longer be necessary and when?

A crucial aspect of vehicle electrification is the deployment and replacement of gas-powered medium- and heavy-duty vehicles, the backbone of our supply chain and one of the biggest contributors to our fossil fuel emissions, with electric alternatives. While only accounting for 4% of vehicles on the road in the state, medium- and heavy-duty trucks contribute 25% of the carbon emissions from the transportation sector¹. In 2021, New Jersey joined 12 other states in adopting the Advanced Clean Trucks (ACT)² rule, advancing a regulatory path for electrifying everything from delivery vans to tractor trailers in the state.

To meet the demands of charging our increasing fleet of medium- and heavy- duty electric vehicles, we need to ensure that our warehouses are properly equipped to accommodate charging infrastructure. Incentivizing community solar on the rooftops of warehouses (including by growing the capacity of the community solar program) and front-of-meter batteries in the parking lots of warehouses will create synergies and cost savings on the electrical infrastructure upgrades that will enable economical installation and use of charging stations.

Strategy 2 of the 2019 EMP:

How can we accelerate the pace at which renewable generation projects are built without making it cost-prohibitive for ratepayers and/or developers?

To ensure that clean energy development incentives are aligned to match generation and load, we need to incentivize the development of projects that are sited close to where energy is consumed, drastically

¹https://www.nj.gov/dep/newsrel/2021/21_0043.htm#:~:text=New%20Jersey's%20transportation%20sector%20is,of%20transportation%2Dsector%20greenhouse%20emissions.

² <https://dep.nj.gov/stopthesoot/advanced-clean-trucks-rule-fleet-reporting/>

reducing transmission and distribution costs. The most effective way to do this is to incentivize development of distributed energy resources (DERs) on our state's most underutilized resource, its commercial and industrial (C&I) rooftops. Encouraging the development of solar on commercial and industrial rooftops can significantly accelerate the pace at which renewable generation projects are built while reducing costs for ratepayers (insofar as avoiding distribution and transmission line upgrades translates into savings for ratepayers who would otherwise pay for those upgrades).

Projects sited on commercial and industrial buildings have increased benefits to the grid. In other states, we have worked with the Brattle Group to quantify and demonstrate the increased value that solar on urban, commercial-and-industrial rooftops has compared to solar located in rural areas away from where the electricity is consumed. In Maryland, for example, it was found that urban rooftop community solar is 4.0 cents per kWh more valuable than rural ground-mount community solar in the base case, and 7.6 cents per kWh more valuable in the high case. A recent study conducted at Stanford University found that solar sited on commercial and industrial rooftops can play a key role in bridging the solar equity gap, which is a serious barrier that historically disadvantaged communities face in adopting clean energy.³ By leveraging federal tax incentives from the Inflation Reduction Act such as the Investment Tax Credit (ITC) we can reduce the upfront costs of solar development and limit any negative impacts to ratepayers. Through the New Jersey Green Bank and other financing measures for renewable energy, we can help encourage the development of DERs in a quick and timely manner at a limited cost to investors and ratepayers.

A study conducted by Clean Power Research demonstrated that the levelized value of solar in New Jersey, calculated based on its bundled energy and attributes, is \$264 per megawatt-hour.⁴ Under the Successor Solar Initiative (SuSI) the price of an SREC-II is typically valued anywhere between \$85 to \$130.⁵ This demonstrates that solar energy provides a cost-effective renewable energy option for ratepayers in the state. Developing solar power on commercial and industrial rooftops represents the most cost-effective and 'shovel-ready' approach to harnessing renewable energy. This method not only leverages existing infrastructure but also provides substantial benefits to businesses and communities alike. By embracing commercial/industrial rooftop solar installations, we can expedite the transition to a sustainable future in a timely and pragmatic manner.

Strategy 5 of the 2019 EMP:

How can New Jersey more swiftly advance required electric distribution system upgrades with which DER project developers may be faced in order to bring their project online? Should project developers be required to pay for the full upgrade, or can financial mechanisms be put in place to reduce the upfront burden of grid upgrades, reduce or mitigate any impacts on ratepayers, and achieve cost effective expanded hosting capacity for DER?

New Jersey can take several steps to accelerate the required electric distribution upgrades for DER project developers and facilitate the integration of these resources to the grid. First, instead of requiring project developers to bear the full cost of grid upgrades, financial mechanisms can be established to share the cost between developers, utilities, and rate payers such as utility cost recovery capital upgrades related to DERs if the rate payers directly benefit, contributions from developers, and state funded incentives and rebates.

By socializing these costs among developers, ratepayers, and the utilities, we would accelerate the rollout of DERs. These upgrades benefit all parties involved, and having the costs shared among them will help

³ <https://news.stanford.edu/stories/2024/03/solar-potential-businesses-low-income-areas>

⁴ <https://mssia.org/value-of-solar-study/>

⁵ <https://njcleanenergy.com/renewable-energy/programs/susi-program/adi-program>

deploy more clean energy to the grid, leading to a more reliable, clean grid. The state should also investigate options on how to leverage funds through the Regional Greenhouse Gas Initiative (RGGI) to provide ratepayer relief grants if any grid upgrades do lead to a negative impact on ratepayers. Furthermore, as noted above, DERs lead to substantial avoided costs of transmission and distribution upgrades that would otherwise be necessary if New Jersey relied instead on electricity generation sited far away from where electricity is consumed.

Strategy 6 of the 2019 EMP:

How can the State ensure LMI communities have access to and can afford clean energy and energy efficiency measures, and other “bridge” programs (for example: home remediation or other financing)?

Through the efforts of the BPU and the Murphy administration, New Jersey has become a leader in providing energy savings to LMI households through its Community Solar Pilot Program (CSPP) and its successor Community Solar Energy Program (CSEP). CSEP requires that all projects have over 51% of their energy generated reserved for LMI households, making it a nationwide leader. Through the passage of S3123/A4782 last winter, the program was expanded significantly, requiring a total of 500 MW of community solar to be approved in EY2024, with another 250 MW to be approved in EY2025⁶.

While the expansion of the program should be applauded, there is still room for the program to grow and improve and provide more benefits to even more LMI households throughout the state. A report by Environment America shows that New Jersey could power nearly 900,000 homes through solar sited on warehouse rooftops.⁷ Another recent study published in *Nature Energy* demonstrates that community solar is effective at extending solar adoption to residents in communities that would have otherwise struggled to adopt rooftop solar, including LMI households.⁸ The Administration and the BPU should explore steps to create an uncapped community solar program, following the lead of its neighbors in Delaware, Maryland, and New York. By removing caps on the program, we would be able to deploy more community solar throughout the state and provide more savings to our LMI population.

Based on information in Order 8J from the BPU hearing on May 22nd, we did not come close to breaching the cost cap in EY2024 and are projected to be below the cap in both EY2025 and in future energy years. This is due to the adjusted offset cost of SC-CO₂ at \$233/ton, capacity demand reduction induced price effects (DRIPE), and the retirement of Legacy SRECs in the coming years⁹. By removing the capacity limit for the program, we would be able to scale up renewable energy deployment and provide significant savings to more of New Jersey’s low-income populations, with the only bottleneck for deployment of DERs being the grid/interconnection issues (see above for comments on that topic).

How can the State further encourage county, municipal, and other jurisdictional participation in making climate investments and advancing the clean energy transition?

New Jersey can significantly accelerate the adoption of renewable energy by streamlining permitting and zoning processes for solar and other clean energy projects. Simplifying and standardizing these processes across municipalities can reduce administrative burdens, cut down delays, and lower costs for developers. Creating a more uniform and transparent permitting framework will encourage more local governments to participate in clean energy initiatives by removing some of the common bureaucratic obstacles. For

⁶ P.L.2023, c.200.

⁷ <https://environmentamerica.org/center/resources/solar-on-warehouses/>

⁸ <https://emp.lbl.gov/publications/evaluating-community-solar-measure>

⁹ [5-22-24-8J](#)

example, community solar projects are grid tied, and thus require approval from the Department of Community Affairs (DCA). Towns and municipalities oftentimes do not understand the proper processes of how zoning and permitting is supposed to occur (i.e. the town reviews the plans for zoning conformance, DCA reviews the construction plans and makes a determination, and the town accepts the DCA's review).

If the state can streamline the review of grid-tied solar projects, it would significantly expedite the deployment of larger-scale solar projects. For example, if there was a staffer at the DCA who was assigned to do "solar reviews" in their entirety (instead of having to deal with multiple entities like electrical, building, and fire officials) we could get through the time-consuming permitting process in a more efficient way.

Additionally, the deployment of clean energy can be expedited if certain items can be exempted from the planning board review processes. For example, buildings ideal for community solar are built to the maximum size allowed on the property, often extending to the front, side, or rear yard setback. This leaves no space for utility or interconnection equipment. To get approval for these projects, we must present to the planning board this equipment, a process which can take over six months. These items should be exempt from planning board review and allowed automatically as developers only have eighteen months to build community solar projects. For example, waiting on a town to approve electric poles can consume a third of the construction timeline, leading to complications in project construction and delaying the deployment of clean energy in the state.

The state can also promote the adoption of clean energy through providing increased funding for programs like its Community Energy Grant Program¹⁰ in anticipation of municipalities engaging with solar developers in automatic enrollment community solar projects. By increasing the funds through this grant, eligible municipalities will be able to conduct requests-for-proposals to engage with developers to have their projects provide savings to their LMI population, with the town serving as the subscriber organization for said project. Automatic enrollment community solar projects will accelerate the deployment of DERs, while providing much needed savings to our low-income communities.

Strategy 7 of the 2019 EMP

As New Jersey continues to invest in building a clean energy workforce, how best can community-based partners such as non-profits, social service organizations, vocational schools, and county colleges play a role in preparing New Jersey residents for clean energy occupations? What emerging or existing clean energy technologies offer the biggest opportunity for near-term job training and placement?

Increasing funding for clean energy-focused workforce development programs and job training is crucial for building a skilled workforce. Additional grants could help community colleges, workforce development nonprofits, and clean energy companies collaborate to boost low-to-moderate income (LMI) participation in the clean energy workforce. These grants would enable tailored training programs to meet industry needs. Funding for incumbent worker training would also ensure current employees can upgrade their skills, maintaining their competitive edge.

New York State's On-the Job¹¹ training funding from the New York State Energy Research and Development Authority (NYSERDA) is another excellent model that could be replicated in New Jersey. The program, On-the-Job Training for Energy Efficiency and Clean Technology (PON 3982), provides

¹⁰ <https://njcleanenergy.com/commercial-industrial/programs/community-energy-plans#:~:text=All%20municipalities%20are%20eligible%20to,to%20receive%20a%20%2425%2C000%20grant.>

¹¹ [On-the-Job Training for Energy Efficiency and Clean Technology \(PON 3982\) \(ny.gov\)](#)

wage subsidies covering 50%-75% of wages for 16-24 weeks. This support reduces employer risk and provides valuable experience for LMI individuals, increasing their employability in the clean energy sector.

A more local option could be increasing funding for the Career Accelerator Internship Grant Program¹², specifically if funds were made more available for those who come from disadvantaged backgrounds. Increased funding for this program could enable more clean energy and energy efficiency businesses to take on paid interns for the summer. Directing some of the internship grant funds toward climate-focused careers in solar, wind, and energy efficiency would also be advantageous. This approach would not only provide valuable work experience for students but also help cultivate a new generation of professionals dedicated to advancing clean energy solutions. By targeting resources to support these initiatives, we can ensure a more diverse and skilled workforce equipped to tackle the challenges of climate change.

Conclusion

We thank the Board for the opportunity to provide comments to collaborate on helping New Jersey meet the challenges of the climate crisis and to bring about an equitable clean energy future.

Sincerely,



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¹² [Office of the Secretary of Higher Education \(nj.gov\)](https://www.nj.gov/education/secretary/)