

Via electronic submission to emp.comments@bpu.nj.gov

September 16, 2019

TO: Aida Camacho, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314, CN 350,
Trenton, New Jersey 08625

FROM: Norah Langweiler, Campaign Organizer, NJ Work Environment Council
On behalf of Jersey Renews Coalition
172 W State Street
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RE: Comments on the 2019 Draft State Energy Master Plan

Secretary Camacho:

Enclosed please find the comments submitted on behalf of Jersey Renews regarding the Energy Master Plan Stakeholder Meetings.

Thank You,

- Kevin Brown, Vice President and NJ State Director, 32BJ Service Employees International Union
- Barbara Rosen, First Vice President, Health Professionals and Allied Employees
- Peg Kelly, Director of Field Services, United Food and Commercial Workers Local 152
- David M. Hughes, Treasurer, American Association of University Professors - American Federation of Teachers Faculty and Grad Union, Rutgers University
- Lou Kimmel, Director, New Labor
- Debra Coyle McFadden, Director, NJ Work Environment Council
- Rev. Fletcher Harper, Director, GreenFaith
- Imam Saffet A. Catovic, Chair, Green Muslims of New Jersey
- Liz Cohen, Co-Chair, Reformed Jewish Voices of New Jersey
- Nancy Griffieth, Chair, Unitarian Universalist FaithAction NJ - Environmental Justice Task Force
- Doug O'Malley, Director, Environment New Jersey
- Amy Goldsmith, New Jersey State Director, Clean Water Action
- Jeff Tittel, Director, New Jersey Sierra Club
- Marty Johnson, Founder and CEO, Isles, Inc.
- Janna Chernetz, Deputy Director & Director NJ State Policy, Tri-State Transportation Campaign
- Richard Lawton, Executive Director, New Jersey Sustainable Business Council

- Mary Beth Gallagher, Executive Director, Tri-State Coalition for Responsible Investment
- David Pringle, David Pringle Associates, LLC
- Tina Weishaus, Founding Member, Central Jersey Coalition Against Endless War
- Pari Kasotia, Mid-Atlantic Director, Vote Solar
- Walt McRee & Joan Bartl, Directors, Banking on New Jersey

Who we are

Comments are reflective of the above 21 organizations who are partners in **Jersey Renews**, a broad coalition of more than 65 labor, environment, faith, and community organizations across New Jersey. The coalition was founded in January 2017 with the goals of reducing greenhouse gas emissions, increasing clean energy infrastructure, and ensuring good, family-sustaining jobs in the transition to the clean energy economy.

Our context

The consequences of climate change are occurring earlier and more rapidly than expected. In late 2018, the overwhelming scientific consensus (based on the UN's Intergovernmental Panel on Climate Change [IPCC] and the federal National Climate Assessment) says we only have 10 years to act and must take more immediate and urgent action to have any hope of tackling climate change.

This draft EMP takes a more holistic and broader approach to combating climate change than its predecessors. It recognizes that New Jersey is far off track in meeting its clean energy goals and bold action is needed. It recommits the Administration to the specific targets and legal requirements of the Global Warming Response Act, and similar targets for offshore wind, solar, energy efficiency, electric vehicles, and storage, many of which were precedent-setting when announced.

However, the enormity of this challenge and the need to overcome it cannot be exaggerated. The overwhelming scientific consensus demonstrates that while this draft EMP starts us down the right path, we must get down this path much farther and much faster than currently proposed and the final EMP must be strengthened accordingly.

Summary of Comments

The BPU needs to disclose and ensure fair framing of the short and long-term economic, social, health, and life cycle costs of all potential energy sources. This current iteration of the EMP lacks specificity, which means that organizations must comment on the intentions of the BPU without concrete goals, strategies, or tactics to which we can respond.

The Integrated Energy Plan (IEP) timeline is not coordinated with the EMP timeline and there does not appear to be an opportunity planned for input into the metrics for determining the IEP recommendations. With a stated preference for "least-cost" options, the IEP results are unlikely to suggest the aggressive projects necessary to adequately tackle the social and economic shifts related to the impact of climate change on New Jersey. The IEP must include metrics like social and economic costs of each energy source and its development.

The BPU needs to plan for meaningful public input prior to the release of the final EMP to address concerns regarding the IEP's framework.

Jobs

Developing a renewable energy industry is an opportunity to engage labor from the start. The dearth of trust between much of the labor community and the renewables industry can be rebuilt with thoughtful consideration for the needs of workers that power our homes and communities. The plan correctly identifies that a large-scale energy transition will create tens of thousands of jobs, but it takes no steps to ensure that these will be quality, family sustaining jobs accessible to New Jerseyans. **This requires a realistic plan to ensure the thousands of new jobs created in New Jersey's clean energy economy will be accessible, high quality, and without impingement on workers' right to organize.**

New Jersey has a highly skilled workforce and the EMP should explicitly state regional and local employers that provide good family sustaining jobs will be prioritized. This is both good for the economy and the environment by creating a low-carbon supply chain. This is an opportunity to make New Jersey a manufacturing hub for the renewable energy industry.

To ensure job accessibility, the EMP needs to plan for training for new workers and re-training for transitioning workers. Government agencies need to work with local technical and community colleges to develop training programs, unions to develop or tailor apprenticeship programs to new jobs, and nonprofit organizations (provided there is a funding stream) with experience in training workers. Whenever feasible, the Small Group Activity Method should be utilized. The training of workers must be coordinated so that the jobs are available when the workers are ready, and vice versa.

There are multiple strategies the state can pursue to promote the creation of high quality jobs, including high road procurement standards, prevailing wage policies, project labor agreements, apprenticeship utilization requirements, and importantly, support for the right to organize and form a union. Through these policies, workers who help to create a better future for our state, will be able to provide a better future for the families through fair wages, health benefits and paid time off.

Offshore Wind

When New Jersey made the goal of 3,500 MW, it was the largest in the country. Now, however, we are being outpaced by other states willing to commit to a more ambitious plan. New Jersey is uniquely positioned for offshore wind, with the shallow ocean crust allowing for more wind power built more affordably than other regions. **New Jersey can leap back into the lead by ramping up our offshore wind energy commitment to at least 7,000 MW by 2030.**

As more states make offshore wind commitments, New Jersey needs to cement its place as a leader in offshore wind, attracting developers and manufacturers to the region. Creating a long-term and predictable procurement timeline offers manufacturers the assurance that the industry is stable, making them more likely to invest locally. **The current system can be extended by continuing the biannual solicitations of at least 1,200 MW starting in 2020 and continuing through 2026, if not longer.** Consideration should be given to awarding multiple projects at once to increase competition.

Finalizing a comprehensive Offshore Wind Strategic Plan can foster a thriving offshore wind industry in New Jersey by setting long term goals. This should include a plan for offshore wind through 2050 with regular interim milestones to ensure the program achieves its goals. Additionally, we strongly encourage New Jersey to follow the path of other leading offshore wind states and establish ongoing Working Groups to ensure continued input and investment from experts and stakeholders as offshore wind project selection and development efforts unfold. In anticipation of potential equity issues around transmission line connections, working groups should include community representatives in a decision-making capacity to determine where connections will be placed.

Transportation

Jersey Renews was heartened to see that transportation is at the top of the EMP. With nearly 50% of New Jersey's greenhouse gas emissions coming from the transportation sector, transitioning New Jersey's transportation system to electric is a foundational piece of the clean energy puzzle. The first part of electrification includes timely goal setting for NJ Transit, private vehicles, private fleets like those owned or contracted by companies, and public fleets used by government officials. **For private vehicles, the development of an Essential Charging Public Network needs to be built out as quickly as possible to address range anxiety among consumers. Rebate programs make EVs more accessible and should be paired with a dedicated funding source to ensure the stability of the program.**

NJ Transit is essential to developing a low or no carbon transportation system and ensuring equity in transportation access. However, stronger language is necessary to hold NJ Transit accountable for faster assessment and implementation of renewable technology and should include concrete benchmark goals. **The EMP should call for full electrification of NJ Transit buses by 2040, prioritizing routes in environmental justice and low-income communities.**

To support NJ Transit in the transition to renewables, the agency needs secure funding from a designated source for both operations and capital improvements. As gas-powered cars are replaced by electric vehicles, the Transportation Trust Fund (TTF) will lose funding, as it is primarily funded with a gas tax. **Since TTF funding directly impacts NJ Transit's capital and operating budget, alternative funding sources must be aggressively pursued to ensure full electrification of NJ Transit on the suggested timeline.**

Emissions Reductions

While the draft EMP recommitments to the mandate established in the GWRA to reduce GHG¹ emissions 80% by 2050, it provides no interim milestones, enabling reductions to be delayed and making it difficult to see where the state is on track or falling behind in emissions reductions. **We must frontload the reductions in GHG emissions, 45% by 2030, to address the immediate emergency we face.**

¹ In these comments, "greenhouse gas emissions" and "GHG" means the NJ 2007 Global Warming Response Act definition ("carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other gas or substance determined by DEP to be a significant contributor to the problem of global warming") with DEP using this authority and Governor's Murphy directive in his bill signing statement for S3207 to include black carbon.

Greenhouse gas emissions are not the only concern. Black carbon (aka soot or particulate matter) is a major contributor to climate change. It is orders of magnitude more potent as a climate pollutant than CO₂ and an ongoing threat to our respiratory and cardiac health. It particularly affects our most vulnerable communities, environmental justice communities that suffer a disproportionate share of pollution and related health harms. The draft EMP must make clear that the state will fast track appropriate regulations of all GHGs and co-pollutants, not just CO₂, and **regulate black carbon for the pollutant and public health threat that it is.**

Under the state and federal Clean Air Acts and GWRA, the state has the authority to regulate GHGs for their true impact but has failed to do so. *The EMP proposes only to discuss if GHGs should be regulated later, but we need to decide how to regulate now*, utilizing the appropriate time horizon especially for short-lived climate pollutants based on their individual global warming potential as recommended by IPCC. **The EMP needs to regulate all climate pollutants aggressively to meet IPCC's 2030 target and GWRA's 2050 mandate.**

Over a 20-year period, methane is 86 times more potent than CO₂ as a GHG. Yet the EMP (a plan for policies over the next 30 years) only considers the impact of methane over a 100-year horizon. This drastically obscures its real effect on climate change in the near term by a factor of at least two-thirds and dramatically understates the impacts of methane emissions occurring today and the volume of reductions required by 2030 and 2050. NJDEP should also stop ozone trading/credits and regulate fossil fuel combustion for water quality not just air quality impacts (air deposition) and the final EMP must disclose the risks of stranded investments as New Jersey moves off fossil fuels.

Detailed Comments

State Priority 1: Reduce Energy Consumption & Emissions from the Transportation Sector

1.1.1 Support the deployment of 330,000 light-duty electric vehicles on the road by 2025, per the Zero Emission Vehicle MOU

- The TTF is a necessary funding source for New Jersey's public transportation. Since it is funded primarily with a gas tax, a similar funding mechanism must be simultaneously and aggressively pursued for electric vehicles. Current wording is weak and is foreshadowing a revenue crisis like the TTF shutdown under former Governor Chris Christie precipitating the increase in the gas tax. Alternative revenue sources for EVs must be considered.
- Decrease in revenue to the TTF directly affects NJ Transit's capital and operating funding, which is already dire. Currently, NJ Transit does not have any dedicated sources of revenue for its operating budget - funding is subject to the annual budget process. Roughly one-third of NJ Transit's operating budget, \$460 millions in FY20, is transferred from its capital budget into its operating budget. Transfers of this magnitude

have crippled the agency's ability to meet transit expansion needs as well as other capital needs like sustained investment in union-built EV buses.

1.1.2 Deploy EV charging infrastructure throughout the state

- EV infrastructure needs a stable pot of money, the one-shot grants, like the Volkswagen Settlement funding, is not enough to build comprehensive statewide EV infrastructure. There is potential to incorporate this program into existing projects like the Transit Village program.
- Utilize Complete Streets community development plans on the municipal, county, and state level.

1.1.5 Rollover the state light-duty passenger fleet to electric vehicles

- The state should transition light-duty passenger fleet as quickly as feasibly possible and have benchmarks in the EMP.

1.1.6 Continue to improve New Jersey Transit's environmental performance

- **Full electrification of the NJ Transit bus fleet by 2040** as well as stable and increased mass transit funding to increase clean transit options for low-income communities.
- NJ Transit is essential to developing a low or no carbon transportation system. However, stronger language is necessary to hold NJ Transit accountable for faster assessment and implementation of renewable technology with concrete benchmark goals. To support NJ Transit in the transition to renewables, the agency needs secure funding from a designated source for both operations and capital improvements.
- Natural gas is not a renewable energy source and should not be considered as such in the EMP.

1.1.7 Increase clean transportation options in low-and moderate-income and environmental justice communities

- This section should also look at options for expanding existing public transit infrastructure and developing new routes to meet the needs of all communities. Without adequate investment in public transportation, which is glaringly absent from this section, low-income communities will be left to rely on private industry, which does not often serve the needs of those in the lowest socioeconomic statuses. The state government needs to take greater responsibility for the transportation needs of its residents by offering a breadth of options.
- The state should begin deploying electric buses and heavy-duty vehicles in environmental justice communities with disproportionately high asthma and lung disease rates.

1.1.8 Partner with industry to develop incentives to electrify the medium- and heavy-duty vehicle fleet with battery or fuel cell technology, or to support R&D that will enable such electrification

- This section should include language to mandate corporate adoption of EVs for fleets operating in NJ along with aggressive benchmark dates for transition. Size and profits of the company should be considered in the regulations with the largest and most profitable companies having the most aggressive transition schedule. This maintains competition and ensures that small businesses are not shut down by regulations they are unable to meet.
- Natural gas and “cleaner liquid fuels” are not renewable energy sources and should not be considered as such in the EMP.

1.1.9 Explore policies that can accelerate adoption of alternative fuels in the transportation sector

- Natural gas and “cleaner liquid fuels” are not renewable energy sources and should not be considered as such in the EMP.
- The state should work faster than the Transportation and Climate Initiative is moving and should explicitly include representatives from environmental justice, frontline, and low-income communities are meaningfully involved in initial discussions and final decision-making to ensure these communities that are most impacted by pollution receive the most benefits.

1.2.1 Identify opportunities to reduce vehicle miles traveled.

- Significant coordination on street-level planning and urban development is necessary to implement any plans to reduce vehicle miles traveled (VMT).
- Energy and transportation/mobility planning should be required by local governments.
- Municipal land use law must evolve to encourage walkable and bikeable communities, bike and scooter sharing, Jitney services and community EVs as the draft EMP suggests.

With respect to transit, this section while noting the importance of improving the quality of service of rail and of improving bus coverage doesn't address the specific strategies to reduce VMT. Reliability is important, but in order to replace motor vehicle trips with transit trips the transit agencies must provide more service on existing lines – for example, providing more frequent bus service through dense, developed corridors. This would have a greater impact on increasing transit trips than investing in coverage out into suburban areas with low density.

1.2.2 Accelerate the implementation of the Transit Village Program

- Any continuation of the Transit Village program must prioritize the inclusion of low-income housing as well as rent caps to ensure that transit oriented-development is accessible to residents of all socioeconomic statuses.

- The program has promoted development around train stations, but is too geographically limited with too slow implementation and insufficient funding to reach GHG reduction goals.
- Rather than rely on the Transit Village Program to deliver meaningful GHG reductions, the State should consider a strategy that recommends land use changes promoting the use of transit, biking and walking.
- Other strategies could include the implementation of Complete Streets policies and ordinances – related to 1.2.1, congestion pricing, and revisions to land use restrictions. The State should review the specific targets that have been adopted and engage with NJDOT in setting future targets that meet the goals of the EMP.

1.3.2 Support a diesel truck buy-out program

- Increase in funding support for those who purchase electric vehicles.

State Priority 2 Accelerate Deployment of Renewable Energy & Distributed Energy Resources

2.1.1 Establish a 50% RPS by 2030

- Need to move more urgently. Jersey Renewables calls for 50% RPS by 2025.

2.1.2 Establish specific in-state Class I renewable energy goals and milestones including but not limited to solar and offshore wind generation to enable a significant majority of electricity consumption to be produced from renewable resources by 2050

- The EMP should include concrete goals, not simply references to making them.
- Many of the energy sources cited in the EMP as carbon neutral are some of the dirtiest forms of energy. Carbon neutral can include garbage incineration, ozone trading, and carbon capture and storage, an expensive technology that has yet to show commercial or practical viability, all of which disproportionately impact LMI communities and communities of color. These highly polluting sources of energy should not be included in the definition of carbon neutral.

2.1.3 Model scenarios and pathways to achieve 100% clean, carbon-neutral electricity generation by 2050 with consideration for least-cost options

- Model scenarios and pathways should consider more factors than simply the least-cost options. Other considerations should include the proliferation of jobs across the state, racial and economic justice, the speed with which projects can be implemented, and the climate mitigation impact each pathway can offer.
- Concerns like racial and economic justice, which can help right the wrongs of decades of irresponsible city planning and development which adversely impacted low-income and communities of color in favor of preserving wealthy and white communities.

- The EMP's definition of carbon neutral includes some of the dirtiest options like garbage incineration, ozone trading, and carbon capture and storage, an expensive technology that has not shown any commercial or practical viability. These options disproportionately impact LMI communities and communities of color.

2.2.1 Develop offshore wind power generation

- Increase the offshore wind goal to at least 7,000 MW by 2030. When New Jersey made the goal of 3,500 MW, it was the largest in the country. As more states make offshore wind commitments, New Jersey needs to cement its place as a leader in offshore wind, attracting developers and manufacturers to the region. The current system can be extended by continuing the biannual solicitations of at least 1,200 MW starting in 2020 and continuing through 2026, if not longer. Consideration should be given to awarding multiple projects at once to increase competition.
- Finalize a comprehensive Offshore Wind Strategic Plan to set long term goals and foster a thriving offshore wind industry in New Jersey. This should include a plan for offshore wind through 2050 with regular interim milestones to ensure the program achieves its goals and flexibility as the technology improves.
- New Jersey should follow the path of other leading offshore wind states and establish ongoing community-led Working Groups to ensure continued input and investment from experts and stakeholders as offshore wind project selection and development efforts unfold.

2.2.2 Develop the offshore wind supply chain

- EMP should require labor neutrality agreement which indicates that companies will not take an anti-union stance and will not stand in the way of workers who are unionizing to ensure living wages and good benefits are the norm for the industry. Prevailing wage rules will ensure that all workers benefit from the increased pay that labor unions are able to provide.
- Domestic sourcing of jobs and materials is key to reaping all the benefits of being an early adopter of offshore wind. As this new industry is developed, the state needs to focus on worker and communities benefits, not just regulations that work for industry.

2.2.3 Develop job training programs to support the offshore wind industry

- Ensure access to workforce development opportunities for low and moderate income communities and develop policies that eliminate barriers to jobs

2.2.4 Support the offshore wind industry through port infrastructure development and interregional collaboration

- Community representatives should also be included in preliminary and decision-making conversations with their voices given the same weight as those of industry. Historically,

energy infrastructure has been placed in low-income communities where the residents have less political power to fight it. A comprehensive, community-led siting process is essential to breaking the cycle of exploitation.

2.3.1 Establish and grow a community solar program

- 40% carve-outs for low and middle income communities is a good goal, but it should include a caveat to prioritize environmental justice communities.
- Needs to be connected to energy efficiency programs and funding to ensure solar is accessible to all communities.

2.3.3 Maximize solar rooftop and community solar development in urban and LMI communities using the local workforce

- Need to fund energy efficiency and weatherization programs to ensure older buildings are suitable for solar. These need to be connected in the clearinghouse.
- Set goals of 250,000 low-income households having solar access and 400 MW of storage for low-income and environmental justice communities by 2030. The benchmark goal for this process is 76,000 low-income households and 200 MW of storage by 2026.

2.3.5 Develop mechanisms for achieving 600 MW of energy storage by 2021 and 2,000 MW of energy storage by 2030

- The state needs to make large investments in research and development for storage. Storage is one of the largest technological barriers to transitioning to renewables and electrification. We need strong support for innovation and invention to breakthrough.

3.1.2 Increase funding for, awareness of, and access to New Jersey's Clean Energy Program and its suite of state-wide programs

- NJ Clean Energy Program should be promoted through a combination of media - tv, local radio programs, newspaper ads, social media, and community-based organizations that target landlords and homeowners
- Additionally, connect with community organizations and hyper-local media to spread awareness for tenant rights regarding home weatherization and safety improvements to ensure access to Clean Energy Programs

3.1.3 Adopt equitable clean energy financing mechanisms that enable greater penetration of energy efficiency opportunities for all customers

- This section should provide incentives for landlords to maintain current or comparable rents so residents are not priced out of their communities.
- Regulate reasonable interest rates and specify the funding source for this program

3.1.4 Streamline marketing, education, awareness, and program administration

- This clearinghouse should be accessible to those who use assistive technology for blindness or deafness.
- Include public health, safety, energy efficiency, and equity as explicit, inseparable overarching goals of the clearinghouse, and make it a requirement rather than a suggestion. A clearinghouse that coordinates the multitude of programs offered is necessary to penetrate low-income and environmental justice communities, and so should be added as a deliberate action item in the EMP in order to promote energy efficiency upgrades, decrease household spending on utility bills, and streamline customer engagement. Energy efficiency cannot be separated from indoor air quality and lead issues. The number of units that could receive energy efficiency upgrades has been limited due to lack of coordination amongst environmental health and safety services. Homeowners are also currently confused about the difference between the WAP and Comfort Partners/NJ Clean Energy programs. It is critical that all programs are housed under one roof.

3.3.2 Establish mechanisms to increase building efficiency in existing buildings

- Should include a worker training subsidy for employers to increase labor availability. This can also help ensure that when a company or organization finds a barrier to energy efficiency, they have an existing workforce to address it.
- If one company cannot take on the job, they should close the loop by checking back in with the clearinghouse to find another contractor or company to take on the job so the customers are not lost.

3.3.5 Increase compliance of mandated building and energy codes

- Ensure adequate staffing for inspections so they are performed within the mandated timeline.
- Weatherization processes should be included in mandated building and energy codes.

State Priority 4 Reduce Energy Use & Emissions from the Building Sector

The EMP needs to make the connection between reductions in energy use and emissions, energy efficiency, and energy sources. Siloing these interconnected systems is sure to create gaps in programming, reducing the effectiveness of these programs overall.

4.1.3 Develop EV Ready and Demand Response Ready building codes for new multi-unit dwelling and commercial construction

4.2.1 Incentivize transition to electrified heat pumps, hot water heaters, and other appliances

- This section should provide more details on what a program from NJ BPU might look like, we note however that “lowest cost” should not be a dominant factor in how such an incentive program is constructed. Instead there should be greater consideration of where the greatest social benefits can be gained from reducing local emissions, the ability to reduce utility costs and improving conditions for low and moderate income earners, as well as the capacity of such programs to be used to create jobs and training workers.
- Additionally, given the ongoing lead crises in New Jersey’s urban areas, we urge the state to consider how environmental justice communities can be prioritized in a holistic approach to make housing healthier through electrification, energy efficiency as well as structural upgrades including lead abatements.

4.2.2 Develop a transition plan to fully electrified building sector

- There is no reason to delay forming a plan to lower emissions from existing buildings. The taskforce proposed in the draft plan should have a clear timeframe to meet and make recommendations.
- The task force should be expanded to include key stakeholders in the sector including unions, environmental justice groups, housing advocates as well as building owners and operators.
- The task force should look at issues like energy efficiency, resiliency, and coordination with increased renewable energy sources to ensure the grid is not overburdened.
- Workforce skills and planning, environmental justice, and housing affordability should be key components of the transition plan developed in consultation with the key government and community partners.
- Electrification of the building sector should prioritize low-income and environmental justice communities.

State Priority 6 Support Community Energy Planning & Action in Low- and Moderate-Income EJ Communities

Bigger community say in the projects - communities should be part of the decision-making process. It is imperative that communities have a seat at the table

6.1 Develop a comprehensive Community Energy Plan in concert with local community groups to identify energy needs and establish ways to participate in and benefit from the clean energy transition at the local level.

- In order to work with community members, the BPU should provide technical assistance and training to ensure all engaged stakeholders are on equal footing with regards to knowledge and processes for the next iteration of New Jersey’s energy production. Trainings and assistance should be offered in the languages of the community, verbal and written, in locations at times when community members are able to attend, and should be promoted via media that are relevant to the local community.

- Establishing Community Resilience Hubs (CRHs), community-run centers powered by clean energy that deploy aid and services to residents during disasters, can create a space for community resilience. CRHs should be existing community spaces like fire stations or schools that act as a microgrid which can function independently during an emergency. Because low-income and environmental justice communities struggled to recover from events like Hurricane Sandy due to grid failure and slower response times from first responders, these communities should be prioritized for CRH development and other types of renewable projects.

6.2.1 Support community-led development of community solar projects

- This list of government agencies should include housing authorities.
- EJ and low-income communities should be separate from middle-income communities because the needs are often different. Priority should be given to environmental justice communities.
- List the evaluation criteria for 'community-led.' They should include things like inclusion in initial conversations, meaningful participation in decision-making processes, and final approval for projects.
- This section should identify best practices from community solar pilots.
- Bring in customers and contractors into planning and decision-making processes from the beginning through focus groups to help design a program that ultimately works for them.

6.2.2 Incentivize maximum installation of rooftop and community solar by the local workforce

- To reduce barriers, there should not be any out-of-pocket costs or costs should be limited.
- Energy efficiency and weatherization programs need to be coordinated to ensure maximum penetration into the rooftop solar market. This should be connected to the energy efficiency clearinghouse.
- Community education should emphasize savings from solar and information of how personal habits can impact energy efficiency.

6.2.3 Develop clean energy workforce opportunities and training programs

- Good opportunities for youth, but formerly incarcerated and other marginalized groups should be included.
- The solar sector should include labor neutrality agreement which indicates that companies will not take an anti-union stance and will not stand in the way of workers who are unionizing.
- Need a trained local workforce to act as ambassadors for these programs and ensure adequate awareness within target communities.
- Establish prevailing wage and project labor agreements to raise wages throughout the industry.

6.4 Eliminate barriers to participate in and benefit from the clean energy economy.

- Engagement with communities requires a tailored approach: consultation with community members on issues like logistics for meetings which should be at convenient times and locations, community representatives, pain points within the community (are there areas within the community that members want addressed first?), and types of energy that work for those communities.
- As mentioned on page 63, the clearinghouse would mediate any barriers and all programs listed here should be contained within the clearinghouse with personal and technology-based support for applicants.

State Priority 7 Expand the Clean Energy Innovation Economy

Clean energy projects should be sited to prioritize environmental justice and low-income communities. This is particularly important given the history of siting polluting energy services in low-income areas, often creating the environmental injustice that must now be addressed. The EMP should prioritize and incentivize development in these communities, in conjunction with the community members, as well as incorporating job training and equitable hiring practices to ensure community members benefit from these new projects.

Addressing barriers in municipal regulations can help alleviate siting issues for community-based renewables energy projects. Local permitting and zoning laws can unnecessarily increase the timeline and cost for project development. Supporting consistent laws and requirements can expedite the distribution of clean energy technology. To address this issues, the state can create model zoning ordinances and permitting processes for local governments along with a timeline to transition to the new regulations.

7.2.1 Develop a workforce needs assessment for the clean energy economy, including but not limited to support for renewable energy generation and distributed energy resources; grid modernization; energy efficiency services; transport system electrification including the installation of electric vehicle infrastructure and potential manufacturing and assembly of electric vehicle components; and zero carbon building construction and retrofits

- Should work with unions to discuss labor neutrality in energy industries, workers' rights and working conditions, prevailing wage and project labor agreements
- Unions should work with community organizations to ensure union jobs are accessible to everyone and help potential employees become union members.

7.2.2 Establish a Clean Energy Job Training program to assist current New Jersey workers to pivot their skills as necessary to meet changing industry needs

- Cross-training is necessary to meet changing industry needs. Frontline workers should have, at least, a basic understanding of corollary or related work in addition to their own field of expertise. Training workers in soft skills like critical thinking and customer service and can improve flexibility.

- New jobs must be equivalent to current positions available in fossil fuel industry in terms of pay and benefits. Labor neutrality should be guaranteed so that workers are freely able to unionize and collectively bargain.
- For business leaders, there should be mandates for the percentage of employees that come from marginalized or surrounding communities. An example of this is, BYD, an electric bus company, does this in their American plants.

7.2.3 Establish Vocational Training to establish a pipeline of well qualified, modern energy specialists

- Unions, community organizations, nonprofits, vocational schools, and community colleges should be included in the planning and establishment of this pipeline.