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October 12, 2018

Grace Power
Chief of Staff, New Jersey Board of Public Utilities
Committee Chair, New Jersey Energy Master Plan

Cynthia Holland
Director, Office of Federal and Regional Policy, New Jersey Board of Public Utilities
Group Lead, Sustainable and Resilient Infrastructure, New Jersey EMP Committee

RE: New Jersey 2019 Energy Master Plan

Dear Chair Power and Ms. Holland,

On behalf of the New Jersey Chapter of the U.S. Green Building Council (USGBC-NJ) and our members, we thank you and the BPU for this opportunity to submit recommendations for the NJ Energy Master Plan. As the developers of the LEED Rating system, the USGBC has led the way to make buildings healthier, efficient and more resilient. Our members include the professionals in the design and construction industry that are the experts in making our buildings more sustainable. Through high-performance, cost-effective, green buildings that save energy, water, and money, USGBC-NJ is promoting environmentally responsible places to live, work, learn, and govern.

New Jersey is home to more than 650 LEED certified projects spanning over 77 million square feet of real estate, and nearly 5,000 LEED credentialed professionals working in the building design, construction, operations, and maintenance fields. Research estimates that from 2015-2018 in New Jersey alone, green construction will support more than 240,000 jobs, support labor earnings of \$13.74 billion, and contribute \$20.51 billion to the state GDP.¹

The USGBC-NJ wishes to applaud Governor Murphy's 2019 EMP and the intention to create a strategic vision for the production, distribution, consumption, and conservation of energy in the State of New Jersey. In reaction to the latest report on climate change issued by the IPCC just this week, we believe the goal of achieving 100 percent clean energy needs to be achieved well before 2050. As has been stated by many, we will reiterate the fact that the cleanest energy is energy that is never used. Energy efficiency is cheaper than any type of energy production. New Jersey has more than 450,000 commercial buildings that consume approximately 50% of the state's electricity. Reducing our energy use will make the task of making our production carbon neutral that less onerous.

¹ USGBC - Booz Allen Hamilton "Green Building Economic Impact Study," September 2015. See: <http://go.usgbc.org/2015-Green-Building-Economic-Impact-Study.html>

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In accordance with the “Reducing Energy Consumption Stakeholder Meeting Discussion Points”, we offer the following recommendations for inclusion in the EMP.

General

1. The Societal Benefit Charge Funds must be used for their intended purpose, and not be diverted to the general fund.
2. The Office of Clean Energy needs to continue their efforts to expand the various energy efficiency programs and to make them more user-friendly. The OCE should institute both residential and commercial energy audit programs with advisors that are not salespeople trying to sell them new equipment.
3. Require annual energy and water benchmarking requirement for buildings 25,000 sq ft and larger through the EPA Portfolio Manager, and set a minimum energy and water performance standard for those buildings.
4. New Jersey should demonstrate their continued commitment to emission reductions and a sustainable future by leading by example with additional requirements beyond those of non-state owned buildings. We recommend that new state owned buildings and state owned buildings undergoing major renovations must achieve LEED BD+C Silver Certification (or higher) and receive a Net Zero Carbon Emissions certificate within 18 months of operation,
5. Require that all new buildings 10,000 sqft and larger, and buildings undergoing major renovations 10,000 sqft and larger which receive state funding must achieve LEED BD+C Silver Certification (or higher), and require that all existing state owned buildings must achieve LEED for Existing Buildings Certification (phased in over the next 10 years).
6. Promote the “100% Committed” campaign of the Climate Reality Project. The NJ Clean Energy and NJ Power Switch websites should provide clear information on energy suppliers that provide clean energy, either into the PJM grid or through offsets. There could be no greater market signal to the investment community than demand from consumers. But we can’t generate this demand if our energy consumers are not aware or understand their options.
7. Natural gas is cleaner than coal, but relying on gas from hydraulic fracturing will create a legacy of methane leaks and water contamination that will haunt our grandchildren.

Technology

1. As New Jersey is one of the few states that has not yet deployed “Smart Meters”, we have the opportunity to leap-frog directly to really smart meters. As part of our grid modernization, we should implement building meters that can communicate with building automation systems in commercial buildings and appliances and thermostats in residential buildings. In order to manage a grid with

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renewable sources, we need to have some control over the load profile. The technology is available to make this happen.

2. While Smart Grid is a topic for another committee, we nonetheless want to point out that the PEER (Performance Excellence in Electricity Renewal) rating system provides a comprehensive framework to evaluate power generation, transmission and distribution systems through the lens of the customer, focusing on efficiency, quality, reliability, resiliency and the environment. We believe that the grid modernization should at least follow the PEER methodology for development, if not actual certification.

State Policy

1. The state should move to de-couple the utility companies' profits from their sales of energy commodities. The cash flow for energy inherently runs through the utility companies. It does not make sense for them to invest in efficiency when it reduces their sales. Adjusting their rates periodically is too difficult and does not provide a clear market signal. Decoupling would align their interests with those of the state and the ratepayers.
2. The state should adopt an Energy Efficiency Portfolio Standard (EEPS). Many other states have adopted these targets and have seen success in reducing their energy use. This would attract capital into this market much as the solar program did.
3. Establish a Green Bank. We endorse the proposal put forth by the Environmental Defense Fund to create a non-profit financial institution to provide financial resources for efficiency projects.
4. Pass the pending PACE legislation to encourage municipalities and counties to establish Property Assessed Clean Energy financing programs.

Codes and Standards

1. New Jersey should commit to a regular cycle of quickly adopting the latest model codes as they are released every three years for residential & commercial buildings.
2. We also recommend that the DCA require rigorous enforcement of the energy code. This would include training Code Officials on the Energy Code. We would also suggest that registered Architects be required to take periodic continuing education training on the energy code.
3. New Jersey should adopt the International Green Construction Code (IgCC) as a model code for all state building projects and projects that receive state funding. The IgCC incorporates all of the best building practices from LEED but does so in enforceable code language. It promotes safe and sustainable construction, establishing minimum regulations for building systems and site considerations using prescriptive and performance-related provisions. It is intended to be an overlay code used with, and is fully compatible with, the Family of International Codes, which NJ adopts as our state codes. The IgCC was designed to provide a



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starting point for states, localities and other jurisdictions striving to write minimum requirements into building codes for building design, construction and operation practices that incorporate an expanded view of safety – water use efficiency, energy efficiency, indoor environmental quality, materials and resource use, construction practices and the building’s impact on the land. The state should also allow local municipalities to adopt the IgCC for redevelopment projects and for designated “green building” zones within their jurisdictions. Buildings paid for with taxpayer dollars should be built to “Best Practices” and not to code minimums. The 2018 IgCC has just been released, and we would be happy to work with the DCA to work through the details of the adoption process.

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Economic Growth & Workforce Development

1. As noted previously, research estimates that from 2015-2018 green construction has supported more than 240,000 jobs, which equates to labor earnings of \$13.74 billion, and contributed \$20.51 billion to the NJ State GDP. The USGBC-NJ has been very active in providing training for jobs in the green building industry, largely through grant programs from the NJ Department of Labor and Workforce Development. We welcome the opportunity to continue and expand our training programs to help meet the needs of this growing and sustainable industry.
2. Raritan Valley Community College recently opened its new Workforce Development Center, which has two programs that specifically relate to the issues at hand. The Environmental Control Technology/HVAC program trains technicians in the latest building automation systems, which are starting to incorporate the Internet of Things (IoT). The Commercial Energy Management program is designed to support the US Department of Energy’s Better Building Initiative goal of improving commercial energy efficiency. The US Department of Labor expects the explosion of cost effective HVAC/R systems for homes and businesses to create over 90,000 new technician jobs by 2020. These programs should serve as a model for other training centers across the state. Employers have always been attracted to NJ for the high quality of our workforce, and these are good jobs that can be kept here.

Environmental Justice

1. The USGBC based the LEED rating system on the triple bottom line – people, planet and profits. Social justice is an extremely important consideration as we transition to a new energy economy. NJ should expand the programs for energy weatherization for low income households.
2. Allow for a sliding scale on rebates for homeowners that allow for larger rebates to low and moderate income households to



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encourage energy conservation improvements up to 100% of the cost of such improvements.

- 3. We should promote investment in Community Solar systems. And we need to ensure that the air quality in our urban areas and along our transportation corridors is clean.

Conclusions

- 1. Green buildings cost less to operate. On average they are 14 percent less costly to operate than traditional buildings, with most new builds today achieving significantly more energy savings than that.² In addition, the average green building is worth 7 percent more than its traditional counterpart. And for better buildings, accountability makes a difference. Through an independent, third-party verification system, LEED affirms the integrity of green building commitments by ensuring project teams are delivering on design plans and goals. Third-party validation helps guarantee that each project saves energy, water and other resources, reducing the overall environmental impact.
- 2. Going beyond reduced operational costs and improved occupant health and comfort, a Net Zero Carbon Emissions certification demonstrates a positive vision of the future, where buildings generate more emissions-free energy than they consume, export clean water and produce zero waste all while enhancing the health and well-being for building occupants.
- 3. USGBC-NJ respectfully urges you to consider the recommendations of our New Jersey stakeholders as you develop a draft EMP. If you have any questions or wish to discuss these recommendations further, please do not hesitate to contact us. Our members and partners look forward to working with you and your colleagues on ways to achieve sustainability through buildings and infrastructure, in 2019 and in the future.

We thank you for this opportunity to present our comments and recommendations. The USGBC-NJ organization and its members are committed to the challenge of transforming our energy economy, and have the expertise to help New Jersey achieve these important goals. We welcome the chance to work with Governor Murphy, the BPU and other state agencies to develop and implement the 2019 Energy Master Plan.

Very Truly Yours,

William Amann, P.E., DCEP, LEED Fellow
Advocacy Committee Chair, USGBC-NJ

² World Green Building Trends 2016 Smart Market Report (<https://www.bdcnetwork.com/green-building-saves-operating-costs-and-boosts-asset-value?eid=330057569&bid=1680707>)