



June 12, 2024

Secretary of the Board
44 South Clinton Ave., 1st Floor
Trenton, NJ 08625-0350

Posted via <https://publicaccess.bpu.state.nj.us/>
CC: board.secretary@bpu.nj.gov

RE: NJ 2024 ENERGY MASTER PLAN – REQUEST FOR INFORMATION

Dear Secretary Golden,

Thank you for this opportunity to comment on the proposed 2024 Energy Master Plan Updates.

These comments are respectfully submitted on behalf of MaGrann, EAM and ReVireo, together representing the longest tenured and most active New Jersey based Energy Rating Companies supporting the Residential New Construction Program.

We offer the following feedback for your consideration.

Strategy 3 – Maximizing Energy Efficiency and Conservation, and Reducing Peak Demand

1. Have the current utility energy efficiency incentive and zero percent financing programs been effective in broadening accessibility to energy efficiency improvements? What else should NJ do to increase education and awareness and address gaps in accessibility of energy efficiency programs?

Overall, NJ's utility energy efficiency programs have been effective at encouraging energy efficiency improvements in existing buildings that otherwise would not have pursued these improvements, but there is plenty of room for improvement and ways NJ can promote increased participation.

As a firm with over two decades of experience helping multifamily property owners leverage these programs, we have learned what works well and what creates barriers for multifamily participation. As the BPU works with the utilities to roll out the Triennium 2 utility programs, along with the HER and HEAR IRA programs, we recommend the BPU consider the following recommendations to increase program participation and capture the greatest energy and/or emissions savings potential out of every project:

- The multifamily sector (and likely all building types) needs its own one stop shop intake process so that program eligibility and the most appropriate program pathway can be determined accordingly. Additionally, each building category needs its own marketing campaign, rather than individual programs and program pathways operating competing marketing campaigns. The combination of program-specific marketing campaigns and program-specific intake processes creates a siloed approach that does not ensure holistic

evaluation or comprehensive treatment of opportunities, and is not set up to provide optimal solutions for properties and residents. It also creates market confusion from the customer's perspective, while also encouraging projects to participate in programs that may not be the best fit e.g., a customer may pursue prescriptive equipment incentives before realizing they could have pursued a more a comprehensive whole building program that would have resulted in more incentives to offset project costs, more energy savings to reduce energy bills, and improved operational and comfort performance.

- Related to the above comment, multifamily properties have often struggled to fit neatly into the existing NJ utility program structure. The utility programs do not currently offer a single *comprehensive* pathway specific to multifamily, though this may be addressed through modifications under Triennium 2. These buildings often incorporate a mix of residential and commercial attributes, including both residential and commercial meters, and centralized and individual HVAC and hot water systems. Categorization of a property as "residential" or "commercial" can severely limit what a property can accomplish when pathways are defined by this categorization, which should be avoided by simply creating a unified "multifamily" program.
- One of the most common barriers to entry is that multifamily property owners are almost universally unwilling to invest in discovery "soft costs" that are not considered part of a project's capital budget but are necessary for determination of project viability and optimal project scope. Programs should adequately cover the cost of these up-front assessments to encourage property owners to not only participate in the programs, but again to do so in a way that encourages them to undergo more comprehensive retrofits when there are opportunities to do so.
- Utility programs should continue to offer low to no cost financing, as this has been shown to be an effective tool to help break down financial barriers to entry.
- The BPU should consider the constraints that traditional cost effectiveness testing places on building decarbonization projects. If NJ is going to meet the emissions reduction goals laid out in the Energy Master Plan, cost effectiveness tests will need to place a much higher societal cost on carbon.
- The BPU should develop a mechanism for targeting program outreach campaigns to properties undergoing refinancing upgrade projects. The BPU should consider whether there might be a way to track which properties are within those refinancing phases and target those properties accordingly. The BPU might consider ways they can partner with the NJ Housing Mortgage Finance Agency (HMFA) to further develop a process like this.

Strategy 4 – Reducing Energy Consumption and Emissions from the Building Sector

- 1. In April 2024, the NJBPU approved a revised program that will offer financial incentives for construction of new buildings that achieve high levels of energy efficiency and that reduce greenhouse gas emissions. How can NJ achieve net zero emissions new construction,**

whether through the new construction incentive program or through additional mechanisms or initiatives?

Energy Codes

NJ should also plan for a near future roll out of a statewide stretch code that municipalities may voluntarily adopt. While incentives will move the needle for some projects, these programs will not be enough to drive the majority of new construction to net zero or near net zero performance outcomes. The longer we wait to push the majority of new construction in this direction, the more resources will be needed further down the line to decarbonize those buildings that will be added to our existing building stock.

To ensure jurisdictions are motivated to adopt these codes, NJ should consider all the benefits that might be provided to jurisdictions that choose to adopt these codes, such as offering technical support and trainings, mechanisms for fast-tracking permitting, etc. while also promoting some of the additional benefits of adopting stretch codes such as decreased energy costs, increased building asset value, etc.

NJ should also take advantage of the federal support for code adoption that has come out of the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA). Some of these programs include the IRA Technical Assistance for the Adoption of Building Codes formula and competitive grant funding, the BIL Energy Efficiency and Conservation Block Grants (EECGB), as well as the Department of Energy (DOE) Building Energy Codes Program. See links below for more information about these programs:

[Technical Assistance for the Adoption of Building Energy Codes | Department of Energy](#)

[Blueprint 2D: Building Performance Standards and Stretch Codes | Department of Energy](#)

[Building Energy Codes Program | Department of Energy](#)

Along with planning for a future statewide stretch code, enforcement of current energy codes needs additional attention and support. In our experience, energy code enforcement can vary significantly across the state. This inevitably leads to different levels of compliance with the energy code, which impedes accomplishment of EMP goals. It also has cascading effects, including making it more challenging to entice participation in above-code energy efficiency programs since the incremental cost and effort to participate is higher than intended because the baseline premise of code enforcement isn't satisfied. The state should closely examine energy code compliance levels, as well as capabilities of all municipalities to review and enforce increasingly complex energy codes. The state should also examine alternative enforcement methods, such as those used in New York City and Philadelphia where qualified private agencies are utilized to complete on-site energy code inspections. The state could also consider regional / county level enforcement of energy code as an alternative.

In the immediate future, more training is also necessary to ensure that HVAC systems in low-rise residential construction are sized properly according to residential energy code requirements. Residential energy code requires a Manual J, S, and D be performed during design but these calculations are rarely collected at permit stage. More training is also necessary to ensure that 3rd party commissioning of HVAC systems and building envelopes is completed for buildings under the commercial energy code. This is a mandatory requirement that has been strengthened in the latest commercial energy code (ASHRAE 90.1-2019), but it's rarely enforced in our experience.

New Construction Program Feedback

We support the BPU's recent new construction program updates. Offering bonus incentives for projects that achieve certain levels of reduced GHG emissions, along with increased incentives for projects that pursue Zero Energy Ready Homes (ZERH) and Passive House will serve as a necessary next step in helping drive the new construction market closer to the eventual end goal of net zero performance.

Additionally, policy makers should be alert for unintended consequences as programs transition to a focus on electrification. For example, the current ineligibility of all-electric new construction projects in non-IOU utility service areas (i.e. municipal suppliers) should be rectified by expanding eligibility for State Energy Program (SEP) funding of incentives to include new construction (previously buildings connected to a NJ gas IOU remained eligible, but with electrification those projects now find themselves in an unanticipated Catch-22).

Another example is the stifling effect of requiring that certain multifamily new construction projects in the popular midrise category that would not otherwise be required to meet prevailing wage must do so in order to be eligible for program incentives. Those incentives fall so far short of making up the incremental cost of meeting the requirement (and are not intended to do so since they are designed to offset the incremental cost of meeting higher energy performance) that the program is stripped of any leverage to encourage participation and the opportunity to build to a higher performance standard is lost for the life of the building.

2. In addition to offering incentives to electrify existing oil and propane-fueled buildings, as well as buildings heated with older and inefficient electric technologies, what else should NJ be doing to successfully achieve its goals of electrifying buildings heated with these technologies?

In addition to supporting the proposed Triennium 2 Utility Building Decarbonization programs, we also recommend the following:

- NJ should plan for a near future roll out of a statewide mandated Building Energy Performance Standard (BEPS) that includes both energy efficiency and emissions reduction targets. All the federal programs cited above can also support jurisdictions with BEPS adoption.
- The current utility programs can be improved to better support electrification projects, beyond just rolling out the proposed Building Decarbonization programs mentioned above – especially programs based on a traditional whole building energy savings calculation without adequately valuing emissions reduction. Additionally, electrification projects may be incompatible with a program because when gas to electric fuel switching is involved, the new electric system savings are compared against a code performing 'like' system, as opposed to being compared against the building's existing gas system performance on an MMBtu basis.

Sincerely,



Ben Adams
MaGrann



Frank Swol
EAM



Matthew Kaplan
ReVireo