



BUILDING PERFORMANCE IMPROVEMENT BOARD MEETING NOTES

January 4, 11 am to 1 pm

In attendance:

Name	In-Person	Virtual	Role
Emily Curley	X		DEP staff liaison
Stan Edwards	X		DEP staff support
Cuiyin Wu		X	DEP staff support
Rhett Tatum	X		Member
Daniel Cleverdon	X		Member
Amanda MacVey	X		Member
Andrew Rivas	X		Member
Lawrence Carroll	X		Member
Sheena Oliver	X		Member
Jill Goodrich		X	Member
Luke Lanciano	X		Member
Adam Landsman	X		Member
Mike Dieterich	X		Member
Julie Wolfington	X		Member
Josh McClelland	X		Member, Deputy Chair
Edward Musz	X		Member
Kevin Walton	X		Member, Chair
Gregory Goldstein	X		Member
Lindsey Shaw	X		Ex officio member (DEP)
Bryan Bommer		X	Ex officio member (DPS)
Dan McHugh	(has retired as of 11/30)		Ex officio member (DHCA)
Michael Yambrach			Ex officio member (DGS)
Henry Jordan		X	Member of the public
Sean Soboloski		X	Member of the public

Administrative items

Quorum present; meeting notes from 12/21 meeting approved.

Recap any actions from previous meeting

DEP shared 2021 benchmarking data from a subset of building types to compare vs potential BEPS targets.

Site EUI Target setting discussion – focus on Zero Net Carbon Compatible target

Technical Feasibility

DEP staff reviewed that heat pumps are more efficient as they move heat from one place to another instead of generating heat resulting in greater site EUI efficiencies.

The Board also reviewed BEPS technical report case studies of 9 buildings - the case studies demonstrated that all buildings met the respective ZNC target with current technologies. Technologies included operations and maintenance changes, lighting, plug loads, solar, HVAC upgrades, and electrification.

A member noted prescribed incentives from Pepco make the VFDs more affordable with a typical payback of 3 years.

Another member inquired if the results from case studies had been reviewed by facility staff of the studied buildings. DEP staff clarified that the case study was disclosed and vetted by building staff.

The Board also reviewed county-wide savings needs to reach the ZNC target. County-wide buildings would need to reduce site EUI by an average of 35% to reach the target (3.5% from baseline on average year over year for 10 years). Benchmarking data shows that consistently-reported buildings reduced site EUI an average of 2.7% per year from 2016 to 2019 (pre-Covid) and an average of 3.5% per year from 2016 to 2021.

Building on the data shared on 2021 benchmarking data, roughly 36% of offices were meeting the ZNC target. 11% of multifamily buildings (from DC data, as County MF buildings are not yet required to report) were meeting the ZNC target.

Members discussed the challenges to multifamily buildings meeting the ZNC target in that most buildings need to take action and that drastic savings are required, given the predominance of natural gas systems in the multifamily sector. Many multifamily buildings with higher EUIs have a lower percentage of energy coming from electricity today.

Economic Impacts

In discussing the economic impacts of a potential ZNC target, the board reviewed ZNC costs county-wide and in case study buildings.

Members noted the limitations on the assumptions about costs in the BEPS technical report. E.g., a that cost savings assume flat rate for electricity and natural gas moving forward, electricity costs seemed slightly lower and natural gas costs a bit higher than members have experienced. The [BEPS Technical Report](#) lays out sources for utility data on page 194. The challenge of looking at total rather than incremental costs above replacement was also noted.

A member asked if the buildings in the case study had done previous retrofitting. DEP staff clarified that some buildings had already done partial retrofitting and data was included in the case study. Another member added the study didn't include occupancy and tenant behavior which would impact efficiency.

Members also discussed the payback time indicated in the case study which averaged 32 years is longer than most equipment lifespan.

A member noted that the case study didn't include any incentive or incremental cost therefore is looking at the worst-case cost scenario and noted that in their experience, many buildings can offset much of the project costs from utility incentives.

Currently Available Incentives

The Board reviewed currently available incentives and financing options, including those from EmPOWER Maryland, federal tax credits, County property tax credits, Montgomery County Green Bank, and the Maryland Energy Administration.

On EmPOWER incentives, an [addendum to the BEPS Technical Report](#) showed that approximately 7% of ZNC retrofit package costs from the case studies could be offset by existing utility incentives. It was noted that today, electrification is not highly incentivized due to how savings are counted in the program, but that the goals and metrics are likely moving to a lifetime net GHG goal which may change how incentives are offered during the next 3 year EmPOWER cycle in 2024 – 2026.

Members noted that if heat pumps are provided incentives in the future, project economics may change. One member noted that prescriptive incentives tend to be more attractive and modular on a large portfolio, being that complex calculations or demonstrated savings are not required to receive incentives. The Board noted that monitoring and operating of systems post building improvement is crucial to achieving the projected efficiency.

In addition to the information DEP presented, members also shared that a federal ITC credit is available and that MEA provides both incentives and low-interest (1%) loans. Information on these programs was added into the slides.

Discussion

In discussing the Board's reaction to a ZNC target, members discussed several topics.

One member reiterated that for multifamily, the ZNC target requires significant savings from nearly all buildings and that an EE target may be better suited for this sector. Concerns about setting a very low site EUI target and impacts on building turn over or rent increases were shared.

One member brought up the concept of "alignment" with state net-zero direct GHG goals and suggested that efficiency could still get buildings on the path without requiring electrification. Another countered that focusing on efficiency alone or complying by installing more efficient combustion systems could lock buildings into producing direct GHGs and facing state fees.

Members noted that affordable housing owners will have a challenge meeting their targets therefore specific incentives should be in place to make it attractive. Members noted similar challenges for condo buildings where it can be more difficult to make upgrades when owners make decisions about their own

equipment, cannot be moved out to make the changes, and where incentives, tax credits, and financing may be less attractive given the individual ownership rather than shared tax burden or system upgrades.

DEP staff commented that the Board can provide recommendations to the county on incentives they would like to see.

One member noted that without significant penalties locally, and without certainty about state penalties, the targets are merely aspirational, and setting targets that are too aggressive may make them seem unattainable and won't push building owners in the right direction.

For the next meeting, members suggested discussing the parameters for building performance improvement plans (BPIBs) and further discussing how to define and support under-resourced buildings.

Action Items

- Provide more information on Montgomery Housing Partnership (MHP) buildings, which were included in the BEPS Technical Report case studies, if possible.
- Provide examples of incentive programs in other jurisdictions, particularly those that focus on preserving housing affordability with investments in building efficiency

For additional information, please visit the Building Energy Performance Standards website at <https://www.montgomerycountymd.gov/green/energy/beps.html> or contact DEP at energy@montgomerycountymd.gov.