



## BUILDING PERFORMANCE IMPROVEMENT BOARD MEETING NOTES

March 15, 11 am to 1 pm

In attendance:

<b>Name</b>	<b>In-Person</b>	<b>Virtual</b>	<b>Role</b>
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			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		X	Ex officio member (DGS)
Henry Jordan		X	Member of the public

### Administrative items

Quorum present; meeting notes from 3/1 meeting approved.

The Board chair and DEP staff created a summary report of the building grouping discussion from previous meetings to be part of an overall Board recommendation document. A draft was circulated to the Board in advance of the meeting. During the meeting, the Board voted to approve the building group report (one member abstained).

The Board chair and DEP staff created a draft summary report on the site EUI target discussion for review by the group with follow-up discussion scheduled for the next meeting on 4/12.

The BPIB meeting on 3/29 will be cancelled due to a scheduling conflict with the Montgomery County Energy Summit.

### **Recap any actions from previous meeting**

Over the past few meetings, the Board discussed various elements of Building Performance Improvement Plans (BPIPs). To date, the Board considered qualifying scenarios for circumstances outside owners' control from other jurisdictions and ways to document those scenarios, discussed "economic infeasibility" as a qualifying scenario, a two-part application approval/submission process, considered what should be included in building performance improvement plans, and how to document measures via processes like energy audits, commissioning, and O&M plans.

### **Building Performance Improvement Plans**

- **Improvement Measures & Cost-Effectiveness**

The Board reviewed BPIP documentation requirements from other jurisdictions which include:

- ASHRAE level II audit – typically required by all jurisdictions with a custom/prescriptive pathway
- Retrocommissioning (RCx) plan – accepted by St. Louis in lieu of an audit once per building during first two BEPS cycles
- Operations and maintenance plan – required for all buildings in Washington State and for those seeking a timeline adjustment in Denver

Discussion focused on which process or combination of "improvement plan" is most likely to result in an actionable building plan and yield demonstrable energy savings.

With an energy audit as the central requirement, one member recommended that RCx/MBCx be done after BPIP approval to be taken as one step in the implementation plan and that an audit, when done thoroughly, should include recommendations for RCx where appropriate.

One member noted that some buildings may have recently commissioned an energy audit or completed retrocommissioning and that BPIPs should be flexible to recognize or utilize plans that were already done. Members felt that an audit completed within a few years (e.g., 2 – 3 years before the BPIP submission) could be used to create the BPIP.

Another member reiterated that monitoring-based commissioning (MBCx) should be required in some form (where building conditions allow it) because this is more likely to result in savings that persist over time. Members noted that there is an MBCx program with Pepco that is useful in defraying initial investment costs and that WGL has a separate incentive program. Members noted that it would be more helpful for these programs to work together as they are difficult to apply for/track in isolation.

One member noted that this is part of the discussion for the EmPOWER working group for consideration for the 2024-2026 cycle.

In terms of O&M plans, members noted that the BPIP could include documentation of what operations and maintenance changes would be done, rather than requiring a separate plan. Another member noted that an O&M checklist or recommendations manual would be useful so that building owners don't need to reinvent the wheel, just ensure that best practices are being followed in their buildings.

One member reiterated that building owners should verify benchmarking data when applying for a BPIP as there are often data quality issues with the self-reported data. Especially for condo buildings where there is no central tax record to clearly state the building's gross floor area, the building size can be wildly inaccurate.

A concern was raised, as discussed in the prior meeting, about the BEPS law stating that a BPIP must be submitted no less than 90 days before the interim or final deadlines. With the long lead time needed, in most instances, to verify and implement the designs in a BPIP, the suggestion was made that the building owner needs to show that good faith efforts were implemented in order for the BPIP to be considered for approval when submitted near to the deadline.

### **Cost Effectiveness**

In terms of cost-effectiveness, one member noted that the idea of a BPIP is to provide allowances for buildings where meeting the target is technically or financially infeasible, not just to have building owners avoid doing anything that may cost some money. As such, cost estimates for BPIP measures should require inclusion of financial measures like incentives or rebates that would help defray the costs.

A few members noted that creating a uniform/objective metric for cost effectiveness can be challenging because auditors make their best estimate of measure costs. More complex measures, like electrification, requires in-depth engineering before even going to bid to vendors. Given the work entailed, vendors are typically wary of providing bids for work that is merely proposed or for which they are unlikely to win the project. So, though it is important to focus on the cost denominator being a real cost vs a rough average or industry estimate, gathering the needed information to create a more accurate cost is time consuming.

One member noted that return on investment is an important measure that owners will be looking at.

Members discussed that part of the plan could be to commit to measures that the building owner is clearly able to do and finance and further commit to additional engineering and cost studies of some more complex measures such that the BPIP is more of a flexible, living document that changes as more information becomes available.

One member noted that owners should also be encouraged to document what has already been done in the building. If they are still far from the target, but have already implemented a range of measures, their plan may have few additional measures, or focus more on RCx or O&M.

One member suggested that, in general, BPIPs should strive to encourage more of an integrated approach to energy savings. For instance, the performance of a new piece of equipment (like a chiller) is often dependent on the other downstream systems attached to it (like fan coil units or piping).

## Verifying Implementation

The BEPS law says that if, after consulting with the Building Performance Improvement Board, the Director approves the building performance improvement plan, the owner must record the building performance improvement plan as a covenant in the County land records and deliver a certified copy of the recorded plan to the Department.

After the Director receives the certified copy of the recorded plan, the covered building will be deemed to be in compliance with the applicable interim or final performance standards as long as the owner fulfills the terms of the building performance improvement plan within the timeline specified in the plan.

Members had questions on the process of recording plan as a covenant in the County land records. One member noted that this is something that prospective buyers will look at when assessing a property purchase, and makes it such that owners will likely do all they can to reach the performance pathway and not have to commit to a BPIP. Another noted that though the covenant can be modified, it may be difficult to make the BPIP more of a flexible, living document if the owner has only committed to some basic “low-hanging fruit” measures. The BEPS law says that BPIPs must include “Procedures for correcting any noncompliance or deviation from the plan.”

The Board considered two methods of verifying that the owner has fulfilled the terms of the BPIP: performance monitoring and tracking measure installation.

With performance monitoring, DEP could recalculate a new site EUI target that would result if all of the agreed-upon measures in the plan were completed, and then track annual benchmarking data to see if the building has met (or come near) the new site EUI target. This verification approach is being used by Denver and Washington State. In Denver, when a building receives a timeline or target adjustment, the owner receives a new site EUI target that would result from implemented measures, or a new timeline within which to meet the standard target. The building owner must demonstrate that the new target EUI or new timeline was met in subsequent benchmarking reports. In Washington State, owners must show that post implementation energy savings meet or exceed 75% of the energy savings projected in the energy audit report.

With tracking measure installation, owners would need to report back to verify that each agreed-upon measure was implemented according to the BPIP timeline. This verification approach is being used by DC in their Prescriptive Pathway and in St. Louis. With DC’s Prescriptive Pathway, compliance is met by successfully completing specific actions and meeting reporting/verification requirements. Owners opting for the “prescriptive” pathway must submit an Implementation Report, including 1) Implementation Verification with supporting documentation to verify the EEMs were installed as approved, and 2) an attestation of implementation of the approved O&M program. In St. Louis, if the property fulfills the terms, including installing agreed-upon ECMs or completing its retro-commissioning within the approved timeline, then the property is in compliance with BEPS.

Members were somewhat split on the best verification approach.

Members in favor of the performance metric noted that tracking performance proves what was done and may be easier to track (for DEP and building owners) vs having to account for potentially dozens of measures in each building. Those against this approach noted that energy performance estimates from

audit reports can be very hard to calculate and post-implementation performance does not always match these estimates.

Those in favor of tracking measure implementation noted that the BPIP is already meant for building owners that are struggling to meet performance targets, and the BPIP is intended to be a measures-based alternative to a performance target. Proving that measures were installed shows that they are making progress and making a good-faith effort to reduce energy use, but then are not penalized if post-implementation savings are not as high as predicted. One member suggested that building owners with BPIPs could be required to report annually on installed measures, potentially by June 1<sup>st</sup> with the benchmarking reports. Those against this approach argued that reaching a new, more building-specific/realistic EUI is more in line with the spirit of the rest of the law and that focusing on installing measures alone could leave savings on the table.

One member harkened the BPIP review/tracking process to a grant management program in which monitoring, evaluation, and tracking are all key elements to review. It was noted that DEP will need dedicated staff to carry out these follow up activities.

- **Next meeting**

The BPIB plans to revisit and continue discussing the verification approaches at the next meeting and begin discussing the Renewable Energy Allowance. The summary report of the site EUI discussions will be considered for approval.

- **Action Items**

- March 29 meeting cancelled.

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](mailto:energy@montgomerycountymd.gov).