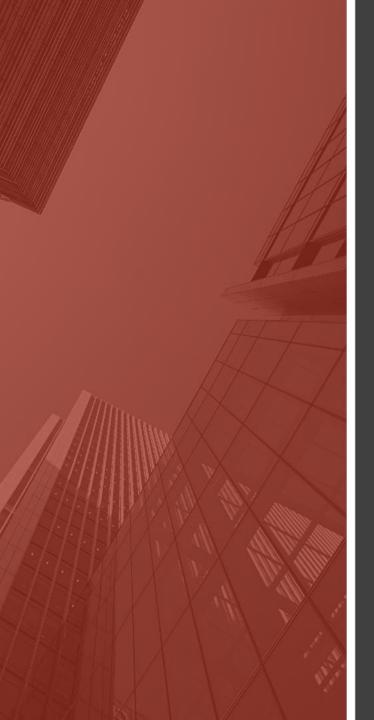


Updates on **Montgomery County Building Energy** Performance Standards (BEPS)

May 1st, 2025





Poll Question

How much have you been following the Montgomery County BEPS process?



Agenda



Chris Pendley
Director of Sustainability
Policy & Strategy
AOBA



Emily Curley

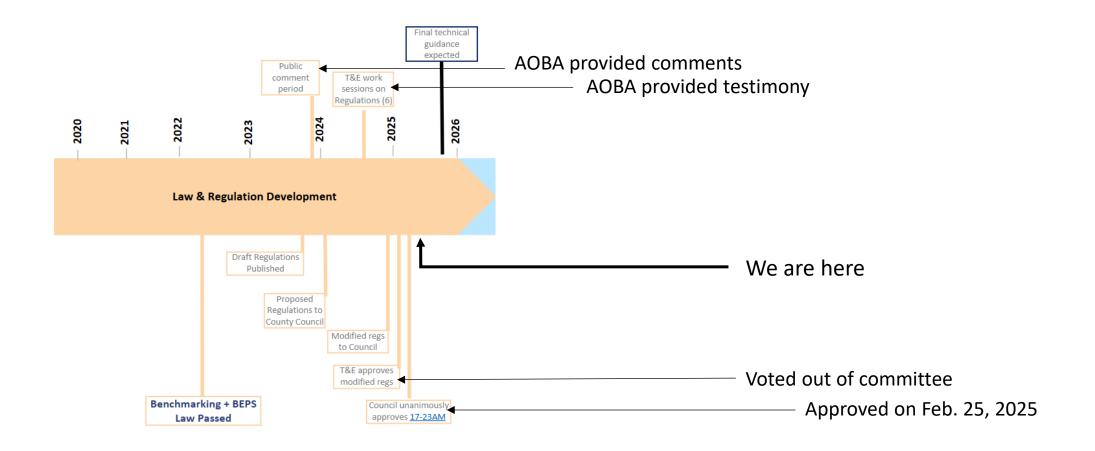
Building Energy Performance

Programs Manager

Montgomery County Department of
Environmental Protection



Background: The (long) Legislative and Regulatory History





Intersection: Maryland HB49

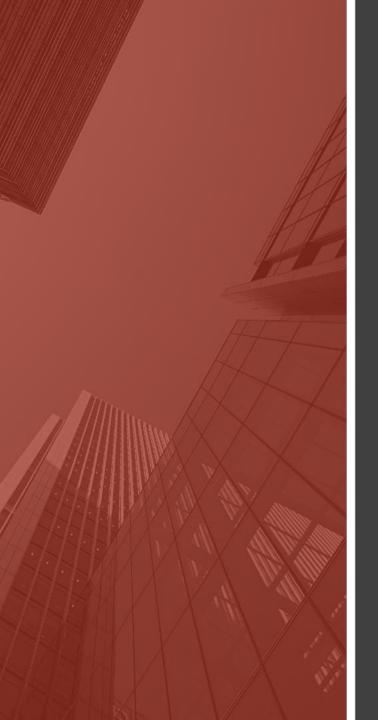
- HB49 requires MDE to certify Montgomery County BEPS, waive Maryland BEPS requirements for Montgomery County
- Montgomery County buildings only subject to Montgomery County BEPS
 - Different formats, different timelines, different approaches
 - Montgomery County regulations are finalized—it's fully developed
 - Don't need to wait until 2027
 - Outstanding question: state benchmarking requirements for Montgomery County buildings



Outreach and Assistance

- Benchmarking assistance document
 - Tailored for Prince George's County, but has useful tips for statewide benchmarking and experienced benchmarkers
- Member-level property discussions—benchmarking, compliance
 - Multiple registrants have talked to me already!
- Upcoming: regional BEPS crosswalk document





Member Q&A



Pre-Submitted Questions

• Will you please provide a list of the changes made this spring?





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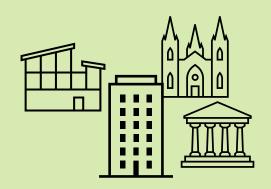
Montgomery County Building Energy Performance Standards Final Regulations

May 2025

Maryland General Assembly

- HB 49 passed by Maryland General Assembly on April 7. Will go into effect Oct 1 if signed by Governor
 or not vetoed.
- Directs MDE to certify Montgomery County's BEPS program and waive requirements for buildings in Montgomery County covered by State BEPS to comply with the statewide program
- Authorizes Montgomery County to:
 - Adopt BEPS for buildings not covered under state law.
 - County BEPS applies to buildings 25k 35k sq ft and some property types like mixed-use manufacturing and hospitals that are exempt from state BEPS.
 - Impose and collect penalties up to the same amount and in the same manner allowed by MDE under §2-610.
 - Will require a change to County law.
 - Establish alternative compliance pathways and impose and collect alternative compliance fees up to the same amount and in the same manner as MDE.
 - Currently, MDE has no ACP or fees for site EUI.

Montgomery County Benchmarking and Performance Standards Law



Covered Buildings

Applies to most buildings 25,000 square feet and larger



Benchmarking

Track and report energy use data to DEP by June 1 each year



Building Energy
Performance Standards
(BEPS)

Meet long-term energy efficiency standards

Building Coverage

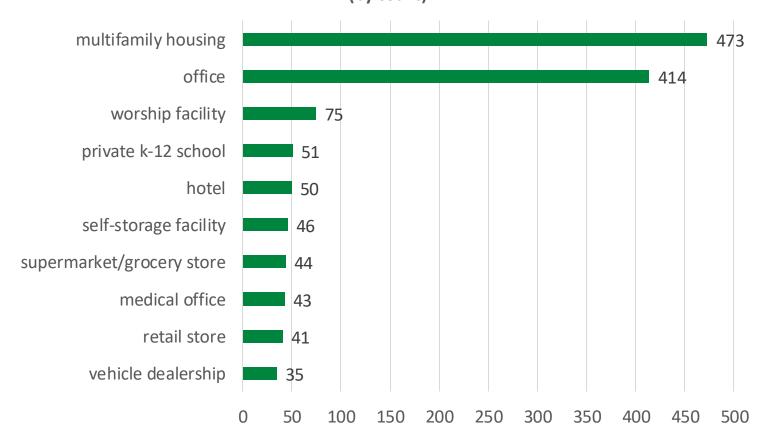


Covered Buildings

Applies to most buildings 25,000 square feet and larger

1,800+ buildings covered, 230+ million gross square feet

Top 10 Most Common Covered Building Types in Montgomery County (by count)



Exemptions & Waivers



Covered Buildings

Applies to most buildings 25,000 square feet and larger

- Law outlines exemptions and waiver criteria for specific building situations. Building owners can apply for:
 - Exemptions to permanently remove a building from the covered building inventory, e.g.:
 - Industrial, transportation, communications, or utility infrastructure
 - Documentation that the building is less than 25k sq ft
 - Annual waivers for any period the waiver criteria applies, e.g.:
 - Financial distress, vacancy, new construction, demolition

Annual Benchmarking and Data Disclosure

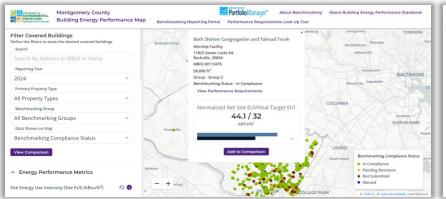


Benchmarking

Track and report energy use data to DEP by **June 1** each year

- All buildings covered by County's BEPS law have begun benchmarking.
 Compliance rate consistently >90%. CY 2024 ~25% reported so far.
- Ongoing outreach:
 - Benchmarking scorecards provided to reporters each year
 - Annual data disclosure and reporting

https://mcbeps.org/



Montgomery County Pe	erformance Standard	
The targets displayed below are prelin approved by County Council.	ninary based on the EUI standards p	proposed in regulations and w
STANDARD	REPORTING YEAR	EUI
Baseline	2019 - 2023	50.75
Interim Standard	2029	41.4
Final Standard	2034	32

Standards displayed in these tools will soon be updated to reflect changes to final performance standards or the 30% performance cap.

What is a Building Energy Performance Standard?



Building Energy
Performance Standards
(BEPS)

Meet long-term energy efficiency standards

- Builds on established energy benchmarking program that promotes data tracking and transparency.
- Applies to covered buildings at set deadlines.
- Establishes requirements for existing buildings to **meet** certain energy efficiency levels.
 - Law establishes site energy use intensity (site EUI) as the performance metric, a measure of energy use per square foot per year.

Deadlines

Covered buildings are grouped by size and type. This phased grouping dictates when buildings began benchmarking, their baseline periods, and their interim and final BEPS deadlines:

Building Group	Included Buildings	First Benchmarking Year (CY)	Baseline Years	Interim Standard Deadline	Final Standard Deadline
County	County-owned 50k+ gsf	2014	2018 - 2022	Dec. 31, 2028	Dec. 31, 2033
Group 1	Non-residential 250k+ gsf	2015	2018 - 2022	Dec. 31, 2028	Dec. 31, 2033
Group 2	Non-residential 50 - 250k gsf	2016	2018 - 2022	Dec. 31, 2028	Dec. 31, 2033
Group 3	Non-residential 25 - 50k gsf	2022	2022 - 2024	Dec. 31, 2030	Dec. 31, 2035
Group 4	Multifamily 250k+ gsf	2022	2022 - 2024	Dec. 31, 2030	Dec. 31, 2035
Group 5	Multifamily 25k - 250k gsf	2023	2023 - 2025	Dec. 31, 2031	Dec. 31, 2036

Setting Standards for Each Covered Building

1. Regulations establish a final site energy use intensity standard for each building type, for example:

Property Type	Final Site EUI Standard
Multifamily Housing	37
Office	55
Retail Store	48
Supermarket / Grocery Store	137
Hotel	60

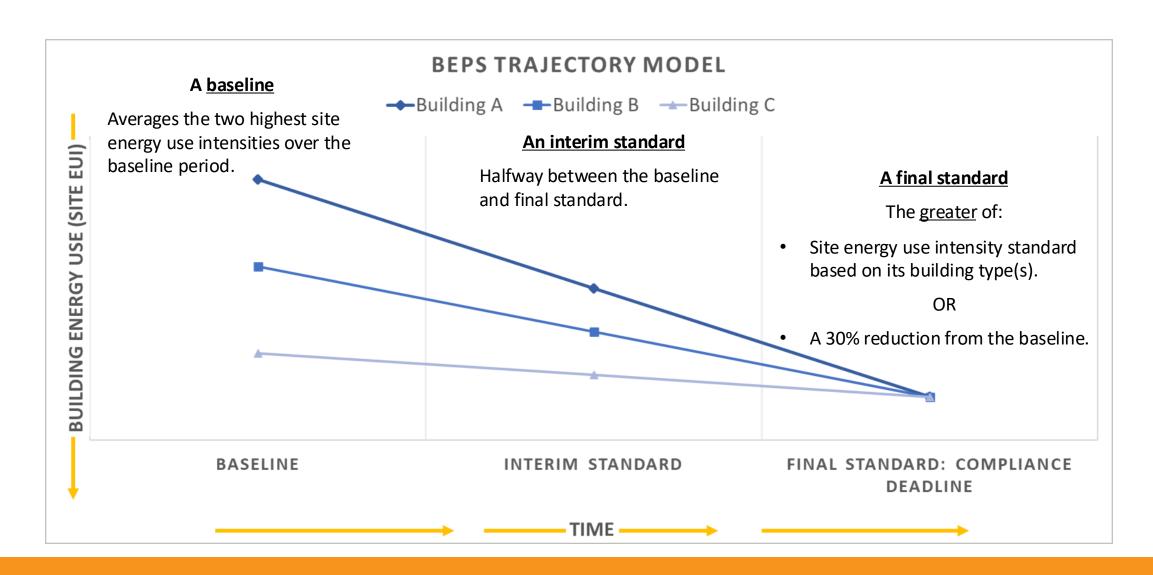
2. Mixed-use buildings receive an "area-weighted" standard based on the size of each type, for example:

Property Type	Gross Floor Area	Final Site EUI Standard
Multifamily Housing	150,000	37
Supermarket / Grocery Store	50,000	137
Total	200,000	62

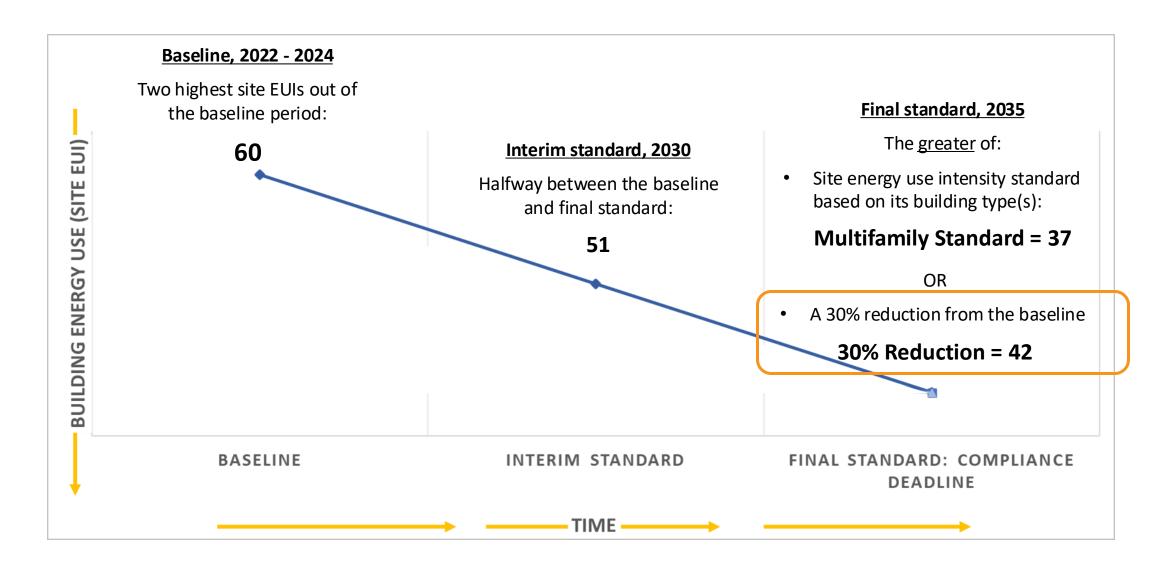
3. Buildings with baselines more than 30% higher than the "calculated" final standard instead receive a final standard reflecting a 30% reduction from the baseline

BEPS Compliance Milestones

A covered building begins benchmarking. After 3 years, it receives:

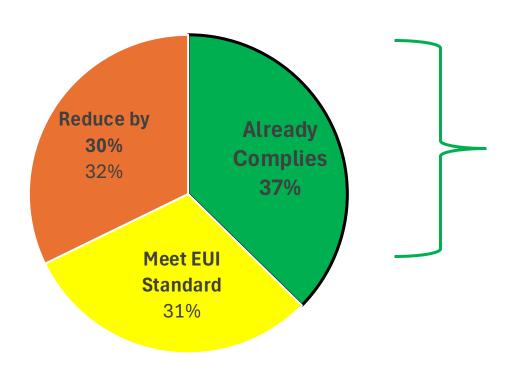


Example: Group 4, Multifamily Building



BEPS Compliance

Based on 2023 benchmarking data, about a third of covered buildings are already meeting their final performance standard:



Site EUI is at or below the building's interim / final standard.

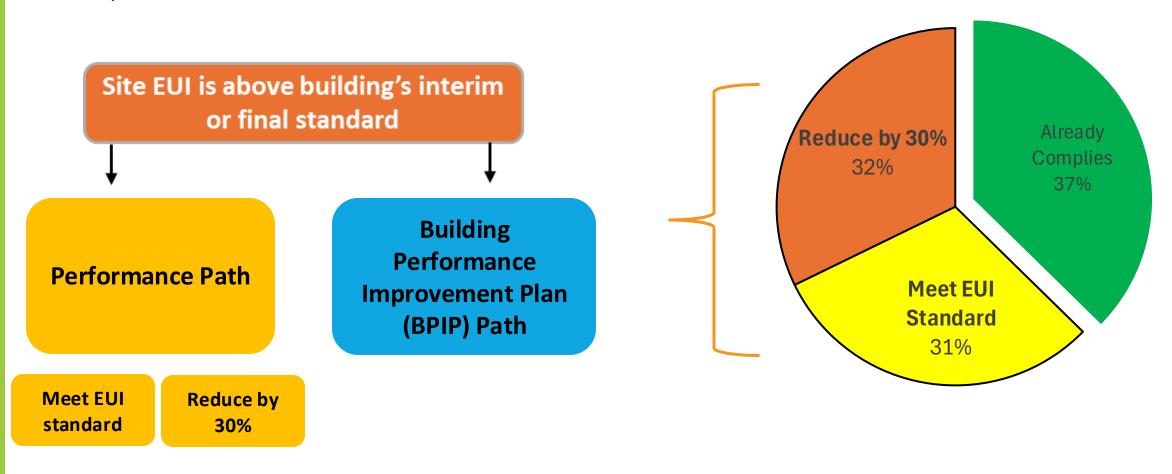
Keep benchmarking and reporting to DEP annually

Maintain Site EUI below building's final standard

Compliance with BEPS

BEPS Compliance Options

Owners of buildings with site EUIs above the interim or final standard have two options to comply with County BEPS:



Performance Path

Performance Path

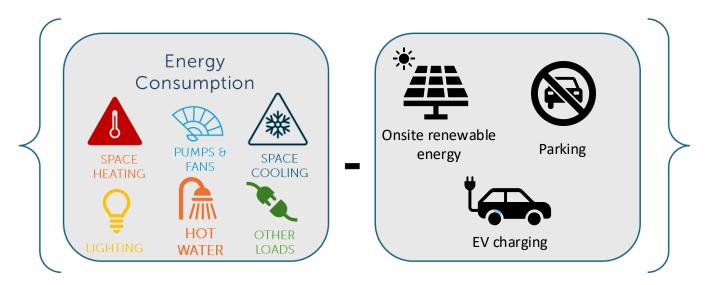
Achieve a "normalized net site EUI" at or below the interim and final performance standard by the building's deadlines.

Normalized Net Site EUI

- Includes: Whole building, weather normalized site energy use
- O Minus:
 - Renewable energy allowance: Renewable energy generated onsite at the building, whether used onsite or exported and regardless of REC retention
 - Parking energy use
 - Electric vehicle charging energy use

If parking and EV energy is not separately metered or submetered, DEP uses the estimated annual site energy use from ENERGY STAR Portfolio Manager which requires accurate reporting of parking GFA/attributes and number/type of EV chargers.

Normalized Net Site Energy Use Intensity (kBtu/sf)





Performance Path

Performance Path

Achieve a "normalized net site EUI" at or below the interim and final performance standard by the building's deadlines.

Reduce

Complete tune-ups, commissioning, lighting, setbacks, other low/no cost measures + energy audit.

Retrofit

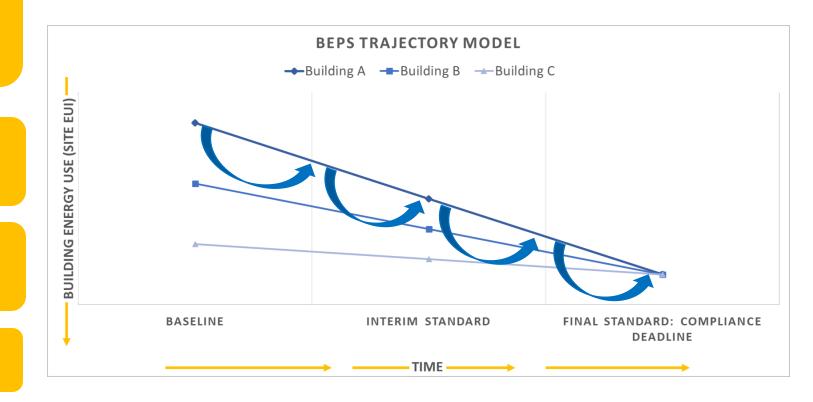
Evaluate & implement deeper retrofits like envelope, equipment replacement.

Refuel: Efficient Electrification

Replace fossil-fuel equipment with heat pumps

Renewable Energy

Install onsite renewable energy.



Building Performance Improvement Plan (BPIP) Path

Building Performance Improvement Plan (BPIP) Path

Custom compliance path based on cost-effective improvements in each building, within economic and technical constraints.

Suitable for situations of economic infeasibility or circumstances beyond the owner's control.

Economic infeasibility means the interim or final performance standard cannot be met by implementing a package of cost-effective energy improvement measures.

Circumstances outside the owner's control may include:

- Characteristics inherent to the building or the building's operations
- Timing events in the building's equipment lifecycles, occupancy, or financing

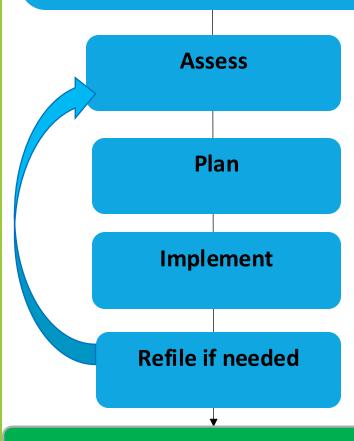
Building Performance Improvement Plan (BPIP) Path

- **Cost effectiveness** is defined within the simple payback of each measure. The <u>lesser</u> of:
 - The lifespan of the measure, or
 - For specially designated buildings, 10 years.
- **Specially designated buildings** include:
 - Affordable housing buildings;
 - "A multi-family building that includes at least 50% of dwelling units whose sale or rental price do not exceed that of a moderately-priced dwelling unit" so intended to include regulated and unregulated affordable housing.
 - Common ownership communities (i.e., all condos and co-ops);
 - Multifamily buildings subject to rent stabilization;
 - Non-profit-owned buildings (e.g., hospitals, worship facilities, private schools); and
 - Local, small-business-owned buildings

Building Performance Improvement Plan (BPIP) Path

Building Performance Improvement Plan (BPIP) Path

Custom compliance path based on costeffective improvements in each building, within economic and technical constraints.

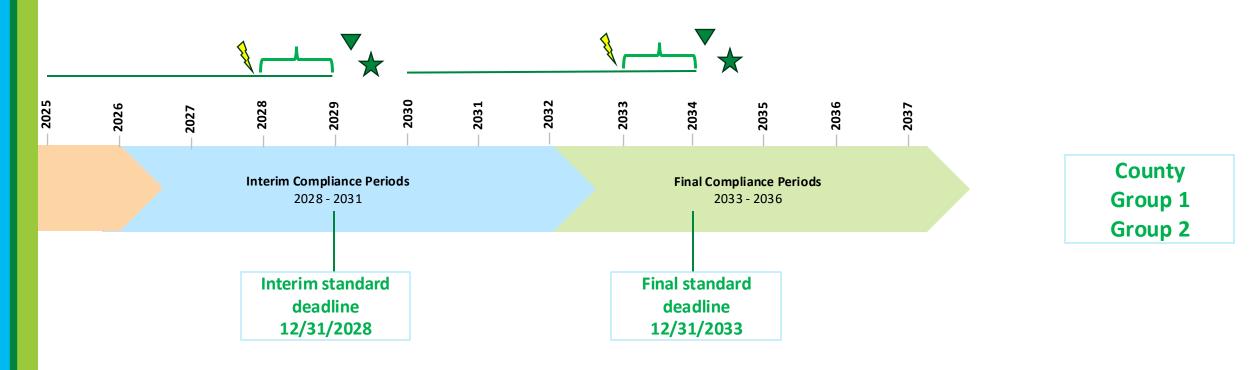


- The BPIP requires an energy audit and assessment of equipment replacement, electrification feasibility, and onsite renewable energy, done by a qualified auditor.
- Create a retrofit plan identifying the cost-effective energy improvement measures and the year or qualifying event during which they will be done.
- Demonstrate ongoing compliance by reporting annually that the measures committed to in the retrofit plan were done per the schedule.
- BPIP can be used for compliance with interim and/or final standards. Measures with a **simple payback of 5 years or less must be implemented** before a subsequent BPIP is approved.

Timing

- Interim / final standard deadline
- Period of performance for relevant interim / final deadline evaluation
- EEMs completed to allow for 12 months of performance tracking
- BPIP-qualifying audit/assessment period ——
- Deadline to file BPIP is 90 days before benchmarking deadline
- Benchmarking deadline, June 1 **

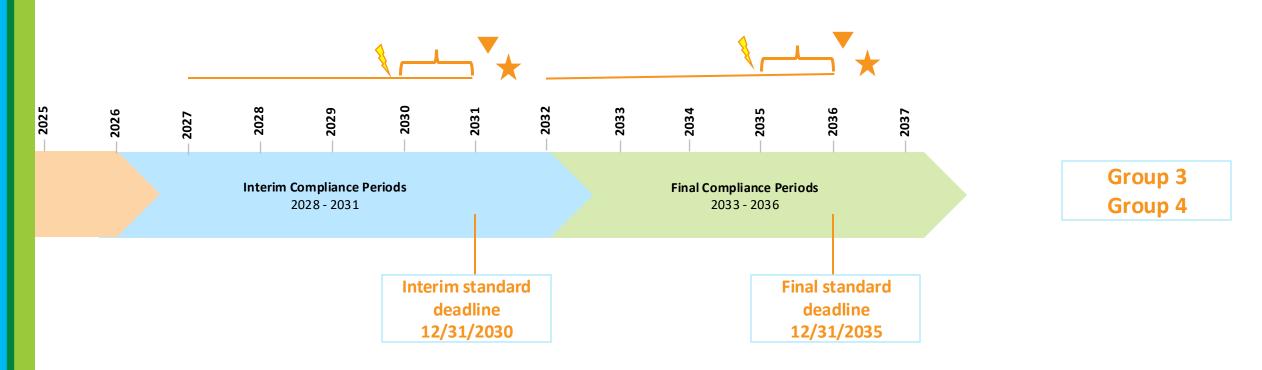
Building Group	Included Buildings
County	County-owned 50k+ gsf
Group 1	Non-residential 250k+ gsf
Group 2	Non-residential 50 - 250k gsf



Timing

- Interim / final standard deadline
- Period of performance for relevant interim / final deadline evaluation —
- EEMs completed to allow for 12 months of performance tracking \(
 \)
- BPIP-qualifying audit/assessment period ——
- Deadline to file BPIP is 90 days before benchmarking deadline
- Benchmarking deadline, June 1 +

Building Group	Included Buildings
Group 3	Non-residential 25 - 50k gsf
Group 4	Multifamily 250k+ gsf



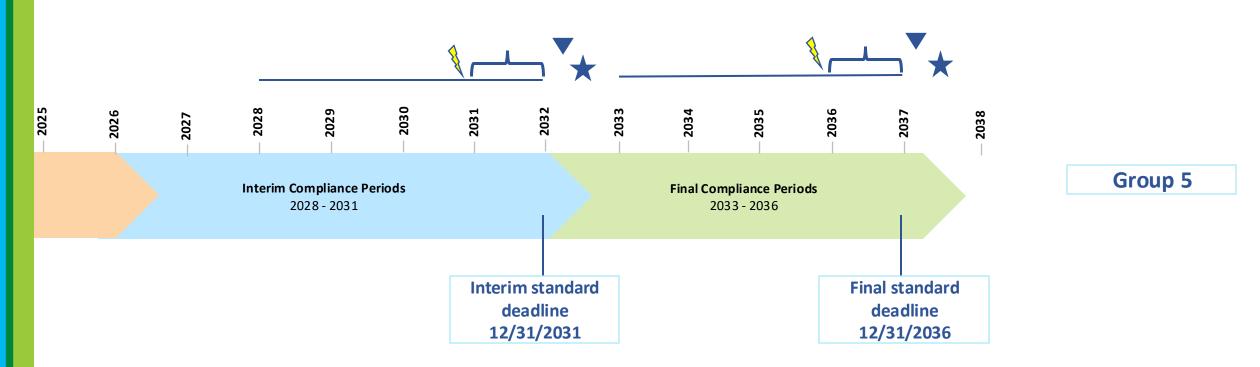
Timing

- Interim / final standard deadline
- Period of performance for relevant interim / final deadline evaluation
- EEMs completed to allow for 12 months of performance tracking

\$ Participants	
,	

Building Group	Included Buildings
Group 5	Multifamily 25k - 250k gsf

- BPIP-qualifying audit/assessment period —
- Deadline to file BPIP is 90 days before benchmarking deadline
- Benchmarking deadline, June 1 **



Support is Available at All Stages

Benchmark & Verify

Track and understand current performance.









Assess & Plan

Document building systems, audit consumption, catalogue conservation & efficiency measures, assess replacement options, determine renewable energy feasibility.





Implement

Tackle operations and maintenance improvements, retrofit, plan and budget for end-of-life replacements.









Next Steps

- Update performance map / target look-up tools May 2025
- Communicate baselines, standards, and deadlines to covered building owners (starting with County, Group 1, and Group 2) *Summer 2025*
- Develop and publish technical guidance in coordination with Building Performance Improvement Board
 - ✓ Benchmarking how-to guide update with BEPS specific guidance done
 - Performance path *May 2025*
 - BPIP *Fall 2025*
 - Documentation for eligibility
 - Audit and assessment requirements
 - Standards for equipment life
 - Standards for calculating simple payback (i.e., current and future energy costs)
 - Incentive resources
 - Avoided penalty calculations
- Launch standardized BPIP forms *Spring 2026*

Thanks



BEPS Website

Energy@MontgomeryCountyMD.gov

Key Regulation Modifications

- 1. Modify site EUI standards for some building types
- 2. Cap performance requirements at 30%
- 3. Modify definitions of "cost effective" and "economic infeasibility" to be defined within the effective useful life of each measure, rather than 25 years.
- 4. Included rent stabilized properties as specially designated buildings.
- 5. Require that energy improvement measures with a simple payback of 5 years or less be implemented a subsequent BPIP is approved.