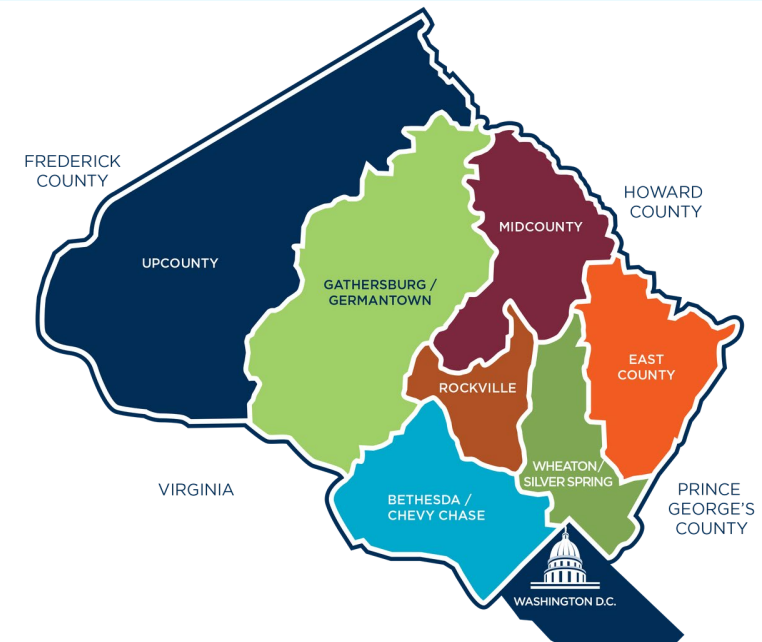




Wednesday, May 11, 2022

Bill 16-21: Environmental Sustainability - Building Energy Use Benchmarking and Performance Standards – Amendments



Learn more at <https://www.montgomerycountymd.gov/green/energy/beps.html>

Agenda

- **Bill 16-21 Legislative Look-Back**
- **Final Benchmarking and BEPS Law:**
 - Policy overview
 - Building coverage and definitions
 - Final timeline
 - Building Performance Improvement Board – Apply by 6/10
- **BEPS Regulation Preview:**
 - Numerical site EUI standards
 - Renewable energy allowance
 - Building Performance Improvement Plans
 - Considerations for under-resourced buildings

Bill 16-21 Legislative Timeline

Apr 1, 2021	<ul style="list-style-type: none">• County Executive transmitted the Building Energy Performance Standard legislation to the Council (full transmittal memorandum and legislative package)
May 4, 2021	<ul style="list-style-type: none">• BEPS legislation introduced during the County Council legislative session
Jul 20, 2021	<ul style="list-style-type: none">• Council held a public hearing on Bill 16-21. View the written testimony.
Oct 2021– Mar 2022	<ul style="list-style-type: none">• Four work sessions with Council’s Transportation & Environment (T&E) Committee work
Apr 19, 2022	<ul style="list-style-type: none">• County Council voted unanimously to pass bill 16-21 (staff packet)
May 2, 2022	<ul style="list-style-type: none">• County Executive Marc Elrich signed Bill 16-21 into law (recording of the bill signing event).
Jul 31, 2022	<ul style="list-style-type: none">• Bill 16-21 takes effect, 90 days after bill signing• BEPS Advisory Board can be appointed by the County Council after CE recommendation
Dec 31, 2023	<ul style="list-style-type: none">• Regulations dictating implementation of BEPS issued no later than this date

Montgomery County Bill 16-21

[Bill 16-21](#) establishes the following:

- 1. Cover additional properties under the Benchmarking Law**
 - Drop square footage threshold to 25,000 gross square feet
 - Add multifamily buildings

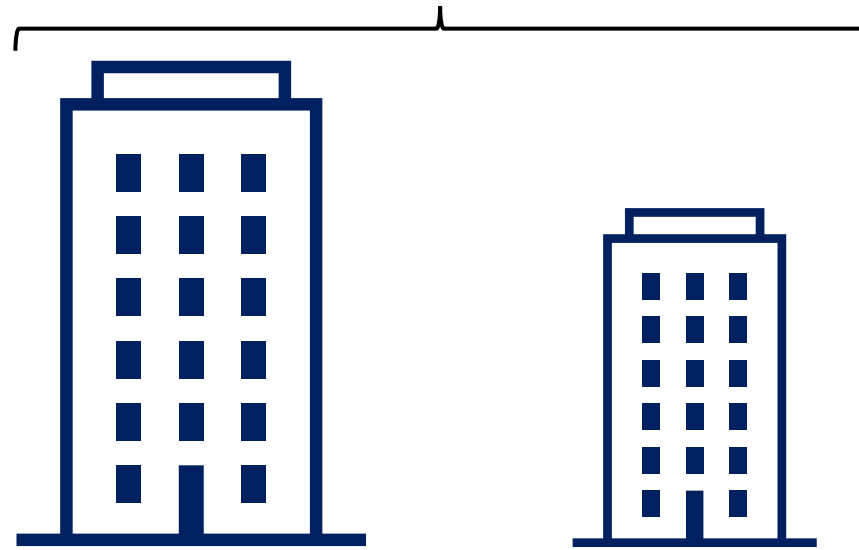
- 2. Phase in Building Energy Performance Standards (BEPS)**
 - Create framework for energy performance standards that buildings must meet over time
 - Require most buildings to become more energy efficient over time to meet long-term targets

- 3. Create a Building Performance Improvement Board**
 - 15 voting members to advise on BEPS regulations & implementation

- 4. Develop Executive Regulations by December 31, 2023**

Benchmarking & BEPS Building Coverage

Currently Covered



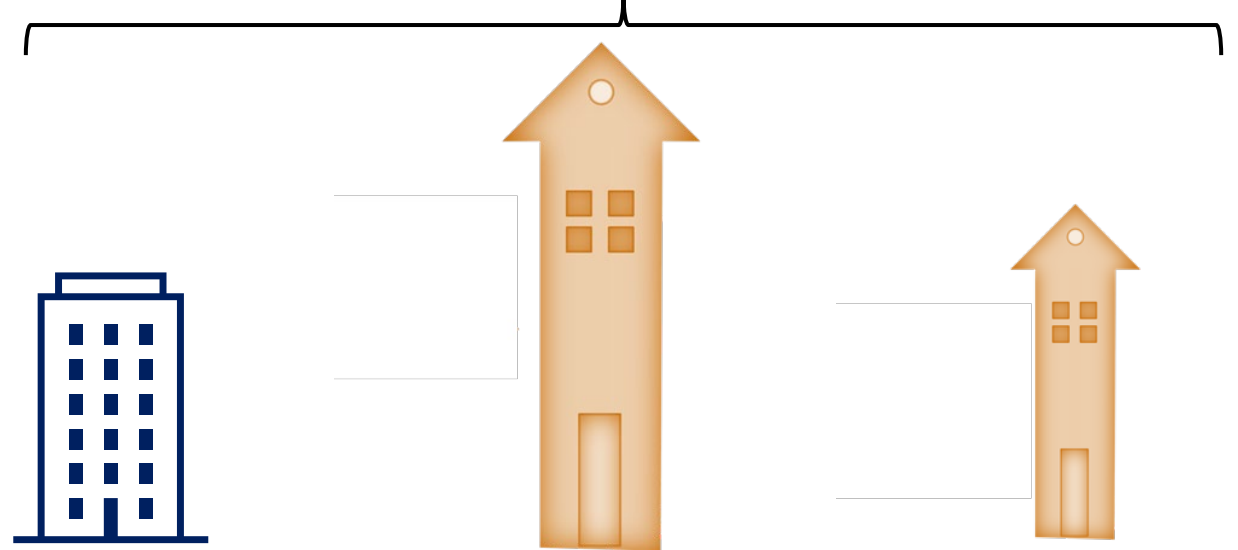
Group 1

Commercial buildings
250k+ GSF

Group 2

Commercial buildings
50k – 250k GSF

Newly Covered



Group 3

Commercial buildings
25k – 50k GSF
+ previously exempted
commercial buildings of all
sizes

Group 4

Multifamily buildings
250k + GSF

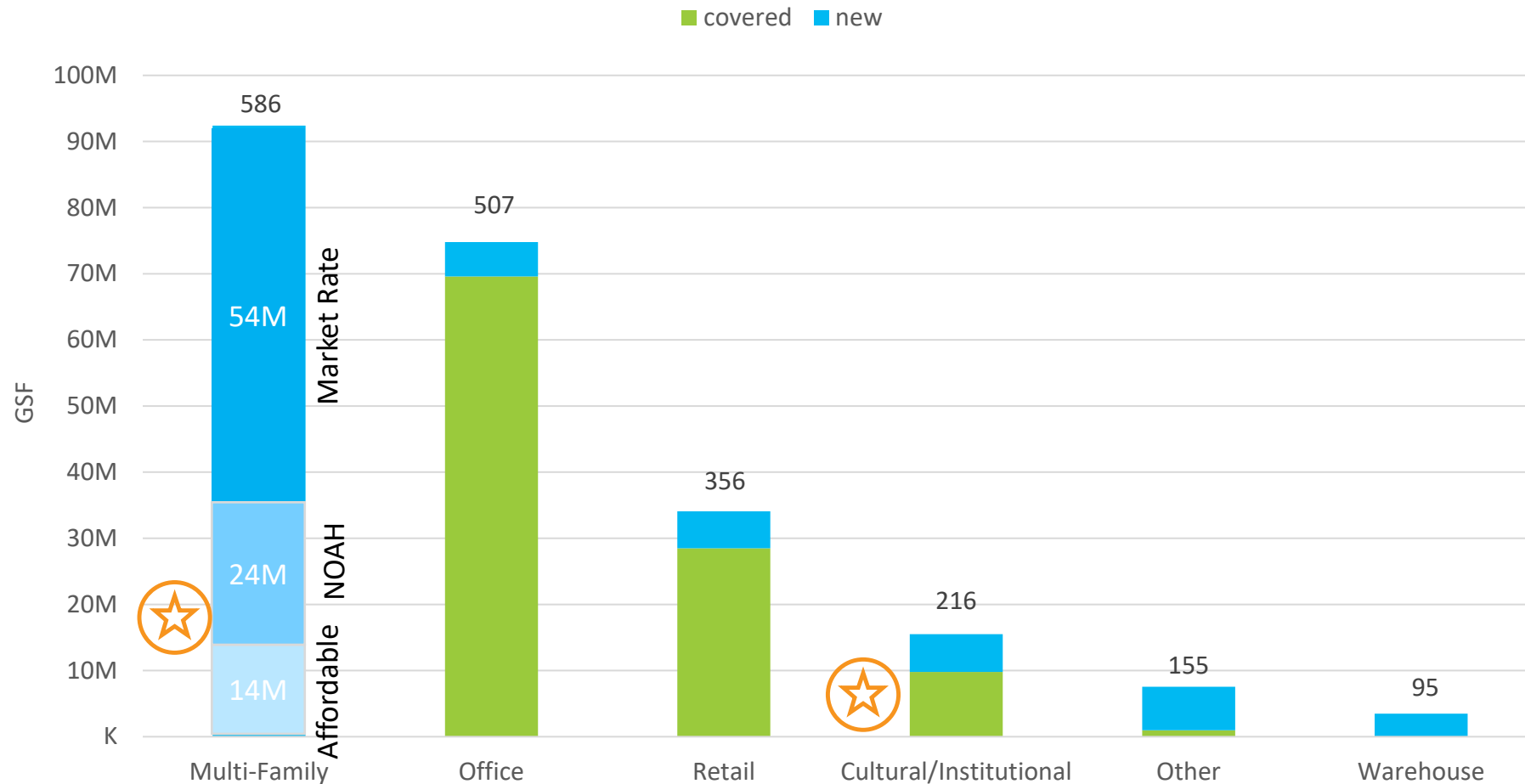
Group 5

Multifamily buildings
25k – 250k GSF

*Buildings with at least 10% warehousing,
self-storage, and manufacturing/industrial
uses were previously exempted*

County-Wide Covered Building Impacts

- **Currently covered:** 110M sq ft, 795 buildings, 40% of commercial floor area
- **Bill 16-21:** Will increase coverage to about 1,900 buildings, 80% of County's commercial building area



Updated Exemption and Waiver Criteria

Exemptions

Covered building for which **more than 50%** of the total gross floor area is used for:

- a) public assembly in a building without walls;
- b) industrial uses where the majority of energy is consumed for manufacturing, the generation of electric power or district thermal energy to be consumed offsite, or for other process loads; or**
- c) transportation, communications, or utility infrastructure.

*Buildings with **at least 10%** warehousing, self-storage, and manufacturing/industrial uses were previously exempted*

Waivers

1. Financial distress, defined as a building that:
 - a) is the subject of a tax lien sale or public auction due to property tax arrearages;
 - b) is controlled by a court appointed receiver; or
 - c) was recently acquired by a deed in lieu of foreclosure;
- 2. On average, less than one full-time-equivalent employee occupied the building during the calendar year being reported;**
3. The covered building is newly constructed and has received its certificate of use and occupancy during the calendar year for which benchmarking is required; or
4. The covered building was demolished or received its demolition permit during the calendar year for which benchmarking is required.

*Buildings with average physical **occupancy of less than 50%** throughout the calendar year were previously waived*

Updated Definition of a Covered Building

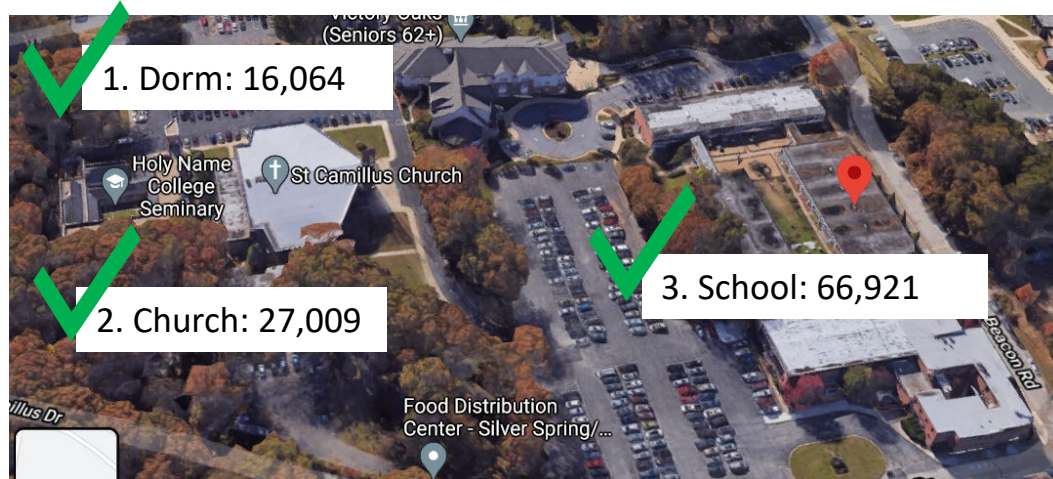
Current Covered Building Definition:

- Building, or any group of buildings that have the same parcel/property identification number, that meet the square footage threshold

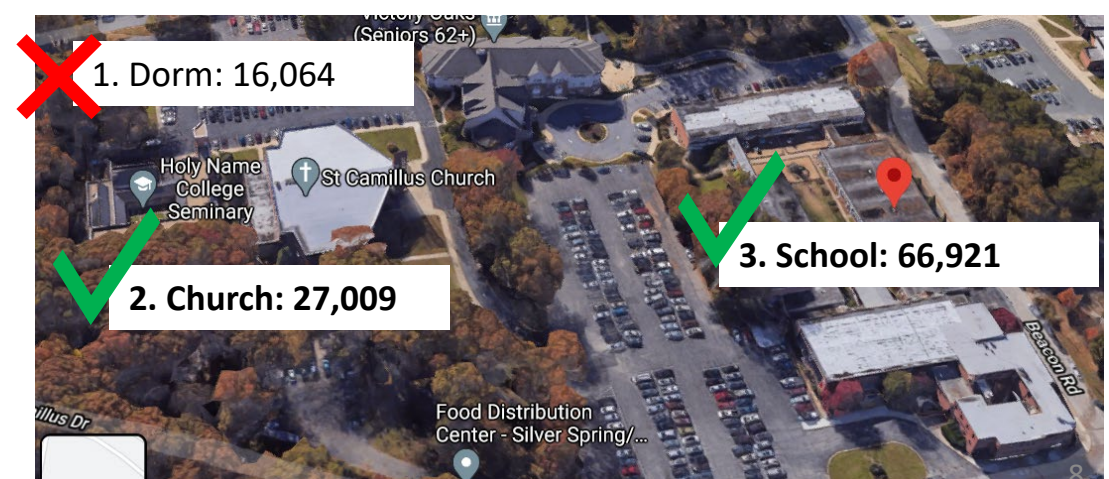
Bill 16-21 Amended Covered Building Definition:

- Single building that can be individually metered and share no interior common area;
- A group of buildings that share an energy meter, have a common heating or cooling system, share interior common areas, or otherwise cannot attribute energy use to a single building.

Parcel: All buildings on tax parcel (summing to 50k+ gsf) must benchmark



Building: Only single buildings 25k+ gsf must benchmark and are subject to BEPS



Building Coverage Examples: Multifamily

Covered

Highrise & mid-rise apartments/ condos



Garden apartments where buildings with shared systems/space are >25k gsf



Retirement homes & assisted living



Not Covered

Townhomes with no shared systems or interior area



Apartments where each building on the parcel is <25k gsf



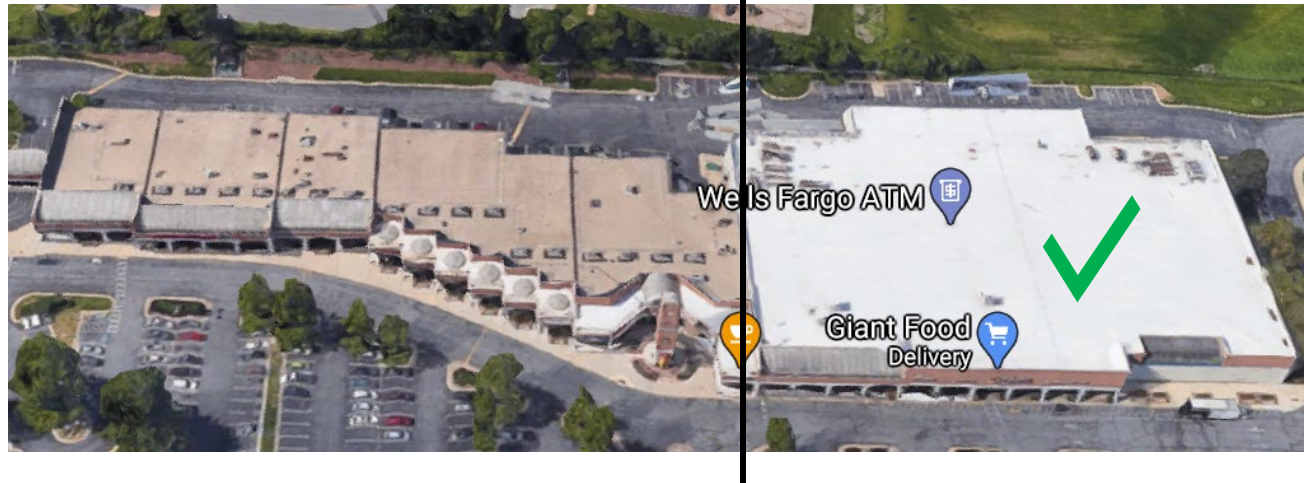
Units with no shared systems or interior area



Building Coverage Examples: Retail

Not Covered

Individual tenants within strip malls with separate energy systems, no shared interior space, and <25k gsf

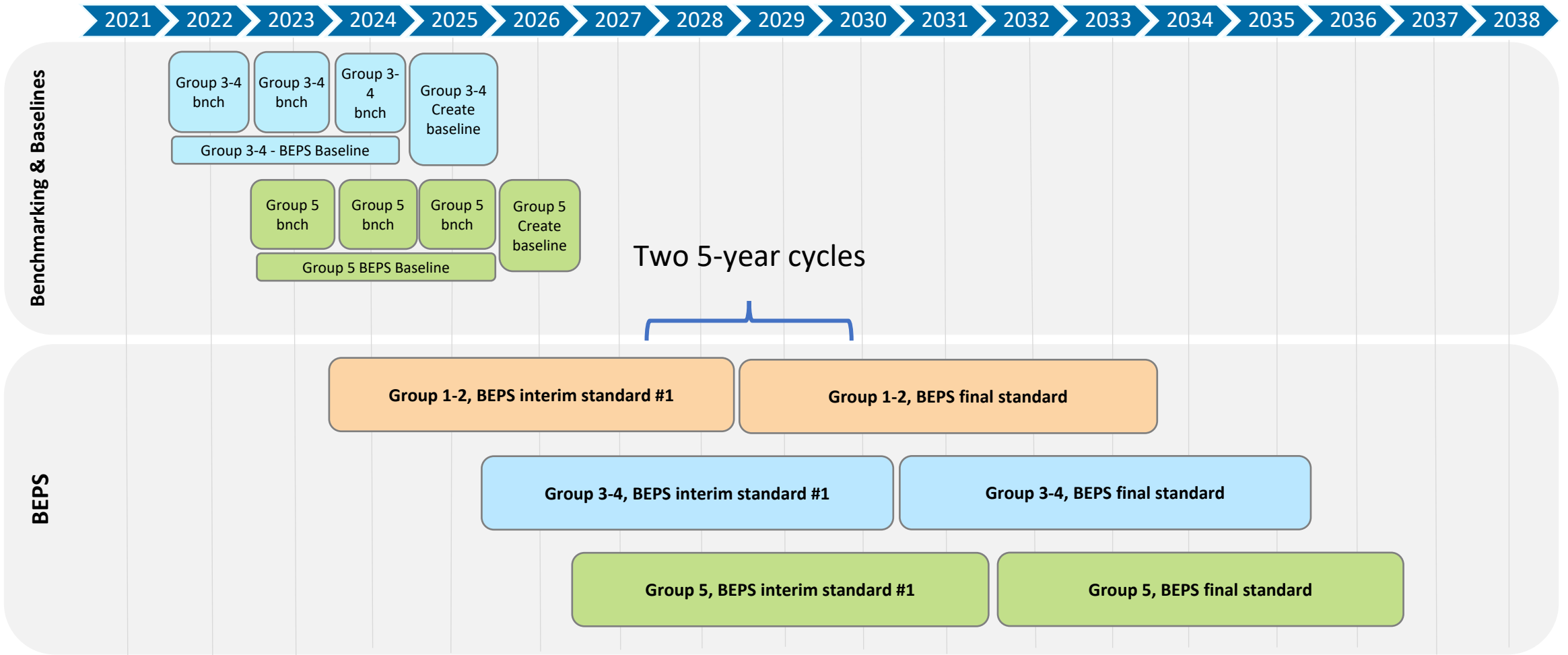


Covered

Individual tenants within strip malls with separate energy systems, no shared interior space, and >25k gsf

Timeline for Benchmarking and BEPS

- Commercial buildings 25k-50k gsf (Group 3) + MF buildings 250k+ gsf (Group 4) first benchmark CY 2022 data by June 1, 2023
- MF buildings 25k-250k gsf (Group 5) first benchmark CY 2023 data by June 1, 2024
- Commercial buildings 50k+ GSF (Groups 1 and 2) begin BEPS on January 1, 2024 and have 5 years until the first interim target

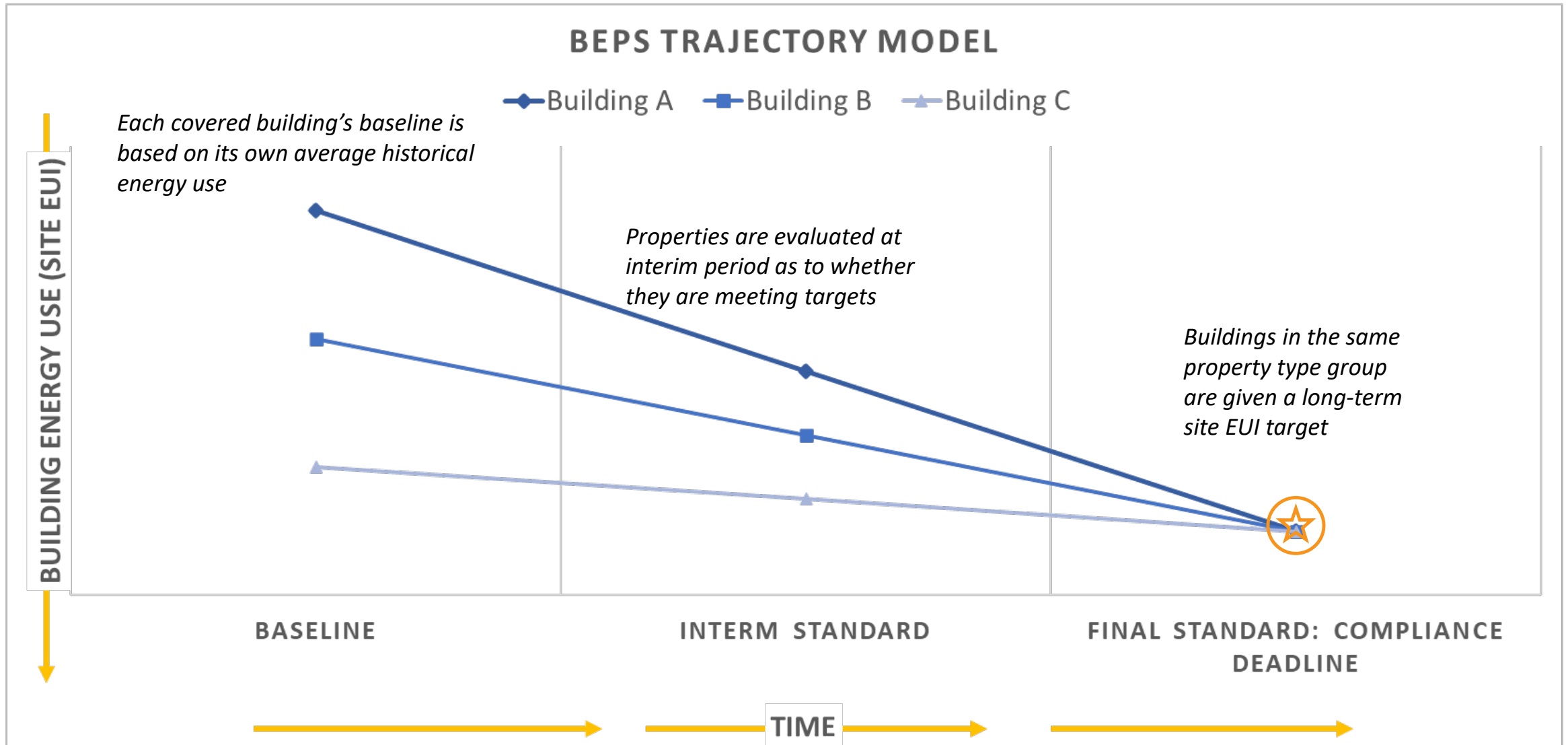


Important Dates: Benchmarking and BEPS

- Newly covered buildings benchmark for 3 years and receive a custom baseline based on average of 2 highest site EUI periods
- Buildings report annually on June 1 with BEPS progress assessed in interim and final standard years

Building Group	First Benchmarking Deadline	Baseline Years	Interim	Final BEPS
County	-	2018-2022	12/31/28	12/31/33
Group 1: Non Residential >250k Sqft	-	2018-2022	12/31/28	12/31/33
Group 2: Non Residential 50-250k Sqft	-	2018-2022	12/31/28	12/31/33
Group 3 & 4: Non Residential 25 - 50k, Residential >250k Sqft	<u>June 1, 2023</u>	2022-2024	12/31/30	12/31/35
Group 5: Residential 25-250k Sqft	<u>June 1, 2024</u>	2023-2025	12/31/31	12/31/36

BEPS Policy Overview



Montgomery County BEPS Performance Metric

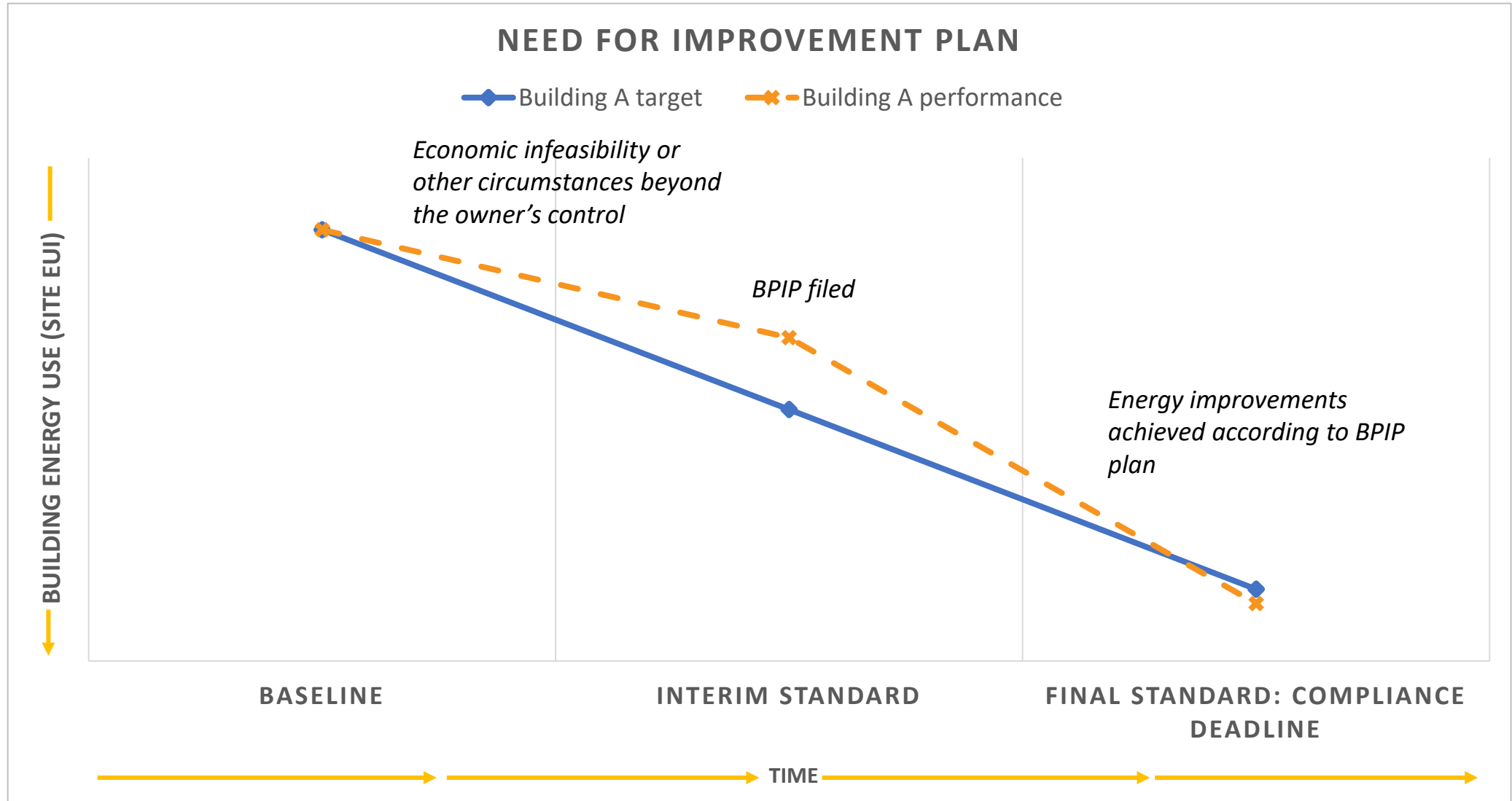
- Buildings in the same property type group are given a long-term **site energy use intensity (EUI) standard**
 - Site energy use intensity (site EUI) measures annual energy used on-site at the building divided by gross floor area (kBtu per gross square feet per year)
- Performance is measured in **normalized net site energy use intensity (EUI)**
 - Normalized site use minus energy generated from the renewable energy allowance divided by the total gross floor area of the building expressed (in kBtu per gross square feet per year)



$$\text{Normalized net site energy use intensity} = \frac{(\text{Normalized Site Energy Use} - \text{Renewable Energy Allowance})}{\text{Gross Square Feet}}$$



Building Performance Improvement Plans (BPIPs)



Building Performance Improvement Board

- The Building Performance Improvement Board (or BEPS advisory board) comprised of 15 voting members serving staggered 3-year terms to advise the Department on implementation of BEPS
- Tasked with advising on items such as:
 - Draft regulations
 - Reviewing building performance improvement plans
 - Handling situations of change in building ownership or property use type
 - Developing guidance for unique building situations
- Includes representation by:
 - Representatives of local electricity or natural gas utilities;
 - Providers of energy efficiency, building resilience and/or renewable energy services or consulting;
 - Owners or managers of affordable housing;
 - Owners or managers of multi-family residential buildings containing market-rate units;
 - Nonresidential building owners or managers;
 - Nonprofit building owners or managers;
 - Technical building design or operations professionals;
 - Providers of facilities, mechanical, or similar engineering services;
 - Commercial or multi-family residential construction finance or investment professionals;
 - Representatives of nonprofit organizations dedicated to climate action, resiliency, public health, green building, economic development, or building decarbonization;
 - Representatives of nonprofit organizations dedicated to racial equity or environmental justice.

Applications for the [Building Performance Improvement Board](#) are now being accepted. The deadline for application is **June 10, 2022**, and appointments will be made by the CE and Council following the Bill's effective date of July 31, 2022.

Benchmarking/BEPS Law and Future Regulations

	Benchmarking/BEPS Law	To be further defined via regulations
Building Coverage	Commercial & multifamily 25k+ gsf	
Timeline	<ul style="list-style-type: none"> 3 years of benchmarking data to inform a baseline Long-term targets with interim check in after 5 years 	Extensions or adjustments for under-resourced buildings like affordable housing, non-profit owners
Advisory Board	Establishment of Advisory Board	
Performance Metric	<ul style="list-style-type: none"> Site energy use intensity (EUI) Credit for renewable energy towards achieving BEPS targets 	<ul style="list-style-type: none"> Numerical site EUI performance standard for each building group (<i>BEPS Technical Report</i>) Detailed guidance for renewable energy as a consideration for credit towards BEPS (<i>Solar Credit Report</i>)
Alternative Compliance Path	Building Performance Improvement Plan (BPIP) for circumstances outside of building owners' control	<ul style="list-style-type: none"> Format and elements required in BPIP Definition of "economic feasibility" and other parameters that would necessitate a BPIP Extensions or adjustments for under resourced buildings like affordable housing, non-profit owners

Regulations will be issued no later than **December 31, 2023**.



Regulations: Numerical Site EUI Standards

Purpose:

- Establish building types with shared characteristics that facilitate the implementation and enforcement for every covered building
- Establish final performance standards for each building type

Goals:

- Create building type groupings that facilitate shared targets
- Guidance for mixed-use buildings or campuses where area-weighted targets may be appropriate
- Establish technically feasible, long-term targets that make significant progress towards CAP goals

BEPS Technical Report

- Identified potential BEPS performance target recommendations to evaluate technical feasibility, potential energy, GHG, and cost savings, and estimated costs county-wide and in case-study buildings
 - Energy Efficiency (EE) target – moderate reduction of electricity and gas use
 - EE-ZNC midpoint – mid-point between EE and ZNC targets
 - Zero-Net Carbon Compatible (ZNC) target – efficient electrification in an energy efficient building
- Executive summary, case studies, full report, and Council presentations available on [BEPS site](#)



Regulations: Renewable Energy Allowance

Purpose:

- Define a “renewable energy allowance” that is accounted for in the performance metric

Related Information:

- Performance metric:

$$\text{Normalized net site energy use intensity} = \frac{(\text{Normalized Site Energy Use} - \text{Renewable Energy Allowance})}{\text{Gross Square Feet}}$$

Goals:

- Outline types of renewable energy and ownership structures that are allowed to be counted towards BEPS compliance
- Establish allowance calculation

Renewable Energy Stakeholder Report

- [Renewable Energy report](#) underway by ICF
- Engaged stakeholders in a series of small-group feedback sessions
- Developing a range of technical approach options that consider:
 - Stakeholders' policy priorities
 - Available data & reporting processes
 - Calculation process
 - Net metering
 - REC retention
- Final report due summer 2022



Regulations: Building Performance Improvement Plans (BPIPs)

Purpose:

- If a covered building owner cannot reasonably meet one or more of the applicable interim or final performance standards due to economic infeasibility or other circumstances beyond the owner's control the owner may submit a proposed **building performance improvement plan**

Goals:

- Define economic infeasibility and other circumstances beyond the owner's control that dictate whether the building is eligible for a BPIP
- Establish format and required documentation for BPIP →
- Define cost-effectiveness criteria for savings measures
- Establish process for verifying implementation of improvement measures on agreed-upon timeline

BPIP must include:

- Documentation of economic infeasibility or circumstances beyond owner's control
- List of potential improvement measures, including energy savings & cost-benefit analysis;
- Plan and timeline for achieving energy improvements to the building's performance that will provide cost-effective energy savings, including estimated savings of implementing all cost-effective measures;
- Procedures for correcting any noncompliance or deviation from the plan.



Regulations: Extensions/Adjustments for Under-Resourced Buildings

Purpose:

- The Department may establish additional criteria recommended by the Building Performance Improvement Board for qualified affordable housing, non-profit buildings, and other buildings as appropriate to modify compliance with interim or final performance standards by regulation

Goals:

- Determine which other building types, if any, are appropriate to be considered under-resourced buildings
- Engage under-resourced building stakeholders for input
- Outline extensions, adjustments, alternative compliance paths, or other compliance modifications for under-resourced buildings



Regulations: Extensions/Adjustments for All Buildings

Purpose:

- The Director, in consultation with the Building Performance Improvement Board, may grant an extension or adjustment to an interim or final performance standard for a covered building whose owner submits a request along with documentation at least 90 days before the deadline for submitting documentation of compliance with an interim or final performance standard if any of the following conditions apply...
 - The Director determines that strict compliance with those standards would be economically infeasible, as defined by regulation, due to circumstances beyond the owner's control
 - Other acceptable conditions as determined by the Director through regulation

Goals:

- Define economic infeasibility
- Determine acceptable conditions for extensions or adjustments
- Establish details on extensions or adjustments

Bill 16-21 and Climate Solutions Now Act of 2022

- General Assembly recently passed [Senate Bill 528 - Climate Solutions Now Act of 2022](#) with an effective date of June 1, 2022:
 - Commercial and multifamily buildings 35k+ GSF to begin reporting data by 2025
 - Statewide energy performance standards established through regulations
 - MDE to adopt regulations on or before June 1, 2023
 - No explicit language prohibiting local authority on BEPS

Questions?

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Stay Informed

Check BEPS website for real-time updates:

<https://www.montgomerycountymd.gov/green/energy/beps.html>

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