

# Introduction to Maryland Benchmarking and BEPS Requirements

**December 11, 2024** 



How familiar are you with Maryland's benchmarking requirements and Building Energy Performance Standards (BEPS)?

## **Meet Our Speakers**



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Policy & Strategy
AOBA



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Vice President
Atlantic Realty Group



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Building Decarbonization Team
Maryland Department of the
Environment



## Agenda

- Scene-setting
- Maryland Benchmarking and BEPS
- Open Q&A



## How many buildings could benchmarking apply to?

Jurisdiction	Covered MF	Covered MF GFA			
Montgomery County	448	76,403,656			
PG County	164	20,992,121			
Baltimore County	237	24,659,538			
Baltimore City	321	40,864,183			
Howard	204	15,413,649			
Anne Arundel	167	16,414,900			
Jurisdiction	Covered Offices	Covered Office GFA			
Montgomery County	477	60,943,035			
PG County	221	20,251,952			







## What do you do today?

• Start reviewing your buildings and preparing to benchmark if you need to

Start reviewing the Preliminary Covered Buildings List





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## Agenda

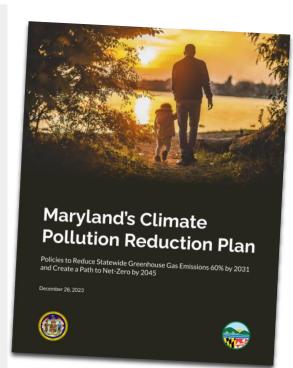
- MD BEPS background
- What's a "covered" building
- What building owners need to know
- Performance standards
- Alternative compliance
- Resources
- Addressing FAQs





## **Climate Plan Objectives**

- Reduce statewide greenhouse gas emissions (compared to 2006 levels)
  - 1. Achieve 60% reduction by 2031
  - 2. Achieve net-zero emissions by 2045
- Implement BEPS to help meet these reductions
- Create net benefits and green jobs
- Read the plan today @ mde.maryland.gov





## **Overview of BEPS Regulation**



**Energy Costs** 







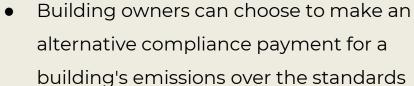
larger are "covered"

Most buildings 35,000 square feet or

- Start meeting phased emissions standards in 2030
- alternative compliance payment for a

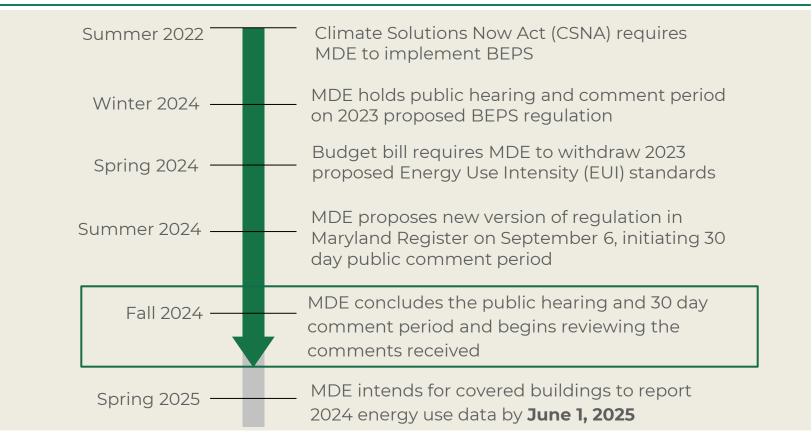








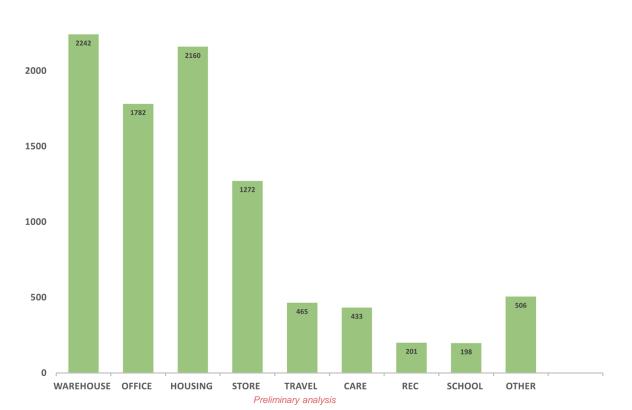
## **Regulation Timeline**





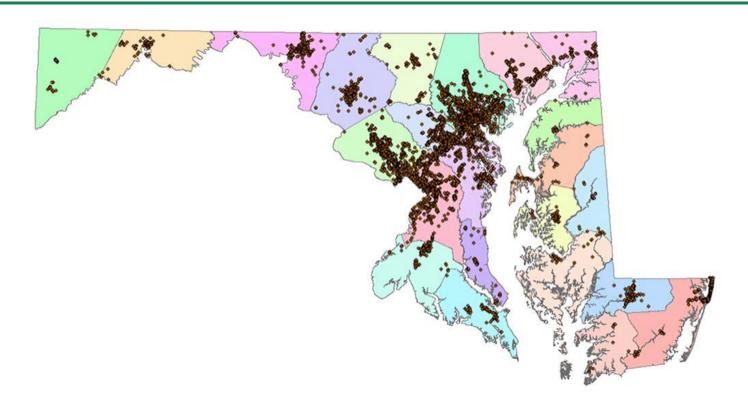
## **Covered Buildings: Property Types**





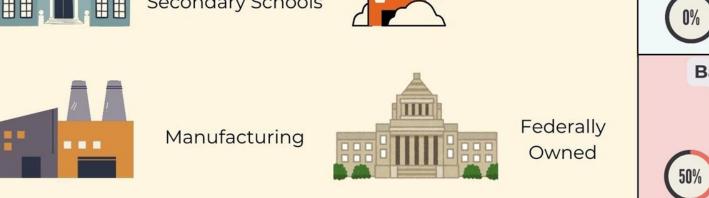


## **Covered Buildings: Locations**

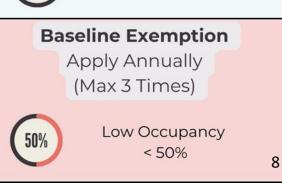


#### **ACP Adjustment Total Exemption** Apply Once Apply Annually Reduced Alternative **Compliance Payments** (ACP) for Designated Agricultural Affordable Housing Historic





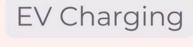




## **Annual Energy Exclusions**

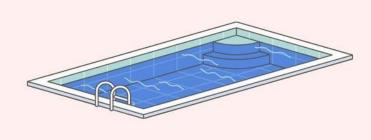
Food Service Facilities



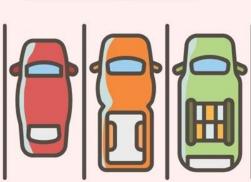




Outdoor Heated Pools



Parking Lots



Combustion Equipment

Required by Law



Other ESPM Exclusions listed in TM24-01





## What Does a Building Owner Need to Do?

1. Determine if a building is covered by calculating its square footage and/or evaluating exemption status

#### 2. Start benchmarking

- 3. Assess whether the building is already achieving the proposed standards
- 4. If not meeting the standards, plan to make improvements and determine when it's preferable to pay for the building's excess emissions



#### **How to Get Started**

#### Benchmarking

## Annually, starting in 2025

Use ENERGY STAR
Portfolio Manager to
track annual energy
use and greenhouse
gas emissions



#### **How to Get Started**

#### Benchmarking Assessment Annually, Annually, starting in 2025 starting in 2025 Use ENERGY STAR Determine if Portfolio Manager to changes are needed track annual energy to achieve the use and greenhouse standards gas emissions



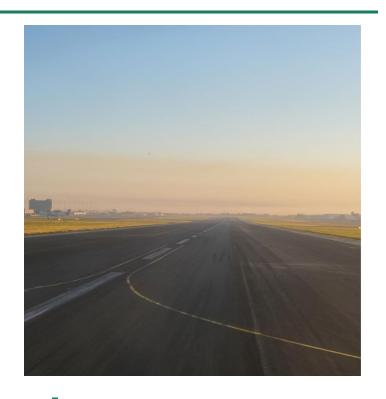
#### **How to Get Started**

Alternative Compliance Payment Achieve Standards Benchmarking Assessment Annually, Annually, Annually, starting in 2030 starting in 2025 starting in 2025 Achieve standards Use ENERGY STAR Determine if OR Portfolio Manager to changes are needed Achieve partial track annual energy to achieve the compliance and make use and greenhouse standards gas emissions alternative compliance payment



#### **Performance Standards**

- Phased reduction of on-site "direct" emissions by type of building
  - 1. Interim Standard 1 (2030 2034)
  - 2. Interim Standard 2 (2035 2039)
  - 3. Final Standard Net-Zero (2040 +)
- MDE intends to adopt an energy efficiency standard, called site energy use intensity (EUI) in 2027 – and recommends not installing inefficient electric equipment



## **Building owners have a long runway!**



## **Alternative Compliance**

Alternative compliance is available for the proposed net direct emissions standard in the form of payments set at the US Environmental Protection Agency's (EPA) social cost of greenhouse gas. These rates are the lowest permitted by law.

Year	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2040+
Annual Payment per metric ton of CO2E		\$234	\$238	\$242	\$246	\$250	\$254	\$258	\$262	\$266	\$270	\$4+

All figures are in 2020 dollars and will be adjusted for inflation to that year



## **Compliance Spectrum**

Undesirable

Ideal

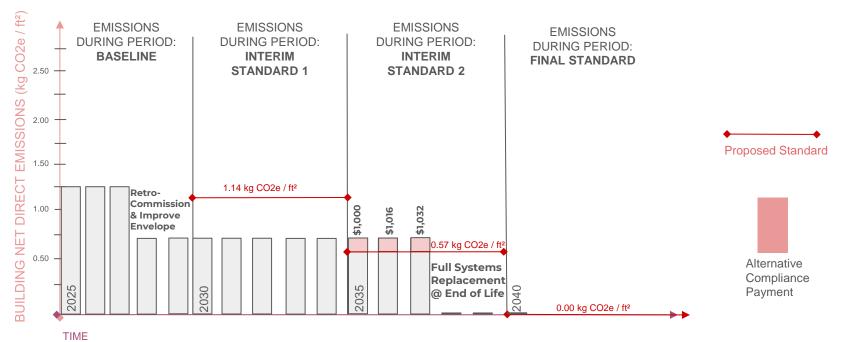
Building owner is not currently meeting the standard and makes no improvements to their property. They opt to meet compliance by making an Alternative Compliance Payment for the difference between the standard and their total emissions.

Building owner is already nearly in compliance and/or opts to make improvements to their property until they deem it is more cost-effective to make an Alternative Compliance Payment on remaining emissions over the proposed standard.

Building owner is already meeting or making improvements to meet the standard.



## **Example: Alternative Compliance**



#### 2035 Alternative Compliance Payment Calculation

Emissions over standard:  $0.67 - 0.57 \text{ kg CO2e/ft}^2 = 0.1 \text{ kg CO2e/ft}^2$   $0.1 \text{kg CO2e/ft}^2*40,000 \text{ ft}^2 / 1000 \text{ kg/ton} = 4 \text{ CO2e}$  4 tons CO2e \* \$250/ton CO2e in 2035 = \$1,000/year $$1000/12 = \sim $83/\text{mth}$ 



## **Resources and Financial Support**



Utility incentives for training, building tuneups, equipment



Federal Incentives, tax credits and deductions



Financing and technical assistance



Turn-key, low cost, standardized services to make buildings energy efficient



Grants and loans for energy efficiency



Clean Buildings Hub, grants, loans, rebates



## **Clean Buildings Hub**







## **Upcoming Outreach Sessions**

- **Dec. 18** Historic Property Working Group Session 1
- Dec. 19 District Energy Systems Working Group Session 1
- Jan. 22 Benchmarking & Reporting Working Group Session
- Jan. 28 Exemption Process Working Group Session 2



Signup today on the MDE BEPS Website





#### **New Draft Guidance Out Now**

- MDE Draft Guidance for Benchmarking in Energy Star Portfolio Manager
- MDE Draft Statewide BEPS and Montgomery County DEP Benchmarking Alignment Guidance
- MDE Draft Campus Compliance Guide
- MDE Draft Guidance on Viewing the Direct Emissions Metric in ENERGY STAR Portfolio Manager

Feedback Under Review







## **Addressing FAQs**



## **Garden Style Apartments**

- If you have separate garden style apartment buildings that aren't connected via envelope, shared systems, and/or energy meters, these are separate buildings.
  - o If they are over 35,000 square feet, you will need to report them.
  - If they are under 35,000 square feet, they do not need to comply.
- If you have separate garden style apartment buildings that are connected via envelope, shared systems, and/or energy meters, these are connected buildings.
  - If the combined gross floor area is over 35,000 square feet, you will need to report them.
  - If the combined gross floor area is under 35,000 square feet, they do not need to comply.

## **Garden-Style Benchmarking Example 1**

Each address is a **separate** building, <10,000 SF Each address has its own gas service Each unit has its own electric service Property isn't subject to MD Benchmarking or BEPS If listed on potentially covered building list, apply for removal



## **Garden-Style Benchmarking Example 2**

Each address is a **separate** building
Each **orange group** has its own gas service, total
group square footage ~50,000 SF

Two covered "buildings" denoted by **orange group** with shared gas metering

Optional to benchmark both buildings as one PM "property"



## **Garden-Style Benchmarking Example 3**

4004, 4008, and 4012 are one physical building because of a shared envelope

Total square footage = 40,000 SF Each unit has its own electric service Each building has its own gas service One covered "building" denoted by orange group
Just the building covered under MD BEPS

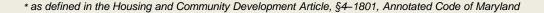




## **BEPS Affordable Housing Providers**

#### An affordable housing provider is defined as...

The <u>owner of a covered building</u> that primarily provides housing to limited income households, <u>where a minimum of 51 percent of households living within the building are at or below 80 percent of the area median income\*, or a covered building that is restricted under the Low-Income Housing Tax Credit (LIHTC) program.</u>









## **BEPS Affordable Housing Providers**

- Naturally Occurring Affordable Housing is eligible for the same flexibilities as regulated providers
  - Reduced alternative compliance payments
- You need to show documentation that supports the previous definition
- We want to hear from you on what documentation is available to you – Join the Affordable Housing Working Group







### **1st Floor Storefronts**

- Gross floor area is inclusive of the entire building
  - This includes from non-residential on-site tenants.
  - If it's a restaurant, exclude the energy use when you benchmark (see draft MoCo guidance for how)
  - o If it's a retail store, doctor's office, etc., you'll need to include the energy use when you benchmark.



# Covered Buildings List (CBL) & Notification

- Preliminary Potentially Covered Buildings List is on the BEPS Website mde.maryland.gov/BEPS
- Best effort to date at mapping over 9,000 covered buildings in the State
- We'll be releasing an updated version in January
- If your building meets the requirements, compliance is required regardless of:
  - Your listing on the CBL
  - Receiving notification by the Department (Ex. Postcard)



## Adjusting for Errors in the CBL

- There's a form for that!
  - o On the CBL but shouldn't be?
  - Not on the CBL but should be?
- We'll release the forms in January



## < 35k Square Feet on CBL Form

This form is for buildings listed on the potentially covered building that **are under 35,000 ft**<sup>2</sup>. Buildings seeking exemption must prove they do not meet the definition of a covered building, as specified in the BEPS regulation (COMAR 26.28.01.02.B):

"A covered building is a building that is a commercial or multifamily residential building in the State of Maryland or is owned by the State of Maryland and has a gross floor area of 35,000 square feet or more, excluding the parking garage area, and is:

- (i) A single building;
- (ii) One or more buildings held in the condominium form of ownership with a combined gross floor area of 35,000 square feet or more, excluding the parking garage area, and governed by a single board of managers; or
- (iii) Two or more buildings with a combined gross floor area of 35,000 square feet or more, excluding the parking garage area, that are served in whole or in part by the same electric or gas meter or are served by the same heating or cooling system or systems, which is not a district energy system."

Attachments\*

Please provide evidence that the building does not meet the definition of a covered building above.



# Getting Data From Your Electric and/or Gas Company

- You'll make a request in early 2025 for your calender year 2024 energy data
- In 2025, the utility has 90 days to supply the energy data to you
  - 30 days in 2026 and beyond
- You need to make your requests on or before March 1st, 2025 to be ready by June 1, 2025.
- Providers are required to supply this information to you. Contact us at BEPS.MDE@maryland.gov if you don't hear back.
- If you can show best efforts to obtain the data but were unable, this will be factored into compliance determinations.



#### **Contact Us**

## **Building Decarbonization Team**



beps.mde@maryland.gov



410-537-3183

#### **BEPS Website**



#### **BEPS Email List**

