

Maryland Building Energy Performance Standards (BEPS)

May 2023 Understanding the Maryland BEPS Standards

Mark Stewart, Climate Change Program Manager



This webinar will provide important background relating to the Maryland BEPS:

- Introduce the benchmarking tool
- Define key terms from the Maryland BEPS draft regulation
- Provide overview of the standards by property type
- Help you prepare for benchmarking and BEPS



US Environmental Protection Agency (EPA) ENERGY STAR Portfolio Manager tool will be used for Maryland benchmarking

| Portfolio Manager® | Help Language: <u>English Fran</u> g |
|--|--|
| Welcome to Portfolio Manager Helping you track and improve energy efficiency across your entire portfolio of properties. Username: * Password: * | ENERGY STAR Buildings Homepage Take a Training |
| Lforgot my password. Lforgot my username. Sign In Create a New Account | Learn More About Portfolio Manager These links provide more information from ENERGY STAR and are not available in French. |



"Greenhouse gas emissions or emissions" means gasses released into the atmosphere that contribute to climate change, including but not limited to carbon dioxide (CO2), as calculated by the benchmarking tool

"Direct greenhouse gas emissions or direct emissions" means greenhouse gas emissions produced on-site by covered buildings, as calculated by the benchmarking tool



- "Net direct greenhouse gas emissions or net direct emissions" means:
 - Direct greenhouse gas emissions; or
 - For a covered building connected to a district energy system, direct greenhouse gas emissions plus the greenhouse gas emissions attributable to thermal energy inputs from the district energy system used by the covered building, as calculated using the methodology provided in this regulation.
 - "Net direct greenhouse gas emissions or net direct emissions" does not include direct greenhouse gas emissions from a food service facility located within a covered building.



"Site energy use" means all energy used on-site by a covered building to meet the energy loads of the building.

- "Site energy use" includes electricity delivered to the building through the electric grid and/or generated on-site with renewable sources; thermal energy delivered to the building through a district energy system; and natural gas, diesel, propane, fuel oil, wood, coal, and other fuels used on-site.
- "Site energy use" excludes electricity used to charge vehicles and other electricity uses excluded from site energy use by the benchmarking tool.

"Site energy use intensity or site EUI" is calculated by the benchmarking tool by dividing the total energy consumed in one calendar year by the gross floor area of the building and reported as a value of a thousand British thermal units (kBTU) per square foot per year.



"Interim performance standard or interim standard" means the numeric values of net direct greenhouse gas emissions and site EUI which covered buildings must achieve by a specified calendar year that is prior to 2040.

"Final performance standard or final standard" means the numeric values of net direct greenhouse gas emissions and site EUI that each covered building must ultimately achieve on an annual basis in 2040 and beyond.



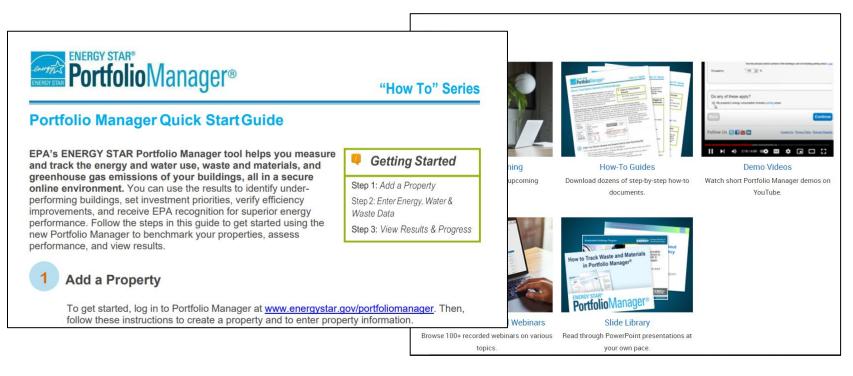
Understanding the Performance Standards

| | Net Direct Emissions Standards kg CO2e per square foot | | Site EUI Standards kBTU per square foot | |
|--|---|-----------------------------------|---|------------------------------------|
| Property Type | Interim Standard for 2030-2034 | Interim Standard for 2035-2039 | Final Standard for 2040 and beyond | Final Standard for 2040 and beyond |
| Benchmark your buildings' performance and assess if and when changes are needed using https://portfoliomanager.energystar.gov/ Learn about EPA ENERGY STAR Portfolio Manager property types and find yours on the <u>Portfolio Manager website</u> | | | | |



Preparing for Benchmarking and BEPS

- 1. Visit the website: https://portfoliomanager.energystar.gov/
- 2. Create an EPA ENERGY STAR Portfolio Manager account
- 3. Begin to access the catalog of how-to guides, pre-recorded and live online training





Contact

MDE BEPS website:

https://mde.maryland.gov/programs/air/ClimateChange/Pages/BEPS.aspx

MDE BEPS email:

BEPS.MDE@maryland.gov