

# OpenBlue Net Zero Buildings

## Montgomery County, MD, Building Energy Performance Standard (BEPS)



### What is the law about?

The [law](#) requires large buildings to reduce their energy use. It sets minimum standards of efficiency for each building type that must be achieved starting as early as 2028 for certain buildings, with final performance standards being achieved five years thereafter.

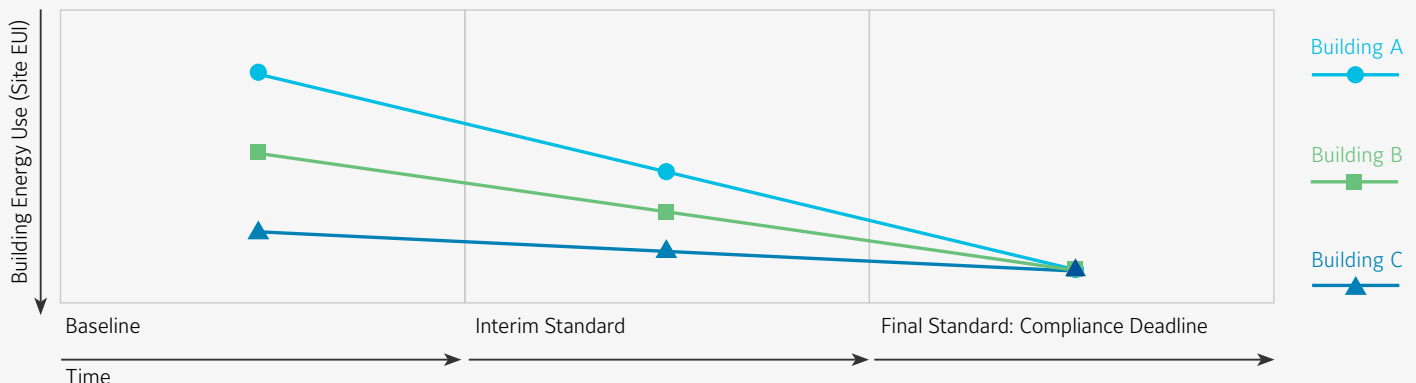
BEPS will eventually cover a variety of properties in Montgomery County, MD:

- Privately-owned non-residential buildings above 25,000 sq. ft.
- Multifamily residential buildings above 25,000 sq. ft.
- County owned buildings above 50,000 sq. ft.

The BEPS Executive Regulations, which establish the specific performance standards and deadlines, were adopted on December 31, 2023. They also establish a required format for an alternative compliance pathway, they provide details on the Renewable Energy Allowance, and they allow for extensions based on building eligibility.

Covered buildings are required to meet final site energy use intensity (site EUI) performance standards based on their types. They are also required to meet interim site EUI performance standards that are on a straight-line trajectory between the final performance standard and their baseline.

### BEPS Trajectory Model



Building Group	First Benchmarking Deadline	Baseline Years	Interim	Final BEPS
<b>COUNTY:</b> County-owned buildings 50k+ gsf	June 1, 2015	2018-2022	12/31/28	12/31/33
<b>GROUP 1:</b> Non-residential >250k gsf	June 1, 2016	2018-2022	12/31/28	12/31/33
<b>GROUP 2:</b> Non-residential 50-250k gsf	June 1, 2017	2018-2022	12/31/28	12/31/33
<b>GROUP 3 &amp; 4:</b> Non-residential 25-50k gsf, Residential >250k gsf	June 1, 2023	2022-2024	12/31/30	12/31/35
<b>GROUP 5:</b> Residential 25-250k gsf	June 1, 2024	2023-2025	12/31/31	12/31/36

Building owners can implement any combination of energy conservation and efficiency measures to meet the interim and final performance standards. Building owners who don't achieve the applicable interim or final performance may take the alternative compliance pathway by submitting a Building Performance Improvement Plan (BPIP) that outlines an implementation plan and timeline for achieving potential energy improvements.



### What it means for you

- More than 1,900 properties accounting for over 228 million square feet in Montgomery County, MD, are covered by BEPS.
- Non-residential buildings above 50,000 sq. ft. should already be reporting energy use to Montgomery County every June 1st.
- Non-residential buildings between 25,000 and 50,000 sq. ft. and residential buildings above 250,000 sq. ft. are required to start reporting by June 1, 2023. Residential buildings between 25,000 sq. ft. and 250,000 sq. ft. are required to start reporting by June 1, 2024. ([See https://www.montgomerycountymd.gov/green/energy/benchmarking.html.](https://www.montgomerycountymd.gov/green/energy/benchmarking.html))
- Final site EUI performance standards are expected to be released for the covered building types in 2023. You can also expect guidance for renewable energy allowances, and for adjustments or assistance to under-resourced sectors such as affordable housing and non-profits.
- Alternative Compliance Payments are still to be determined.

## How we can help

Partner with Johnson Controls to develop an excellent sustainability and resiliency program to comply with Building Performance Standards laws. We'll build your business case to meet your needs, and we'll help balance the traditional conflict between cost savings and investment. We offer a wide assortment of building systems that can help you reduce your facility's emissions. We blend technical and operational expertise with our reputation for quality.

### Step 1: Assess your facility.

We look at current and anticipated use to understand present energy usage, plan for energy needs, and review indoor air quality. We also make sure all your systems are right sized for your facility, which is essential for efficient operation.

### Step 2: Help build your business case.

Our team develops models specific to your equipment and facility, giving you a clear picture of potential efficiency gains and lifecycle cost improvements. We draw on our industry know-how to incorporate additional opportunities to optimize performance.

### Step 3: Recommend next steps.

We lay out a step-by-step plan for you to modernize against your goals and budget. We give you a menu of options and recommendations that make sense for your facility, and we include a range of smart technologies, such as tools to support predictive maintenance.

### HVAC Equipment and Hydronic Systems

We offer the largest portfolio of HVAC equipment and controls in the world. With expertise in mechanical retrofitting existing systems, our team performs audits of the current equipment and identifies deficiencies that prevent you from meeting regulations and best practices in indoor air quality. From there our experts will design and recommend solutions to meet today's energy, decarbonization and healthy buildings initiatives.

### Building Automation Systems and Controls

Our next generation building automation systems make it possible to extend automated control to every building system from a single platform. We make everything from simple, configurable controls to highly programmable automation systems for entire facilities. Our systems allow you to improve control of your key systems and improve desired outcomes against your goals for indicators such as CO2, Energy Use Index (EUI), kWh, emissions intensity.

### Accessible Digital Tools

Our suite of tailored, AI-powered digital solutions optimize building performance through predictive maintenance, remote diagnostics, emission management, goal and targets, and more. Leverage our OpenBlue platform to integrate with Metasys and third-party BMS to deliver optimal building outcomes, ensuring compliance with building performance standards while also balancing comfort, air quality, costs and emissions.

### Water Usage Reduction

We supply the expertise and funding mechanisms to provide water and energy conservation solutions for businesses. By helping decrease water leakage and operational costs, we can reduce water consumption by up to 50 percent. Water heaters can be upgraded from fossil fuel fired to electric, or we can provide high efficiency or indirect options. Our experts are able to calculate the most effective ways to reduce water usage in sinks and toilets.

### Lighting

We partner with the world's premier lighting innovators to revolutionize interior and exterior lighting. Our experienced lighting engineers have designed and executed hundreds of millions of dollars in lighting projects around the world. By integrating the lighting systems to work in conjunction with existing building systems the result is a holistic system better suited for energy efficiency, convenience and security. From clinics to classrooms, these intelligent lighting systems provide advantages well beyond energy savings to help buildings run more efficiently.

## Your partner in sustainability and net zero

As leaders in sustainability and net zero, our approach brings together expertise with leading capability to deliver energy efficient outcomes through our building and infrastructure management services. Upon review of your goals and your facility, our team advises on all aspects of ESG and sustainability to provide a comprehensive roadmap of actions and solutions to meet the critical milestones.

## Ready to get started?

Contact your local Johnson Controls representative or visit [johnsoncontrols.com/BPS](https://johnsoncontrols.com/BPS)

