

Open**Blue**Net Zero Buildings

Maryland's Building Emissions Performance Standard (BEPS)



On December 13, 2024, the Maryland Department of Energy (MDE) issued a Notice of Final Action for COMAR 26.28 Building Energy Performance Standards (BEPS) in the <u>Maryland Register</u>. The regulations, which do not differ substantially from the <u>proposed text</u>, went into effect on December 23, 2024.

What this law covers

The law establishes requirements for large buildings to reduce their energy use starting in 2025. It sets minimum efficiency and emissions standards for each building type that must be achieved by 2030, with interim standards by 2035 and final standards by 2040.

BEPS covers a variety of properties in Maryland:

- · Any building owned by the State of Maryland
- · Non-residential buildings above 35,000 sq. ft.
- Residential multifamily buildings above 35,000 sq. ft.
- Two or more buildings with combined gross floor area above 35,000 sq. ft. that are served by the same electric or gas meter or served by the same heating or cooling system

Initially, covered buildings were required to meet final site energy use intensity (site EUI) standards and "net direct" greenhouse gas emission (GHG) standards based on type. As of September, 2024, the new proposed regulations do not include site EUI limits as a performance target. Budget amendments require MDE to collect more benchmarking data and conduct further analysis before proposing site EUI limits. Therefore, the next step for building owners is to submit ENERGY STAR benchmarking data to MDE by the June 1, 2025, deadline.

In addition, covered buildings must reduce their net direct GHG emissions to meet compliance. The final GHG performance standard is zero net direct emissions by 2040, with 2025 serving as the baseline year and interim GHG standards in 2030 and 2035 (see the table below). Building owners can implement any combination of energy conservation, efficiency and electrification measures to meet the standards.

What it means for you

- Covered buildings must start reporting their 2025 energy and emissions data in 2026.
- Officially designated historic properties, elementary and secondary schools, manufacturing buildings and agricultural buildings are exempt.
- Buildings on a campus, such as universities, hospitals and multifamily properties, may optionally benchmark as a campus and meet the standards at a blended campus level.
- A <u>Building Energy Transition Implementation Task Force</u> has been created to advise building owners on the financial resources needed to comply.
- · Alternative compliance is available by paying a fee that will increase every year between 2030 and 2040.
- · You can learn more on Maryland's BEPS webpage.
- Be sure to familiarize yourself with the net direct emissions standards:

Net Direct Emissions Standards (Kg CO2e per square foot)					
Property Type	Interim Standard for 2030—2034	Interim Standard for 2035—2039	Final Standard for 2040 and beyond		
Adult Education	2.34	1.17	0		
Ambulatory Surgical Center	1.76	0.88	0		
Aquarium	1.99	1	0		
Bank Branch	1.01	0.5	0		
Bar/Nightclub	1.7	0.85	0		
Barracks	0.57	0.29	0		
Bowling Alley	2.07	1.03	0		
Casino	1.03	0.52	0		
College/University	2.43	1.21	0		
Convenience Store with Gas Station	2.25	1.13	0		
Convenience Store without Gas Station	2.25	1.13	0		
Convention Center	0.39	0.19	0		
Courthouse	1.14	0.57	0		
Data Center	1.26	0.63	0		
Distribution Center	0.58	0.29	0		
Drinking Water Treatment & Distribution	exempt	exempt	exempt		
Enclosed Mall	0.24	0.12	0		
Energy/Power Station	exempt	exempt	exempt		
Fast Food Restaurant	exempt	exempt	exempt		
Financial Office	0.32	0.16	0		
Fire Station	1.7	0.85	0		
Fitness Center/Health Club/Gym	2.87	1.43	0		

Net Direct Emissions Standards (Kg CO2e per square foot)					
Property Type	Interim Standard for 2030—2034	Interim Standard for 2035—2039	Final Standard for 2040 and beyond		
Food Sales	2.25	1.13	0		
Food Service	exempt	exempt	exempt		
Heated Swimming Pool	2.07	1.03	0		
Hospital (General Medical and Surgical)	6.1	3.05	0		
Hotel	1.47	0.74	0		
Ice/Curling Rink	2.07	1.03	0		
Indoor Arena	1.03	0.52	0		
K-12 School	exempt	exempt	exempt		
Laboratory	5.35	2.68	0		
Library	1.92	0.96	0		
Lifestyle Center	0.91	0.46	0		
Mailing Center/Post Office	0.92	0.46	0		
Medical Office	0.18	0.09	0		
Movie Theater	0.78	0.39	0		
Multifamily Housing	0.82	0.41	0		
Museum	0.75	0.38	0		
Non-Refrigerated Warehouse	0.09	0.05	0		
Office	0.22	0.11	0		
Other — Education	1.59	0.8	0		
Other — Entertainment/Public Assembly	0.54	0.27	0		
Other — Lodging/Residential	0.002	0.001	0		
Other — Mall	1.4	0.7	0		
Other — Other	1.6	0.8	0		
Other — Public Services	2.12	1.06	0		
Other — Recreation	0.7	0.35	0		
Other — Restaurant/Bar	exempt	exempt	exempt		
Other — Services	2.63	1.31	0		
Other — Specialty Hospital	6.1	3.05	0		
Other — Stadium	0.31	0.16	0		
Other — Technology/Science	0.001	0.001	0		
Other — Utility	exempt	exempt	exempt		
Outpatient Rehabilitation/Physical Therapy	1.76	0.88	0		
Parking	exempt	exempt	exempt		

Net	Direct Emissions Standards (Kg (CO2e per square foot)	
Property Type	Interim Standard for 2030—2034	Interim Standard for 2035—2039	Final Standard for 2040 and beyond
Performing Arts	2.38	1.19	0
Personal Services (Health/Beauty, Dry Cleaning, etc.)	2.17	1.09	0
Police Station	1.52	0.76	0
Pre-school/Daycare	2.45	1.23	0
Prison/Incarceration	0.57	0.29	0
Race Track	1.03	0.52	0
Refrigerated Warehouse	1.37	0.69	0
Repair Services (Vehicle, Shoe, Locksmith, etc.)	2.16	1.08	0
Residence Hall/Dormitory	0.7	0.35	0
Residential Care Facility	1.43	0.72	0
Restaurant	exempt	exempt	exempt
Retail Store	0.6	0.3	0
Roller Rink	2.07	1.03	0
Self-Storage Facility	0.19	0.1	0
Senior Living Community	1.43	0.72	0
Social/Meeting Hall	1.53	0.76	0
Stadium (Closed)	0.31	0.16	0
Stadium (Open)	0.32	0.16	0
Strip Mall	1.9	0.95	0
Supermarket/Grocery Store	2.25	1.13	0
Transportation Terminal/Station	2.22	1.11	0
Urgent Care/Clinic/Other Outpatient	1.76	0.88	0
Vehicle Dealership	2.23	1.12	0
Veterinary Office	1.76	0.88	0
Vocational School	2.34	1.17	0
Wastewater Treatment Plant	exempt	exempt	exempt
Wholesale Club/Supercenter	0.6	0.3	0
Worship Facility	0.87	0.44	0
Zoo	1.03	0.52	0

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, Al-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 thousands of 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

