

Insights into Building Performance Standards in the Northeast Region

(January 2024)

Key Takeaways

- Building Performance Standards (BPS) are implemented by state or local governments to enhance building energy efficiency and reduce carbon emissions in commercial and multifamily buildings.
- Seven jurisdictions in the Northeast region currently have BPS: New York City, Boston, Cambridge, Washington D.C., Montgomery County, Maryland, and Philadelphia.
- Each jurisdiction sets BPS's GHG emission reduction goals for the next decade.
- The metric for compliance varies across the region; New York City and Boston use CO2 per square foot, while Cambridge, Washington, D.C., and Mongomery County use site energy use intensity.
- One of the main challenges in implementing BPS is aligning building energy codes and BPS metrics.
- BPS scope varies: Maryland targets buildings over 35,000 square feet, New York City over 25,000 square feet, Boston over 20,000 square feet and Washington D.C. plans to cover buildings over 10,000 square feet by 2026.
- Periodic compliance assessments are a key feature in the BPS frameworks in the region.
- Montgomery County and Boston incorporate equity measures through Green Buildings Property Tax Credit and Equitable Investment Fund to ensure fair distribution of emission reduction benefits.

Introduction

Buildings are one of the top emitters of greenhouse gas (GHG) emissions in the Northeast region.¹ As jurisdictions strive to meet climate goals, they must focus on the energy efficiency of buildings. One key policy tool gaining prominence in this effort is <u>Building Performance Standards (BPS)</u>. These standards are relatively new in practice and there is no uniform approach for how they are designed or operated. The goal of a BPS is to require building owners to adhere to specific energy targets that become more stringent over time, playing a critical role in achieving emissions reductions. Across the country, jurisdictions are implementing BPS to drive changes in building energy consumption and emissions. This resource highlights BPS examples from the Northeast region including New York City, Boston and Cambridge, Washington D.C., Montgomery County, Maryland, and Philadelphia. We illustrate various program designs, emphasize the significance of BPS in the broader context of building efficiency, and offer insights and best practices for jurisdictions on the path to adopting similar standards.

¹ Acadia Center, Building Electrification, available at: <u>https://acadiacenter.org/work/buildings-and-transportation/buildings/</u>.



What is a Building Performance Standard?

A <u>BPS</u> is a policy that requires owners of commercial and large multifamily buildings to meet performance targets over time, usually with the goal of reducing greenhouse gas emissions in accordance with climate change goals. Common metrics used in these programs include energy use intensity (EUI), greenhouse gas emissions (CO2 equivalent), and efficiency scores like ENERGY STAR Score, and/or water use intensity (WUI). A BPS can be implemented at any level of government including federal, state, county, and municipal.

Building Performance Standards Examples in the Northeast Region

New York City, New York: Local Law 97 was included in the Climate Mobilization Act, passed by the City Council in April 2019 as part of Mayor de Blasio's New York City (NYC) Green New Deal. Under this law, most buildings over 25,000 square feet will be required to meet new energy efficiency and greenhouse gas emissions limits by 2024, with stricter limits coming into effect in 2030. Limits will be established every five years through 2050, but only the first two periods are currently set. Period 1 covers 2024-2029 and is designed to impact the top 20 percent of emitters. Period 2 runs 2030 to 2034 and is designed to impact the top 75 percent of emitters. The overarching goal is to reduce the emissions produced by the city's largest buildings by 40 percent by 2030 and 80 percent by 2050. The law also established the Local Law 97 Advisory Board and Climate Working Groups to advise the city on how best to meet these aggressive sustainability goals.

Local Law 97 is estimated to cover 11,800 buildings in the city including buildings that exceed 25,000 gross square feet, two or more buildings on the same tax lot that together exceed 50,000 square feet, and two or more buildings owned by a condo association that are governed by the same board of managers and that together exceed 50,000 square feet. Compliance is measured in metric tons of carbon dioxide equivalent (CO2e) per square foot of building space. To comply, owners of the buildings covered by Local Law 97 will be required to file a report with the NYC Department of Buildings by May 1, 2025 and by May 1 every year thereafter, detailing their annual greenhouse gas emissions. The report must be certified by a registered design professional. Additionally, starting in 2025, owners of covered buildings who submit a report indicating that their building exceeded its annual building emissions limit will be liable for a civil penalty of \$268/metric ton of CO2e emitted over the limit.

Based on a <u>recommendation</u> from the Local Law 97 Advisory Board Report, the Board encourages load shifting by implementing a Time of Use Coefficient. NYC conducted a <u>research project</u> exploring the possibility of establishing a carbon market where buildings surpassing their energy efficiency targets could trade carbon credits with underperforming buildings. The research concluded that a trading mechanism for emission reduction in NYC has the potential to significantly reduce compliance costs and enhance the benefits of Local Law 97. However, the effort determined a need for further research and inclusion of diverse stakeholder groups in the discussion to avoid inequitable outcomes. The law outlines methods to invest equitably and limit localized pollution in historically marginalized communities and reserves two seats on the Advisory Board for members representing environmental justice communities.

Boston, Massachusetts: In 2021, the city of Boston adopted the <u>Building Energy Reduction and Disclosure</u> <u>Ordinance (BERDO 2.0)</u>. BERDO 2.0 gives the city authority to set emissions targets and reporting requirements for buildings greater than or equal to 20,000 gross square feet (GSF), establish an Emissions Review Board with community representation to increase accountability and transparency, and establish an environmental justice Buildings Emissions Investment Fund. BERDO 2.0's aim is to reduce building emissions 50 percent by 2030 and become net zero by 2050 in alignment with city goals. The Ordinance is estimated to cover 5,927 buildings in the city including non-residential buildings that are 20,000 square feet or larger (excluding parking), residential buildings that have 15 or more units, any parcel with multiple buildings that add up to at least 20,000 square feet (excluding parking) or have 15 or more residential units,³ and buildings owned by the city and the Boston Housing Authority. Compliance is measured in kilograms of carbon dioxide equivalent (CO2e) per square foot. Buildings must begin complying with emissions standards in 2025 (buildings of 35,000 square feet or more) and in 2030 (buildings of 20,000 square feet or more).

BERDO 2.0 requires building owners to <u>report</u> emissions annually by May 15. Reporting started in 2022 and captured 2021 data. The data to be reported includes:

- Energy consumption data by fuel type and utility meter (which are used to calculate CO2 emissions)
- Building uses and associated floor area
- Any applicable Renewable Energy Certificates (RECs)
- Any applicable Power Purchase Agreements (PPAs)
- Details about any onsite power generation or electric vehicle charging stations
- Contact information for building ownership/management.

Boston partnered with <u>One Square World</u>, a third-party consultant, and collaborated with community-based organizations to conduct extensive outreach and gather feedback to develop BERDO 2.0. The Ordinance establishes the <u>Equitable Emissions Investment Fund</u>, which will collect any related payments and penalties made to BERDO and invest them in local building carbon abatement projects that benefit environmental justice communities and populations disproportionately affected by air pollution.

Cambridge, Massachusetts: In 2014, led by the Climate and Energy team in Cambridge's Community Development Department, the city adopted the <u>Building Energy Use Disclosure Ordinance (BEUDO)</u>, part of the Cambridge Green New Deal. The 2014 BUEDO requires benchmarking and disclosure of building energy performance for large commercial, institutional, and multifamily buildings. In 2023, the Cambridge City Council voted to amend the ordinance to establish a BPS, requiring large non-residential buildings to reach net zero greenhouse gas emissions by 2035 and mid-size non-residential buildings to do so by 2050. The BPS applies the 2035 target to non-residential buildings of 100,000 or more square feet and the 2050 target to non-residential buildings of 25,000 to 99,999 square feet. The ordinance does not apply to residential buildings. Covered buildings will be required to reduce emissions gradually, relative to a 2018–2019 baseline, over compliance periods starting in 2026 and 2030. Building owners subject to the ordinance are required to track their energy (i.e., electricity, natural gas, steam, and fuel oil) and water use and report it annually to the Community

Development Department. The reporting based on BEUDO started in May 2015 and is completed through the <u>U.S. EPA's ENERGY STAR Portfolio Manager</u>. Portfolio Manager processes information to show energy use intensity (i.e., energy use per square foot), GHG emissions, and other metrics. Building owners who fail to comply will be fined \$234 per metric ton of excess emissions.

Cambridge's BEUDO was passed after over two years of stakeholder engagement and debate. In addition to BEUDO, the Cambridge Green New Deal contains two other components — an ordinance establishing training programs for green jobs and a zoning petition introducing new emissions accounting requirements.

Washington D.C.: The <u>Building Energy Performance Standards (BEPS)</u> Program was created in Title III of the <u>Clean Energy DC Omnibus Amendment Act of 2018</u>. BEPS was created to help meet the energy and climate goals of the <u>Sustainable DC</u> plan, to reduce greenhouse gas emissions and energy consumption to 50 percent by 2032 and to reach carbon neutrality by 2050. The BEPS program <u>applies</u> to:

- 1) Beginning 2021: All privately-owned buildings at least 50,000 square feet; All District-owned or District instrumentality-owned buildings at least 10,000 square feet;
- 2) Beginning 2027: All privately-owned buildings with at least 25,000 square feet;
- 3) Beginning 2033: All privately-owned buildings at least 10,000 square feet.

In January 2021, the Department of Energy and Environment (DOEE) established <u>property types and BEPS</u> for each property type, or an equivalent metric for buildings that do not receive an ENERGY STAR score. The DOEE is required to establish new standards every six years. DOEE and building owners measure whether a building meets BEPS through the <u>Energy Benchmarking</u> program. Buildings that do not meet the standards for a <u>BEPS</u> <u>period</u> are placed in a <u>five-year compliance cycle</u>. The first requirement for buildings entering a compliance cycle is to select a compliance pathway by April 1, 2023. The building owner will have until the end of the cycle for the building to meet energy performance requirements following one of the available compliance pathways:

- **Performance Pathway**: The property needs to reduce site energy use intensity (EUI) by 20 percent. This reduction is demonstrated by a decrease in energy use between two compliance cycles.
- **Prescriptive Pathway**: A property must complete specific actions agreed to with the DOEE, which includes one or more recommended energy efficiency measures designed to achieve energy savings, conduct an audit, create an action plan, and complete monitoring, evaluation, and verification.
- Standard Target Pathway: The standard target pathway applies solely to properties exceeding the national median in energy usage. The DOEE will measure compliance by assessing the building's Energy Star score.
- Alternative Compliance Pathway: This option applies to buildings that require specialized compliance pathways and encompasses properties undergoing extensive energy retrofits, new construction, changes in property types, or encountering other building-specific obstacles.

The first BEPS compliance cycle ends December 31, 2026, with end-of-cycle reporting due April 1, 2027.²

The BEPS Program utilizes multiple metrics to evaluate energy performance. Buildings must meet a predetermined <u>ENERGY STAR Score or Source EUI</u>. DOEE is also exploring the possibility of using the GHG metric. To ensure that the BEPS does not have negative impacts on disadvantaged groups, DOEE is considering implementing an exemption criterion for qualifying affordable housing buildings to delay compliance with the building energy performance requirements for more than three years. Additionally, the <u>Affordable Housing</u> <u>Retrofit Accelerator</u> provides technical support and financial assistance to affordable housing to ensure their compliance with the BEPS program.

Montgomery County, Maryland: On April 19, 2022, the Montgomery County Council voted unanimously to pass Bill 16-21, a <u>Building Energy Performance Standard (BEPS)</u> Law. BEPS builds on the County's existing <u>Building Energy Benchmarking Law</u>, which requires owners of certain buildings to report annual energy use to Montgomery County's Department of Environmental Protection (DEP). Under the BEPS, buildings are categorized by property type, and each category is assigned a long-term final performance standard according to the site <u>energy use intensity (EUI)</u> metric, measured in kBtu per gross square foot per year. The standard also mandates that buildings meet interim standards every four years, calculated using a straight-line trajectory from the building's baseline performance to the final standard. In addition, Montgomery County is accepting renewable energy credits that properties pursue as an allowance toward the BEPS target.

To ensure compliance, building owners must submit annual energy use data via <u>ENERGY STAR Portfolio Manager</u>. Buildings that meet or exceed the net site energy use intensity target are considered in compliance with the standards. In cases where a building struggles to meet the performance standards due to economic infeasibility or other uncontrollable circumstances, the county allows for the submission of a Building Performance Improvement Plan. However, compliance with the actions and timelines outlined in the plan is mandatory for owners to remain in compliance with the BEPS.

Montgomery County has extended the scope of the BEPS to cover a wide range of buildings, including affordable housing structures, small businesses, houses of worship, and non-profit organizations. The DEP is exploring additional technical assistance and support for these under-resourced sectors to ensure they can meet the BEPS standards. To support the implementation of the BEPS, Montgomery County has taken steps to provide financial assistance and incentives. The county has allocated a portion of its fuel-energy tax revenue to its <u>Green Bank</u>, with a focus on financing building energy improvements. A designated percentage of these funds is dedicated to supporting affordable housing upgrades and upgrades in <u>equity emphasis areas</u>. Additionally, Montgomery County offers a <u>Green Buildings Property Tax Credit</u> for both new and existing buildings. This incentive program rewards buildings that demonstrate improved energy performance in ENERGY STAR Portfolio Manager and grants

² Due to the COVID-19 public health emergency, DOEE has provided a one-year delay for all energy performance and reporting/verification requirements for all buildings in the BEPS Period 1 compliance cycle.

additional credits for achieving recognized green building certifications. Notably, buildings located in equity emphasis areas receive an additional 10 percent credit, and an up-to-100 percent deduction in property taxes as a credit granted against the county taxes owed for two years.

Maryland: Buildings emit 40 percent of Maryland's greenhouse gas pollution and account for 90 percent of Maryland's electricity usage. For these reasons, creating <u>Building Energy Performance Standards (BEPS)</u> was a core recommendation of the Maryland Commission on Climate Change to help the state reach its climate goals. The goal of the regulation, as laid out in <u>the Climate Solutions Now Act of 2022</u>, is to achieve 20 percent greenhouse gas (GHG) emissions reductions in buildings by 2030, compared to 2025 levels; a 60 percent reduction in 2035 compared to 2025 levels; and net-zero direct carbon emissions by 2040.

The BEPS targets buildings that are 35,000 square feet or larger, excluding parking garage areas. Historic properties, public and nonpublic elementary and secondary schools, manufacturing buildings, and agricultural buildings are exempt. Owners of covered buildings will need to report data on energy usage each year beginning in 2025 to the Maryland Department of the Environment (MDE), through ENERGY STAR Portfolio Manager. The regulation requires that covered building owners meet specific net direct GHG emissions and energy use intensity (EUI) standards. Between 2025 and 2040, building owners whose buildings do not already meet the BEPS standards will be required to implement energy efficiency measures and/or electrification measures or pay alternative compliance fees in order to comply with BEPS.

Maryland offers grants, rebates, tax credits, and low-interest financing with technical assistance offered through green banks such as the <u>Maryland Clean Energy Center</u> to assist homeowners with energy efficiency and electrification projects. In addition, the MDE launched a <u>Building Energy Transition Implementation Task Force</u> this year. This task force will recommend additional state incentives needed to reduce GHG emissions from the building sector.

Philadelphia, Pennsylvania: The <u>Building Energy Performance Program (BEPP)</u>, also referred to as "Building Tune-ups", was passed in 2019 through the <u>Building Energy Performance Policy</u>, aiming to achieve efficient energy use in the largest non-residential buildings in Philadelphia. A building tune-up is a review of energy systems, controls, and maintenance practices, along with minor improvements to achieve an efficient state of performance as outlined in the policy. On average, these improvements could result in 10-15 percent annual energy savings for a building. The targeted buildings are nonresidential buildings with at least 50,000 square feet of indoor floor space, and to comply building owners must take the following steps:</u>

- Identify the compliance year: Compliance <u>deadlines</u> are based on building size and compliance is required every five years
 - \circ $\ \ \,$ 2022: Buildings with 100,000 sq. ft. or more
 - \circ ~ 2023: Buildings with 70,000 sq. ft to 99,999 sq. ft.
 - 2024: Buildings with 50,000 sq. ft. to 69,999 sq. ft.
- Determine which compliance pathway is appropriate for the building: <u>high-performance pathway</u>, seek an <u>exemption</u>, or conduct <u>building tune-up</u>

- Engage with a tune-up specialist
- Undergo the tune-up process: a) assessment of the building and its systems, b) complete corrective actions to resolve issues identified during the assessment, c) final review and submission
 - The tune-up specialist completes an assessment that consists of inspecting elements relating to maintenance and repairs, HVAC, lighting, hot water, and the building envelope
 - o The building owner completes corrective actions
 - o The tune-up specialist verifies actions and submits a report to the city

BEPP requires that reporting be completed through ENERGY STAR Portfolio Manager. Before submission, a building tune-up specialist must verify the report. The policy is implemented and overseen by the Office of Sustainability. The city estimates that this policy will cut carbon pollution in Philadelphia by nearly 200,000 metric tons and that an estimated 250 to 600 new jobs will be created across the region in the first six years of program implementation to complete the tune up projects. The Office of Sustainability created a <u>BEPP webpage</u> that outlines more information about this program, including <u>regulations</u>, <u>workbooks</u>, instructions, and more.

Key Takeaways

In the pursuit of enhancing building energy efficiency and mitigating carbon emissions, various jurisdictions have implemented BPS. These standards, adopted by state or local governments, are applied to existing commercial and multifamily buildings. In the absence of a national standard, jurisdictions have flexibility to adopt BPS that best fit their building stock and emission reduction goals.

Periodic compliance assessments are a key feature in many BPS frameworks, including New York City's Local Law 97 and Washington D.C.'s BEPS Program. This process establishes evaluations of building performance and enables adjustments and improvements in the energy consumption of buildings over time, which ensures that standards remain effective and responsive to changing emission reduction goals.

Despite these commonalities, there are notable differences among jurisdictions. Metrics used for compliance vary among jurisdictions. NYC and Boston use metric tons of carbon dioxide equivalent (CO2e) per square foot, while Montgomery County and Maryland adopt site energy use intensity (EUI) measured in kBtu per gross square feet. Jurisdictions must carefully choose those BPS metrics that align best with their decarbonization strategies. It is crucial that selected metrics are easy to understand and implement by both government entities and building owners. Consideration should be given to metrics that accommodate significant variations in building operations or activities. For instance, Washington, D.C., and Maryland's BPS employ the ENERGY STAR score, which adjusts for key factors influencing energy use based on property type. In addition, it is important to recognize the potential misalignment between metrics used in BPS and building energy codes. Notably, a new building, upon completion, becomes an existing building that must comply with the BPS metric. Aligning building energy codes and BPS metrics can streamline compliance efforts and will make it easier for jurisdictions to assess and track progress towards energy efficiency and decarbonization targets.

BPS policies hold the potential to drive emissions reduction actions and energy efficiency upgrades.

Additionally, the scope of buildings covered under these standards differs. NYC focuses on buildings over 25,000 square feet, Boston's BPS includes buildings over 20,000 square feet, while Washington D.C. by 2026 will cover buildings that are at least 10,000 square feet. These variations underscore the adaptability of BPS frameworks to suit unique characteristics of each jurisdiction. When determining which buildings fall under the purview of BPS, it is essential to recognize that substantial energy savings and emissions reduction potential exist among large commercial and multifamily energy users. These entities, equipped with in-house resources, often demand less external support. In contrast, smaller building owners, and affordable housing buildings with fewer resources may require extra assistance. In determining the building size threshold that will be covered under these standards, jurisdictions should balance the need to capture substantial energy savings with the administrative burden of tracking a large volume of buildings. Decision makers should proactively consider and plan for needed support when determining coverage parameters. Engaging stakeholders through outreach is a critical step for state and local governments to gain insights into property owners' needs and ensures an equitable distribution of compliance resources. Boston's collaboration with community-based organizations serves as a prime example, emphasizing the importance of diverse perspectives and local insights in shaping effective policies.

The mechanisms for compliance and the flexibility provided to building owners also vary. Washington D.C.'s BEPS Program offers multiple pathways, including meeting ENERGY STAR score or EUI requirements, completing a checklist of measures, or exploring exemptions for qualifying affordable housing buildings. This flexibility accommodates different building types and conditions, encouraging widespread participation. Furthermore, equity considerations play a crucial role, as seen in Montgomery County's focus on equity through the Green Buildings Property Tax Credit and an Equitable Emissions Investment Fund. Boston uses an Equitable Investment Fund and Washington D.C. established a financial assistance program for affordable housing. This ensures that the benefits of emission reduction efforts of these standards are distributed fairly, especially in historically marginalized communities.

Conclusion

While it is too soon to evaluate the effectiveness of fully implemented BPS policies, they hold the potential to drive emissions reduction actions and energy efficiency upgrades. BPS policies, designed to improve building performance across various aspects, send signals encouraging investments in clean energy technologies. Collaboration among state and local governments, the private sector, utilities, and other stakeholders is essential to help building owners achieve and surpass standards over multiple performance improvement cycles. State and local leaders, along with utilities, can provide crucial support, funding, and technical assistance to building owners in need, thereby ensuring the success of BPS policies in achieving decarbonization goals for much of the existing building stock.

SUMMARY TABLE

BPS	Goal	First Compliance Year	Buildings covered under the policy	Metrics used to measure compliance	Strategy to support underserved communities			
NEW YORK CITY								
<u>Local Law 97</u> (2019)	To reduce the GHG emissions by the city's largest buildings by 40 percent by 2030 and 80 percent by 2050	May 1, 2025	Most buildings over 25,000 square feet	Metric tons of carbon dioxide equivalent per square foot of building space	Two seats on the Advisory Board for members representing environmental justice communities			
		BOS	TON					
Building Energy Reduction and Disclosure Ordinance (BERDO 2.0) (2021)	To reduce building emissions 50 percent by 2030 and become net zero by 2050	Reporting from May 15, 2022. Compliance with standard from 2025	Buildings greater than or equal to 20,000 gross square feet	Kilograms of carbon dioxide equivalent per square foot	Established an Emissions Review Board with community representation to increase accountability and transparency and establish an environmental justice Buildings Emissions Investment Fund.			
CAMBRIDGE								
Building Energy Use Disclosure Ordinance (BEUDO) (2014, amended in 2023)	Large non-residential buildings to reach net zero greenhouse gas emissions by 2035 and mid-size non-residential buildings to do so by 2050	May 2015	2035 target applies to non-residential buildings of 100,000 or more square feet and the 2050 target to non- residential buildings of 25,000 to 99,999 square feet	Energy use intensity				
		WASHING	TON D.C.					
Building Energy Performance Standards (BEPS)	To reduce GHG and energy consumption by 50 percent by 2032	The first BEPS compliance cycle ends December 31, 2026, with end-of-cycle reporting due April 1, 2027. Pathway selection is due April 1, 2023	Beginning 2021: All privately-owned buildings at least 50,000 square feet; All District- owned or District instrumentality-owned buildings at least 10,000 square feet; Beginning 2023: All privately-owned buildings with at least 25,000 square feet; Beginning 2026: All privately-owned buildings at least 10,000 square feet.	No lower than the local median ENERGY STAR score (or the equivalent metric of Source EUI)	Affordable Housing Retrofit Accelerator provides technical support and financial assistance to affordable housing to ensure their compliance with the BEPS program			

Summary Table, continued

BPS	Goal	First Compliance Year	Buildings covered under the policy	Metrics used to measure compliance	Strategy to support underserved communities
		MONTGOMER	Y COUNTY, MD		
Building Energy Performance Standard (BEPS) (2022)	To reduce overall greenhouse gas emissions and help the County achieve its climate action goal of zero greenhouse gas emissions by 2035	Benchmarking Deadline-Final BEPS: County-owned buildings: June 2015 – December 2033 Group 1: June 2016– December 2033 Group 2: June 2017– December 2033 Group 3&4: June 2023– December 2035 Group 5: June 2024– December 2036	County buildings and Groups 1 & 2: County and privately-owned nonresidential buildings 50,000 gross square feet and larger; Group 3: County and privately-owned nonresidential buildings 25,000 to 50,000 gross square feet, and buildings previously exempted by the Benchmarking Law; Group 4: Multifamily residential buildings 250,000 gross square feet and greater; Group 5: Multifamily residential buildings 25,000 to 250,000 gross square feet.	Energy use intensity metric, measured in kBtu per gross square foot per year	Montgomery County has allocated a portion of its fuel-energy tax revenue to its <u>Green</u> <u>Bank</u> , with a focus on financing building energy improvements. A designated percentage of these funds is dedicated to supporting affordable housing upgrades and upgrades in <u>Equity Emphasis</u> <u>Areas</u> . Additionally, Montgomery County offers a <u>Green Buildings</u> <u>Property Tax Credit</u> for both new and existing buildings.
		MARY	(LAND		
Building Energy Performance Standards (BEPS)	To achieve 20 percent GHG emissions reductions in buildings by 2030, compared to 2025 levels; a 60 percent reduction in 2035 compared to 2025 levels; and net-zero direct carbon emissions by 2040	2025	Buildings that are 35,000 square feet or larger, excluding the parking garage area	Net direct GHG emissions and energy use intensity	Maryland Clean Energy Center assists homeowners with energy efficiency and electrification projects. A Building Energy Transition Implementation Task Force was launched and will work on recommending additional state incentives needed to reduce GHG emissions from the building sector
		PHILAD	DELPHIA		
Building Energy Performance Program (BEPP)	To reduce carbon pollution in Philadelphia by nearly 200,000 metric tons and result in 10–15% annual energy savings for a building	2022-2024 (depending on a building size)	Nonresidential buildings with at least 50,000 square feet of indoor floor space	Building tune-up which is a review of energy systems, controls, and maintenance practices, along with minor improvements to achieve an efficient state of performance	An estimated 250 to 600 new jobs will be created across the region in the first six years of program implementation to complete the tune up projects.