West Arlington Analytics

Energy. Sustainability. Finance.

July 15, 2021

Montgomery County Council 100 Maryland Avenue, 6th Floor Rockville, MD 20850

Re: Support for Bill 16-21, Environmental Sustainability - Building Energy Use Benchmarking and Performance Standards

Dear Montgomery County Council,

West Arlington Analytics (WAA) is pleased to provide the following comments in support of Bill 16-21. WAA is an energy finance consultancy and commercial property assessed clean energy (C-PACE) program administrator. Since 2015 we've helped customers in the mid-Atlantic region operate energy finance programs and achieve their sustainability goals. I applaud the County's adoption of its Climate Action Plan (CAP) earlier this year, which established aggressive goals to cut greenhouse gas (GHG) emissions 80% by 2027 and 100% by 2035, and am writing today to express strong support for the adoption of Bill 16-21, which expands the number of buildings covered by benchmarking requirements and establishes building energy performance standards (BEPS).

Overview

According to the county's GHG inventory, 26% of county GHG emissions stem from commercial buildings. The CAP includes a list of building-related actions for the County including establishment of the Building Energy Performance Standard (BEPS). The BEPS will require many existing buildings to improve their whole-building energy performance, and saving energy in existing buildings is key to the County achieving its climate commitments.

In the absence of owner-defined sustainability goals or policy such as a BEPS, many property owners are presented with — and often default to investing in — the lowest-cost code-compliant replacement system. They regularly time their investment decisions in response to equipment failure. A BEPS will alter the property owner's approach to investment analysis and timing.

With a BEPS, covered building owners will establish multi-year improvement plans comprising targets for energy performance and timelines for action. Per the BEPS Stakeholder Recommendation Report, "Not only will a BEPS policy in Montgomery County offer long-range expectations for building owners to improve their buildings with guidance and assistance from local government, but it will provide maximum flexibility for owners to choose when and how to improve their buildings, create a tool for the actors in the built environment to collaborate and innovate, encourage financial stability through lower energy bills, and create energy-efficiency jobs at every skill level." ¹

 $^{^1\} https://www.montgomerycountymd.gov/DEP/Resources/Files/ReportsandPublications/Energy/MC-BEPS-Stakeholder-Report.pdf$

Energy. Sustainability. Finance.

How Does a BEPS Economically Impact Covered Building Owners?

The proposed legislation entails establishment of a Building Performance Improvement Board to advise staff on implementation and enforcement. The devil is in the details, but there are multiple compliance pathways envisioned, and a system of county-specific "carrots and sticks" will be developed to promote BEPS compliance.

To the extent these translate to new economic incentives, e.g., "compliance credit" for solar photovoltaic systems or "alternative compliance payments" (ACPs) levied in the event covered buildings fail to reach interim or final performance standards, such incentives would inform a project level cost-benefit analysis. This type of analysis equips property owners with the information needed to determine a course of action - and quantify the cost of insufficient action.

Service providers will be tasked with identifying energy upgrade opportunities and presenting the business case for energy improvements needed in each phase of their customer's multi-year plans. This will often entail consideration of building electrification technologies. Table 8 from the CAP shows how things would have to change in commercial buildings and by what time:

Table 8: How things would have to change and associated CAP actions (Buildings)

How things would have to change by 2027*	How things would have to change by 2035*	Associated CAP Actions
85% of residential units with natural gas space and water heating have converted to electric heat pumps 25% of residential units have installed improved building envelopes	100% of residential units with natural gas space and water heating have converted to electric heat pumps 100% of residential units have installed improved building envelopes	B-2: Electrification Requirements for Existing Residential Buildings B-4: Electrification Incentives for Existing Buildings
 20% of residential units have installed low-flow water fixtures 	 100% of residential units have installed low-flow water fixtures 	
75% of commercial buildings with natural gas space and water heating have converted to electric heat pumps	100% of commercial buildings with natural gas space and water heating have converted to electric heat pumps	B-1: Electrification Requirements for Existing Commercial and Public Buildings
15% of commercial buildings have installed improved building envelopes	100% of commercial buildings have installed improved building envelopes	B-3: Energy Performance Standard for Existing Commercial and Multifamily Buildings
 50% of commercial buildings have installed low-flow water fixtures 	100% of commercial buildings have installed low-flow water fixtures	B-4: Electrification Incentives for Existing Buildings

The business case for energy projects should include both technical and financial data including the costs, benefits, and payment methods associated with equipment and investment alternatives.

Existing ways to lower the capital cost of improvements include EmPOWER Maryland utility rebates, state and federal grants, and tax credits. Examples of recurring benefits from energy projects include lower operating expenses and revenue generated by the sale of solar renewable energy credit (SRECs).

In addition, BEPS-related economic incentives (e.g., credit for solar PV toward compliance) and disincentives (e.g., ACPs) can be expected to drive an evaluation of high performing energy efficiency

West Arlington Analytics

Energy. Sustainability. Finance.

solutions (e.g., heat pumps) and renewables. In the end the magnitude and frequency of such incentives must be sufficient to tilt property owner decision towards investments that align with climate goals.

Covered building owners often explore methods of payment in parallel with project development. BEPS-related disincentives may present a new burden for covered building owners. Fortunately, there are number of financial resources and innovative programs to ease that burden and promote compliance, but not all property owners or service providers are aware they exist. This presents an "education challenge" for the County and area stakeholders.

Traditional payment methods such as self-funding or obtaining a market-rate commercial loan are prevalent. In addition, innovative 3rd party energy financing solutions such as C-PACE, Montgomery County Green Bank products, and power purchase agreements round out the menu of options to choose from in Montgomery County. This ecosystem for capital is a valuable asset to the County, as demand for 3rd party financing solutions will increase with the adoption of a BEPS.

Summary

Given the CAP goals and timeline, I encourage the County to adopt the proposed BEPS policy and immediately commit the resources needed to achieve its policy goals in the specified timeline. The County should continue to rely on input from property owners, service providers, industry experts, and the Montgomery County Green Bank as it settles on an initial BEPS implementation framework. Furthermore, implementation calls for increased market engagement, education on the new standard, and information on financial resources. Of great urgency is a plan to a) help private market actors source project leads in the County (including from among non-covered small buildings that fall outside the size requirements) and b) promote uptake of high performing energy efficiency equipment and renewable energy technologies.

Thank you for the opportunity to provide these comments, and please consider us a partner in working toward a carbon neutral future in Montgomery County.

Sincerely,

Scott Dicke

Principal, West Arlington Analytics

scott@waanalytics.com

West Arlington Analytics
Energy. Sustainability. Finance.