

Montgomery County Draft Climate Action Plan

Baltimore Gas and Electric Company (BGE) appreciates the opportunity to submit the following comments in response to Montgomery County's Draft Climate Action Plan (CAP).

At BGE, we know that <u>addressing the climate crisis</u> is one of the single greatest things we can do to ensure that our communities remain strong, safe, and prosperous. BGE acknowledges Montgomery County for its commitment to building a healthy, equitable, and resilient community through this ambitious plan.

BGE is also actively pursuing a multifaceted approach for addressing climate change, focusing on emissions mitigation, enhancing customer resiliency, and engaging with policymakers and regulators to facilitate the transition to a net-zero future. There exist many synergies and opportunities for partnership between our own efforts and those recommended in the CAP. Below, we will highlight just a few of those opportunities and raise areas of concern.

Opportunities for Partnership

BGE looks forward to partnering with Montgomery County on some of the exciting and forward-thinking recommendations in the CAP. We hope to share best practices we have learned as they pertain to fleet electrification and smart city technology as well as actions related to racial equity and social justice.

Fleet Electrification

One key tool to reduce GHG emissions and to improve local air quality is transportation electrification. Widespread transportation electrification represents a significant opportunity to reduce GHG emissions from the transportation sector, which is currently the largest category of GHG emissions in the United States and in our service territory.

The County has already taken a major step towards its own fleet electrification through its announcement and actions this week to electrify its entire school bus fleet over the next two decades. BGE had already begun a pilot program with the Howard County Public Schools System to introduce two electric school buses to their own fleet and assist the school board with designing and installing the necessary infrastructure. We look forward to sharing lessons learned and best practices with Montgomery County as it moves forward in its exciting transition to more electric school busses. Note that under our interpretation, House Bill 832, currently in consideration at the Maryland Legislature, would allow Maryland's electric utilities to work with counties – as well as their school bus vendors under leasing or purchase arrangements such as those being leveraged by Montgomery County – to help offset costs of this new technology.

In addition, BGE <u>launched its EVsmart public charging network</u>, in Maryland in fall 2019, with a goal to help Maryland meet its 300,000 zero emissions vehicle (ZEV) goal by 2025. To support this effort, BGE aims to install 500 publicly available Level 2 smart chargers or DC fast chargers throughout the BGE service area. These chargers are installed at no cost to the official government locations. We have already installed and operate over 115 of these public stations across BGE's territory, with more than another 100 stations currently in design, engineering and/or construction phases. In the near future, we



would hope that Montgomery County will take advantage of this program for the segment of the County we serve. Of note, Pepco has a similar program in place for the benefit of the County.

Finally, BGE is investing in <u>electrification of our own fleet</u>, not only to reduce our own company's GHG emissions, but enable us to share our experiences as we work with customers looking to electrify their fleets -- including Montgomery County.

Smart Cities Technology

Throughout the CAP, there are references to the beneficial uses of smart city technology (for example: a traffic management system, temperature monitoring and alerts). At BGE, and Exelon more broadly, we envision supporting and managing a more distributed and decentralized future electric system. This new connected system will offer more energy choices for customers and will be increasingly transactional and broader in scope, as more people exchange digital information, products, and services through the grid.

Digital grids will manage increasingly complex flows of power and information. The utility distribution model will operate as a platform that generates value by facilitating and strengthening connections and transactions between and among customers, generators, and communities. We aspire to this vision of "Connected Communities" as we embrace the changing role our utilities can play in creating value for customers and communities.

In addition, BGE is actively engaged in demonstrations to assess "Smart City" and "Connected Community" related technology, including relevant IoT (internet of things) devices that align with Montgomery County's priorities. We see opportunities within the CAP to support your "connected communities" vision.

Commitment to Racial Equity and Social Justice

The CAP emphasizes the disproportionate impact of climate change on underserved communities, which is correlated with structurally racist practices. <u>BGE is similarly focused on issues relating to equity in all aspects of our work, in partnership with our community partners and stakeholders.</u> We are prepared to partner with Montgomery County in these efforts.

Areas of Concern

As previously stated, BGE applauds Montgomery County's efforts to combat climate change. However, we appreciate the opportunity to identify specific concerns with the CAP's recommendations, including the mandate to electrify existing residential and commercial buildings, as well as to ban natural gas in new construction.

Building Electrification

BGE recognizes that electrification is a key tool to reduce GHG emissions, and we believe in the resiliency of the electric grid to support electrification over time. However, the timeline suggested in the CAP would put undue responsibility on residents and businesses to retrofit their homes with electric appliances. While there are a variety of factors that contribute to what it would cost to retrofit a home, upfront equipment and installation costs can range from \$5,000 - \$10,000, depending on the number of appliances requiring replacement¹. This does not include potential further costs to upgrade electrical

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¹ Source: EIA and Gas Technology Institute



service if it is not sized to support the appliances, and other equipment or renovations that may be required to accommodate the transition to electric equipment in the relevant residential and commercial structures. Additionally, increased electrical service could ultimately require upgrades of infrastructure if capacity constraints materialize. Potential upgrades should be engineered and constructed thoughtfully and strategically.

Finally, the desired transition would be more effectively accomplished through well-placed incentives rather than short-term mandates, as demonstrated by the successful Empower Maryland program. In other words, providing rebates, discounts, or other incentives to residents and businesses to encourage electrification would motivate the transition at a more responsible and gradual rate. The CAP describes that the electrification requirements could potentially have a "very negative" impact on racial equity and social justice. Incentives could also serve as a mechanism to support residents and businesses through this transition, as identified in the plan to mitigate the negative impacts on racial equity and social justice.

Natural Gas Ban

As a natural gas distributor, BGE believes in the value and added resiliency natural gas utilities provides to Maryland's energy system. Still, we acknowledge that there are opportunities to reduce GHG emissions.

BGE's natural gas system is undergoing important <u>infrastructure upgrades via the STRIDE program</u>. Upgrading the system, and thereby reducing leaks, has a substantial impact on reducing GHG emissions. In fact, since 2015, BGE has reduced fugitive emissions from our natural gas distribution systems by over 40,000 metric tons of carbon dioxide equivalent (mtCO2e). That work is ongoing and will only continue to drastically reduce GHG emissions, strengthen the system integrity, and make the gas distribution system more efficient. To that end, our current efforts to upgrade and modernize the gas distribution system that currently is in place is consistent with Montgomery County's interest in reducing GHG emission.

The added resiliency that gas distribution brings to the energy delivery system should also be taken into consideration. Given that the natural gas system is underground it is largely protected from many of the events that can result in unplanned outages of the electric system, such as extreme weather. The natural gas system is an extensive energy storage resources and can quickly respond to events. This resilience, in particular, is important to heating and cooking needs of residents and businesses in the County and throughout the state.

As an alternative to a ban on natural gas, and in addition to the incentives to adopt electric appliances previously discussed, Montgomery County should consider support for clean gas alternatives. Clean alternatives, such as renewable natural gas, reduce lifecycle GHG emissions, while maintaining the added resilience and consumer choice that gas distribution brings to the system. They also serve as a potential solution for those buildings and service needs where the technology does not yet exist (or exist affordably) to use electric instead of natural gas.

BGE appreciates the opportunity to review and provide comments on this draft CAP. Our goal is to be a partner and subject matter expert as you consider next steps to achieve your important goals related to climate change.