

February 28, 2021

Adriana Hochberg
Assistant Chief Administrative Officer
Montgomery County, Maryland

Dear Adriana,

Washington Gas Light Company (WGL) commends Montgomery County's Climate Action Plan process and looks forward to helping the County achieve its goal of reducing GHG emissions 80% by 2027 and 100% by 2035, from a 2005 baseline.

As you know, between 2005 and 2018, the County decreased emissions by 19%, but there are ways for WGL and Montgomery County to partner on decarbonization efforts to accelerate the reduction.

As the chart on page 59 of the Draft Plan displays, "the County needs to reduce the greatest amount of GHG emissions from electricity generation, followed by transportation and followed by private building energy".

Currently, it appears HB 768, Montgomery County – Community Choice Energy - Pilot Program, has a strong chance of passing the General Assembly. Should all residential electric customers remain in the CCE, and that CCE is 100% renewable, we project the County to reduce its emissions in the ballpark of 1,025,000 MTCO_{2e}. That is another ~8% towards the goal.

WGL currently delivers energy to almost 60% of Montgomery County residents.

With over 11,000 commercial & industrial customers, almost 2,000 group metered apartments, and 223,000 residential meters, we take pride in our role in the County.

We have over 400 employees working in five Maryland facilities with an annual payroll of ~\$35,000,000 and pay ~\$80,000,000 in Maryland corporate taxes annually.

We stand ready to collaborate with the County on implementing equitable decarbonization strategies that reduce emissions, while providing affordable and reliable energy to residents and businesses.

Our comments will focus primarily on the Building Actions within the Draft Climate Action Plan which outline a target of "all-electric new construction starting in 2022" and "100% electrification of existing buildings by 2035."

Could that physically work?

During the peak heating (coldest) days of the year, WGL delivers 150% of the energy delivered during summertime's peak cooling days¹. If the County were to pursue this policy-driven electrification, the electric grid's capability would need to increase by at least 50%, at a substantial cost to Marylanders. Should the County decide to procure only renewables, that infrastructure investment would have to increase even more due to both the capacity factors and intermittent nature of wind and solar.

How much would electrification cost?

In a detailed [study for decarbonizing Washington, DC](#)—commissioned by WGL—, consulting firm ICF found that a policy-driven electrification pathway would cost \$2.7 billion more than a fuel neutral approach for DC alone.

While we don't have a projection specifically for Montgomery County, there are ~60,000 more gas and 10,000 more electric customers in the County than there are in the District. This means a greater proportion of customers would need to be “electrified” and would ultimately, prove costlier to residents.

What ways can a natural gas utility help the County drive down GHG emissions?

Delivering on an equitable and resilient decarbonization approach.

This strategy would include action in three key areas – Energy Efficiency, Distribution, and Supply.

Energy efficiency –The cleanest and lowest cost energy is that which is not used. Increasing energy efficiency is the first step to reduce energy use and the associated GHG emissions. In addition, new natural gas and hybrid technologies along with Combined Heat and Power (CHP) solutions will improve end-use efficiency of the energy that is used. The University of Maryland College Park already utilizes CHP and we're working with the County currently on projects at government buildings.

Distribution – Through programs like STRIDE, we need to continue to reinforce and strengthen our infrastructure and advanced leak detection efforts to reduce leaks and

¹ Formal Case No. 1142, *In the Matter of the Merger of AltaGas Ltd. and WGL Holdings, Inc.*, Climate Business Plan for Washington, DC (Mar. 20, 2020) (<https://washingtongasdclimatebusinessplan.com/wp-content/uploads/2020/04/Climate-Business-Plan-March-16-2020-FOR-WEB.pdf>)

fugitive methane emissions. We'd welcome the opportunity to work with the county on pursuing emerging, advanced leak detection technologies.

Supply - Decarbonize the energy delivered. We are actively looking at offering low/no carbon non-fossil-based gases for our customers, such as Renewable Natural Gas (RNG). That same study by ICF determined that there are ample supplies of carbon-neutral RNG in our geographic region, and we should pursue agreements for County-owned buildings. The County could also evaluate a voluntary RNG tariff for residential customers, similar to the CCE program for renewable electricity.

Building Actions WGL Supports

Emissions reductions should be considered within a portfolio framework—lowest cost, highest impact approaches should be executed first. We appreciate the County's focus on and analysis of the four co-benefits of racial equity & social justice, public health, environmental stewardship, and economic prosperity.

Given our previous points and utilizing the co-benefit scope, **“B-7: Net Zero Energy Building Code for New Construction” is a recommendation WGL strongly supports.**

B-7 has a “High” GHG mitigation benefit while achieving “Somewhat Positive” public health and economic prosperity co-benefits.

The Draft Plan describes the positive impacts best:

- Montgomery County would need to amend the building code to require all newly constructed buildings in the County to be net-zero energy starting in 2030.
- As the industry evolves to meet electric building needs, a net zero building code can replace the County's all-electric building code.
- A net-zero code would result in net zero emissions for all future developments and decrease stress on the electric grid
- A net-zero code would promote local solar and geothermal installation

B-7 is cost-effective and impactful path for buildings to remove as much carbon dioxide from the atmosphere as they put into it. To start looking at this, energy efficiency is essential.

Building Actions WGL Opposes

B-1: Electrification Code Requirements for Existing Commercial and Public Buildings

B-2: Electrification Code Requirements for Existing Residential Buildings

B-4: Electrification Incentives for Existing Buildings

B-5: All-Electric Building Code for New Construction

B-6: Ban Natural Gas in New Construction

Not only would these recommendations be very costly to Montgomery County residents, the Draft Climate Plan lists the first two as having: “Co-Benefits: Racial Equity and Social Justice – Very Negative”. (page 103 of Draft Plan²)

Increased demand on the grid (such as for vehicle electrification or the potential displacement of natural gas, particularly in the winter) will require a massive increase in electrical distribution infrastructure and upstream generation. With fossil fuels accounting for 64% of the generation fuel-mix for the PJM grid, broad scale electrification could result in a higher carbon intensity and GHG emissions than the direct use of natural gas for heating, cooking, hot water and clothes drying. Emissions from electricity generation must be a factor in developing a thoughtful climate change mitigation strategy, whether emissions occur within or beyond County borders.

For Action B-1:

This action calls for code requirements that would force building owners and developers to convert to all-electric equipment as part of sale, lease renewal, tenant turnover, or major renovation. In simpler terms, commercial gas users would be forced to take on substantial costs of conversion and electrical equipment purchases. WGL introduced natural gas incentive programs in 2015 for County customers via the company’s EmPOWER Maryland program, upon approval by the Public Service Commission. The high-efficiency installed by County customers in response to these programs likely has many years or decades of useful life remaining. Forcing customers to remove and replace this relatively new equipment will strand their investment and negates the energy savings and GHG reductions that have already been and could be realized through commercial building owners investing in high-efficiency gas equipment.

Commercial building owners will likely see a spike in energy costs required to convert to electric equipment. Absent a robust incentive mechanism in place, commercial building owners will be forced to pass these energy and equipment costs onto their tenants, resulting in higher rents and leases, adding additional barriers for people to do business in the County. In the scenario of this proposed code replacing newer, high-efficiency gas equipment, there will be a substantial amount of up-front costs incurred with little-to-no benefit of GHG reductions.

Both B-2 and B-4 should be absolute non-starters. Put simply, if the County begins moving existing gas customers to electric-only, costs will be borne disproportionately by low-income residents.

For B-2 specifically, the same concerns shown in B-1 would also apply to residential buildings, negatively affecting both homeowners and renters. Incentives for gas equipment have been

² <https://www.montgomerycountymd.gov/green/Resources/Files/climate/draft-climate-action-plan.pdf>

available to homeowners since 2015 through EmPOWER Maryland, making the likelihood of newer high-efficiency gas equipment being replaced by this action more prevalent, resulting in a higher financial and energy burdens with little-to-no GHG reduction benefits to justify costs. Within the multifamily space, equipment purchases, and higher energy costs incurred by property owners will be passed along to tenants, resulting in higher rents. With a large portion of County's more vulnerable lower-income communities residing in multifamily buildings, this action would impose additional energy burdens that could drive-up rent for these communities and create a serious equity issue.

Action B-4: WGL is concerned that the examples of incentives shown in this section (grants, tax rebates, and fee reductions) will only address a small fraction of the costs associated with requiring existing buildings to convert to all electric equipment. It is possible that these incentives will come with strings attached, such as inordinate efficiency requirements and higher audit/inspection fees, that will either result in higher up-front costs that negate the value of the incentive or push potential candidates to be ineligible to receive these incentives.

Furthermore, WGL takes issue with the comment in this section that states “energy efficiency programs incentivized by the federal, state, and County Government; utilities; non-profit organizations; and others have been in effect for years. However, these programs have not penetrated all building sectors, and opportunities for significant improvements in building energy efficiency still exist...” The utility-led energy efficiency programs offered and incentivized through the EmPOWER Maryland initiative have been servicing commercial and residential customers across all market sectors within the County since 2011 and directly contradict the mentioned statement. In addition, the American Council for an Energy Efficiency Economy (ACEEE) ranked Maryland as the 6th best state on its annual [State Energy Efficiency Scorecard](#).

While there may be limitations in scope and scale of each program due to cost effectiveness requirements imposed by state statute, there is substantial publicly available evidence of widespread participation, and energy savings have been realized across every market sector. WGL is concerned that the incentives proposed in this section will provide little-to-no coverage for any gaps that may be identified through either a gas or electric utility-led energy efficiency program.

The proposals described in this section also are highly duplicative of ongoing utility-led energy efficiency programs that have successfully been reducing GHG emissions in Montgomery County for over a decade. For example, this section states that “the most direct efficiency improvements include improvements to a building’s envelope, increased insulation, and more efficient HVAC systems, lighting, and appliances” – all measures currently offered and incentivized through EmPOWER Maryland and already achieving substantial reductions to gas and electricity consumption. This section acknowledges the importance of energy audits, yet another measure that is available and incentivized through EmPOWER Maryland.

WGL would welcome collaboration with Montgomery County on potential improvements to existing programs that address the proposed measures. Additional funding or reduced cost-effectiveness requirements for such programs could accomplish Montgomery County's intended goals without creating parallel and duplicative incentive that could add confusion for County residents and businesses.

Lastly, the section concludes "...electrification will increase local jobs in the building, electrical, and mechanical sectors." Washington Gas encourages the County to take into account the fact that electrification may lead to significant job *losses* in the building and mechanical sector by way of fewer plumbers, gasfitters, and HVAC (gas furnace) contractors. The County has produced no evidence indicating that the jobs gained through an aggressive electrification strategy will offset the potential jobs lost in other relevant industries. Montgomery County should be aware of the notion that electrification could lead to a net job loss in the County, thus creating another serious equity issue. A more holistic assessment of net job creation or loss is necessary to justify such statements.

B-6: Ban Natural Gas in New Construction

Natural gas consumption produces 19% of County-wide GHG emissions and, as explained earlier, there is a far more cost-effective way to begin reducing that percentage. For example, focusing on reductions in the transportation sector, which exceed the emissions associated with natural gas, will deliver greater reductions at a far lower cost per ton, while also helping customers and businesses reduce their overall expenditures on vehicles, maintenance, and fueling. All while coupling these efforts with the three equitable decarbonization strategies previously mentioned.

Transportation Actions

While the Plan's Transportation section does not include specific actions, we think it important to raise important concerns. It is critical to note that the transportation sector currently accounts for 42% of the County's GHG emissions, with on-road transportation accounting for 36%.

T-3: Private Vehicle Electrification

T-5: Electrify Public Buses and School Buses

T-6: Electrify County and Public Agencies Fleets

T-7: Expand the Electric Vehicle Charging Network

T-10 Electric Vehicle Car Share Program for Low-Income Communities

T-11: Off-Road Vehicle Electrification

In considering the promotion of EVs, we would suggest that all zero-emission vehicles (ZEVs) be treated equally. ZEVs include Battery Electric Vehicles (BEV) which run exclusively on batteries and Fuel Cell Electric Vehicles (FCEV) which utilize hydrogen-powered electricity producing no harmful exhaust emissions. CNG-powered vehicles can also be net zero-emissions vehicles if the CNG is sourced from renewable resources such as RNG.

The different types of ZEVs have different operating characteristics - including vehicle range, size & weight constraints, and refueling time – which are valued differently based on the various transportation-related need.

We are currently in discussions with Montgomery County’s Fleet Management Services to discuss a hydrogen fuel cell pilot for County transit buses. These are the types of innovative programs we need to pursue together to advance towards the goals.

We look forward to continuing the dialogue and thank you for your consideration.

Best,
Brian Smith

State Government Relations and Public Policy Manager | WGL
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