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	SUBJECT	City Council Bill 21-0161	MEMO	1797

March 11, 2022

TO:

Health, Environment, and Technology Committee

I am herein reporting on City Council Bill 21-0161 introduced by Council Members Conway, Dorsey, Porter, Bullock, Middleton, Burnett, Cohen, Ramos, and Glover. The purpose of the Bill is to make City operations achieve net-zero emissions of greenhouse gases by 2050; define certain terms; authorize rules and regulations; and generally relating to the City's emissions of greenhouse gases.

Barclays, a corporate and investment bank, issued an article in April of 2021 titled *Emission impossible? Closing in on net zero*. The article recognizes the large number of cities and private companies that have pledged to achieve net-zero by 2050, by removing as much CO2 as they produce. It also acknowledges that, on a global scale, achieving net-zero emissions can be hampered by the costs to transition to an energy mix that has a much lower carbon intensity, as well as by trade disputes, slow adoption of technology, and the lack of political will. Their research analysts identified five pillars for decarbonization: An End to Waste (includes unnecessary consumption, keeping raw materials in use longer, and greater use of recycling); More Electrification (moving away from fossil fuels, growing the use of wind and solar, building more resilient grids, investing in storage); Bioenergy (using inedible crops and oils, agricultural and municipal waste); Greater Use of Hydrogen (providing incentives, using for heating commercial and residential buildings and long-haul trucking); and Carbon Sequestration (creating carbon capture hubs, halting deforestation, improving soil management).

City Council Bill 21-0161 would add to the Office of Sustainability's Sustainability and Environmental Management Program appropriate measures to develop, implement, and coordinate City policies that would make all of its operations achieve net-zero emissions of greenhouse gases (GHGs) by January 1, 2050. The legislation would also include this goal in the Commission on Sustainability's Comprehensive Sustainability Plan that sets and tracks 3, 5, and 10-year sustainability targets. The 2019 update to the Comprehensive Sustainability Plan noted that approximately 70 percent of the City's GHGs are generated by the energy it takes to power homes and commercial and industrial buildings. In addition, the Plan reports that transportation

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activities are responsible for roughly 30% of emissions, with waste disposal and water processes making up approximately one percent each. The 2019 Plan commits Baltimore to achieve reductions similar to the goals set by the Paris Agreement, with a 25 percent reduction in GHGs by 2020, and 30 percent by 2025. At the time this updated Plan was produced, the inventory showed that GHG emissions dropped by 15 to 20 percent (as compared to 2007 measurements).

City Council Bill 21-0161 requires that all city agencies achieve net-zero emissions for GHGs by 2050. The Department of Public Works would expect the following areas of its operations to provide opportunities for GHG reductions:

- Fleet As noted in our response to City Council Bill 21-0159, the Department works closely with the Department of General Services (DGS) on the management and replacement of its fleet, and would rely on their expertise and guidance in developing a citywide zero-emissions fleet vehicle plan.
- Buildings In addition to occupying municipal office buildings managed by and leased from DGS, the Department has operational facilities located within and outside of the City that we would expect to be subject to the same analyses for zero-emissions opportunities.
- Water and Wastewater Processes The processes for filtering and producing potable water and distributing it, and collecting and cleansing wastewater, are chemical and energy intensive operations. Newly mandated treatment and removal processes create new energy and chemical demands. Currently, the Department uses methane produced during the wastewater treatment process to heat buildings and processes, and has used some of its available land for solar fields, to offset some of these energy demands.
- Solid Waste Transitioning to waste diversion practices can greatly reduce the reliance on traditional methods of waste disposal and achieve some net-zero results. Education programs will be needed to support waste diversion practices, as well as helping residents understand how they can reduce unnecessary consumption and wasteful practices.

The Department of Public Works supports the goals of City Council Bill 21-0161, being mindful that doing so will require a thoughtful prioritization and realignment of the City's investments, as well as a broad social commitment to support these changes. The Department defers to the Office of Sustainability on the provisions that are specific to its functions and plans.

Jason W. Mitchell

Director