Metropolitan Washington Council of Governments

BUILT ENVIRONMENT AND ENERGY ADVISORY COMMITTEE (BEEAC)

Draft Webinar Meeting Summary: September 15, 2022

BEEAC Members in Attendance:

- Dawn Ashbacher, Frederick County (Chair)
- Bill Eger, City of Alexandria
- Erica Bannerman, Prince George's County
- Amanda Campbell, City of Rockville
- Rich Dooley, Arlington County
- Kevin Milsted, Prince William County
- Shannon Moore, Frederick County
- Najib Salehi, Loudoun County
- Susan Gerson, Loudoun County Public Schools (LCPS)
- Cristine Gibney, DOEE
- Joseph Jakuta, DOEE
- Shawn O'Neill, Fairfax Water
- Richard Quaofio, DC Water

Additional Attendees:

- Emily Curley, Montgomery County
- Collin Burrell, District Department of Energy and Environment (DOEE)
- Matthew Gaskin, District Department of Transportation (DDOT)

COG Staff:

- Leah Boggs, COG DEP
- Robert Christopher, COG DEP
- Maia Davis, COG DEP
- Jeff King, COG DEP
- Sunil Kumar, COG DEP
- Wyetha Lipford, COG DEP
- Tim Masters, COG DEP

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1. CALL TO ORDER AND INTRODUCTIONS

Dawn Ashbacher, Frederick County (BEEAC Chair)

Chair Dawn Ashbacher called the meeting to order, and introductions were given.

2. APPROVAL OF THE BEEAC JUNE 16, 2022 MEETING SUMMARY

Dawn Ashbacher, Frederick County (BEEAC Chair)

The June 16 BEEAC Meeting Summary was approved.

3. BACKGROUND ON BEEAC AND MWAQC-TAC JOINT MEETING

Tim Masters, COG Environmental Programs

Tim Masters provided a brief overview of MWAQC-TAC's interest in Building Energy Efficiency Measures in relation to the National Ambient Air Quality Standards (NAAQS), as well as background on energy efficiency tools of interest to BEEAC. NAAQS provide limits on atmospheric concentration of six criteria air pollutants. NAAQS are health-based, and the EPA sets the standards, as required by the Clean Air Act. The COG region was initially designated Marginal Nonattainment Area (NAA) for the 2015 Ozone NAAQS but failed to attain the standard by the deadline (August 2021). EPA recently proposed a bump up to Moderate NAA and a Moderate NAA State Implementation Plan (SIP) is due January 1, 2023. However, certified 2021 data shows attainment. EPA intends to issue a Clean Data Determination after the end of ozone season (Fall 2022). The Washington region is working on both Attainment Plan and Redesignation Request and Maintenance Plan. Both an Attainment Plan and Maintenance Plan require certain measures to reduce pollutant emissions. An Attainment Plan would require control measures, which are defined as measures to be put in place to reduce emissions of criteria air pollutants in order to attain the standard. A Maintenance Plan would require contingency measures, which are defined as measures to be enforced if the region's pollutant levels trigger predetermined indicators (states establish indicators that trigger contingency measures). MWAQC-TAC is interested in how building energy efficiency measures could fit into air quality planning for the metropolitan Washington region.

4. OVERVIEW OF THE DISTRICT OF COLUMBIA'S BUILDING ENERGY PERFORMANCE STANDARD (BEPS)

Cristine Gibney, District of Columbia

The District's Building Energy Performance Standard (BEPS) Program was set forth the Clean Energy DC Omnibus Act of 2018. The BEPS was created to help meet the energy and climate goals of the Sustainable DC plan — to reduce greenhouse gas (GHG) emissions and energy consumption by 50% by 2032. Cristine Gibney provided an overview of the District's BEPS, as well as the energy efficiency and emissions benefits. Sustainable DC commits the District to carbon neutrality by 2050. The BEPS program is vital as around 75 percent of DC's GHG emissions come from existing buildings. Clean Energy DC is the District of Columbia's energy and climate action plan, and the BEPS program is focused on meeting the goals of this plan. To advance the goals of the plan, the District passed the Clean Energy DC Omnibus Amendment Act of 2018. The Clean Energy DC Act lowered the minimum building square footage required to benchmark over time, created data verification requirements, and aims to improves the performance of existing buildings by implementing BEPS. Previously, the Clean and Affordable Energy Act of 2008 required all private and DC-owned buildings to report their calendar year energy and water use to the DOEE for public disclosure by April 1

annually. This history of building energy benchmarking has greatly assisted the District's efforts to implement BEPS. The Clean Energy DC Act requires an establishment of a minimum threshold for energy performance that will be "no lower than" the local median ENERGY STAR score by property type (or equivalent metric). The BEPS standards are set every 6 years (with 1+yr adjustment for COVID in Period 1). The BEPS focuses on two primary metrics: Standard Metrics (e.g. ENERGY STAR score or Source Energy Use Intensity (EUI)), and Performance Metric (Site EUI). Building owners have a variety of pathways to choose from to bring their buildings into compliance: the Performance Pathway, the Standard Target Pathway, the Prescriptive Pathway, and the Alternative Compliance Pathway. For further information, please see DOEE's presentation on the BEEAC event page.

Joseph Jakuta, District of Columbia
Joseph Jakuta provided an overview of the clean air benefits that can be realized from building energy efficiency measures including BEPS. The metropolitan Washington region is in a close-to-nonattainment situation as it relates to the 2015 ozone NAAQS. The BEPS program will especially target emission reductions of nitrogen oxides (NOx), a precursor to ground-level ozone. Generally, this impact will be felt at stationary source polluters, such as power plants. Since there are no power plants in the District anymore, this will likely result in little direct impact to local air quality. However, an area that will become increasingly important will be commercial heating and cooling systems. The BEPS will impact commercial spaces that make use on natural gas for heating and cooling, which is an important source of NOx emissions. The BEPS themselves will not provide a solution for regional air quality NAAQS compliance over the long term, although there is potential to realize some localized benefits. The BEPS program will likely reduce NOx emissions by 4,000 tons per ozone season. In terms of power plant energy production, this will not have a large impact on the region's air quality but will likely lower pollution from power plants by a few percentage points. In terms of upwind pollution transport, this will have positive effects, but would not significantly improve air quality for the Washington region. These types of energy performance standards are an important tool in the context of a larger suite of energy efficiency measures that can positively impact regional air quality. For instance, building electrification and removal of heating systems that make use of fuel oil or natural gas can significantly impact air quality locally and regionally.

5. OVERVIEW OF THE MONTGOMERY COUNTY'S BUILDING PERFORMANCE STANDARD (BPS)
Emily Curley, Montgomery County

In 2022, Montgomery County joined forces with state and local governments across the country in the White House Council on Environmental Quality's National Building Performance Standard (BPS) Coalition. Through the coalition, Montgomery County commits to increase community and local stakeholder engagement to co-design BPS and complementary policies and programs with the goal of adopting BPS programs by Earth Day 2024. Montgomery County has ambitious GHG emission reduction goals of 80 percent by 2027 and 100 percent by 2035. The county's BPS address energy use and emissions in existing commercial buildings. Ultimately, the county is looking to achieve all-electric buildings supplied with 100 percent clean energy to operate at net zero carbon emissions. The BPS seeks to influence things directly under building owners' control and require better energy performance through conservation and efficiency, promote electrification, and in Montgomery County also seek to incentivize renewable energy use. The county has had an energy benchmarking law in place since 2014 for public buildings. Non-residential buildings over 50,000 gross square feet were required to report since 2016. Building owners track energy consumption and building operations data in ENERGY STAR Portfolio Manager. The data is reported to the county's Department of Environmental Protection by June 1 of each year. Data verification is required in the first year of reporting and every three years thereafter.

In May, 2022, the County Council signed Bill 16-21 into law. This legislation established the county's BPS, but also requires additional buildings to begin benchmarking. Multifamily buildings make up the largest share of buildings that will need to begin reporting. The legislation also drops the size requirement from 50,000 to 25,000 gross square feet, and updates exemption criteria. Each building starts at a baseline based on that building's own historical energy use. After 5 years, properties are evaluated at an interim period as to whether they are on track to meet their final targets. The interim target is calculated by drawing a straight line between the baseline and the final standard. Buildings in the same property group are assigned a long-term site EUI target to reach by their final BPS year, 10 years after they begin into the BEPS portion of compliance. Buildings that are already using less energy per square foot will be closer to the ultimate target, buildings that use more energy per square foot will have to realize more savings to reach the target. The BPS helps to ease the burden on the supply side to provide electricity from carbon free sources. This target would yield a 35 percent reduction in site EUI and also reduce scope 1 emissions from on-site fossil fuel combustion by 86 percent. BPS also provide improved local air quality inside and outside of buildings.

Additionally, the Maryland General Assembly recently passed Senate Bill 528 - Climate Solutions Now Act of 2022 with an effective date of June 1, 2022. This legislation requires commercial and multifamily buildings larger than 35,000 gross square feet to begin benchmarking and reporting data by 2025. Statewide BEPS are established through this legislation. The legislation aims to reduce net direct GHG emissions by 20 percent on or before January 1, 2030, as compared with 2025 levels for average buildings of similar construction and aims for net zero direct GHG emissions on or before January 1, 2040.

6. FACILITATED DISCUSSION ON BEPS AND THEIR IMPACT ON GHG EMISSIONS AND AIR QUALITY
BEEAC Members and Presenters

Discussion:

- The region's attainment of the 2015 ozone NAAQS was in part impacted by the pandemic. In 2021, there was an increase in ozone pollution, but it has remained relatively low. With preliminary data for 2022 it seems that the region will remain in attainment of the standard. Whether the region stays in attainment over the longer term remains to be seen. If the region does slip into nonattainment, the EPA will have to issue a redesignation, which would start a new clock on the State Implementation Plan (SIP) process. If the region falls out of attainment it would also trigger contingency measures that are being developed for the Maintenance Plan.
- Regarding BEPS, responses of property owners have been mixed. Property owners in the District have been concerned about what is required of them and how BEPS will affect their buildings. It has been helpful for property management folks to better articulate the need for building improvements, so from this standpoint the BEPS have given many property management workers a feeling of empowerment. It has also provided stimulus for building improvements. Opportunities for energy efficiency upgrades have increased and the District has a number of projects in their retrofit accelerator pipeline. This mixed response has also been reflected in Montgomery County. There is some concern amongst building owners about meeting the BPS, especially coming out of the pandemic. There are a number of high performance buildings in the county already, and many companies and businesses have been seeing the benefits of energy efficiency improvements, so there is a lot of opportunity in this area and there are many property owners who see how BPS could be good for business too.

Additionally, the county has a number of incentives available for building owners to make these types of improvements. The Montgomery County Green Bank also provides incentives and opportunities for building owners to make improvements. The county has heard that a longer-term standard is better for them, as it provides more time, as well as certainty around the standards themselves.

- DOEE has partnered with the DC's Building Innovation Hub, as well as the DC Sustainable Energy Utility (DCSEU) and the DC Green Bank. Together with these partners, the aim is to provide support to provide resources and connections to help building owners, operators, designers, contractors, and tenants improve their buildings. This work also entails a heavy emphasis on outreach. The Affordable Housing Retrofit Accelerator program aims to tackle equity issues, while making energy efficiency improvements to buildings. Montgomery County has not begun full implementation of their BPS yet, so they are a bit further behind DC and are looking to learn from DC as it pertains to the outreach and equity pieces of this work. Montgomery County is also hiring folks that will be dedicated to stakeholder outreach and engagement in this area. The county just established their Building Performance Improvement Board that will be engaging with community stakeholders and provide technical support for building owners.
- In the District, audits are required as part of the BEPS' prescriptive pathway. This audit provides a preliminary look at the factors required for electrification. This introduces the building owner to the components of electrifying their building and identifies next steps and the costs. The District has not fully studied the outcomes of electrification versus renewable natural gas as it relates to the grid at this point. However, there would be definite impacts on air quality in the region. Also, thinking about the longer-term implications of electrification is important, as the grid is expected to become cleaner over the long term, leading to decreased emissions combined with electrification.

7. UPDATES AND ANNOUNCEMENTS

- GHG Emissions Inventory Update

Based on feedback, COG staff are currently working on a small edit related to solid waste for a few of the local GHG emissions inventories. This is the only technical update being made to the inventories. Aside from this, COG is also working with and the World Resources Institute (WRI) on forest and trees sequestration calculations. WRI is reviewing COG's Data Summary spreadsheets and advising staff on how to incorporate forest and trees into those spreadsheets that is both compliant with the U. S. Community Protocol, as well as the Global Protocol. COG is still on schedule to provide final GHG emissions inventories by the end of the year. The COG Board of Directors may ask for the 2020 GHG inventory results to be shared at the October 12 Board of Directors meeting.

- Regional EV Deployment plan

At the March Board meeting, the COG Board of Directors chose to focus on electric vehicle (EV) deployment as a top priority regarding climate change. A special session on EVs was held over the summer, which led to the adoption of a resolution calling for a clearinghouse to be built, shared, and maintained to provide information on EV policies, programs, incentives, and best practices. Additionally, a resolution was adopted to establish a regional EV infrastructure deployment working group to focus on EV policies, programs, incentives, and best practices, as well as potentially bidding for federal funding for EV infrastructure deployment in the region.

- 2022 Climate and Energy Leadership Awards

COG's Climate and Energy Leadership Awards recognize organizations that develop climate stewardship projects and programs that engage and serve the region's underserved communities. The awards program ran from April 20 to June 30 this year. The awards will be announced at the October 12 COG Board of Directors meeting.

- Energy Efficiency and Conservation Block Grant (EECBG) Program

The Department of Energy (DOE) has announced program funding for the Energy Efficiency and Conservation Block Grant (EECBG) Program. It will provide about $550 million dollars for local governments, as well as state government funding. More information will be forthcoming.

- New Climate Contract Update

New contracts are being finalized to provide expert local and regional planning and implementation support in all sectors of strategies needed to meet the region's 2030 climate goals and more. The Contractors include AECOM, Cadmus, ICF, Michael Baker, Stantec, and Tetra Tech. COG member communities will be able to engage with these contracts and receive support from COG staff through an MOU with COG. COG members will also be given access to these contractors directly through the COG Rider Clause.

- Green Bond Resource

CEEPC has asked COG staff to look into local governments that have leveraged a green bonding authority for renewable energy or related projects. Staff have put together a resource document but are soliciting any input on local examples of this before providing this document to CEEPC.

8. ADJOURNMENT

Dawn Ashbacher, Frederick County (BEEAC Chair)

Chair Ashbacher adjourned the meeting.

All meeting materials including speaker presentations can be found on the MWCOG website or by clicking the link below –
https://www.mwcog.org/events/2022/9/15/built-environment-energy-advisory-committee/

The next CEEPC meeting is September 28, 2022
The next BEEAC meeting is November 17, 2022

Reasonable accommodations are provided upon request, including alternative formats of meeting materials.
For more information, visit: www.mwcog.org/accommodations or call (202) 962-3300 or (202) 962-3213 (TDD)