Metropolitan Washington Council of Governments

BUILT ENVIRONMENT AND ENERGY ADVISORY COMMITTEE (BEEAC)

Draft Webinar Meeting Summary: February 20, 2025

BEEAC Local and State Government Members in Attendance:

- Al Carr, DOEE (Chair)
- Mati Bazurto, City of Bowie, MD (Co-Vice Chair)
- Amanda Campbell, City of Rockville
- Beth Groth, Charles County
- Chloe Delhomme, City of Manassas
- Dale Medearis, NVRC
- Devin Peart, Frederick County
- Drew Stilson, City of Arlington
- Emily Curley, Montgomery County
- Jenny Willoughby, City of Frederick
- John Silcox, Fairfax County
- Kevin Smith, Fairfax County
- Lauren Paulet, City of Frederick
- Lindsey Shaw, Montgomery County
- Luisa Robles, City of Greenbelt
- Matt Meyers, Fairfax County
- Maya Dhavale, Fairfax County
- Michele Blair, City of Laurel
- Michelle Smyk, Prince William County
- Mustafa Ahmad, MDE
- Rich Dooley, Arlington County
- Shawn O'Neill, Fairfax County
- Stephen Gyor, DC
- Valerie Amor, City of Alexandria
- Yi Sun, Prince William County

Additional Attendees:

- John Clinger, ICF
- Deb Harris, ICF
- Krista Hoffman, JCDA
- John Jameson, ICF
- Nicole Keller, PlanRVA
- Denise Nelson, DN Advising
- Matt Wendling, Warren County
- Fiona Wissell, ICF

COG Staff:

- Dan Barry, COG DEP
- Alissa Boggs, COG DEP
- Leah Boggs, COG DEP
- Heidi Bonnaffon, COG DEP
- Robert Christopher, COG DEP
- Maia Davis, COG DEP
- Jeff King, COG DEP
- Tim Masters, COG DEP
- Carly McGovern, COG DEP

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1. CALL TO ORDER AND INTRODUCTIONS

Al Carr, Branch Chief, Clean Transportation & Infrastructure, DC Department of Energy & Environment and BEEAC Chair

Chair Al Carr called the meeting to order, and introductions were given.

2. APPROVAL OF THE NOVEMBER 21, 2024 MEETING SUMMARY

Al Carr, BEEAC Chair

The November 21, 2024, BEEAC meeting summary was approved.

3. 2025 BEEAC PRIORITIES DISCUSSION

Al Carr, BEEAC Chair

During a recent discussion led by the chair, the committee reviewed the 2025 priorities while recapping the achievements of 2024. For 2025, the main priorities include conducting a mid-course review, addressing data center issues, and designing an outreach and education campaign. Continuing from previous years are focal points such as solar energy, information exchange, and the Comprehensive Climate Action Plan (CPRG).

The recap of 2024 highlighted two key areas: implementation and education. Implementation efforts centered on solar energy, climate investment planning, clean energy financing, and building energy tracking and reporting; meanwhile, the educational aspect emphasized topics like embodied carbon, electrification, and reliability.

During the discussion, members underscored the importance of electrification, particularly with the potential increase in interest in transitioning from natural gas furnaces to heat pumps, primarily due to anticipated rebates from the Inflation Reduction Act (IRA). They also highlighted the necessity for clear communication from local jurisdictions regarding federal policies and their implications for local and regional initiatives. Additionally, leveraging venues like BEEAC and COG to stay updated on federal developments and manage communication was discussed as crucial.

Members expressed concerns about accessing reliable information and suggested exploring methods to enhance the sharing and documentation of valuable resources. They reiterated the importance of focusing on energy efficiency and electrification alongside solar energy. The committee demonstrated a continued commitment to advancing renewable energy, improving information sharing, and implementing comprehensive climate action strategies to meet regional sustainability goals.

4. DATA CENTERS DISCUSSION: GHG EMISSIONS INVENTORY AND ENERGY STAR CERTIFICATION

Fiona Wissell, ICF
John Clinger, ICF
John Jameson, ICF

ICF Staff provided updates on inventories of greenhouse gas emissions for data centers, the Energy Star data center certification, and pathways to improve efficiency.

Presenter: Fiona Wissell

Fiona Wastell began by providing an update on the greenhouse gas (GHG) inventory for data centers, which is being developed as part of the comprehensive climate action plan under the CPRG program. The inventory aims to estimate electricity consumption specific to data centers and separate it from the broader category of commercial buildings. This involves collecting data on planned and permitted data centers from localities in the MSA and applying an energy use intensity metric to estimate electricity consumption and emissions. The initial survey responses indicated significant growth in data center square footage and electricity demand, particularly in Virginia.

Presenter: John Jameson

John Jameson then discussed the ENERGY STAR certification program for data centers, which aims to improve efficiency through certified products. He explained the certification process, which involves benchmarking in the EPA's Portfolio Manager tool, achieving a score of 75 or higher, and undergoing a site visit by a licensed professional. The program also includes the Design to Earn ENERGY STAR recognition for new construction or major retrofits. John highlighted the importance of using ENERGY STAR certified products to improve uptime, reliability, and security while reducing energy consumption and costs.

Presenter: John Clinger

John Clinger covered the technical pathways to improve efficiency in data centers, including raising temperature set points, server virtualization, removing inactive servers, and upgrading to more efficient fans and power supplies. He emphasized the importance of purchasing ENERGY STAR certified products and implementing best practices for airflow management and infrastructure efficiency. John also discussed the benefits of liquid cooling for high-compute applications and the potential for significant energy savings.

Q&A Session

The discussion concluded with a Q&A session, where participants raised several questions:

The first question was how the data compared to the JLARC report made public in December 2024, which noted a tripling of energy demand on the grid, primarily due to data centers, by 2040. Fiona responded that the JLARC report's unconstrained data center growth forecast mirrors PJM's 2025 load forecast.

Another member inquired about comparing ENERGY STAR and LEED data center evaluations. John Clinger explained that ENERGY STAR focuses on existing buildings and performance-based metrics, while LEED presents a more prescriptive and checklist-based approach. A question arose about whether any data centers had received ENERGY STAR recognition, and John Jameson confirmed that 289 data centers hold that certification.

Another person asked if an alternative exists to Portfolio Manager in case it becomes unavailable. John Jameson responded that there is currently no alternative.

One member questioned why the Design to Earn certification requires a score of 80 or better while the standard certification requires a 75. John Jameson explained that a higher score for new construction motivates better performance.

Participants also inquired about data centers' normal energy use intensity (EUI) compared to regular commercial offices. John Clinger noted that data centers have much higher energy densities due to their high compute loads.

Someone asked if the parameters discussed apply to server rooms and whether cleaning out unnecessary files reduces energy use. John Clinger confirmed that these principles apply to server rooms and that reducing data can save energy by decreasing the number of storage devices needed.

Another attendee inquired about the potential energy demand reductions if liquid cooling became mandatory at the server level. John Clinger responded that liquid cooling is more efficient than air cooling but also more expensive and challenging to retrofit.

One member asked whether energy-efficient equipment and practices reduce noise that disturbs the neighborhood. John Clinger explained that most noise comes from external sources like backup generators, but employing more efficient backup generation methods can reduce noise and GHG emissions.

A question arose about whether on- or offsite battery storage facilities serve data centers specifically. John Clinger mentioned that while some data centers house large battery banks for UPS equipment, the capacity needed for continuous operation remains much larger.

Overall, the discussion highlighted the challenges and opportunities in improving data center efficiency and reducing their environmental impact. The presenters emphasized the importance of clear communication and collaboration among stakeholders to achieve these goals.

5. CLIMATE GOALS MID-COURSE REVIEW: TECHNICAL APPROACH

Maia Davis, COG Senior Climate Planner

Item 5 focused on the mid-course review of the regional climate and energy action plan for 2030. The discussion was led by Maya, who provided an overview of the approach and sought participant feedback.

The plan was adopted in 2020, and now, in 2025, stakeholders are interested in assessing progress towards the 2030 goals. The review also aligns with the comprehensive climate action plan under development through the EPA CPRG program, which aims to achieve net zero by 2050. The mid-course review involves surveying localities to gather data on their climate and energy actions.

The end products of this review include a new, interactive climate energy dashboard on the COG website and a mid-course review report. The dashboard will focus on one to three performance indicators in various climate action areas, while the report will highlight local best practices and examples. The survey will align with the 2030 plan's climate mitigation strategy, covering areas such as clean electricity, zero-energy buildings, and zero-emission vehicles.

The survey will include both numerical data and multiple-choice questions. The questions will cover the percentage of local government operations energy consumption from renewables, the number of

net zero government facilities, and the steps to accelerate electric vehicle deployment. The survey aims to collect information that can be used to develop the dashboard and report.

Q&A Session

Participants raised several questions during the discussion:

One question was how much time would be given to respond to the survey. Maya mentioned that they are considering giving about a month to respond to the survey, which will likely be sent out in mid-March. They are open to feedback on whether this timeframe is sufficient.

Another question was about whether the survey questions would overlap with other ongoing data collection efforts, such as the CDP survey. Maya acknowledged that there might be some overlap with other surveys but emphasized that the mid-course review survey will be much simpler and less exhaustive than the CDP survey. They aim to avoid overloading respondents and will coordinate the timing to minimize conflicts.

Participants also asked how the data collected from the survey will be used. Maya explained that the data collected from the survey will primarily be used for the mid-course review report, highlighting local best practices and examples. The dashboard will focus more on data from other sources, such as utility data and greenhouse gas inventories.

There were concerns about the availability and granularity of data requested in the survey. Maya assured participants that they were not required to answer every question in the survey. If specific data is difficult to obtain, respondents can skip those questions. The goal is to gather as much useful information as possible without causing undue burden.

Another question was about whether the survey will include questions about battery storage and solar installations. Maya explained that while they are interested in data on battery storage and solar installations, they recognize that this information might be difficult to obtain from local jurisdictions. They are considering focusing on multiple-choice questions and best practice examples instead of detailed numerical data for these topics.

Participants also asked how the survey results will be shared. Maya explained that the survey results will be used to develop the mid-course review report, which will be shared with stakeholders. The report summarizes regional progress and highlights best practices, but individual jurisdiction responses will not be publicly shared.

6. 2025 MEETING SCHEDULE AND ADJOURNMENT

All Carr, BEEAC Chair

Chair Carr thanked members for their attendance and participation in the discussions; announced the date of the next meeting; and adjourned the meeting.

2025 BEEAC Meeting Schedule (Virtual meeting only):

- April 17, 2025
- June 19, 2025
- September 18, 2025
- November 20, 2025

All meeting materials including speaker presentations can be found on the MWCOG website by clicking the link below –
https://www.mwcog.org/events/2025/2/20/built-environment-and-energy-advisory-committee/

The next BEEAC meeting is April 17, 2025.

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)