



## Climate, Energy, and Environment Policy Committee Meeting

### DRAFT WEBINAR MEETING SUMMARY: MARCH 24, 2021

#### CEEPC MEMBERS IN ATTENDANCE

- Hon. Deni Taveras, Prince George's County
- Hon. Koran Saines, Loudoun County
- Hon. Mary Cheh, District of Columbia
- Hon. Matt De Ferranti, Arlington County
- Hon. Cindy Dyballa, City of Takoma Park
- Hon. Penny Gross, Fairfax County
- Hon. Takisha James, Town of Bladensburg
- Hon. Alanna Mensing, City of Manassas Park
- Hon. Tom Osina, City of Manassas
- Hon. Del Pepper, City of Alexandria
- Hon. Dave Snyder, City of Falls Church
- Hon. Ann Wheeler, Prince William County
- Hon. Patrick Wojahn, City of College Park
- Melissa Adams, Washington Gas
- Dr. Kambiz Agazi, Fairfax County
- Erica Bannerman, Prince George's County
- Michele Blair, City of Laurel
- James Bradbury, Georgetown Climate Center
- Amanda Campbell, City of Rockville
- Rachel Clark, DC Council
- Eric Coffman, Maryland Energy Administration (MEA)
- Ira Dorfman, GWR Clean Cities Coalition
- Randy Freed, Citizens' Climate Lobby
- John Friedman, Washington Gas
- Susan Gerson, Loudoun County Public Schools (LCPS)
- Kim Goddu, Bethesda Green
- Stephen Gyor, District of Columbia
- Dawn Hawkins-Nixon, Prince George's County
- Maureen Holman, DC Water
- Katherine Johnson, District Department of Energy and Environment (DOEE)
- Geoffrey King, Connected DMV
- Melissa Lavinson, Pepco
- Keith Levchenko, Montgomery County
- John Lord, Fairfax County Public Schools

- Su Ly, US Environmental Protection Agency
- Elissa McDade, Washington Metropolitan Area Transit Administration (WMATA)
- Dale Medearis, Northern Virginia Regional Commission (NVRC)
- Deborah Moran, City of Gaithersburg
- Regina Moore, Virginia Department of Transportation (VDOT)
- Shannon Moore, Frederick County
- Guillermo Ortiz, Chair of Air and Climate Policy Advisory Committee (ACPAC)
- Scott Pomeroy, Scalable Strategies
- Jim Ponticello, VDOT
- Matt Ries, DC Water
- Adam Roberts, Bethesda Green
- Erica Shingara, City of Rockville
- Dr. Dann Sklarew, George Mason University
- Tom Smith, Prince William County
- Hilari Varnadore, US Green Building Council

#### ADDITIONAL ATTENDEES:

- Adam Agalloco, ICF
- Dawn Ashbacher, Frederick County
- James Ball, Co-Chair DMV Net Zero Coalition
- Kim Cheslak, New Buildings Institute
- Leslie Chinery, ICF
- Kelly Crawford, DOEE
- Kim Drake, Maryland Department of the Environment (MDE)
- Ellen Eggerton, City of Alexandria
- Kathie Hoekstra, City of Alexandria
- Allison Homer, Fairfax County
- Michael Knapp, Montgomery County
- Gina Mathias, City of Takoma Park
- Demetra McBride, Arlington County
- Matthew Meyers, Fairfax County
- Bill Pugh, Coalition for Smarter Growth

- Steve Walz
- Jenny Willoughby, City of Frederick
- Angela Wong, ICF
- Norman Whitaker, VDOT

**COG STAFF IN ATTENDANCE:**

- Chuck Bean, COG Executive Director
- Leah Boggs, COG Environmental Programs
- Camilla Cook, COG Environmental Programs
- Maia Davis, COG Environmental Programs
- Jennifer Desimone, COG Environmental Programs
- Paul DesJardin, COG Community Planning and Services
- Katie Dyer, COG Environmental Programs
- Lyn Erikson, COG Transportation Planning

- Megan Goodman, COG Office of Communications
- Jeff King, COG Environmental Programs
- Brian LeCouteur, COG Environmental Programs
- Wyetha Lipford, COG Environmental Programs
- Mark Moran, COG Transportation Planning
- Erin Morrow, COG Transportation Planning
- Tim Masters, COG Environmental Programs
- Sabreen Rash, COG Environmental Programs
- John Snarr, COG Environmental Programs
- Kanti Srikanth, Deputy Executive Director Metropolitan Planning
- Dusan Vuksan, COG Transportation Planning



## 1. WELCOME AND MEETING SUMMARY

*Deni Taveras, CEEPC Chair*

Chair Deni Taveras called the Climate, Energy and Environment Policy Committee (CEEPC) webinar meeting to order. Chair Taveras made the announcement that the Global Covenant of Mayors for Climate and Energy (GCoM) has recognized the COG region's climate goals and CEEPC's 2030 Climate and Energy Action Plan as fully compliant to the global standards of best practices for climate planning. The COG region is the first region in the United States to achieve this status. Maia Davis (COG staff) went over the virtual meeting guidelines. CEEPC's January 27 Meeting Summary was approved with one abstention (Deborah Moran, City of Gaithersburg).

## 2. COMMITTEE AND MEMBER UPDATES

### A. Built Environment Energy Advisory Committee (BEEAC)

*Gina Mathias, BEEAC Chair*

- BEEAC has been engaged in capacity building on net zero energy buildings and building decarbonization for over a year now. This time last year, BEEAC launched a 3-part meeting series on this topic, which included participation from the New Buildings Institute (NBI), US Department of Energy (US DOE), the National Renewable Energy Laboratory (NREL), the Carbon Leadership Forum, as well as industry experts.
- Now that the region is beginning the implementation phase of the 2030 Plan, BEEAC had a panel discussion at the February 2021 meeting where the NBI discussed their framework for building decarbonization through decarbonizing building code language. BEEAC also hopes to explore technical assistance options to support work in this area.
- BEEAC also heard from the Cities of San Jose and Denver on their nuanced approaches to transitioning to all-electric buildings.
- Today's CEEPC panel with NBI and the Net Zero Energy Coalition is building on that effort, but from a policy level perspective.
- Finally, the deadline for the Non-utility Fuel Use Survey is approaching at the end of the month. COG staff is collecting this local data to improve the accuracy of the non-utility consumption in the greenhouse gas (GHG) inventories.
- BEEAC's next meeting is April 15.

### B. Air and Climate Public Advisory Committee (ACPAC)

*Guillermo Ortiz, ACPAC Chair*

- Since ACPAC's last update in January, ACPAC opened a second round of recruitment, from February 19 to March 19. The first recruitment round was from November to December 18, getting in over 20 applications, with most of the expertise in climate and energy. In February, ACPAC moved forward with a quorum (12 members) approved by the Metropolitan Washington Air Quality Committee (MWAQC) Executive Committee. The Executive Committee directed ACPAC to open a second round with a focused effort on getting more applicants with air quality expertise, making the distinction between expertise and interest.
- Metropolitan Washington didn't meet the 2015 Ozone Standard of 70 parts per billion by the 2020 deadline date, so ACPAC will be providing input on the extension process. Making sure that ACPAC has diverse expertise on the committee in the two main areas - climate and air - will ensure the highest quality of input as possible.
- The MWACQ Executive Committee will appoint the remaining 6 members at their April meeting.

- At the March meeting, ACPAC decided to move ahead with the regional Climate and Energy Leadership Awards Program, but with 1 or 2 awardees instead of 3.
- ACPAC's next meeting is May 17.

#### C. Greater Washington Region Clean Cities Coalition (GWRCCC)

*Ira Dorfman, GWRCCC*

- GWRCCC recently supported the application of DC Water to replace 14 of its older diesel trucks with 12 vehicles that run on 100 percent biodiesel. This is becoming a trend with public works departments. For example, the DC Department of Public Works has 24 such vehicles in its 76-vehicle fleet, with more on the way. GWRCCC has been supporting these initiatives.
- GWRCCC also wrote a letter of support for the District Department of Transportation (DDOT) Federal Transit Administration (FTA) grant application for 17 more electric transit buses for their fleet. They currently operate 14 and are in the process of replacing all of their diesel buses with electric buses.
- There are opportunities for CEEPC members with regard to the Mid-Atlantic Electrification Partnership. A number of the EVSE partners are looking to install charging infrastructure at homes, specifically in high utilization areas in the region. If any CEEPC members have ideas for the Mid-Atlantic Electrification Partnership to consider, they would welcome the input.
- GWRCCC is also contemplating a streetlight charging pilot with the World Resource Institute (WRI) and Pepco. There is discussion around installing chargers on streetlights that would be accessible to residents and also to multi-unit dwellings.
- GWRCCC is working with DDOT on a workforce development task force. Workforce development is going to be a big part of the infrastructure bill and GWRCCC has heard from WMATA and DDOT and others that there is a great shortage of technicians. There is an effort to provide training in underserved communities and provide great well-paying jobs.
- Finally, GWRCCC has been doing a lot of outreach to community organizations as part of their equity project in Wards 7 and 8, as well as in Johnson square in Baltimore as part of the Mid-Atlantic Electrification Partnership. GWRCCC is looking to get input and put together a program that the community really supports.

#### D. Regional Tree Canopy Sub-Committee (RTCS)

*Michael Knapp, RTCS Chair*

- RTCS presented the Tree Conservation Cookbook at the last CEEPC meeting. The committee is currently working to finish and release document. A CEEPC member requested a few improvements to the document, which RTCS is working on.
- At the next RTCS meeting, the sub-committee will be working on tree canopy goal recommendations. Essentially, RTCS is assessing current canopy levels using 2013 and 2018 data from the Chesapeake Conservancy and the Maryland Department of Natural Resources. RTCS is using that data to make recommendations for land use canopy goals, jurisdictional canopy goals based on population density, and also a regional tree canopy goal. RTCS is also developing metrics to judge the success of these goals over time.
- RTCS has developed a strategic tree planning program and partners publication. This can be shared at a future CEEPC meeting. RTCS has also started work on an interim regional urban forest action plan. This plan will contain information on how to implement the tree canopy recommendations.

#### E. Committee Member and Staff Roundtable Updates

*Kim Drake, MDE*

- Recently, the Maryland Department of the Environment released their 2030 climate plan, called the [2030 Greenhouse Gas Emissions Reduction Act Plan](#). Maryland has a state goal of reducing GHG emissions by 40 percent below 2006 levels by 2030. However, projections show that emissions can be reduced to nearly 50 percent. With recent change in federal administration, MDE is hoping that Maryland will indeed meet a 50 percent reduction in GHG emissions by 2030. MDE is also including a long-term goal of net zero emissions by 2045. The aim is to achieve these goals, while also fostering a healthy state economy. According to the World Resource Institute (WRI), Maryland is number one in the nation for reducing emissions while growing the economy. MDE has also incorporated environmental justice components in the plan. MDE asked each of the state agencies to discuss how their programs affect or address environmental justice. The plan has an entire chapter on climate justice and a just transition.

*Amanda Campbell, City of Rockville*

- Larissa Johnson (Montgomery County) is working with Solar United Neighbors and local staff around the region on coordinating messaging regionally for a solar co-op, launching April 1.

*Mary Cheh, District of Columbia*

- The DC Council is working on legislation to quantify emissions from food and beverages to create a green procurement policy that reduces emissions from these purchases.

*Elissa McDade, WMATA*

- WMATA is bringing an update of their draft Sustainability Principles to the WMATA Board of Directors for adoption on Earth Day, April 22.
- WMATA will launch regional conversations about resiliency as they develop their resilience implementation strategy. WMATA is coordinating with the Transportation Planning Board (TPB) on this.
- WMATA is continuing to move forward on zero emission vehicles. There is a zero emission update available on their website. WMATA is rebuilding two bus garages right now and making them electric vehicle ready. Also, WMATA is launching an evaluation effort for potential electric buses at Shepherd Parkway. They will test up to 14 buses and chargers for interoperability and to support a strategic fleet rollout. WMATA's entire fleet is around 1,600 buses. There is still a long way to go, but progress is being made.

*Koran Saines, Loudoun County*

- Loudoun County is starting an Environmental Commission. The county also approved one full-time staff member position to work on any initiatives from the environmental committee and anything related to environmental issues.
- On April 20, Koran Saines will submit a Board Member Initiative (BMI) directing staff to look into the feasibility of deploying solar farms in Loudoun County. If the county moves forward, they will be looking at best practices and where to deploy them. Recently, the county received five unsolicited requests from solar companies looking to bring solar farms to Loudoun County. So, doing the research is going to be necessary to provide better guidance.

*James Bradbury, Georgetown Climate Center*

- Regarding the Transportation and Climate Initiative (TCI), there was an memorandum of understanding (MOU) signed at the end of last year by Mayor Bowser (District of Columbia) and also by the governors of Massachusetts, Connecticut, and Rhode Island to move forward with a cap and invest program for transportation. Virginia and Maryland are still considering whether to

move forward with implementation. There have been updates since the signing of the MOU in December. A draft model rule has been released with public input period through April 1. TCI is initiating a set of processes including the development of a model framework for public engagement, with particular focus on underserved and overburdened communities. The TCI invites input on this.

*Deni Taveras, Prince George's County*

- Prince George's County is currently in the engagement process for their Climate Action Plan.

### **3. CITY OF FREDERICK DRAFT CLIMATE ACTION PLAN**

*Jenny Willoughby, City of Frederick*

The City of Frederick started working on this Climate Action Plan (CAP) in early 2020. The city has developed the CAP for city operations to address current and future climate change. The CAP comprehensively considers the changing climate in the city by addressing both mitigation and adaptation. This scope is focused on city government operations and includes buildings and facilities the city owns and operates, streetlights, and traffic signals, water and wastewater treatment plans, fleet vehicles, and non-fleet vehicles and equipment (e.g., lawn mowers, construction equipment). This CAP demonstrates the city's commitment to lead by example.

*Leslie Chinery, ICF*

In April 2020, the City of Frederick passed a climate emergency resolution recognizing the need to consider climate change in all of the city's actions. The CAP was developed as an iterative process within the city. It was led by the Sustainability Department and Jenny. However, throughout the process, the project team engaged with other departments as well. There were four key goals for the CAP. First was to assess the city's baseline GHG emissions and project emissions out to 2030. Next was to identify actions that the city could take and understand the impact of those actions on their anticipated emissions. Next, was to assess and explain the climate change risks that the city may face, including the impacts and consequences across city departments, the population, and city operations. Finally, the CAP provides recommendations for climate resilience strategies that the city can take, including incorporating considerations of climate change into planning.

The government operations GHG inventory showed that electricity use accounts for a little more than half of the city's carbon footprint, followed by landfilled waste disposal. The city's on road fleet vehicles overall emissions were projected to increase by about 7 percent from the baseline year of 2015 through 2030, as a result of anticipated growth in city operations, but offset in part by the anticipated decarbonization of the grid. The project team then worked to identify opportunities to reduce emissions, largely focusing on purchased electricity, the vehicle fleet, and solid waste. The project team focused on 17 potential strategies and then modeled 10 strategies that were included in the final CAP. These strategies result in 2030 emissions that are 50 percent lower than 2015 levels. Some key strategies that were modeled included completing the city's LED streetlight project, following up on energy audits that the city conducted, retrofitting existing facilities with energy efficiency upgrades, developing an environmentally preferred purchasing policy, installing renewable energy at city facilities, where feasible purchasing clean energy through renewable energy credits and PBAs, and implementing a green building policy for any new construction. Regarding transportation, some strategies looked at expanding telecommuting opportunities, electrifying the city's fleet, purchasing fuel efficient vehicles, including a hybrid replacement program. Finally, some waste strategies included looking at landfill management practices and possible improvements.

It is key to engage with departments at the beginning and throughout the process in order to get buy-in, as other departments will need to be engaged with regard to implementing the strategies identified in the plan. In addition, addressing feasibility concerns that were raised by other departments was important. The project team wanted to make sure that the strategies identified were actually feasible and could be implemented over the next 10 years. Engagement with partners is critical throughout the GHG inventory development process.

*Angela Wong, ICF*

As a part of the resiliency planning portion of the CAP, the project team identified climate change projections, as well as climate impacts and consequences. Most of the work focused on identifying strategies to integrate resilience into municipal decision-making. First, the team pulled together climate change projections to have a better understanding of how the future might look within the City of Frederick. The team used climate change data on temperature and precipitation from the NOAA Climate Explorer, and also looked at hazards including inland flooding, as well as frequency and intensity of storms, and extreme winter conditions. These projections were used to assess potential climate impacts and consequences for the various sectors and municipal departments. This information was collected from the city's hazard mitigation plan, COG's Climate Risk and Vulnerability Assessment and local expert knowledge. In addition, the team also identified climate impacts on vulnerable communities by drawing from COG's Equity Emphasis Areas map. The team focused in on three areas for the city to integrate climate resilience into municipal processes. First, integrating resilience into overarching plans, such as the 20 year comprehensive plan and the 10 year strategic plan. Second, integrating resilience into the city's capital improvement program. Third, resilience as it related to land management. The team held one workshop for each of the three resiliency strategies. This was particularly useful to engage with the staff who would be implementing these recommendations. Providing specific examples of what was meant with regard to integrating resilience was helpful for staff to understand how to implement the recommendations.

#### Discussion:

- The City of Frederick's process started before Frederick County's Climate Emergency Mobilization Workgroup came online. The city will consider this workgroup's recommended actions and policies in the next phase, which will be more community-focused.
- Data collection was one of the first challenges that was encountered. The city already collects great data, but there are certain areas where data is not available. Putting policies or procedures in place to collect data on a regular basis is very important. The team could estimate data using proxy methods if recent data was not available. There were some issues collecting on-site fuel use data, fleets data, as well as off-road equipment data. Finally, refrigerants are usually a relatively small portion of an inventory, but it is something that has a large potential to grow and is going to be the focus of policies moving forward.
- The Frederick County landfill had a landfill gas collection system that was in operation in the 2015 base year. Subsequently, that collection system ceased operations in 2018; it was no longer economically viable. This caused a jump in emissions. Additional information from the County indicated that 96 percent of the county's waste is now sent to another landfill out of state, which does have landfill gas collection. This is why there is a noticeable jump in emissions, followed by a decrease back to lower levels.
- In terms of equity and the development of resiliency strategies, the team emphasized the need to consider both communities with greatest risks, as well as distribution of resources related to climate resilience. For example, when identifying capital improvement projects, this could entail consideration of where the greatest infrastructure investment needs are,

where the greatest climate risks are, as well as where investments could most reduce social inequity and increase opportunity.

#### 4. PATHWAYS TO ZERO ENERGY BUILDINGS

CEEPC's 2030 Climate and Energy Action Plan identifies the need to transition all new construction to zero energy by 2030. The New Buildings Institute (NBI) presented an overview of the 5 foundation steps to zero carbon building policies and laid out specific policy guidance within each step. CEEPC was also introduced to the DMV Net Zero Coalition, a peer-exchange network of multi-disciplinary building industry professionals that promotes and builds capacity for net-zero energy buildings and technologies throughout metropolitan Washington.

*Kim Cheslak, New Buildings Institute*

NBI focuses on what they consider the five foundations of zero carbon building policies. The five foundations include energy efficiency, renewable energy, grid integration and storage, electrification, and embodied carbon. There is a loading order to these foundations; improving energy efficiency first, and then adding renewable energy, grid integration and so on, allow buildings to achieve net zero carbon status. With regard to the policy landscape, there is more emphasis on building codes and zoning policies for new construction, while energy benchmarking, retrocommissioning, and building performance standards are emphasized for existing buildings. Municipal policies look at zoning, incentives, gas moratoriums, and other sustainability actions. At the state level there is utility regulation and state building codes. Energy efficiency and renewable energy form the basis of net zero energy. These are driven primarily by codes, building performance standards, and incentives (e.g. zoning, utility, and market incentives). Finally, materials impact refers to a building's embodied carbon. Policies that influence this include materials-based codes, recycling/reuse policies, and other incentives.

*James Ball, Co-Chair DMV Net Zero Coalition*

The DMV Net Zero Coalition envisions a National Capital Region made up of thriving, resilient and just communities working to reduce atmospheric carbon in the built environment as the pathway to achieve sustainability in the region and for future generations. Their mission is focused on driving the region towards zero carbon communities. This is done largely through their six committees and a network of volunteers who participate by developing case studies and working on the committees. Collaboration is a large part of this work, as many government and industry stakeholders come to meetings to share knowledge and support each other. The Coalition's current projects include expanding training on equity in the built environment, launching an exhibit on the aesthetics of net zero energy buildings, ongoing peer exchanges to discuss topics such as embodied carbon and building performance standards, and launching peer groups to work on projects and issues around net zero energy buildings. CEEPC members are welcome to join in and participate in the Coalition.

Discussion:

- NBI's research has indicated that integrating all new construction with the grid and providing on-site renewable energy can make all-electric new construction possible in most places. There is not evidence that the grid will break by requiring all-electric new construction. If all buildings were transitioned to all-electric, the peak would shift and this causes some concern. It is for this reason that there is an increased focus on energy efficiency in existing buildings.
- Natural gas is a major heating source in the COG region. It is difficult to see how this



transition can occur. Transition costs would be massive. There is uncertainty over whether the grid can sustain such a shift. The failure of the grid in Texas in February raises a lot of questions. There is much to say about the vulnerability of the grid.

- Another large pressure on the electric grid will come from the transition to electric vehicles.
- There is no comprehensive study that examines the impact of total electrification or the cost. There is always a focus on energy efficiency first, which mitigates, but does not address the issue. Most of the region's buildings are existing buildings and very expensive to convert.
- Communities that NBI is most actively engaged with start out with some version of a roadmap or technical analysis. That type of work would both evaluate the current policy landscape and review of grid capability in terms of some of the peak shifting, efficiency targets required to avoid some of the potential grid impacts. The roadmap type exercise helps to bring a lot of the technical background to the forefront and shape the steps needed to move communities forward.
- Members suggested the next steps of updating the current policy landscape, session(s) on cost/benefits of electrification and PJM grid capabilities and resiliency, then identifying how to further utilize tools from the NBI to achieve some of the regional goals in COG's 2030 Climate and Energy Action Plan.

## **5. UPDATE: 2020 COVID-19 IMPACT ON ENERGY AND EMISSIONS**

*Tim Masters, COG Environmental Programs*

COG staff have worked on a multi-sectoral analysis of the impacts of COVID-19 on the COG region using available data. As more robust data becomes available, the impacts will be more clearly quantified. Electricity consumption decreased considerably in 2020 and remained lower than previous years. Electricity data used in this analysis is for the entire PJM grid territory, which is much larger than the COG region. COG's utility energy data survey, which will be analyzed over the summer, will provide more precise data for the COG region. Telework in the region increased dramatically in 2020 and it is likely that many workers will be teleworking more often after restrictions have been lifted. This was one factor that contributed to lower roadway traffic volumes in the region. Traffic volumes in 2020 decreased by 50 percent for the month of April compared to 2019 volumes. Overall, traffic volumes in 2020 were down around 20 percent for the year compared to 2019. Metrorail and metrobus ridership were down considerably in 2020. Air travel was also significantly lower in 2020. All these factors have resulted in lower GHG emissions in 2020, as well as contributed to improved air quality in the region. In 2020, the COG region experienced the cleanest air recorded in the past 40 years. GHG emissions are estimated to have dropped 10 percent below what was expected for 2020, according to COG's business-as-usual (BAU) projections. The biggest contributor to this decrease was on road transportation. Almost 7 percent of the emission reductions were due to lower traffic levels. Air travel had a 2 percent reduction impact in overall emissions, and lower electricity consumption led to around a 1 percent decrease in emissions.

Discussion:

- Energy use reductions are not automatic because a building is "closed" via policy. Operational work to ensure savings is important and required. Efforts focused on energy reduction should not be downplayed by implying reductions were a "bonus" from COVID.
- COG staff will continue to work on analyzing data as it becomes available and see how the lifting of COVID-related restrictions impacts activities and emissions in the COG region.

## **6. ADJOURN**

*Deni Taveras, CEEPC Chair*

Chair Deni Taveras adjourned the webinar meeting. CEEPC meeting dates for 2021 include:

- May 26
- July 28
- September 22
- November 17