

Climate, Energy and Environment Policy Committee (CEEPC)

MEETING SUMMARY: NOVEMBER 15, 2017

CEEPC MEMBERS IN ATTENDANCE: (*) Indicates participation by phone

- Hon. Penelope Gross, Fairfax County (Chair)
- Hon. Jay Fisette, Arlington County
- Hon. Mary Lehman, Prince George's County
- Hon. Del Pepper, City of Alexandria *
- Dr. Kambiz Agazi, Fairfax County
- Ira Dorfman, Greater Washington Region Clean Cities Coalition (GWRCCC)
- Gretchen Goldman, Chair, Air and Climate Public Advisory Committee (ACPAC)
- Rachel Healy, WMATA
- Maureen Holman, DC Water
- Kate Johnson, District Department of Energy and Environment (DOEE)
- Scott Pomeroy, Scalable Strategies *
- John Lord, Loudoun County Public Schools (LCPS)
- Katherine Magruder, Maryland Clean Energy
- Jon Settles, Capital Sustainability
- Pamela, Sebesky, City of Manassas *
- Tim Stevens, Virginia Sierra Club
- Kathryn Zyla, Georgetown Climate Center
- Ashleigh Armentrout, City of Bowie *
- Erica Bannerman, Prince George's County
- Nick Bonard, NCPC
- Megan Gould, EPA *
- Daniel Sze, City of Falls Church
- John Warren, VA DMME

ADDITIONAL ATTENDEES

- Anthony G. Bigio, George Washington University
- Bill Updike, Integral Group
- John Miller, Flywheel Development
- Jessica Pitts, Flywheel Development
- Chris Somers, Arlington County
- Greg Mella, Smith Group

COG STAFF IN ATTENDANCE:

- Stuart Freudberg, Executive Office
- Steve Walz, COG Environmental Programs Director
- Amanda Campbell, COG Environmental Programs
- Maia Davis, COG Environmental Programs
- Jeff King, COG Environmental Programs
- Leah Boggs, COG Environmental Programs
- Tim Masters, COG Environmental Programs

1. CALL TO ORDER, INTRODUCTIONS, APPROVE MINUTES, CHAIR'S REMARKS

Chair Penelope Gross called meeting to order. Introductions by those in attendance and on the phone followed. Meeting summaries from the September CEEPC meeting was approved.

2. COMMITTEE REPORTS

A. Built Environment Energy Advisory Committee (BEEAC) (Gina Mathias, Chair)

- BEEAC received results of annual survey, which will guide the committee's priorities for the coming year. Initial results show energy efficiency as a committee priority.
- BEEAC hosted two workshops as part of its "solar market workshop series" over the last two months. Lessons learned included how local governments should consider the transparency of processes and guidelines, making sure there is a clear regulatory pathway for community solar projects, the permitting and zoning processes, customer acquisition, and site location. Panelists also explored regional policies or programs that support community solar.
- Penny Gross, Fairfax County (Chair) Regarding a solar project's end of life, there is concern
 over what happens to the infrastructure at end of life and who takes responsibility for this,
 especially as solar developers may no longer exist when an array is decommissioned. This
 issue is expected to be taken up at Virginia's General Assembly, and is something that
 CEEPC should track.

B. Air and Climate Public Advisory Committee (ACPAC) (Gretchen Goldman, Chair)

- ACPAC spearheaded the Climate and Energy Leadership Awards. The winners (Mundo Verde Bilingual Public Charter School, Arlington Initiative to Rethink Air, and City Blossoms, Inc.) were recognized at a ceremony at October 11 COG Board Meeting.
- Additional committee activities included a tour Blue Plains Wastewater Treatment Plant, hearing from the Northern Virginia Regional Commission (NVRC) regarding increased solar installations in Virginia, and discussing potential meeting topics for 2018. Potential meeting topics ranged from carbon taxation to bus rapid transport to continuing the environmental justice and resilience work.

C. Member Updates

- *Tim Stevens, Virginia Sierra Club* C-PACE Lunch and Learn event (sponsored by Virginia Sierra Club and Virginia Energy Council) in Fairfax County on November 29.
- Dan Sze, City of Falls Church Dan Sze was reelected as a City of Falls Church Council Member on November 7.
- Penny Gross, Fairfax County (Chair) November 15 is Penelope Gross's last CEEPC meeting as Chair of the committee. Mary Lehman has been nominated to serve as the CEEPC Chair for 2018, pending official appointment by the COG Board.
- Chair Gross recognized Jay Fisette for his leadership on CEEPC. He did not run for reelection to the Arlington County Board (where he had been for 20 years), and November CEEPC meeting is his last CEEPC meeting. Over 10 years, Jay has been a force driving regional climate action and the creation of CEEPC. For CEEPC's first three years, he served as Chair.
- *Mary Lehman, Prince George's County* Thank you to Penny Gross for her hard work and leadership of CEEPC. At a meeting with COG's Board, Mary shared the recent accomplishments of CEEPC, particularly the adoption of the 2020 Climate and Energy Action Plan and the leveraging of \$4M of outside funding this fiscal year to support the implementation of the plan. In the coming year, CEEPC will be focusing on continuing to support implementation of the 2020 plan, as well as advocacy and divestiture of government investments in fossil fuel stocks. Prince George's County recently voted to do this.

D. Staff Updates

• Steve Walz, COG – The Mid-Atlantic PACE Alliance (MAPA) met at COG on November 13, bringing together stakeholders with the goal of creating a more common market for PACE in this region so it can develop. The District has more than \$30M of projects in process and a strong pipeline of other projects coming in. There are several jurisdictions in Maryland that have PACE programs. This weekend, there will be an ordinance on the agenda of the Arlington County Board to establish the PACE program in Arlington and there is a rider clause, which would allow other VA jurisdictions to establish PACE programs.

3. FEDERAL CLEAN POWER PLAN

The Environmental Protection Agency (EPA) has proposed to repeal the Clean Power Plan (CPP) and are seeking comment on this proposal through January 16, 2018. The repeal impacts air pollution and could affect the ability of the region to meet its long-term greenhouse gas (GHG) emission reduction goals. CEEPC discussed whether to join MWAQC in commenting on this proposal. There are both legal and technical arguments being made in this proposed repeal. A letter from these committees would focus on the technical arguments.

The repeal would result in an additional 82 million tons of CO2 emissions nationally in 2020, growing to 413 million tons by 2030. Staff recommended that any comment letter should speak to the increase in emissions and note that this would cause increased levels of pollution affecting the region. Based on the projected harm to the region, the letter would conclude that the Clean Power Plan should be retained as promulgated in 2015.

Discussion:

- Dan Sze, City of Falls Church Secondary pollutions should be included, not just CO2 emissions caused by the burning of fossil fuels, but also arsenic, mercury and lead. Suggestion of a 2nd separate letter for the mayors of the We Are Still In Initiative.
- Kathryn Zyla, Georgetown Climate Center This is an opportunity to highlight benefits to
 other emissions and other health and environmental impacts of energy production. It is not
 just about CO2 emissions. CEEPC should also weigh in on the impact of changing regulatory
 analysis methodologies to minimize the effects that are reported for CO2 emissions and
 other pollutants.
- *Kate Johnson, DOEE* This has an impact on the Chesapeake Bay. Maybe this letter should be bigger than these two committees. DC is working on joint comments at the state-level, dealing with the legal issues of the proposed repeal. Climate Mayors (over 300 cities led by the City of LA) is providing resources to their members to submit comments, which should increase volume. EPA is only holding one public hearing about the repeal in Charleston, West Virginia. Potentially ask for hearings to be held in their states/cities to give their residents a chance to weigh in on proposal.
- Penny Gross, Fairfax County (Chair) The CPP comment letter should be added to the Chesapeake Bay Policy Committee's (CBPC) agenda.
- *Tim Stevens, Virginia Sierra Club* The health impacts of increased ozone as a result of higher CO2 levels might also be worth mentioning in the letter.
- Steve Walz, COG There is not enough time to take this up with the COG Board, as they do
 not meet again until January. The letter can say that it is consistent with the position that the
 COG Board has taken in accepting the analysis of the Multi-Sector Working Group.
 Additionally, the letter should stress the effects here in the region and recognize and how
 there should be opportunities for hearings that represent a broader scope of the nation.

4. ACHIEVING ZERO ENERGY DEVELOPMENT AT SCALE

The built environment accounts for a significant portion of the region's GHG emissions. Reducing these emissions is at the core of CEEPC's Action Plan. The adoption of Net Zero Energy (NZE) buildings is a path to addressing this challenge. NZE building projects have begun to trickle into the region, and this meeting's panel of private sector experts discussed the state of the regional market and what local governments can do to scale up NZE development.

Bill Updike, Integral Group

Bill is a Principle of Integral Group. Prior to this, he was Chief of the Green Building and Climate branch of the DC DOEE. Integral Group is a leader in delivering NZE projects. Mr. Updike commented how the trajectory of NZE building projects is looking similar to LEED certification projects back in the mid-2000s. Cities and counties across the country have made 100% renewable energy, zero carbon, or similar commitments. NZE buildings will be a significant part of achieving those goals.

DC was the first city in the US to pass a green building law in 2006, requiring LEED certification and Enterprise Green Communities. In 2008, it was the first city in the US to pass an energy and water benchmarking law. The renewable portfolio standard (RPS) was updated last summer, requiring 50% of DC's electricity to come from renewable sources by 2032, with a local carveout of solar at 5%. DC has added language in to their RFPs for public building projects, giving additional points for projects that propose NZE, Passive House, or Living Building Challenge plans in their RFP responses. This is something that every COG jurisdiction could do, with no cost or implications.

DOEE has been working on an update to both DC's Energy Conservation Code and Green Construction Code. The new energy code is very aggressive. Within this new code is the first NZE language in any code in the US. The atmosphere for NZE has been created, as far as policy and finance (DOEE created the DC Sustainable Energy Utility and the DC PACE financing program – also working on creating the first City Green Bank in the US) are concerned. For NZE in DC, there can be anywhere between a 33%-37% return on investment as simple payback inside of three years.

John Miller, Flywheel Development

John is a Principle of Flywheel Development, a real estate developer based in the District of Columbia. They use the Passivhaus standard to achieve NZE.Flywheel's most recent project, the Perry Street Townhome development, was recently completed in Prince George's County. The County was quite supportive of Flywheel. The permitting process was smooth due to Prince George's County DPIE, which has changed its inspection process for modular projects.

Flywheel also has two additional 100% affordable housing projects with DC DHCD in the District currently in design including Stack Eight, 16 townhouse style flats, and Cycle House, 15 apartments over a commercial space. The State of Maryland has a number of programs that can help developers like Flywheel such as a NZE loan program, the Community Legacy and Smart Growth plans and funds associated with those.

There are some key incentives and policies for scale and affordability that Flywheel recommend including permit fast tracking; lowering upfront costs through financing programs such as DC PACE, MD DHCD; property tax abatements; creating NZE construction codes and standards; mandating NZE projects; changing building area calculations (when measured to the exterior wall it inadvertently penalizes high-performance wall assemblies, which are usually thicker); grouping or minimizing the amount of mechanical rooftop features would free up space for solar deployment; and adding preference points on competitive solicitations for those implementing standards like Passivhaus and NZE.

Greg Mella, Smith Group

Greg is the Director of Sustainability for Smith Group. He's also the co-chair for the American Institute of Architects' (AIA) 2030 commitment. Smith Group has designed several NZE buildings. Recently, he was the project designer and architect for the Brock Environmental Center for the Chesapeake Bay Foundation, a NZE, net zero water, and net zero waste building.

With regard to NZE buildings, designers need to be focused on passive building design because this is the most cost-effective way of reducing a building's energy consumption. There are amazing tools available to simulate building performance now, and these really need to be utilized at every step of the design to improve building energy performance. Occupancy also needs to be focused on, as how people use the buildings is crucial to improving energy performance. Finally, designers and builders should stay engaged with buildings after they are completed to learn from these buildings and apply lessons to future projects.

Smith Group was involved in the Old Town North Small Area Plan Ecodistrict study. They had the goal of trying to get this district to NZE by 2030. Smith Group modeled some of the new development that was planned for the ecodistrict and strategies were identified for the buildings that were planned for the district. The result of this modelling will be used as a tool for anyone interested in developing in the district, as it provides several strategies that have a range of payback periods. Smith Group looked at how policies and incentives could be created to encourage the kinds of energy targets they needed to get to NZE. Adopting more rigorous energy codes is critical. Encouraging the retrofitting of existing buildings is an area for expansion from a policy perspective. Mechanisms to encourage retrofits are important. A "change hands" policy is an example of this, where whenever a building changes hands the seller would need to retrofit the building to bring it up to an energy standard. Solar coops and other incentives should also be considered.

Discussion:

- John Miller was asked to speak to how the inspection process changed as a result of the Prince George's County projects. Mr. Miller commented that it was a meeting of the minds including elected officials, appointees at DPIE, and the Flywheel team. There was a lot of willingness to learn.
- It was noted that the building code is not an option in the Commonwealth of Virginia.
- Panelists were asked how geothermal plays a role in NZE projects. Many projects do have geothermal. Limited land area can be an issue in urban environments sometimes. An alternative is tapping into sewers, which is a better heat transfer medium than the earth and in urban environments there is an abundance of that (example, DC Water headquarters).
- Panelists were asked how they cater to personal vehicle or EV charging in both residential and commercial buildings. Mr. Updike described how the Green Construction Code in the District has requirements for EV and those have increased in the new version.

5. ADJOURN

The next CEEPC meeting will be on the Public Policy day at the Washington Auto Show (Thursday, January 25). CEEPC will meet at the Washington Convention Center, not at COG, and this will give members full access to the show prior to its opening to the public. A reminder of the COG annual meeting, which is going to be at Gallaudet University on December 13 (registration required).