



Built Environment and Energy Advisory Committee (BEEAC)

Meeting Summary: December 17, 2015

MEMBERS AND ATTENDEES:

Michelle Vigen, Montgomery County (Chair)
Emil King, District of Columbia (Vice-Chair)
Joan Kelsch, Arlington County
Bill Eger, City of Alexandria (by phone)
Shane Cochran, City of Alexandria (by phone)
Jessica Lavender, Fairfax County
William Marsh, Fairfax County
Lindsey Shaw, Montgomery County
Erica Shingara, City of Rockville
Lisa Orr, Frederick County
Jorge Camacho, DCPSC
Kimberly Campbell, District of Columbia (by phone)
Brian Uher, District of Columbia
Gina Mathias, Takoma Park
Edward Yim, DOEE
Kate Walker, City of Falls Church
Tim Stevens, City of Falls Church
Liz Entwisle, MDE (by phone)
Noel Kaplan, Fairfax County (by phone)

COG STAFF:

Maia Davis, COG DEP
Sophie Earll, COG DEP
Jeff King, COG DEP
Isabel Ricker, COG DEP
Madison Wagner, COG DEP

1. Call to Order and Introductions, *Michelle Vigen (Chair)*

Chair Vigen called the meeting to order and attendees introduced themselves.

2. Jurisdiction Roundtable Updates

Falls Church: The City of Falls Church has hired an Environmental Programs Coordinator to work on the city's greenhouse gas emissions inventory and coordinate volunteer environmental programs.

Takoma Park: The City of Takoma Park has recently approved an effort to convert all of the city's street lights to LED by the end of 2016.

Fairfax County: Fairfax County has approved electric vehicle (EV) infrastructure for residential charging stations and is waiting on review by the planning commission to move forward with the project.

Rockville: The City of Rockville will be signing its first solar power purchasing agreement soon. The city has been working to create a comprehensive master plan for its environmental actions; as well as working on LED retrofit upgrades for unmetered streetlights within the jurisdiction.

Montgomery County: The Montgomery County Green Bank has started holding meetings and is working towards putting together an implementation plan. Montgomery County passed amendments to its benchmarking requirements and will be sending out first notices at the end of January. The county is close to announcing the hiring of a residential energy program manager as well as the launch of a solar landfill project. Maryland will be holding a community solar regulation meeting in January that Montgomery County will attend.

DC: The District of Columbia recently signed a large community solar power purchasing agreement for 11 MW, making it the largest municipal solar project in the US. The district has also been working on PACE and microgrid studies.

Frederick County: Frederick County is planning on receiving at least 5 electric buses in January, and will continue to add 4 more per year going forward, until the fleet is completed.

3. DC Grid Modernization Program

Jorge Camacho, DC PSC

The DC Public Service Commission (DC PSC) is attempting to identify ways to update and modernize DC's electrical grid, and has conducted research on how to move forward with this effort. The district's current energy delivery system depends on natural gas, thermal energy, and electricity, and needs the power density of these three sources to meet the grid demand. Modernizing the grid will need to complement the electric utility, foster distributed generation, and increase the use of fuel and system alternatives. Alternatives to the existing grid are being considered in DC because of clean energy mandates, the question of system reliability, customer expectations, cost reductions, and compatibility with increased renewable energy use.

DC PSC explored options and best practices by looking at the case studies of Massachusetts, Minnesota, New York, and California. However, DC is not starting from scratch with efforts to update the grid. The district is one of the top RPS states, has almost 100% advanced metering infrastructure (AMI) penetration, and has about 13 MW of PV solar. Despite this, there will be technical and policy challenges for distributed generation. Multiple stakeholders, changing ownership structure, compensation and market facilitation concerns, technology deployment, and integration issues will all need to be addressed in future efforts to modernize the grid.

Moving forward, DC will need to participate in workshops and working groups to learn best practices and what has not worked for other jurisdictions and municipalities. Collaboration will lead to a better program for the district and can help other localities in the region as they modernize in the future.

Discussion:

Members of BEEAC asked Jorge whether or not PSCs across the country communicated and shared information like this on a regular basis. While public service commissions in the US do collaborate and share strategies, different states and localities have different capabilities and approaches, depending on their residents and situations. Members also mentioned the fact that DC's current grid will not be able to support the region's renewable energy or RPS goals, which triggers the need for grid modernization.

4. Residential Energy Efficiency Programs Panel

Gina Mathias, Takoma Park; Lisa Orr, Frederick County; Joan Kelsch, Arlington County

Takoma Park

The City of Takoma Park undertook a Neighborhood Energy Challenge in order to lead residents by example towards achieving goals within the city's sustainable energy action plan and competing for Georgetown University's 2-year municipal energy reduction prize. The Neighborhood Energy Challenge is a 1-year competition with 18 neighborhood teams that participate in a tiered, voluntary reduction program to earn green home certification points. Single family homes, apartments, and condominiums can all earn points towards winning a \$2,000 grand prize that will go towards sustainability projects in their neighborhood.

Green home certification is tiered and flexible, allowing residents to participate regardless of their financial capabilities or whether they rent or own. The certification has three categories: light green (10 points), medium green (20-40 points), and dark green (40-100 points). In order to encourage participation, the City of Takoma Park has enhanced the emPOWERMD rebates and currently has 710 participating households and 43 certified green homes. 21% of the city's single family homes are participating, or 11% of total city households. One challenge for the program has been finding ways for multi-family households to participate.

In order to raise public awareness and encourage participation in the challenge, the City of Takoma Park has used the physical advertisements like the city newsletter, public and neighborhood meetings, and yard signs. The city has not relied heavily on social media outlets or online presence, as many residents do not utilize these outlets or do not speak English as their first language. Takoma Park "utilized" existing activists and environmentalists in the city to spread word of mouth to their neighborhoods. Door-to-door canvassing was a leading contributor to participation in the challenge.

Discussion:

BEEAC members present asked Gina Mathias what the budget for Takoma Park's Neighborhood Energy Challenge was. Including the rebate program, the budget for this program was \$85,000. Members were also curious about the effectiveness of canvassers and what the city had found were the best practices in using canvassing as a strategy to increase public participation. The City of Takoma Park had two college student interns canvassing from 4pm to 8pm in the summer to raise awareness.

Frederick County

Frederick County created the a 3-part residential energy efficiency program called the Green Homes Challenge, encouraging residents to become “power savers” and pledge to be more sustainable. The program includes an interactive website with participant profiles containing to-do lists and points for completed actions, as well as links to relevant information on why each action is important. The website allows participants to track progress, earn “medals” and points, see the estimated impacts of the actions they have taken, and join green teams to increase the overall impact of their actions.

Frederick County has also implemented several special energy reducing initiatives under the challenge. In 2014, the county implemented a refrigerator exchange to replace old, inefficient refrigerators, free of charge. The county also conducted power-saving retrofits from 2013 to 2015, focusing on low to moderate income homes. These retrofits, up to \$5,000 in services and equipment, or up to \$8,000 if HVAC upgrades were needed, came with no cost to the homeowner. This program came with the criteria that all retrofit work must meet a 10-year payback requirement. Over 300 households were served in the three years the program has run.

Discussion:

BEEAC members asked Lisa Orr if Frederick County had encountered any financing problems in running this program. The Green Homes Challenge and special initiatives under it have been funded largely through grant money from the Regional Greenhouse Gas Initiative (RGGI) and Maryland Energy Administration (MEA), reducing financial strain on Frederick County.

Arlington County

Arlington County’s primary residential energy efficiency program is the Arlington Initiative to Rethink Energy (AIRE). This organization has implemented several small initiatives that it hopes to combine into a larger, more impactful effort. These small initiatives include efforts like lighting education, hosting a life-sized energy journey board game for residents, holding lightbulb swaps for inefficient bulbs, and encouraging residents to borrow the “kill-a-watt” device from the public library to measure energy use from household appliances.

AIRE also organizes citizen groups such as Arlingtonians for a Clean Environment, which trains volunteers to retrofit houses to increase energy efficiency. AIRE has launched several small programs including the commercial lighting rebate program, a small residential energy challenge, and the green home choice program. The organization also has an online presence, which it uses to encourage energy reductions and educates residents about energy efficiency.

Discussion:

The members of BEEAC asked Joan Kelsch if the Arlington Chamber of Commerce was involved in raising public awareness for AIRE’s programs. AIRE has bought ad space in the chamber newsletter, but has found it is not a good outlet to reach residents. Members were also interested in how Arlington was able to get such large turnout for its life-sized energy board game. AIRE utilizes school and civic newsletters and local ad space to raise awareness. However, the game requires 40 adult volunteers, which can be a challenge.

5. BEEAC FY 2016 Priorities

COG staff conducted a survey of COG member jurisdictions to determine the priority topics for BEEAC to address in the upcoming year. The survey found that the top three priorities for local governments in 2016 are: solar and other renewable energy, energy efficiency, and alternative fuel/electric vehicles. Other priorities the committee wishes BEEAC to cover include: high performance buildings, and energy resiliency. These priorities demonstrated a slight shift from those identified in 2015, with a higher focus on renewable energy and clean vehicles.

These priorities will be addressed in BEEAC meetings next year. Specific topics will include: an energy finance workshop, report-out on solar co-ops and other solar work, sustainability and master planning, and alternative fuel vehicle work. The development of the CEEPC 2017-2020 action plan will also provide guidance on BEEAC priorities and topics for next year. Survey respondents recommended the 2016 legislative priorities focus on energy conservation, district and renewable energy, emissions reductions, tracking greenhouse gas regulation efforts, solar power, and electric vehicles.

Going forward, recommended links to CEEPC and the MSWG will include topics and priorities like energy storage, microgrids, energy resiliency, greenhouse gas emissions reductions, benchmarking, alternative vehicles, energy infrastructure, smart grids, efforts to reach 2% reductions in existing buildings, and residential engagement.

6. COG Updates

- **Chief Purchasing Officers Committee:** COG has been working with the Mid-Atlantic cooperative procurement's sub-committee for purchasing officers to start crafting a cooperative procurement agreement. The sub-committee will begin meeting in February and will work to create discounts on sustainable products for its members.
- **Solar Co-ops:** COG has been consolidating feedback from stakeholders to create a public information website on solar co-ops as a tool for local governments. This website will contain case study information and infographics to inform policy makers. Commercial solar workshops have also contributed to improved understanding of solar energy and new financing or procurement opportunities.

7. Upcoming Meetings and BEEAC Adjournment

- MSWG Full Committee – January 7
- PACE Workgroup– January 12
- CEEPC – January 27
- BEEAC – January 21