

## Built Environment and Energy Advisory Committee (BEEAC)

Meeting Summary: February 16, 2017

### BEEAC MEMBERS:

- Michelle Vigen, Montgomery County (*Chair*)
- Jeffrey Bond, Prince George's County
- Noel Kaplan, Fairfax County (\*)
- Gina Mathias, Takoma Park (\*)
- Kevin Milstead, Prince William County
- Mary Olean, Fairfax County (\*)
- Lisa Orr, Frederick County (\*)
- Najib Salehi, Loudoun County (\*)
- Lindsey Shaw, Montgomery County
- Kate Walker, Falls Church
- Jay Wilson, District of Columbia

### ATTENDEES:

- Carl Elefante FAIA, Quinn Evans Architects
- Audrey Tepper, Department of Interior National Park Service
- Gregory Miller, Georgetown University (\*)
- Megan Milliar, DHR (\*)
- Eboni Wimbush, Siemens (\*)

### COG STAFF:

- Leah Boggs, COG DEP
- Jeff King, COG DEP
- Maia Davis, COG DEP
- Michael Truax, COG DEP
- Amanda Campbell, COG DEP

(\*) Indicates participation by phone

### **1. Call to Order and Introductions, Michelle Vigen, Montgomery County, BEEAC Chair**

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The Chair called the meeting to order and attendees introduced themselves in person and by phone. The meeting minutes from the December 15, 2016 meeting were approved with one correction by the attendees. The correction notes that Montgomery County's C-PACE program webpage is MC-PACE.com.

### **2. Jurisdiction Updates and Announcements, Michelle Vigen, BEEAC Chair**

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**Falls Church:** Falls Church will participate in Solarize Virginia with Fairfax City and the Town of Vienna. The program will begin on May 18<sup>th</sup>, and run through June. Falls Church is also interested in

the legislation moving through the Virginia legislator that will allow for a Dominion Power managed community solar program.

**Fairfax County:** The county is beginning to prepare a draft that details its Environmental Vision update. The draft is currently online and available for public comment. There has been over 350 comments after just one week of posting, and will continue to accept comments until March 6<sup>th</sup>.

**Washington DC:** The District Solar for All Program has recently launched. More information about the program is available on the Department of Energy & Environment webpage. The DC Greenbank report will be publicly launched later this month. The Sustainable DC revisions that are required every five years has launched, and will look to update the DC Comprehensive Plan, which will include resiliency. The draft report will be available for public comment later in March. There are grants available for case studies of green buildings to examine how they can be built and ways to continue the greening process in historic preservation guidelines.

**Frederick County:** The sign up period for Maryland Sun solar coop has been extended until April. There have been 115 sign ups so far that help gauge interest in the program, although signing contracts has not kept up with the pace of interest. The county is wrapping up its power savings program, which served 145 households, helping to upgrade the energy efficiency with \$8,000 in grants for the necessary efficiency upgrades. The county has concluded its electric transit buses pilot program and found that cold weather reduces the effectiveness for buses that have an 8-hour shift route schedule. 4-hour shift route buses are still able to operate in the colder weather at an ideal efficiency. The county will wait for better technology to purchase electric buses for the 8-hour shift route buses.

**Takoma Park:** The city is in the final process of the Georgetown Energy Report. The report focuses on a grant program for multifamily energy efficiency program. The program provided \$5,000 in grants, funded by the city, for efficiency upgrades which had a combined estimate of savings of nearly 154,000 kWh a year. The city is continuing to work on its street light conversion program.

**Montgomery County:** The county is continuing its benchmarking process for Group 1 and Group 2 buildings throughout the entire county. The county Department of Environmental Protection has partnered with the US Green Building Council (USGBC) for the 4<sup>th</sup> annual energy summit, which will take place on Wednesday, April 5<sup>th</sup>. There are attempts to get accredited credits to count toward the USGBC *Continued Education* requirement from participation in sessions at the energy summit. The Montgomery County Greenbank continues to meet.

### 3. Panel Discussion: Energy Efficiency, Sustainability, and Green Building Practices in Historic Buildings

*Panel Facilitator: Michelle Vigen, BEEAC Chair*

*Panelists:*

*Carl Elefante FAIA, Quinn Evans Architects*

*Audrey Tepper, Department of Interior National Park Service*

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- *Carl Elefante FAIA, Quinn Evans Architects*

The United States has a problem when it comes to how to view “green buildings”. There is a belief that we can build the *greenest building* if only we could remove the structure already standing. The problem is, that the *greenest building* is the structure that is already there, which makes historic properties inherently greener than new constructions, like the supposedly “Greenest building ever built”, the Edge, in Amsterdam. The Edge is all about machine based green, or technology that allows for people to sidestep their responsibility to know of the effects of their habits. The Pension Building, in Washington, DC, is the true “Greenest Building”, since it forces people to observe their environment.

Washington, DC provides us with excellent examples to see how we can incorporate the historic character into making an existing building greener. There are old public schools that have been converted into low-income apartment complexes, all while keeping the original integrity of the building intact. The developers learned how to admire what was already provided by the older buildings, such as natural lighting, and natural cooling systems, which left included in the structure of the new development, allowed for a more efficient lighting and cooling systems all while keeping the historic feeling alive.

A lot of what we are doing today is correcting intentional policies that were used to change cities decades ago. We need to realign those policies to fit the current understandings of how communities coexist, and how we utilize buildings. In 2016, the UN Conference on Housing and Sustainable Urban Design adapted Habitat III, which calls for plans to prepare for an additional 3.3 billion people living on Earth by the end of the century. This plan focuses on sustainable growth. Additionally, the COP 21 Conference in Paris in 2015 developed the framework to limit global warming to 2 degrees C. In order to meet these goals, we need to double renewable energy deployment, get to 70-80% below ASREA standards for green building development, and renovate 80% of our building stock to also meet 70-80% ASREA standards. We also need to reduce the holistic carbon footprint of buildings by 50% by 2050, which can only be done by reducing new construction projects and prioritize existing building stocks.

Presentation:

<https://www.mwcog.org/file.aspx?&A=2ba35%2fjG3GvbU2TsSLrZp5cT6eipSkto6gHppgsiB9s%3d>

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- *Audrey Tepper, Department of Interior National Park Service*

The Department of Interior National Park Service provides preservation guidelines to restore a building without destroying the integrity of the building in the process. The NPS is tasked with leading the historic preservation efforts for both projects both internal and external of the NPS system. The guidelines call for the retention and repairing, rather than the replacement of materials on historic buildings. It is usually cheaper, and more efficient to use what is already available, rather than purchase new materials that might not have the same durability as the original historic ones. This process also keeps the historic character attached to the building, even while making 21<sup>st</sup> century upgrades.

Any designs made to a historic building should ideally strive to keep the historic building the dominate figure in the project, with additions serving no more than a continuation and companion to the original structure. It is important to consult a sustainability advisory team when in the designing process for a new historic restoration project. This will ensure that the project's characteristic integrity is kept alive, all while making the building as efficient as a new building.

Presentation:

<https://www.mwcog.org/file.aspx?&A=84JMcVWfzwmw%2fbjuioZ3wcyBf%2fBvGCqCHT6V2JuZGVkg%3d>

## Discussion

Q - Both of you pointed to the overall industry desire to throw things away and build anew. Is this an American thing, or are other countries dealing with the same problem? Are there any examples of cities or states that do things well?

A - Carl - There is a cultural element in the US to build new things. We are coming out a rapid building pace era, so change is happening to this mindset towards understanding we have a great foundation available to us with what we already have. We have made a lot of process to come out of that phase. Recycling buildings is a big part of the recent reurbanization being seen. Moving into neighborhoods that have authenticity is a popular thing for all age groups. Tension still exist particularly the fact that a person owns a piece of property, but the property value is not due to the person's own doing but the public service investment from piping to transportation. Also, we depend on what people around us build to make that property have value. We do not take enough credit for that when we negotiate with private owner. We need to start asking private property owners what they plan on doing to improve the neighborhood.

Q - There is interest in historic tax credits. Historical tax credits are on the table and are considered special interest benefits. Infrastructure programs look a lot like historic tax credits. They are being considered as the new way to focus of redeveloping and rebuilding our infrastructures.

A - Audrey – There are a variety of users of tax credits and other programs throughout the country. Community revitalization has been done taking advantage of these tax credits, which creates a chain reaction causing a wider community wide redevelopment to happen. There is currently a discussion to couple the low income tax credit and historic preservation tax credit to encourage low income residency development.

Q - What is the importance of tax credits for historic redevelopment projects? Are there any funds available for public historic preservation?

A - Audrey – Public historical preservation depends on state funding opportunities since the public sector cannot take advantage of tax incentives for these types of projects.

Q - Are there any advocacy opportunities that are fighting to take advantage of policies that might be contentious, but still need to be enacted?

A - Audrey – The NPS is in the process of writing guidelines to allow a low level understanding of the opportunities available for any developer. The guideline work will also suggest actions that need to be taken to address further recommendations and policies to encourage rapid development of historic restoration projects.

Q - Are there any incentives with GSA to emphasis greening historic building?

A - Audrey – President Obama signed an Executive Order that prioritizes green buildings, but these are on their way out with the new administration.

Carl – The Federal government has a program that dictates how to be a steward on federal property.

Federal energy standards can help this but is under attack with the new administration. This will not just impact what happens on federal properties, but the impact that these properties have on its surrounding market setting price. The Federal government is a big customer, and can change the marketplace, which can cause industries to want to get into that market to serve the large customer. Without the size of Federal government customer, that industry will contract.

The elephant in the room is the post war building stock. This is the era of the worst performing buildings ever built and represent a big percentage of building stock in nation. These are uniquely problematic to find proper ways to deal with this building stock, mainly due to the fact that the most popular construction type during this era is the single family residence, and in turn has a lot of pushback from local governments to address the efficiency issue of single family. Commercial building stocks are also problematic due to the fact that they are sealed buildings that become uninhabitable once the power goes out, a consequence of the absence of any windows.

Audrey – As time marches on we are going to see more and more post-war buildings reaching the 50-year-old buildings to be considered historic. The post war inefficient buildings are not hitting this mark and these are the worst buildings to attempt to preserve since the materials were not intended to last long and the design being not ideal for climate adapting.

#### **4. COG Updates, Leah Boggs and Jeff King, COG DEP**

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- **MSWG Update and Status of Climate and Energy Survey**

- Elected officials have been involved to help create a policy group, which has resulted in a resolution of voluntary actions for local and regional governments to do, and a set of actions that will need federal and state support to move forward.

- **Fleets for the Future Next Steps**

- COG will send out an annual soft request survey for the procurement process to gauge what to expect for the purchase price of AFV's. This process will help vendors to determine if they want to purchase an AFV(s), and if so, how many.

- **COG VW Settlement Initiative**
  - COG has submitted an application to participate in the appendix C funding opportunity from the VW Emission Scandal Settlement. Appendix C provides \$1.2 billion across 49 states, excluding California, to further develop an electric vehicle charging station network. VW has aimed to accept applications from 15 regions, and although they did not release which regions would be given priority yet, it is expected that the metro Washington area will be one such area.
  
- **Army Corps of Engineers Coastal Flood Risk Study**
  - COG is partnering with the Army Corps of Engineers to create a study of the coastal flood risk in areas around the Potomac and Anacostia Rivers. The study will look at flooding as a result of coastal storm surges, sea-level rise, overland flooding, and any other causes that can be expected to hit the region as a result of climate change. The study will help determine solutions to address the concerns found. The study is a 3-year, \$3-million project, with half of the funding provided by the Army Corps of Engineers. COG has signed on to be the non-federal sponsor, and is looking for partners to help fund the remaining \$1.5-million, hopefully by April. The next step is to have webinars to inform stakeholders about the study details and to solicit feedback from at-risk jurisdictions for what they want to see in the study.

#### 5. Upcoming Meetings and BEEAC Adjournment, *Michelle Vigen, BEEAC Chair*

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- BEEAC Planning Call – March 2, 2017
- BEEAC Meeting – March 16, 2017
- CEEPC Meeting – March 22, 2017