Department of Energy and Environment

# **Green Building Advisory Council**

Meeting Date: 12/06/2017

Meeting Location: DOEE, 1200 1st Street NW

Attendees: Jay Wilson (DOEE), Steven Gyor (DCOP), Anica Landreneau (HOK), Carl Reeverts (Ret. EPA) (phone), Eugenia Gregorio (Tower), David Epley (DCRA), Mark James (Urban Green), Cliff Majersik (IMT), Maribeth DeLorenzo (DOEE), Katherine Johnson (DOEE), Katie Bergfeld (DOEE), Marshall Duer-Balkind (DOEE), Mary Lynn Wilhere (DOEE), Alexander Bonelli (DOEE), Bryan Bomer (DCRA), Meggan Davis (DGS), Zach Dobelbower (DGS)

### Main Points/Discussion:

## Introductions (All)

**Council Swearing-In/Reappointment:** Booker Roary, Director of Operations with the Mayor's Office of Talent and Appointments (MOTA), presided over a swearing-in ceremony for the following reappointed council members:

- Mark James
- Eugenia Gregorio
- Anica Landreneau

# **Green Building Legislative Discussion:**

- Council Member Cheh introduced <u>B22-0437 Solar Ready Roofs and Sustainable Development Amendment Act of 2017</u>; a public hearing for the bill is scheduled for December 13<sup>th</sup>. The proposed bill amends the Green Building Act of 2006 and adds requirements for new and substantially renovated commercial buildings to be solar ready by January 1, 2020, and to have installed solar energy systems by January 1, 2023. The GBAC discussed the following issues in detail:
  - Provision requiring on-site renewable energy (RE) systems capable of generating a minimum of 10% of the building's energy needs for commercial buildings with five or more dwelling units:
    - The proposed bill is not easily enforced, in part because of this requirement; it may be more effective to have a higher renewable energy percentage potential for smaller buildings than 10%, and a lower one for larger buildings. While the first part of the bill can actually be achieved under existing building codes requiring no additional legislation achievement of the 10% provision is much more uncertain.
      - Should the requirement be limited to on-site solar?
      - Should there be an alternative compliance fee, or other options?
      - Should the focus be on capability, versus performance?
    - While on an average DGS 2-4 story buildings achieves about 20%, it is a more difficult target to achieve on larger residential buildings.
    - A 10% target is also not ambitious enough to move the city to net zero by 2050.
      - It was observed that, as the city approaches 2032, goals set today would change based on advances to technology, etc.
  - Stormwater requirements: Solar roofs are able to be combined with green roofs for the purposes of stormwater requirements; for example, Duke Ellington School's balance of





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green & solar roofs satisfies stormwater requirements.

- An errata will be released by DOEE to clarify the requirements for solar on top of a green roof.
- Distinction between common areas and residential areas: Should there be a separation between common areas and residential areas (over which the owners have no control in sub-metered buildings)? Or is information about multi-family residential buildings insufficient to make that distinction between EUI for common areas vs. residential areas?
- The District may want to consider a comprehensive "Clean Energy Act" based on implementation of the Clean Energy DC Plan.
- The GBAC discussed whether it was more effective to address the issue of renewables for buildings comprehensively, or incrementally. It was observed that the best option would be to present City Council with a comprehensive plan, with incremental steps that would occur over time. However, it may be difficult to usher through a comprehensive bill; therefore, incremental steps may wind up being the best, or only, option.
  - O How would the proposed bill capture building stock that is net zero overall, but without solar, for instance a district energy system?
  - How could one address buildings within a portfolio (here, the DGS portfolio) that have good solar access but need restoration?
  - Energy efficiency needs to be potentially the first and most aggressive tactic used to improve building performance.
- Affordable housing:
  - Should a comprehensive bill add in incentives or requirements for cogeneration systems that work well with existing housing stock?
- Building codes: Current codes don't let buildings that produce energy on-site use this produced energy during an outage, which lowers building resiliency.
- Hearing on 13 December 2017: Jay Wilson will distribute information on the hearing, which will take place from 10 am to 2 pm. Testimony from the GBAC can be given in person and in writing, individually and as a corporation.
  - Are there other industry organizations putting together statements for this hearing?
  - Cliff Majersik will look into which other industry groups Councilmember Cheh is in conversation with regarding the proposed bill.
  - Consensus of the GBAC: The GBAC is in support of the goal of the proposed bill, but not as written, instead supporting a more comprehensive approach. Further, the 10% threshold is not appropriate for all buildings covered by the provision. The first part of the proposed bill is covered by existing codes, and much of the bill is addressed in draft building codes that are waiting for adoption and enforcement.
  - O Be aware that questions may arise from the Council regarding Montgomery Country's ambitious goals; note that DC's goals are based on available modeling and is implementation-focused.
- Looking ahead: What is needed as oppose to or in addition to the proposed bill?
  - Details on Clean Energy DC Plan:
    - Building performance standards for existing buildings: Included in the Clean Energy DC Plan, but without details for which standards existing buildings must meet, which scope of buildings, and the ACPs. It does have requirements for retro-commissioning and auditing.
    - The Clean Energy DC Plan will move DC to the 50% reduction by 2032 as





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needed, but is not in legislation yet, which it should be.

- Calls for the Energy Code to have solar-ready buildings and to be renewable energy ready.
- The plan is to have a revised version submitted to Mayor Bowser for publication by February 2018.
- Potential addition: Feebate. Meaning, if a building doesn't reach a minimum standard or demonstrate improved performance over time, a fee must be paid.
  - New York City has proposed a fossil fuel cap with fines for buildings, but because DC does not heat buildings in the same way (higher number of electrified buildings), this specific example is not perfectly applicable. However, DC could have a performance standard.
- Note that the goals in the bill are interrelated; all actions assume that the other actions are occurring.
- o How should DC balance renewable energy targets with climate goals?
- o How do these issues affect adorable housing?

### **Roundtable Updates**

- Katie Bergfeld, DOEE: Washington Gas now has the functionality for the automatic upload of data, similar to the Resource Advisor application from Pepco.
- Cliff Majersik, IMT: Washington DC won one of 5 C40 climate awards given to cities in the U.S.; he observed that IMT works with all of the winners of this award. He also noted that Kim Newcomer had joined IMT, focusing on codes.
- Stephen Gyor, DCOP: DCOP is writing their comprehensive plan, which will work in concert with other DC government plans, including the update to Sustainable DC.
- Kate Johnson, DOEE: The Deadline 2020 commitment was agreed to by Mayor Bowser at the Chicago C40 meeting; it recognizes that if cities don't take significant action now, long-term goals won't matter as much, so pushes cities to focus on short-term implementation. DOEE has also awarded a grant to Enterprise Community Partners (that will be very relevant for Solar4All, as well as Climate Ready DC) that aims to build a resilient audit tool for DC. The tool will incorporate resilience metrics such as green infrastructure, passive survivability, and others. It will be specifically tailored for affordable housing, and will include 20 assessments done in DC.
- Eugenia Gregorio, Tower: The Metropolitan Washington Council of Governments has decided to pursue implementing fast-charging stations (as oppose to regular EV charging). Another organization potentially of interest to the GBAC is FitWel, a building wellness standard.
- David Epley, DCRA: DCRA is working with DOEE to host a conference in DC on achieving net zero goals. DCRA is also working with the DCSEU to create a "DC Green Home" program for single family residences. Further, they are experiencing growth in IT for better data collection & monitoring. The DCRA team is growing, and seeks resumes for Inspectors. DCRA anticipates that their proposed codes would be open for public comment in January or February 2018. Regarding these codes, DCRA conducted a study on the percentage increase of new codes over the prior set of DC codes, and observed that it is important to provide this information to the technical assistance group at C40.





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- Anica Landreneau, HOK: HOK is partnering with BREAAM. Additionally, she observed that resilience and sustainability were not addressed as comprehensively at a policy level elsewhere in comparison to DC, which is positive for the city.
- Marshall Duer-Balkind, DOEE: In terms of the Clean Energy DC Plan, he noted that a final version of the plan would have detailed projections for energy use, better modeling, and multiple scenarios discussed. For example, the plan demonstrated the 50% of the needed energy reductions could come from EBs. The plan also includes sections on equity, transit, single family residences and small multi-family residences, and developer-friendly content. The plan going forward is to focus on implement of these ideas. He encouraged the group to attend the Sustainable DC working group meetings, observing that there was a need for technical expertise (particularly in the Waste Working Group). Finally, the EPA will be introducing a revised Energy Star score in 2018—many building scores will go down because the buildings on average have improved, but 75 will remain as the threshold.
- Zach Dobelbower: For DGS, in FY17, 25-30% of load each year is being supplied by renewable energy. Additionally, the DGS Smart Roof program was an Honorable Mention in C40. As an agency, they are striving to tell an effective narrative around OPM, specifically in order to fund preventative and predictive maintenance, which is extremely cost-effective. The agency is also offering on an ongoing basis a "Building Retuning Training," in partnership with UDC's Building Sciences & Advanced Energy Efficiency Management center. It is open to anyone and coordinated by DGS. An ongoing question for the agency is and potentially a topic for a third party to examine: what does it cost DC to not engage in predictive and predictive operations & maintenance?
- Mark James, Urban Green: Urban Green is moving towards off-grid pocket communities "club communities" tiny homes on microgrids that are also net zero. They have a site in Oxen Hill, MD, and are hoping to develop a site in DC. They are also working on housing for the homeless in Baltimore, where they have created a 7x9 paid for by donation. These cubes are set in different vacant lots in Baltimore on blue code nights for people who may not be able to access shelters.
- Jay Wilson, DOEE: The Urban Sustainability Administration is distributing an RFA for technical bulletins. Additionally, the USA is meeting with WELL to begin a conversation on building wellness. He observed that DC was named the Smart City of the Year by Utility Dive, for smart technologies.

**Next Meeting:** Jay Wilson thanked the GBAC for their work throughout the year, noting that it has been a tremendous and successful year for sustainability and resilience in the District.

The meeting adjourned at 5:17 pm ET.

The next meeting will be:

February 7, 2018

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1200 First Street NE, 5<sup>th</sup> Floor



