

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

Green Building Advisory Council

Meeting Date: August 3, 2022 at 3pm

Meeting Location: Online – WebEx

Recording: <https://dcnet.webex.com/dcnet/ldr.php?RCID=43ec5dce9f3ba73e14ef6c6be757bbf5>

Attendees (all by Webex/phone)

GBAC Members Present: Jenn Hatch (DOEE), Anica Landreneau (HOK), Joseph Knackstedt (DHCD), Billy Grayson (ULI), Nick Burger (RAND Corporation), Stephen Gyor (OP), Gonzalo Rodriguez (Earthjustice), Michael Brown (DCRA), Cliff Majersik (IMT), Linda Toth (Arup)

GBAC Members Absent: Matt Floca (DGS)

Other Attendees: Connor Rattey (DOEE), Casey Studhalter (DOEE), Sarah Edwards (DOEE), Daphne Arko-Dadzie (DOEE), Jamie Donovan (DOEE), Ali Alaswadi (DCRA), Mark Bryan (DCSEU), Alex Fisher (DOEE), Ashley Delgado (DCRA), Marina Smith (DCSEU), Michael Feldman-Wiencek (DOEE), June Marshall (Holland & Knight), Jeff Meng (PIMA), Marshall Duer-Balkind (Integral Group)

Administrative updates and introductions – *Connor Rattey, DOEE*

- Jenn Hatch is the new Branch Chief of the Green Building & Climate Branch. She has been appointed as the DOEE representative to the GBAC. In this role, she will also serve as chairperson of the GBAC.
- Interviews have concluded for the private sector vacancy on the GBAC. The new representative has been selected and is working through the approval process.
- The next meeting will be held on October 12, 2022 (the second Wednesday of the month) to avoid conflicting with a holiday.

Energy system transition – *Alex Fisher, DOEE*

- The District is accelerating its carbon emission reduction work, and is moving its target of carbon neutrality up from 2050 to 2045. This means that starting 2045, the District should no longer use fossil gas.
- The deep decarbonization pathway that the District is using to meet this goal has three pillars:
 - *Demand reduction* (energy efficiency) on the consumer side to achieve a 50% per capita energy consumption reduction by 2032.
 - *Cleaning electric grid* on the supply side to get our electricity supply to 50% renewable energy by 2032.
 - *Fuel switching*, or replacing fossil fuels, incrementally, by 2045.
- For fuel switching, the plan is to gradually eliminate fossil gas and fuel oil, starting with shifting water heating and space conditioning to non-fossil equipment.

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

- The District has a single electric distribution company, Pepco, and a single fossil gas distribution company, Washington Gas. Both are regulated by the Public Service Commission (PSC), which has a mandate to consider climate change.
- The PSC is putting forward a cost-benefit framework to evaluate new utility investment decisions. DOEE asked the PSC to include environmental factors (e.g., GHG emission price) and health/safety factors (e.g., indoor air quality) in that framework.
- Related to fossil gas fuel switching:
 - DOEE studied methane leaks across District, focusing on residential zones. The study, completed in 2021, found 3,346 methane leaks across the District.
 - [2021 Fugitive Methane Emission Survey of the District of Columbia](#)
 - Washington Gas’s plan is to replace every leaking pipe, as they envision continuing to sell fossil gas through 2050. This does not comply with the District’s carbon neutrality commitments.
 - [DOEE’s comments to the PSC concerning Washington Gas’s Climate Business Plan](#)
 - One strategy is to target super emitting leaks. DOEE’s methane leak detection consultant found that roughly 7% of the leaks are causing most of the emissions.
 - Another strategy currently being evaluated is one to begin decommissioning gas infrastructure for a building or group of buildings (starting with residential neighborhoods) and electrifying those buildings so that they only use electric systems and appliances. This strategy is known as the “non-pipe alternative.” The money saved on replacing the infrastructure could be redirected to help cover the costs of electric heat pumps and other electric systems.
- Related to strategic electrification:
 - DOEE was funded by the US DOE to deliver a grid study for the District’s electrification plans. The report should be publicly available within the next few months.
 - One task involved in this process was to model different scenarios of efficiency for the District’s buildings by breaking them into typologies, developing energy models for each typology, and then aggregating the results to evaluate impacts on electric substations across the District.
 - Second task was to do a similar analysis for transportation, looking at the anticipated reductions in vehicle miles traveled based on DDOT’s MoveDC plan and electrification of vehicles, including buses and fleet vehicles.
 - Third task was to analyze GHG impacts of this pattern of electric use and future grid changes.
 - Fourth task was a grid analysis to identify areas of the grid infrastructure that would need to be upgraded to handle the new electrification load.
 - Fifth task was to analyze non-wires alternatives, such as demand side management, demand response, and distributed energy resources (e.g., solar) in order to handle additional load without costly grid upgrades.

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

NZE incentive program – Ashley Delgado, DCRA & Marina Smith, DCSEU

- The DC Sustainable Energy Utility (DCSEU) helps residents and businesses save energy and money by providing financial incentives, technical assistance, and information.
- The 2017 DC Energy Conservation Code introduced Appendix Z as a voluntary net-zero energy (NZE) compliance pathway for commercial buildings.
- DCSEU and DCRA partnered to develop an [NZE incentive program](#) for residential buildings (below 4 stories) to help prime the market for future NZE code requirements.
- DCSEU can only offer incentives for above-code energy savings, so programs like this will likely disappear once NZE codes are adopted.
- Since its inception in 2019, the program has supported 5 residential projects achieve NZE, with incentives of up to \$10k each. The financial incentive helps to offset incremental costs of NZE, including equipment upgrades and services like energy modeling and performance testing.
- Some challenges in making NZE construction mainstream: District's housing stock is older, limited roof space for PV, insufficient workforce development.
- Most of the NZE projects that have been funded through this program have relied on designers and contractors from outside the District. This highlights the need for more training and development of the local workforce. DCSEU is actively working to address this issue through a number of training initiatives.
- Feedback from GBAC members: This is a great program, conceptually. However, there is insufficient awareness about the program in the industry and among homeowners. DCSEU/DCRA should work on promoting the program, starting with updating the information available on their websites.
- GBAC members also expressed interest in the development of a similar program focused on commercial buildings, including residential buildings taller than 4 stories.

Energy legislation and codes update – Casey Studhalter, DOEE

- [The Clean Energy DC Building Code Amendment Act of 2021](#) was passed unanimously by Council and has been signed by the Mayor. Next, it must clear the Congressional review period before being enacted as law. The Act mandates that an energy code requiring net-zero energy performance must be adopted by December 31, 2026. This deadline aligns with the goals established in the Sustainable DC 2.0 and Clean Energy DC plans.
- The legislation focuses on the commercial energy code, applying to all projects of any use type, 4-stories or greater, as well as non-residential uses of any height. It does not require NZE for projects falling under the residential provisions of the energy code.
- Development of the 2023 DC Construction Codes is ongoing, with a goal of adoption by late 2023. The Commercial Energy TAG is still reviewing proposed amendments to the Energy Code and presenting them to the Construction Codes Coordinating Board. Once the Energy Code drafting process is complete, the TAG will then turn its attention to updating the Green Construction Code.
- The CCCB will hear the Commercial Energy TAG's proposal to require electrification for all new

GOVERNMENT OF THE DISTRICT OF COLUMBIA

Department of Energy and Environment

construction in the 2023 DC Energy Conservation Code on August 18th. Members of the public are welcome to participate and share their input. Interested parties can email Casey Studhalter for the link to attend the meeting.

- The Residential Energy TAG has already had their electrification proposal for new construction approved by the CCCB.

Equitable Building Electrification RFA – *Michael Feldman-Wiencek, DOEE*

- Help spread the word about this funding opportunity using the following promo blurb:
 - DOEE is seeking eligible entities to help refine what the District's path to electrification should look like with respect to the priorities and challenges of disadvantaged communities. This project will support DOEE's community engagement on the concepts of equitable electrification and decarbonization of homes and buildings.

Nonprofit organizations, faith-based organizations, and private enterprises are eligible to apply. The amount available for the project is approximately \$75,000.

The deadline for application submissions is **August 22, 2022 at 11:59 pm**.

Visit: [Notice of Funding Availability - Equitable Building Electrification](#) for more information about this RFA, and visit [grants and other funding](#) for other DOEE funding opportunities.

Direct all inquiries about this RFA to: greenbuildingrfa.grants@dc.gov.

Roundtable Updates – *All*

- Gonzalo Rodriguez – Private and non-profit members have drafted an embodied carbon bill and are working on proofreading and gathering feedback from stakeholders.
- Jenn Hatch – The Climate Commitment Act, which codifies the District's 2050 carbon neutrality commitment passed Council and has been signed by the Mayor. It is now going through Congressional review before it becomes law. <https://lims.dccouncil.us/Legislation/B24-0267>
- Mike Brown – On October 1, DCRA will split into the Department of Buildings (DOB) and the Department of Licensing and Consumer Protection. <https://dcratransition.dc.gov/dob>
- Nick Burger – In mid-June, the Net-Zero Energy Coalition held a Forum on Education and Workforce Development. If interested in workforce development, reach out to Nick.
- Cliff Majersik – Maryland passed a BEPS in April and IMT is helping to develop rules to implement. Montgomery County also passed their BEPS and has a pending bill that would require new construction be all-electric, with limited exceptions (e.g., commercial kitchens, backup power). The vote on this bill may not happen for another 1-2 months.
- Linda Toth – USGBC is accepting applications for new members on several LEED committees. This is a great way to support the development of the rating system. The application period closes Friday. <https://www.usgbc.org/articles/volunteer-leed-committee-2022>

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

Meeting adjourned at 4:19 pm.

The next meeting will be:

October 12, 2022 at 3-5pm