Department of Energy and Environment

Green Building Advisory Council

Meeting Date: April 5, 2023 at 3pm Meeting Location: Online – WebEx

Recording: https://dcnet.webex.com/dcnet/ldr.php?RCID=58d4416b3d721919215ae518e374c69f

Attendees (all by Webex/phone)

GBAC Members Present: Joseph Knackstedt (DHCD), Cliff Majersik (IMT), Mansi Talwar (GWU), Linda Toth (Arup), Michael Brown (DOB), Jenn Hatch (DOEE), June Marshall (Private Sector)

GBAC Members Absent: Billy Grayson (ULI), Anica Landreneau (HOK), Matt Floca (DGS), Stephen Gyor (OP)

Other Attendees: Connor Rattey (DOEE), Casey Studhalter (DOEE), Jennifer Johnston (DOEE), Andrea Foss (Steven Winters Associates), Andre Javier-Barry (DCSEU), Ali Alaswadi (DOB), Lauren Wingo (Arup), Vanessa Bertelli (Electrify DC), Webly Bowles (NBI), Francisco Matiella (DOEE), Stephanie Myles (DOEE), Nicole Whalen (Green Compass), Brittany Whited (DOEE)

Administrative updates - Connor Rattey, DOEE

- GBAC Chair, Jenn Hatch, has returned from parental leave.
- The GBAC currently has one vacancy for a nonprofit sector representative and one vacancy for a representative to be appointed by Council.
 - Interested candidates may apply here: <u>https://motaboards.applytojob.com/apply/CDm4XF/Green-Building-Advisory-Council</u>

Embodied Carbon: Next Steps – Private/Nonprofit Members

- Embodied carbon emissions are the lifecycle emissions of products and buildings. For buildings, this includes pre-operational emissions, including emissions from raw material extraction, manufacturing, and transportation.
- In February, GBAC private/nonprofit sector members wrote a letter to Councilmember Allen and the Committee on Transportation and the Environment calling for embodied carbon legislation.
- Since then, the GBAC private/nonprofit sector members have been working with CM Allen's office and other subject matter experts to craft legislation to address these two priorities:
 - The top priority is to require future building code updates to include low embodied carbon material standards that would gradually become more stringent with each code update. (Similar to how the <u>Clean Energy DC Building Code Amendment Act of 2022</u> calls for the adoption of net-zero energy standards in the 2026 code update).
 - The second priority is to require an interim standard for District government procurement. (Similar to how the <u>Greener Government Buildings Amendment Act of</u> <u>2022</u> calls for District-owned and -financed projects to meet net-zero energy standards before the 2026 codes.)





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- The <u>GSA's draft IRA Low Embodied Carbon Material Standards</u> are a good illustration of what the GBAC members would like to achieve for District procurement.
- This builds on similar legislation proposed and recently adopted across the country, and would help with data collection.
- Joe: What kind of reporting will the legislation call for? Lauren: Projects will need to submit Environmental Product Declarations (EPDs) to verify global warming potential of materials. Currently looking at concrete and steel as priorities, and then looking to expand. Cliff: Smaller projects (below a dollar or size threshold) would not be subject to reporting requirements.
- Webly: NBI is creating a code overlay for embodied carbon. Will have code language for 27 different products. Jurisdictions will not have to adopt in whole; can choose building materials to address.
- Next steps: Embodied Carbon Subcommittee will continue to work with Councilmember Allen to hopefully propose a bill before Council's July recess.

Funding Opportunities – Casey Studhalter

- Several upcoming federal funding opportunities. Here are just a few highlights from the DOEE side:
 - US DOE: Resilient and Efficient Codes Initiative. New Buildings Institute (NBI) partnered with DOEE to pursue funding for net zero energy code development. Application was submitted in March.
 - US DOE: Inflation Reduction Act. Support for adopting the latest energy codes. The RFI was just released this week. DOEE is still in an information-gathering phase and exploring how this might support our net zero energy code.
 - US EPA: Climate Pollution Reduction Act. These will be formula funds \$3M in planning funds for both priority climate planning and comprehensive climate planning. This would cover both regional and local efforts.
 - Mansi: Is there anything for low-income residents? Casey: There will be some direct-toconsumer rebates coming out of the IRA. Tax benefits are now available, but there will be more incentives coming.
 - Jenn: Lots of opportunities now and upcoming, and we are working on a webpage to summarize what DOEE is pursuing. When available, we will share.

DCSEU Services & Incentives for Commercial Real Estate – Andre Javier-Barry, DCSEU

- DCSEU Goals: Serve the people, businesses, organizations who live or are based in DC. Focus on source energy savings, GHG reductions, economic development goals, green jobs, deep energy retrofits, 30% of budget is on assisting low-income families.
- DCSEU can help with:
 - No-cost technical support
 - Calculate energy and cost savings of equipment



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- Review of vendor quotes
- Cash flow and return on investment analysis
- New Program Audit Incentive
 - For a building that does NOT meet BEPS
 - ASHRAE Level II 211-2018 compliant audit with DC Amendments
 - District building at least 50,000 sq ft
 - 5 cents per sq ft up to \$15,000
 - For a building that does meet BEPS
 - Same, but only 2.5 cents per sq foot up to \$7,500
 - DCSEU can help make sense of the audit and identify incentives for the building to take advantage of as they create a roadmap to improve their building performance.
 - DCSEU website has a list of auditors who can complete this work, but the program is not limited to those auditors.
- o Commercial Rebates
 - Standard rebates: Lighting, motors, HVAC, refrigeration, food service and vending
 - Instant Rebates: Lighting
 - Custom rebates: Building owners identify an energy saving opportunity and provide quotes from contractors. DCSEU provides custom savings analysis.
 Building purchases and installs equipment. DCSEU inspects and provides a rebate check.
- o Pay for Performance (P4P)
 - Accounts for actual energy consumption
 - Baseline: pre-implementation
 - Performance period: post-implementation
 - DCSEU does a regression analysis to determine energy savings. If there are savings, DCSEU can assist with payment.
 - Project examples: building controls/setback changes,
 - envelope/weatherization/other sealing, re/retro-commissioning
- DCSEU Commercial and Institutional Services and Rebates <u>https://www.dcseu.com/commercial-and-multifamily</u>
- ASHRAE Level 2 Incentive: <u>https://www.dcseu.com/commercial-and-multifamily/energy-audit</u>
- Pay for Performance: https://www.dcseu.com/commercial-and-multifamily/pay-for-performance
- Please reach out to learn more! Andre Javier-Barry DC Sustainable Energy Utility Account Manager: 202-677-4805 or <u>ajavierbarry@dcseu.com</u>
- Mark Bryan DCSEU Train Green Program

★ DEPARTMENT -

 DCSEU Train Green SEICBP (Train Green Sustainable Energy Infrastructure Capacity Building and Pipeline Program) offers training and certification courses at no cost to participants on a first-come, first-served basis.



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- Offers courses on energy efficiency, sustainability and health, building operations, LEED, HVAC, renewables and solar. Many of these courses include credentials or certification.
- Some courses are live and others are on-demand, including a how-to course for code compliance.
- Registrants that fit the following criteria will be given priority access to courses:
 - Tier 1 District residents at District CBE or CBE-Eligible firms
 - Tier 2 District residents working outside of the District or non-residents working for District CBE or CBE-Eligible firms
 - Tier 3 Residents and businesses that do not meet the criteria listed under Tiers 1 and 2
- Train Green Course Supplement found here: <u>https://www.dcseu.com/Media/Default/docs/seicbp/dcseu-traingreen-</u> <u>coursesupplement-2023.pdf</u>
- Questions can be sent to <u>traingreen@dcseu.com</u> or <u>mbryan@dcseu.com</u>
- District government employees are also eligible to register if they fit the criteria above or may audit courses (without earning certification). Contact Mark at the email address above for more information.

Residential Electrification Challenges & Opportunities – Vanessa Bertelli, Electrify DC

- Electrify DC overview: <u>https://docs.google.com/document/d/1Nf2uSueazMS3h4EhKYL2PG1oDluPHijDw09QcWJv_sM/</u> <u>edit?usp=sharing</u>
- Electrify DC website: <u>https://www.electrifydc.org/</u>
- Questions, ideas for funding, or other feedback: <u>vanessa@electrifydc.org</u>
- Urgency of residential electrification:
 - On-site combustion of fossil fuels in residential buildings is 40% of total on-site combustion in buildings.
 - Even if all our electricity came from renewable by 2032, we'd still have 600k MTCO2e/year from on-site combustion equipment.
- Challenges for electrification in the District:
 - o Lack of legislation on electrification of residential buildings
 - Over 300k units and every home is unique
 - o District has older residential stock, which poses challenges to upgrade
 - o Lack of consumer awareness
 - Risks locking us into more emissions as Washington gas doubles down on communication around more efficient fossil fuel appliances
 - Low-income communities are unaware and fearful of being taken advantage of, which makes it difficult to implement legislation that has been introduced
 - o Lack of contractor awareness and buy-in and fragmented market
 - Lack of workforce at all skill levels
- Opportunities





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- o Direct access to IRA and IIJA funds without state-level administrative burden
- Most residential buildings in the District are heated burning fossil fuels decarbonization will have a huge impact
- o Increase energy efficiency
 - Replacing fossil fuel burning appliance with efficient heat pumps
 - Heat pumps can also replace inefficient AC units
- Electrify DC's work:
 - o Education and training
 - o Advocacy
 - Convening, connecting, and fostering collaboration and partnerships
- Electrify DC engages two key stakeholders to reach consumers and electrify:
 - <u>REALE</u> (Real Estate Agents Leading Electrification) real estate agents, including brokers, real estate developers and appraisers.
 - Pledge that clients will be informed on electrification and help make decisions informed by electrification benefits.
 - Without proper training, realtors may dissuade clients from electrification, solar, and other innovative technologies.
 - Realtors are a strong group and informed members of Real-E can help advocate for electrification to council, their boards, and more.
 - BFF (Building for the Future) contractors, including HVAC installers, electricians, mechanical engineers, architects and design-build firms.
 - BFF can recommend contractors to future homeowners and educate homeowners about new technologies.
- Cliff: Continuing education requirements for appraisers and relators is a good idea. Council may be interested in legislating a requirement for this.
 - Webly: California licensed architects are required to complete zero net carbon mandatory continuing education: <u>https://aiacalifornia.org/zero-net-carbon-mandatory-</u> <u>continuing-education/</u>
- Linda: HOA managers and companies have significant influence and would be another good stakeholder to engage.
- Nicole: Is the District doing anything to require an energy scorecard to sell a home? If the home appraises higher for having an energy scorecard, that would be great. Vanessa: This would be the "energy labeling." It does work, but takes time and incentives. This could also protect renters from higher bills. There is currently a pilot program in NYC on this. Connor: CEDC 1.0 did suggest that there should be point of sale energy audits. This sort of requirement would likely need to be addressed by Council.

Roundtable Updates – All

• Those interested in applying to join the GBAC can apply here: <u>https://motaboards.applytojob.com/apply/CDm4XF/Green-Building-Advisory-Council</u>





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- DOEE filed its Strategic Electrification Roadmap in PSC case 1167: <u>https://edocket.dcpsc.org/apis/api/filing/download?attachId=188452&guidFileName=d34f67e1-84ad-4bc9-9236-81dcfca1e9f2.pdf</u>
- Cliff: IMT will be hosting a webinar on May 15 with NASEO, Denver, and EPA for jurisdictions to implement building energy standards. Webinar: Better Buildings for Everyone: How Federal Funding Can Support BPS Planning & Implementation https://us06web.zoom.us/webinar/register/WN_bwPsYaLwTJ6dyhZS9bNz0Q#/registration
 - Cliff is testifying tomorrow during DOEE's budget hearing. The mayor's proposed budget calls for a three-year delay on BEPS, and Cliff will be testifying in opposition to that delay.

Meeting adjourned at 4:33 PM.

The next meeting will be: June 7, 2023 at 3 pm



