Department of Energy and Environment

Green Building Advisory Council Meeting Date: June 1, 2022 at 3pm Meeting Location: Online – WebEx

Recording: https://dcnet.webex.com/dcnet/ldr.php?RCID=3d5e0a86a633a4aa78ff4721c1844e9b

Attendees (all by Webex/phone)

GBAC Members Present: Anica Landreneau (HOK), Fernando Arias (Clark Construction), Michael Brown (DCRA), Joseph Knackstedt (DHCD), Linda Toth (Arup), Billy Grayson (ULI), Nick Burger (RAND Corporation), Matt Floca (DGS), Stephen Gyor (OP)

GBAC Members Absent: Cliff Majersik (IMT), Gonzalo Rodriguez (Earthjustice)

Other Attendees: Connor Rattey (DOEE), Jenn Hatch (DOEE), Katie Bergfeld (DOEE), Erin Garnaas-Holmes (DOEE), Sarah Edwards (DOEE), Maribeth DeLorenzo (DOEE), Daphne Arko-Dadzie (DOEE), Jamie Donovan (DOEE), Ali Alaswadi (DCRA), Jeff Mang (PIMA), Mark Bryan (DCSEU), Antonio Yaquian (DOEE), Andrea Wise (DHCD), Lindsey Falasca (Building Innovation Hub)

Administrative updates and introductions – Connor Rattey, DOEE

- Jenn Hatch is the new Branch Chief of the Green Building & Climate Branch.
- Fernando Arias will be stepping down from his private sector position on the GBAC.
 - o A blurb about the vacancy is at the bottom of this document.

Embodied carbon & DGS – Matt Floca, DGS

- DGS has started discussing ways to address embodied carbon and has identified a couple projects that are at the right stage in their development timeline to set targets. These projects include four DCPS schools (Brown, Truesdell, Adams, Foxhall) and the Benning Road transfer station.
- DGS welcomes input from GBAC members to help steer those projects in the right direction on embodied carbon.

Embodied Carbon Subcommittee update - Private/Nonprofit Sector Members

- Private/nonprofit sector GBAC members have been meeting weekly since the last meeting to discuss embodied carbon and draft a bill to propose to Council.
- The bill may be based on "Buy Clean" policies that exist in other jurisdictions and require government-funded construction materials (e.g., concrete, asphalt, steel) to comply with certain requirements, such as a Global Warming Potential (GWP) limit. The bill may also require integration of embodied carbon into building codes in this code cycle (2023) or next (2026).
- The group has heard presentations from RMI and CLF, which included recommendations and examples of what other jurisdictions have done/are doing to address embodied carbon.





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- Stages of embodied carbon reporting in building code:
 - o 1. Disclosure/transparency
 - 2. Material targets
 - o 3. Whole building LCA
- Vancouver had the first North American mandate for embodied carbon reductions in new buildings and major renovations (40% by 2030)
- In the District, the Green Construction Code has some provisions for disclosure and projects that are held to the Green Building Act often do some disclosure as part of their LEED strategy.
- The GBAC would like to see more consistency in these requirements and would like to build transparency requirements into the building code during the 2023 code cycle. And the next step would be for the GBAC to work with Council to require a more stringent code update in the 2026 cycle.

2023 Code Cycle: + Consistent Requirements for Disclosure

Stage 1: Disclosure

Provide EPDs for specific products in a publicly available database. This step helps prime the market for what's coming and allows a jurisdiction to collect data to inform target setting in future steps.

EPD reporting is the first step and bare minimum. EPDs are a summary of a material LCA and quantifies the impact of a product on the environment. They include information about the manufacturer, product, LCA methodology, material content, emissions, waste, chemical content, valid date, etc. EPD is only data. The existence of an EPD does not mean that it can meet a specific environmental standard. The EPD discloses information on the product, and that might include environmental certifications (like Green Guard) or recycled content.

Language like this recognizes the lack of data around certain products and product types and should be applied to material products in alignment with other regulations, like those recognized in the Clean Future Act to increase the amount of data for future updates to model code language. Jurisdictions can revise the percentage of materials subject to the requirements as necessary to meet their own needs.

• Linda and Gonzalo will prepare a draft bill for other members to weigh in on at the next meeting.

80 M Street Mass Timber – Linda Toth, Arup

- A mass timber overbuild in Navy Yard designed by Hickock Cole Architects and Arup.
- https://www.arup.com/projects/80-m-street-se
- https://80mstreet.com/
- DCRA approved a code modification that allowed the project to add two floors and a penthouse to the top of a 7-story commercial office building. The IBC code has now been changed to allow mass timber above 85 feet, but this has not yet been adopted by the District.
- Materials were procured before current supply chain issues. A small crew came in from Seattle





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to put it together and the mass timber allowed for a quicker, quieter construction process.

- The building's core makes use of steel and concrete for the sake of egress (elevators).
- Project also includes on-site PV on about a third of the roof (60kW), as was required by the Zoning Commission.
- Project team engaged with DCRA early in the process. With all code modifications, DCRA looks for two things: the modification should still meet the intent of the code and public safety must be maintained.
- Since the 2021 IBC has not yet been adopted by the District, developers looking to do similar projects must still submit a code modification request to DCRA.

Small-scale residential discussion - Nick Burger, RAND Corporation

- Discussion question: while the GBAC has primarily focused on matters concerning larger-scale commercial and residential projects, is there any interest in addressing green building issues for small-scale residential projects?
- A couple ideas that the GBAC could explore:
 - o Time-of-sale disclosures of energy efficiency/performance of existing small buildings.
 - o Incentives to exceed codes.
 - o Electrification retrofits for existing buildings.
 - Look into effectiveness of code enforcement.
- Other GBAC members are interested in continuing this discussion, especially focused on incentives for small residential.
- The group will also need to establish a definition of 'small-scale' residential.
- Recommendations for groups/people to invite to talk about this at the next meeting:
 - Pepco to discuss electrification of existing buildings.
 - o DCRA Mike Brown is the resident expert on this.
 - DOEE Energy Policy team discuss the cost of replacing gas lines and whether this money could be spent on electrification.
 - o DCSEU Incentives.
- Vancouver has had issues with the implementation of an NZE requirement for new homes.
- Building Energy Exchange resources on heat pumps.
- DOE Zero Energy Ready Homes Program.

Green building grants awarded – Connor Rattey, DOEE

- DOEE recently awarded three Green Building Innovation Assistance Grants. Applicants were asked to propose one or more of the following for their District-based building project(s):
 - 1. Net-zero energy,
 - 2. Building electrification,
 - 3. Renewable energy storage,
 - 4. Embodied carbon reduction, and/or
 - 5. Deconstruction and reuse.





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- NHT Communities is a nonprofit organization that is redeveloping the Galen Terrace Apartments, an affordable housing community in the District. The grantee is focusing on building electrification and renewable energy storage. They will create a phase-out plan for the building's existing on-site combustion equipment. They will also design a solar array for the building, along with an energy storage system that will be able to power critical systems in the event of a power outage or other emergency event. The grantee will also prepare a resiliency plan for the building.
- Deaf-Reach Inc. is designing an affordable housing community for deaf residents, many of whom
 have other medical needs. The grant will fund a number a number of activities intended to
 support the project team with pursuing net-zero energy and renewable energy storage, similar
 to the project above. The grantee will also conduct a life cycle assessment to evaluate options to
 reduce embodied carbon. Finally, the grantee will evaluate strategies to deconstruct the existing
 buildings on the project site and salvage or reuse the materials from those buildings.
- Community Forklift will conduct a comprehensive deconstruction survey of District-based companies to assess the experience, knowledge, and interest in an independent deconstruction program service in the District. They will use the information collected to design and distribute marketing materials for their deconstruction program, DeconWorks, which will help them establish relationships and informal agreements to perform deconstruction services for Districtarea contractors and builders.
- Past grant projects: https://doee.dc.gov/node/1144081

Roundtable Updates – All

- Nick NZE Coalition is hosting a Forum on Education and Workforce on June 10 from 9:30-11:30 am. Register here: https://www.eventbrite.com/e/forum-on-education-and-workforce-tickets-344199619327
- Mike Many restaurants have been having issues purchasing EnergyStar equipment due to supply chain issues, and they've been coming to DCRA for relief.
 - o DCRA is working with the DC Green Bank to help fund accessory dwelling units as long as they have solar and have R-60 insulation in the attic/roof.
 - The CCCB approved the Residential Energy Code TAG's recommendation for an electrification requirement for new construction residential projects.
 - The Commercial Energy Code TAG will be making a similar recommendation to the CCCB soon, and will need support from GBAC members and other advocates to convince the CCCB to approve the code.
- Billy ULI has funding for decarbonization-focused advisory service projects this coming year. If you
 can think of a DC question about decarbonization that could benefit from national experts
 developing an advisory services report, contact Billy. Here's an <u>example</u> and more on the program
 here.
- Jenn Mayor announced a <u>Build Back Better Infrastructure Task Force</u> to figure out how to apply for and use federal dollars effectively. Some of these funding opportunities may come up with short notice, and DOEE may have requests for the GBAC between now and the next meeting.





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Apply to join the Green Building Advisory Council as a Private Sector Representative

The Green Building Advisory Council (GBAC) is a volunteer commission that makes recommendations on green building policies and monitors the District's compliance with green building requirements. Made up of representatives from the public, private, and nonprofit sectors, the GBAC continues to support the District as a leader in green building innovation. To view agendas for upcoming meetings and minutes from past meetings, visit the <u>GBAC webpage</u>. The next GBAC meeting is scheduled for **Wednesday**, **August 3**, **3:00–5:00 p.m.** and is open to the public. The meeting agenda, including a link to join the virtual meeting, will be posted to the <u>GBAC webpage</u> at least 48 hours before the meeting.

The GBAC is seeking applicants who live or work in the District to fill one vacancy for a private sector representative. For more information or to apply, visit the Mayor's Office of Talent and Appointments website.

Meeting adjourned at 4:59 pm.

The next meeting will be:

August 3, 2022 at 3-5pm



