

# **GSA Green Building Advisory Committee (GBAC) FY2024 Topic Selection Meeting**

**Thursday, December 7, 2023**

## **Attendees**

### ***GBAC Members***

- Ralph DiNola, New Buildings Institute (NBI), Committee Chair
- Fernando Arias, RETech Advisors, Acting Committee Co-Chair
- Kevin Bates, Sharp Development
- Brett Bridgeland, Rocky Mountain Institute (RMI)
- Roger Chang, Buro Happold
- Projjal Dutta, New York State Metropolitan Transportation Authority
- Christine Harada,
- Clay Nesler, The Nesler Group
- John Park, VA
- Jane Rohde, JSR Associates
- Mary Sotos, DOE FEMP
- Conan Wilson, U.S. Environmental Protection Agency

### ***GSA Participants***

- Michael Bloom (DFO), Brian Gilligan, Brad Nies, Kevin Kampschroer, Ken Sandler, Bryan Steverson, Meredith Holland (contractor), GSA OFHPGB
- Susannah Gilmore, GSA PBS
- Anne Stanley, GSA OCS
- Liz York
- Jen Schutt

### ***Additional Participants***

- Birgitte Dodd, U.S. Army Corps of Engineers
- Drew Friedman, Federal News Network
- Leo Gumapas, Kathryn Narvacan, U.S. Department of Health and Human Services
- John Higdon, IAPMO
- Nick Kehtel, ESG
- Renee Lani, American Public Gas Association
- Jacob Loflin
- Jeff Mang
- Henry Manville, National Gallery of Art - Energy Manager
- J Rifkin
- Andrea Thi, U.S. Department of Justice
- Craig Updyke, ASTMIntl.

## **Welcome and Introductions**

*Michael Bloom, GSA, OFHPGB, Designated Federal Officer*

- Michael Bloom welcomed attendees and reviewed the statutory and historical context for the Committee.
- The Green Building Advisory Committee (GBAC) was established to develop recommendations and findings to advise the federal government on moving its portfolio to sustainability, as required by the Energy Independence and Security Act of 2007 (EISA).
- All proceedings are open and public. It is not binding on GSA to accept any advice put forth. The advice needs to be implementable, feasible, and practical.

*Ken Sandler, GSA, Designated Federal Officer*

- Advice letters are now posted and can be viewed at <https://www.gsa.gov/gbac>.

*Bryan Steverson, GSA, Designated Federal Officer*

- The Committee bylaws are currently being updated to better document and reflect committee activities and procedures, and will allow GBAC to formally appoint Fernando Arias as Co-Chair. Once revisions are approved, the Committee will receive a copy and adoption will take place next Spring.

*Brad Nies, GSA*

- The GSA Sustainability Rewards Program recognizes the outstanding efforts and achievements of GSA colleagues that are advancing federal sustainability goals. There is an opportunity to add volunteer members of GBAC to each of the jury panels for the program.

*Liz York, GSA*

- In conjunction with the National Academies, the health and buildings roundtable that NIH started several years ago will be brought back. GBAC members are encouraged to participate in the new health and buildings roundtable, which also includes sponsorship opportunities.
- Liz York will be sending out an email with more information.

## Potential Topic Areas from the 11/2 GBAC Meeting

- **Embodied Carbon**
  - How to scale decarbonization and electrification
  - Low Embodied Carbon (LEC) Protocols
  - Environmental Product Declarations (EPDs)
  - Carbon labeling of materials
  - Buy Clean Act in the IRA era
- **Refrigerants**
  - Compare the lifecycle emissions of different combinations of refrigerants (natural, ultra-low GWP, low GWP) at different levels of energy efficiency. This analysis should consider different grid emission factors, both at time of installation and over time (Cambium estimates).
  - It would be good to do an analysis for applied equipment and unitary (packaged) equipment
- **Compare Lifecycle Emissions**
  - Compare lifecycle emissions from early replacement (which incurs an immediate increase in embodied carbon) with replacement at end-of -life.
  - Service life of materials and equipment
- **Occupant Health and Wellbeing**
  - Reimagining ESPCs to include health
- **Performance**
  - Performance contracting
  - Performance tracking

### Additional Topic Ideas:

- Traditionally when existing building performance is evaluated, it is evaluated for energy efficiency and greenhouse gas emissions, rather than quality as it is related to occupant health and wellbeing. When system replacement occurs, it should be used as an opportunity to check on ventilation and indoor air quality.
  - Could try to complete a crosswalk for health and wellbeing through SF Tool. Instead of just having an Advice Letter, we also have a tool to go along with it.
  - Utilize previous advice letters to consider the intersection of health and wellbeing.
  - Reimagining ESPCs to cover health.
- Evaluate a comprehensive approach that includes "a congregate framework" for looking at Embodied Carbon, Occupant Health and Wellbeing, Energy, Performance from a holistic perspective (material selections, indoor air quality,

energy, and GWP evaluation), design, building, selection of materials, and operation of building, as a compilation.

- How is embodied carbon utilized differently than operational carbon?
  - GBAC could engage with [MEP 2040](#) on this effort
- Use language learning models and other types of rapid technologies, such as creating requirements for an AI enabled data aggregator to accelerate enhanced procurement of low embodied carbon materials, using SF Tool as the host.
  - Implications of AI for GSA, as well as opportunities for deployment, should be considered.
- The utility relationship is a critical one and there hasn't been much exploration done on it in the past. There could be an opportunity to bring forth models for utility engagement, especially the GSA utility relationship for decarbonization and grid integration.
- How could GSA integrate the social cost of carbon into procurement and project cost-benefit analysis? This would really help decarbonization and healthy building project justification for ESPCs and equipment replacements.
- Integration of refrigerants into Lifecycle Emissions.

#### **Additional Comments:**

- Having a resource to more easily access information that has already been generated by past Task Groups to help with writing future advice letters should be considered as to not reinvent the wheel.
- There have been 19 advice letters that have come out of the Green Building Advisory Committee so far.
- GBAC has traditionally used Advice Letters to disseminate information, but GBAC can also post meetings and workshops and use other forms of communication.

#### **Three Potential Topics for Consideration: (Topics likely to change or combine prior to final choice)**

1. Occupant Health and Wellbeing
2. Comparative Lifecycle Emissions
3. Social Cost of Carbon