

These notes represent the deliberations of an independent advisory committee, and as such, may not be consistent with current GSA or other Federal agency policy. Mention of any product, service or program herein does not constitute endorsement.

## **Green Building Advisory Committee**

### **Monday, April 18, 2022 Meeting**

### **Meeting Notes**

#### **Committee Chair**

David Kaneda IDeAs Consulting

#### **Committee Members**

Fernando Arias	Clark Construction Group
Kevin Bates	Sharp Development Company
Gopinath Boray	US Department of Health and Human Services
Chris Castro	City of Orlando
Ralph DiNola	New Buildings Institute
Projjal Dutta	NY State Metropolitan Transportation Authority
Dave Gibson	US Environmental Protection Agency
Clay Nesler	World Resources Institute
Victor Olgyay	Rocky Mountain Institute
John Park	US Department of Veterans Affairs
Andy Persily	National Institute of Standards and Technology
Kent Peterson	P2S Inc.
Jane Rohde	JSR Associates
Costa Samaras	Office of Science and Technology Policy
Dee Siegel	Council on Environmental Quality
Sarah Slaughter	Built Environment Coalition
Tim Unruh	National Association of Energy Service Companies
Scott Whiteford	US Department of Energy

#### **GSA Participants**

Ken Sandler	Designated Federal Officer (DFO), Office of Federal High-Performance Green Buildings (OFHPGB)
Kevin Kampschroer	Federal Director and Chief Sustainability Officer, OFHPGB
Sonal Larsen	Senior Advisor on Climate to the Administrator
Andrea O'Neal	Senior Advisor on Equity to the Administrator
Boris Arratia	Office of Governmentwide Policy (OGP)
William Bartek	OFHPGB

Michael Bloom	OFHPGB
Kathleen Cruise	Public Building Service (PBS)
Ashish Desai	Region 4
Mark Falter	Region 3
Susannah Gilmore	PBS
Loaela Hammons	PBS
Stephanie Hardison	OGP
Judith Heerwagen	OFHPGB
Sean Henry	PBS
Don Horn	OFHPGB
Matthew Burrell	Office of Strategic Communications (OSC)
Alex Intermaggio	PBS
Saul Japson	OGP
Alexandra Kosmides	PBS
Ruth Kroeger	PBS
Lauren Pittenger	PBS
Kristle Richardson	OFHPGB
MacKenzie Robertson	OGP
Alex Rogers	OFHPGB
Kenneth Schelbert	PBS
Robin Snyder	Region 11
Anna Soyka	OFHPGB
Bryan Steverson	OFHPGB
Walter Tersch	PBS
Creshona Whitmyer Armwood	PBS

## **Updates & Introductions**

*Ken Sandler, GBAC Designated Federal Officer*

*Kevin Kampschroer, GSA Chief Sustainability Officer*

*Sonal Larsen, Senior Advisor on Climate to the GSA Administrator*

Ken Sandler welcomed everyone and reviewed the statutory and historical context for the Committee. Sonal Larsen thanked everyone for their participation in this meeting and their work in the GBAC community, with encouragement to keep up their high-impact efforts. Kevin Kampschroer welcomed the Committee and announced that, following on the work of the Environmental Justice and Equity Task Group, GSA's Office of Federal High-Performance Green Buildings is [requesting GBAC membership nominations for candidates with expertise in environmental justice, equity, and green buildings.](#)

Committee members introduced themselves and shared brief ideas for the group to pursue next. (A number of these topics are discussed in the “Next Committee Topics: Discussion” section below).

## **Update on Embodied Carbon**

*Don Horn, Deputy Director, GSA Office of Federal High-Performance Green Buildings*

Don Horn updated the committee on how GSA has responded to the Committee’s [findings and recommendations on embodied carbon](#), completed February 2021. In June 2021, GSA held an embodied carbon roundtable, at which experts and practitioners shared ideas and insights.

In October, the Public Buildings Service (PBS) [P100 building standard](#) added a decarbonization section including a “Carbon Smart Materials Palette.” In December, [Executive Order 14507](#) was released, creating a Buy Clean Task Force to recommend policies and procedures to reduce embodied emissions of construction materials in Federal procurement.

By February 2022, GSA issued [requests for information](#) from industry on the national availability of low embodied emission concrete and asphalt. Finally, in March 2022, GSA promulgated new [embodied carbon standards](#) covering these two high-volume materials. Under the standards, all construction and major renovation projects will need to provide environmental product declarations (EPDs) and demonstrate environmentally preferable characteristics including low global warming potential for these materials. Larger projects must implement whole-building lifecycle assessments, and target a 20% in their embodied carbon. The first projects with the new standards have been awarded.

## **Update on GSA Environmental Justice Initiatives**

*Andrea O’Neal, Senior Advisor on Equity to the GSA Administrator*

Andrea O’Neal discussed the variety of actions that GSA and the White House are taking to advance equity in the government. She outlined the progression from inequality to equality to equity and finally to justice regarding access to opportunities.

Equity goals are now included in the [FY 2022-2026 GSA Strategic Plan](#), as well as a series of Executive Orders, from the requirement for agency Equity Action Plans in EO 13985 to goals to advance diversity, equity, inclusion and accessibility (DEIA) in GSA federal workforce and operations in EO14035. The sustainability EO 14057 also calls on federal agencies to “strengthen the vitality and livability of the communities in which Federal facilities are located.”

[GSA’s Equity Action Plan](#) outlines what the agency is committed to doing to advance DEIA in all of its operations. GSA’s approach begins with processes that provide sufficient stakeholder engagement to understand community needs and the downstream effects of policies. The government needs to understand how to perform that engagement meaningfully and early enough to allow the communities to provide feedback that impacts the decisions and outcomes. It should be considered how the Federal Advisory Committee Act (FACA) can be used to work better with diverse communities. GBAC should consider what balance means in every context.

Andrea noted that equity is an umbrella operating principle, a perspective on both design and outcomes, that should not be siloed. It's about mitigating risks, getting these matters right in the front end rather than paying for them on the back end. Properly executed, a sound equity policy will lead to better government operations and outcomes.

Resources: [Advancing an Equitable Government](#), [The White House: Advancing Equity and Racial Justice Through the Federal Government](#), and [GSA's DEIA webpage](#).

## **Environmental Justice and Equity (EJ&E) for Federal Green Buildings: Proposed Advice Letter**

*Sarah Slaughter, Built Environment Coalition, Task Group Co-Chair*

*Projjal Dutta, NY State Metropolitan Transportation Authority, EJ&E Task Group Co-Chair*

This Task Group's mission was "to identify and propose effective approaches to intentionally improve environmental justice and equity in federal building processes, thereby eliminating persistent inequities found in the local community and enhancing engagement with diverse local communities and key partners throughout the building lifecycle that is responsive to the true needs of the local community."

The public Task Group meetings were held from April 2021 through November 2021. In the discovery phase, Task Group participants were surveyed early on regarding major topics for consideration and heard presentations from a variety of EJ&E experts.

Among its numerous public, private and NGO representatives, the Task Group included participants from the NAACP Centering Equity in the Sustainable Building Sector (CESBS) Initiative. The NAACP CESBS Initiative held a Town Hall, which provided opportunities for a wide variety of stakeholders to provide input into the process.

The Task Group began its work to draft an Advice Letter by developing a framework of guiding principles, cross-cutting themes and community-focused collaboration. The Advice Letter underwent six rounds of revisions, incorporating many contributions from Task Group participants.

The objectives of the Advice Letter were to: advance the application and implementation of the guiding principles for EJ&E in Federal buildings; engage and maintain a collaborative dialogue among stakeholders and diverse groups of communities, for the entire lifecycle of each building; and correlate and align project needs with community needs for each project. The Advice Letter includes seven recommendations developed by Task Group participants. It also includes, as an attachment, alternative recommendations developed independently by the NAACP CESBS Initiative (Attachment 1 of the Advice Letter).

## **Discussion**

Committee members discussed what a challenge and departure this Task Group was for the Committee, as well as a major step forward. There was some discussion of the inclusion of the NAACP CESBS group's alternative recommendations as an attachment, as this material did not go through the Task Group's consensus process. Considering the challenges of gathering input from diverse communities and the fact that this Attachment was clearly delineated, the Committee agreed to accept it along with the rest of the document.

Committee members commented that this was a groundbreaking first step and a topic on which there should be ongoing discussions.

## **Motion**

Sarah Slaughter introduced a motion for the Committee to accept the Task Group's Advice Letter. The motion was seconded by Projjal Dutta. The Advice Letter was accepted with a unanimous vote among all 18 voting GBAC members, with 1 abstention.

## **Federal Building Decarbonization: Proposed Advice Letter and Update**

*Clay Nesler, WRI, GBAC Task Group Co-Chair*

*Kent Peterson, P2S Inc., GBAC Task Group Co-Chair*

The mission of the Federal Building Decarbonization Task Group is to “explore opportunities and challenges for reducing greenhouse gas emissions - in alignment with national climate goals and action plans - through the use of renewable energy, energy efficiency, electrification and smart building technologies at federal facilities.” Its primary focus is on existing federal building operations and actions that can be taken to minimize their carbon footprint over the next 3-5 years.

The Task Group presented its initial findings and recommendations in a draft Advice Letter for the Committee's review and approval, even as it proposed to continue its work to explore the topic in more detail.

The group identified 7 key federal building decarbonization principles:

- Accelerate the rate of net-zero emissions building retrofits to optimize for cost and impact;
- Comprehensive planning to include efficiency, electrification demand flexibility, and solar storage;
- Onsite renewable generation;
- Consideration of the impacts of embodied carbon, refrigerants, and EV charging emissions;
- Supporting resilience, health, and comfort;
- Supporting system-wide optimization to avoid unintended consequences; and
- Supporting equal opportunity job creation and training underpinned by equitable procurement practices.

The group also identified barriers to overcome:

- Capital access and investment barriers include the lack of consideration of carbon reduction in investment and appropriations, the lack of a clear value stream and metrics to evaluate the social cost of carbon.
- Workforce and building technology barriers include shortages of skilled industry professionals, federal project management staff unequipped to adopt lower carbon processes and materials, difficult to quantify subcontractor operation emissions and lack

of non-structural materials for renovations with product-specific environmental product declarations (EPDs) that facilitate carbon accounting.

- Climate zone and building performance design barriers include variations in buildings' sizes and shapes, climate zones, local building codes, utility rates, and utility-scale renewables and storage penetration, and in general, building-related carbon emissions rarely being considered in standards and design.

The group proposed developing a building decarbonization retrofit playbook geared to GSA's major building types, project scenarios, project approaches, and project scopes, and the group plans to continue its work to suggest how the government should prioritize buildings for decarbonization and design and carry out its implementation approaches.

## **Motion**

Clay Nesler introduced a motion for GBAC to accept the Task Group's Advice Letter. The motion was seconded by David Kaneda. The Advice Letter was accepted with 17 voting GBAC members, with two abstentions.

## **Ongoing Task Group Activity**

The Co-Chairs also summarized continuing Task Group work. Regarding the prioritization of federal buildings for decarbonization, the group is identifying useful federal building data sources, determining criteria for prioritization and reviewing current efforts, tools and resources.

Regarding the implementation of federal building decarbonization, the Task Group is focused on identifying cost-effective decarbonization measures for existing buildings and developing "solution stacks" or combinations of technologies and strategies proposed based on building and project characteristics, e.g., building size, HVAC system type, and project types, including early project development, retro-commissioning, beneficial electrification, demand side management, renewable energy, and others.

Committee members raised questions about the definitions of terms such as "net-zero energy" and "decarbonization." The Co-Chairs agreed to make sure that these terms were defined clearly and used consistently in the Task Group documents. Members also noted the importance of working with utilities on decarbonization efforts.

The Co-Chairs invited more members to participate in the Task Group and noted the need to identify how environmental justice and equity concerns may be incorporated into this Task Group's deliberations as well.

## **Executive Order 14057: Update and Discussion**

*Dee Siegel, Cara Carmichael, Council on Environmental Quality*

Two representatives from the Council on Environmental Quality (CEQ) discussed [Executive Order 14057](#), *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. CEQ has also developed an ambitious [Federal Sustainability Plan](#) to implement this Executive Order across the Federal government.

The EO's goals include achieving net-zero greenhouse gas (GHG) emissions across the federal building portfolio by 2045, with a priority focus on energy efficiency and replacement of on-site fossil fuel use through electrification and other strategies. The Sustainability Plan includes objectives for new construction, existing owned buildings and leased properties, which still are required to meet the Guiding Principles for Sustainable Federal Buildings

Other EO goals include ensuring 100% of electricity purchased by the federal government is carbon pollution-free on a net annual basis by 2030, including 50% 24/7 carbon pollution-free electricity (CFE), i.e., CFE generated in real time for federal agency use. The EO includes goals on zero-emissions vehicles and procurement as well as resilient infrastructure and operations.

Agency-level planning and goal-setting will be required since each agency has different needs and capabilities. CEQ plans to transparently report on federal progress towards reaching these goals and will post updates on [sustainability.gov](https://www.sustainability.gov).

CEQ noted that in 2022, it plans to release a Federal Building Performance Standard focused on reducing Scope 1 emissions through existing building upgrades to efficient, all-electric equipment and appliances. Dee and Cara also cited four elements CEQ considers critical to success: increasing the speed and scale of decarbonization retrofits, prioritizing projects for greatest impact, developing a roadmap/playbook for decarbonization, and building climate literacy of portfolio/building managers across the whole of the Federal government.

## **Discussion**

CEQ is working to identify the best training resources for climate literacy, as agencies move forward with their own training initiatives. Dee and Cara suggested the [Association of Climate Change Officers](#) and [SFTool's Climate Learn](#) webpages as initial resources.

On the question of funding, CEQ is working with OMB to better integrate climate sustainability into budget cycles. This administration has renewed the emphasis on the use of performance contracting through utility energy services contracts (UESCs) and energy savings performance contracts (ESPCs). DOE's Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) grant funding also will be substantially increased this year.

The CEQ representatives offered two questions for the GBAC to consider: Are there better turnkey solutions for achieving scale that we should use in our federal buildings? What expertise and innovation can the private sector bring to the Federal government?

## **New Committee Topics & Directions**

The Committee discussed potential new topics that the GBAC could pursue, including:

- Beneficial building electrification
- Electric vehicle charging infrastructure
- Enhanced ventilation
- Re-evaluating the financial value of sustainability to federal buildings
- Re-purposing federal buildings

GSA will propose a process for Committee members to vote on their highest priority topics for the next year and express their interest in working on task groups to develop findings and recommendations on these issues.

### **Public Comment Period**

*Alice Sung, Founding Principal of Greenbank Associates*, and member of the NAACP CESBS, encouraged all to read Attachment 1 of the EJ&E Advice Letter, noting its development by NAACP CESBS members who participated in the Task Group's activities. She discussed how Advice Letter recommendations correspond to CESBS proposals and where they differ. Sung stated that the NAACP would look forward to working together with GSA to move these recommendations into reality and to integrate EJ&E into GSA's operations.

*Renée Lani, Director of Regulatory Affairs at the American Public Gas Association*, urged the Committee to investigate how low carbon fuels can play a part in Federal decarbonization. She referenced research on gas-fired heat pumps and the resiliency that combined heat and power can provide for critical infrastructure such as hospitals.

### **Closing Comments**

*Kevin Kampschroer, GSA Chief Sustainability Officer*

*David Kaneda, GBAC Chair*

Kevin Kampschroer thanked both the hard-working Committee members as well as the scores of observers at today's meeting, together totaling nearly 100 participants. David Kaneda commented that, now more than ever, GBAC is firing on all cylinders and having a huge impact in the Federal government with national and international implications as well.