GSA Office of Federal High-Performance Buildings Advisory Committee Meeting 1800 F Street, NW, Washington, DC, Room 1425 Monday, February 5, 2018 **Meeting Notes**

Committee Chair

Greg Kats

Capital E

Committee Members

Ash Awad Charlene Bayer Paul Bertram CJ Córdova* Ralph DiNola Projjal Dutta* Jennifer Frey Chris Garvin Dave Gibson* Jonathan Herz David Kaneda Yvonne Medina* Victor Olgyay Brendan Owens Andrew Persily Kent Peterson Jane Rohde Sarah Slaughter* Maureen Sullivan* Cyndi Vallina*

McKinstry Hygieia Sciences LLC PRB Connect U.S. Department Veterans Affairs New Buildings Institute New York State Metropolitan Transportation Authority Sellen Construction **Terrapin Bright Green LLC** U.S. Environmental Protection Agency U.S. Department of Health and Human Services Integral Group U.S. Department of Transportation **Rocky Mountain Institute** U.S. Green Building Council National Institute of Standards and Technology P2S Engineering **JSR** Associates **Built Environment Coalition** U.S. Department of Defense Office of Management and Budget

Active GSA Participants

Kevin Kampschroer*	Chief Sustainability Officer and Director, Office of Federal
	High-Performance Buildings
Ken Sandler	Designated Federal Officer, OFHPB
Don Horn	Deputy Director, OFHPB
Ann Kosmal	OFHPB

* denotes members not present at the meeting

Opening Remarks and Introductions

Designated Federal Officer Ken Sandler provided background on the Committee, which was established to provide independent advice and recommendations to the GSA Office of Federal High-Performance Buildings (OFHPB), as required by the Energy Independence and Security Act of 2007 (EISA).

Ken also provided brief updates on several recent recommendations of the Committee:

- OFHPB is creating a Health and Wellness Group as a task force of the Interagency Sustainability Working Group (ISWG), which the Office co-chairs with the U.S. Department of Energy (DOE) Federal Energy Management Program (FEMP). This group would coordinate Federal agency pursuit of the <u>healthy building policies recommended</u> by the Committee.
- <u>The Committee's High Performance Building Adoption proposals</u> were recently cited and promoted by the e-newsletter of the High Performance Building Coalition and by the Green Building Certification Institute (GBCI) blog.

Federal Building Resilience: Presentations & Discussions

Safeguarding GSA Assets

Ann Kosmal FAIA, GSA OFHPB

- The Federal government is required to safeguard assets and avoid misappropriation, per 31 USC §3512(c)(1)(B), 31 USC §1115(a)(6), 31 USC §1115(h)(5) and guidance including the Office of Management and Budget (OMB) Circular A-123 Management's Responsibility for Internal Control. This includes enterprise risk management.
- The General Accountability Office maintains a <u>High Risk List</u> of critical issues the Federal government must address, one of which is managing climatic risks in order to limit fiscal exposure. GAO identifies enhancing climate resilience in Federal buildings as a way to reduce these impacts.
- GSA manages these risks to maintain mission continuity and secure the federal investment in the face of both acute threats (e.g., natural disasters) and chronic (e.g., incremental changes in climatic trends). These risk management efforts dovetail with GSA's existing portfolio-based and site-specific decisions driven by the asset service life, criticality and historical/cultural value.
- For decision makers that have a duty of care and fail to plan for foreseeable risks, the standard of care is evolving and requires the professional judgment of licensed design professionals.

Buildings and Grid Integration & Harmonization

Ralph DiNola and Alexi Miller, New Buildings Institute (NBI)

- Both the building industry and the electricity generation and distribution industry are currently undergoing monumental changes, including the incorporation of renewable energy, energy storage, "smart" technologies, and other efficiency innovations into their systems.
- However, there is a general lack of coordination and communication between the building side and the grid side, which can create challenges in balancing the electricity supply, and in building the durable and resilient infrastructure of the future. NBI is working with the US Green Building Council to develop a new program, the <u>GridOptimal</u>

<u>Initiative</u>, to help bridge this gap through the delivery of a new metric and rating system that will measure the quality of building-grid interactions and rate "grid citizenship" of buildings.

- The GridOptimal Initiative will develop a methodology to aggregate and measure a building's overall "peakiness," or the extent to which a building exacerbates or mitigates both positive peak and negative peak demand during "over-consumption" or "over-generation" hours over a year.
- NBI is currently raising funding and assembling a technical advisory committee and welcomes interested parties to apply to become members of it.

Urban resilience

Greg Kats, Capital-E

- Capital-E is about to release a report, <u>Delivering Urban Resilience</u>, based on a study of the urban environments of Washington, DC, El Paso, TX and Philadelphia, PA. The study examined the costs and benefits of adopting "smart surfaces," such as green roofs, solar panels, and permeable and porous pavement in these locations.
- The study found net present value benefits in the billions of dollars for adoption of smart surfaces. Benefits to low income areas of these cities were particularly noteworthy, considering that these areas are often devoid of vegetation, and would benefit from affordable, local power solutions that also can create jobs in these communities.
- Greg will release a summary of the report to the group once it has been published. In addition, when the underlying data sets are available for review, he will circulate them.

Committee Comments:

- On building-grid interactions:
 - It's particularly important for utilities to align their incentives to reward buildings' "grid citizenship"; otherwise, it often won't make financial sense for the building industry to invest in major changes.
 - The program will need to be tailored to states' unique regulatory environments.
 - o GridOptimal should build on and coordinate with smart grid research, e.g., at NIST.
- On next steps:
 - GSA and other Federal agencies can contribute to industry trends by piloting and demonstrating smart surfaces or grid citizenship, as appropriate.
 - These are big problems meriting thoughtful analysis, but requiring reasonable problem definition boundaries to avoid making the task too challenging to complete.
 - The value of these approaches to spur domestic US economic development and job creation should be delineated.
 - The Federal Emergency Management Agency (FEMA) has released a draft <u>National Mitigation Investment Strategy</u>, focused on how to increase resilience; it is open for public comment until March 11, 2018.

Closing Comments

Ken will survey Committee members to gauge their interest in pursuing Federal building resilience issues, and if so, in what manner and to what extent.