

**U.S. General Services Administration (GSA)  
Green Buildings Advisory Committee  
Wednesday, November 9<sup>th</sup>, 2011 Meeting  
1275 First Street, NE, Washington, DC  
Meeting Notes**

**Advisory Committee Members**

Chair

Bob Fox                      Cook + Fox Architects

Members

Zaida Basora	Dallas Public Works Department
Ed Bradley*	U.S. Veteran's Administration
Dan Burgoyne	California Department of General Services
Michael Deane	Turner Construction Company
Angela Donatelli*	Office of Management and Budget
Projjal K. Dutta	New York State Metropolitan Transportation Authority
Hunter Fannee*	National Institute of Standards and Technology
Will Garvey	Council on Environmental Quality
Bucky Green	U.S. Environmental Protection Agency
Jonathan Herz	U.S. Department of Health and Human Services
Gregory Katz	Capital – E / Good Energies
Nico Kienzl	Atelier Ten
Linda Lawson	U.S. Department of Transportation
Dennis Maloskey	Pennsylvania Governor's Green Government Council
Barbara A. Nadel	Barbara Nadel Architects
Victor Olgyay	Rocky Mountain Institute
Kent Peterson	P2S Engineering
Nick Sinai	Office of Science and Technology Policy
Maureen Sullivan	U.S. Department of Defense
Patrick Tyrrell	Vornado Realty Trust
Timothy Unruh	U.S. Department of Energy

(\*Denotes those not present at meeting)

**GSA Office of Federal High Performance Buildings Participants**

Kevin Kampschroer , Federal Director  
Ken Sandler, Designated Federal Official  
Joni Teter, presenter

## Introductions

**Bob Fox, Committee Chair**, welcomed Committee members, GSA staff and the public to the first meeting of the Green Building Advisory Committee (the Committee). He stated that this Committee is committed to providing its expertise on green building and related issues to GSA at the Committee's semiannual meetings and beyond.

**Ken Sandler, GSA's Designated Federal Officer for the Committee**, is the official liaison between GSA and the Committee. He noted that this Committee was called for under the Energy Independence and Security Act (EISA), which also established GSA's Office of Federal High Performance Green Buildings (the Office). The Committee's operations are also governed by the Federal Advisory Committee Act (FACA).

Members are appointed for two years and we are planning two face-to-face meetings per year. Potential follow-up activities will be up to the Committee to decide, and may include teleconferences, subcommittees, letters to the GSA Administrator, etc.

**Kevin Kampschroer, Federal Director of the Office**, said that GSA is seeking advice and direction on initiatives the Office is going to be taking in the coming year, to fulfill its mission of accelerating and successfully transforming the Federal building portfolio to sustainable technologies and practices. The Office is focused on finding ways to significantly and continually improve the performance of the government's building stock.

A key challenge is how to measure building performance, going beyond current metrics to greater degrees of detail. Executive Order 13514 set ambitious goals for the Federal government, including calculating and reducing aggregate greenhouse gas emissions. Getting the measures and practices right is essential.

As we proceed in our work, we seek advice from the Committee for mid-course corrections and additional actions we can take to help the government not only meet its obligations but lead the marketplace by example.

**Joni Teter of the Office** presented information on four priority projects, each of which the Advisory Committee asked questions about and provided advice on in turn:

- Levers for Change
- High Performance Green Building Demonstration projects
- Research into Practice Knowledge Hub
- Green Building Certification Systems review

\*\* (See companion documents, Advisory Committee 11-9-11 Meeting Materials and GB Advisory Committee Mtg Presentation, for more detail)

## Levers for Change – presentation

- The Office commissioned an expert panel of the National Academies to produce the report *Achieving High Performance in Federal Buildings: Strategies and Approaches for Transformational Change*, available at [http://www.nap.edu/catalog.php?record\\_id=13140](http://www.nap.edu/catalog.php?record_id=13140).
- The report identified seven principles for rapid transformation of the Federal building portfolio to sustainability, i.e.: **levers for change**
  - Most effective actions are those that change systems at fundamental levels. Key themes are:
    - Systems thinking
    - Portfolio-based Facilities Management
    - Procurement and Financing
    - Budget and Finance
  - GSA and the National Academies are planning expert meetings in 2012 – 2013, to identify “bright spots” for follow-up action on:
    - Performance based contracting (completed September 2011)
    - Technology bundling
    - Budget and finance
    - Systems based thinking and regenerative design

## Levers for Change – Key Discussion Points

- Site location, taking transportation needs into account as part of portfolio management and planning, is a critical lever due to the sizable percentage of energy consumed in commuting
- Technology bundling:
  - Should fundamentally look at how technology impacts behavior
  - Should be framed across the GSA portfolio by geography or building type so it can be bundled across a variety of projects
- Performance based contracting helps overcome major disconnects in the building process, and brings in more stakeholders
- Standards and specifications are another critical lever
- GSA should use its leasing authority more fully to allow tenants to gain the benefits of energy reduction as an incentive
- Need to resolve disconnects between the goals of GSA and its Federal tenants – e.g., many high security buildings are energy hogs
- GSA should do performance benchmarking across its portfolio
- Consider performance incentives for O&M managers
- Develop in-house Energy Service Companies (ESCOs), performance contracting
- Develop simple, effective language to put into contracts

## Demonstration Research Project – Presentation

Joni Teter – Our statute, the Energy Independence and Security Act (EISA) requires the Office to find a Federal facility annually to use as a learning lab to gather data and

improve understanding about building performance and how to enhance it. Our project goals are to test new technologies and strategies, identify best practices and technologies and bring them into a “knowledge hub” where they can be shared across the government and marketplace.

Our first project was performed at the US Environmental Protection Agency (EPA) Region 8 Office in Denver, or Wynkoop building, and it involved a series of studies. The full report will be available publicly soon. An example of one of our key studies was on plug load management and its relation to occupant behavior.

Ken Sandler – We are now in the early phases of launching the next demonstration research project at an Army base. This project will have an even greater focus on the impact of behavior on energy and water use and indoor environmental quality. The plan is to go beyond one building and focus on multiple buildings on this base, and then determine the implications for sustainable portfolio management.

### **Demonstration Research Project – Key Discussion Points**

- Occupant behavior is key, but we currently spend too much time thinking about “the car” but not enough about “the driver”
  - o Education often doesn’t work because people don’t know what to do with it. We need positive reinforcement and information feedback per the “Prius Effect”. We need systems where smart facility operators can control systems, while also incentivizing smart occupant behavior with continuing education and feedback loops.
  - o GSA should aggregate and parse behavioral research done by others.
  - o Expand behavioral research to examine impact of organizational structures, and of key players like procurement and contracting officers.
- Areas recommended for more research include:
  - o Security technology, as it is energy intensive
  - o Innovations using peer groups and reward systems via social networking to drive more efficient energy practice
  - o Building envelope performance and affordable ways to measure it.
  - o Site planning, landscaping & security, e.g., to improve guidance on setbacks
- Need to be very rigorous in your research to get a full picture, and get more than a year of results. Develop a generally usable protocol for measurement.

### **Research into Practice Knowledge Hub – Presentation**

Joni Teter – This project was developed to identify how to overcome the problem that major players in building decision making and implementation – from purchasing and contracting to construction and facility management – often fail to receive key information in the right form (including training and demonstrations) at the right time.

The Office's evidence-based policy strategy is to start with strategic goals, collect evidence to test hypotheses, transfer this information through a Knowledge Hub, facilitate Federal adoption of best practices and technologies, evaluate and measure success and feed these findings back into the process. We plan the Knowledge Hub to be an "information ecosystem" facilitating the dispersal and adoption of technology, practices, and strategies focused around sustainable and cost effective building operations. We have initiated a communication plan that maps key audiences with the types of information they need when and built-in feedback loops.

### **Research into Practice Knowledge Hub – Key Discussion Points**

- Concentrate on the most aggressive technologies and best practices, e.g., those that lead to 50%+ improvement; otherwise you will drown in excess information
- There is already extensive information available that is not sufficiently influencing behavior. Need to understand why, e.g., how to overcome risk aversion
- Community and customization are key: focus less on volume of info and more on filtering content and connecting communities with what they want & need
  - o Distinguish three levels of audiences: those predisposed to sustainability information; those who don't care; and those in the middle
  - o Gear information based on audience needs (more technical vs. plain language), building type, levels of building management
- Adding an element of competition and the promise of implementation can help motivate building audiences to do more
  - o Consider open innovation principles and competitions to harness the entrepreneurial spirit, like the Defense Advanced Research Projects Agency (DARPA) competitions on how technologies perform in the field.
  - o Consider a Federal contest like the ENERGY STAR Battle of the Buildings
- Public disclosure of building performance is another big motivator that can embarrass poor performers into action. But need to overcome security issues

### **Green Building Certification Systems Review – Presentation**

(Note: Dennis Maloskey recused himself from this discussion and the public comment period due to his current tenure on the US Green Building Council Board of Directors.)

Kevin Kampschoer - EISA requires that GSA look at green building certification systems every five years and make a recommendation regarding their use by Federal agencies. The purpose of today's discussion is to discuss where we are in this review but not to provide recommendations as we have not yet completed the study.

Joni Teter – We passed known green building certification systems through an initial screening stage to eliminate those least appropriate for Federal use. Key criterion is how these systems match up to our performance requirements, looking at performance in terms of measured use, calculated use, and evidence of intent or activities. We will compare how well these systems help agencies meet requirements of the Guiding

Principles, Executive Order 13415, EISA and EPAct. We are planning to run the report through consecutive discussion processes, first interagency, then public.

### **Green Building Certification Systems Review – Key Discussion Points**

- Worth considering whether rating systems are still useful for Federal needs.
- Factor in the changed context: we now have better codes providing higher baselines, like the latest International Energy Conservation Code (IECC).
- Consider how rating systems and Federal requirements interact with historic building standards

### **Public comment period**

The following commenters spoke at the meeting. Written comments submitted to GSA will be available upon request.

- IAPMO - Sherard Jones
- National Association of State Foresters – Jake Donnay
- Green Building Institute (GBI) – Erin Shaffer
- American Forest Foundation – Melissa Moeller
- National Ready-Mix Concrete Association – Phil Kresge
- National Electrical Manufacturer’s Association – Craig Updyke
- Softwood Lumber Council – David Anderson
- American Wood Council – Jeff Bradley

### **Next steps and Closing Remarks**

Bob Fox and Ken Sandler – We would like to hold several conference calls between now and when we next meet as a full group in Spring 2012. We will publish notices in advance of these meetings. We may develop subcommittees for more detailed and focused recommendations, to present to the full committee.

We will make meeting notes available once they’ve been completed. We are developing a public website and will post the notes and other Committee information there. Written comments will be accepted until Nov 21<sup>st</sup> and will become part of public record. We will work to develop the agenda for the next full meeting in Spring 2012.

Meeting adjourned.