

**U.S. General Services Administration (GSA)  
Green Building Advisory Committee  
Monday, February 27, 2012  
3:00 – 4:00 p.m. (Eastern)  
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 Fanney*	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 Green Buildings Participants**

Kevin Kampschroer	Federal Director
Ken Sandler	Designated Federal Official

Bob Fox welcomed everyone. Ken Sandler conducted roll call for the Committee and went over ground rules for the Committee and this call.

## Levers for Change: Highest Priorities

Ken summarized results of a poll of the Committee re: National Academies' "Levers for Change" report and highest priority (top three) "levers" for the Federal government to green its building portfolio.

Ken: We received 7 responses to this poll:

- Five respondents saw *portfolio management* as one of the top three priorities, and two said it should be the Office's top priority particularly given budget reductions. One commented that this issue should be addressed by the Federal Real Property Council.
- Six respondents saw the *business case for green building* as one of the top two priorities. Comments included that the discussion should be focused on broader benefits, especially health, and that an ongoing dialogue with feedback loops is what's needed.
- *Ongoing commissioning/behavioral commissioning* was one of the top three priorities for 3 respondents; one suggested combining it with portfolio management.
- Three respondents said that *lifecycle analysis/lifecycle cost analysis* should be part of the business case. Comments included that it must be done with an understanding of the budget process, but it will represent the most compelling message to key audiences.
- *Building certification* was a priority for 3 respondents. An array of comments included examining why there was a need to develop certification systems originally and incorporating the lessons of that history; and noting that if codes become more rigorous, certifications may be unnecessary, except to meet a higher standard.
- Additional comments included noting the importance of defining building performance metrics, and the need to incorporate social costs into building and acquisition processes.

### Additional comments:

- Note difference between lifecycle analysis (LCA) and lifecycle cost analysis (LCCA) – LCA includes environmental impacts and is more complicated and less compelling for pragmatic business-minded types. The LCCA/economic case, looking at total cost of ownership has more traction. But note value of National Academies in bringing the right people to the table to assign appropriate values to health and environmental impacts.

## The Business Case for Federal Green Building

Bob: For the rest of the call, we'd like to discuss the business case for green building in the Federal paper, citing the discussion paper distributed to the Committee. [\\*\(link\)](#). Key questions on which GSA seeks your advice and input are re: which business case messages and audiences are most important.

Greg Kats (introduction): Two converging issues:

- Federal buildings are owner/occupied as a rule, with a lower cost of capital than the private sector, with employees insured through taxpayer funds, hence an ideal situation for recognizing and achieving real dollar savings from moving to healthier/greener design and operations. Research findings support health and productivity benefits, so should they be included in cost/benefit equations?
- Federal decision re: whether to upgrade energy efficiency standards to the latest (2010) version of ASHRAE 90.1, which would significantly raise the bar on efficiency.

Kevin: There is a lot of research on impacts of building design and operations on health, which leads us to key questions of how we express these findings effectively to audiences that control capital investment in buildings, whether there is a better way to translate health research into economic benefits as part of a “triple bottom line”, and what we should do to investigate still-unanswered research questions.

Key Discussion Points:

- Key issue is maintaining green building improvements through operations and maintenance (O&M). Need to invest in training facilities staff to maintain efficiency savings, and this information needs to be factored in. Turner Construction has studied LEED-certified schools in Ohio and found that schools with lower certification levels can perform better because they are at the right level of sophistication for O&M staff to manage well. Need to strive for high performance but also ease of operation.
- Those immersed in the green building field forget that most people don’t “get” green building. Consumers will drive the market for sustainable building if they are educated to understand and adjust their perspective on it, which in turn will influence decision-makers.
- Re: benefits of health and productivity, there has not been a systematic protocol for gathering evidence and translating it into lifecycle cost information other than Carnegie Mellon University’s BIDS system, and as a result, these issues have been neglected in green building.
- There are hundreds of studies on health impacts, so by ignoring those, we risk being 100% wrong rather than approximately right. But getting health data is challenging, so California is more focused on reducing energy and water use with a roadmap to net zero building impacts on the environment. The key is not to ignore such health issues but focus on how to control them – e.g., better ventilation and low-emitting materials.
- We also need to broaden the discussion to account for building siting impacts, including transportation access and associated energy use – location efficiency is a greater determinant of a building’s environmental impact than any other factor.
- Re: update of ASHRAE Standard 90-1, the Department of Energy issued a final determination in October 2011 ([http://www.energycodes.gov/status/documents/Standard\\_901-](http://www.energycodes.gov/status/documents/Standard_901-)

[2010\\_Final\\_Determination.pdf](#)), and the Federal Buildings Rule is currently at OMB in Final draft.

- At the Federal level, the government is the consumer, and we need to make sure Congress understands the issues; note its concerns as reflected in spending controls on LEED construction in the National Defense Authorization Act.
- The challenge is for the Federal government to get to critical mass on green building such that when administrations change, continuity on these issues isn't lost.
- There may be a need for an Advisory Committee subcommittee on the business case issue.
- Key decision-makers are at OMB – challenge is how to make the case to economists.
- In New York City at least, developers of new commercial buildings do see the value of sustainable design – the bigger challenge is what to do with existing buildings.

Kevin: A key takeaway here is that there is a high interest in translating green building benefits into a business case effectively. In an ideal world, we would have a set of facts relevant to multiple audiences (e.g., private developers with a shorter-term investment focus vs. long-term building owners) who influence investment decisions.

Bob thanked all the participants and adjourned the meeting.