Buildings Technology Research and Development Working Group Meeting

October 16, 2008

Location: 950 L'Enfant Plaza DOE
Time: 1:30-3:30 p.m.

Attendees[1]	**Agency/Office**	
Shyam Sunder	DOC/NIST	BTRD Co-chair
Jerry Dion	DOE/EE-Buildings	BTRD Co-chair
Kevin Hurst	EOP/OSTP	
Paul Domich	DOC/NIST	BTRD Ex-Sec
Dru Crawley	DOE/EE-Buildings	
Alan Schroeder	DOE/EE-Buildings	
Matt Grey	DOE/FEMP	
Sean McDonald	PNL	
Patrick Hughes	ORNL	
Paul Torcellini	NREL	
Bobbie Lippiatt	DOC/NIST	
Andy Persily	DOC/NIST	
Steve Bushby	DOC/NIST	
Hunter Fanney	DOC/NIST	
William Brodt	NASA	
Jennifer Beiro-Reveille	USPS	
Dale Manty	EPA/ORD	
William Weidemeyer	Architect of the Capitol	
Uday Varadarajan	OMB Energy Branch	
Bob Thompson (via telephone)	EPA	
Dana Bres	HUD/PD&R	
Martin Weiland	GSA	
Kevin Kampschroer	GSA	
Russell Conklin	DOE/CCTP	
Donna McIntire	DOS/OBO	

Next Meeting: December 4, 2008, 1:30 - 3:30 PM, 950 L'Enfant Plaza DOE

January 15, 2009	July 16, 2009
February 19, 2009	August 20, 2009
March 19, 2009	September 17, 2009
April 16, 2009	October 15, 2009
May 21, 2009	November 19, 2009
June 19, 2009	December 17, 2009

[1] Active Members not attending identified in light gray

Introductions: Subcommittee Co-chair Paul Domich (NIST) opened the meeting of the Buildings Technology Research and Development (BTRD) Working Group meeting welcoming the agency representatives and thanking them for their participation. Agency participants provided brief self-introductions.

Review of Minutes: Review of Minutes for October 16, 2008 was not performed (please see attached minutes for October 16, 2008).

Status on the public release for the Federal R&D Agenda: Paul Domich reported out on the status for a public release of the Federal R&D Agenda report. The Committee on Technology was issued a time-sensitive review of the report with suspense of September 29, 2008. Executive Branch Departments on the Subcommittee reviewed and approved the document with minor revisions. Committee Co-Chairs Richard Russell (OSTP) and Bud Albright (DOE) must provide the final clearance to release the report. Additional status information will be circulated as required. The final clearance is expected shortly at which time the public affairs people at OSTP will issue a press release, followed by a NIST announcement.

Domich also reviewed the distribution list developed for the report. The list contains media, professional organizations, private sector interest groups, standard development organizations, senior government officials, and congressional members and staffers. Printed and/or electronic copies of the report will be distributed to various subsets of the full distribution list as appropriate. Congressional outreach will focus on relevant congressional committees involved in energy, science, and resource management. Particular focus will be placed on congressional representatives with federal programs resident in their states/districts. NIST Legislative Affairs Office will hand deliver copies to member and staff.

Action Item: Domich will work with the NIST Public Affairs Office to develop a final press release for review and approval by Sunder, Dion, and Kevin Hurst (OSTP). Domich will also work with the NIST Legislative Affairs Office to develop a draft a distribution list for members of the U.S. Congress.

R&D Implementation Whitepaper: Paul Domich provided a summary of the previous subcommittee discussion on the challenges faced by federal agencies in implementing new high-performance technologies within their agencies. A significant disconnect exists between senior management at some federal agencies and in the U.S. Congress in recognizing the issues and impacts of the range of Executive Orders, Memorandums of Understanding (MOUs), and public laws (EPAct 2005, EISA 2007) requiring federal building owners and managers to implement these directives. A draft scoping document and short whitepaper outline was developed based upon comments from Bill Brodt (NASA) and Kevin Kampschroer (GSA). The scoping document focuses on purpose/objective, need/justification for working group, anticipated work products/deliverables,

membership, and timeline. If the Subcommittee agrees to form a working group and leadership of the working group is identified, the short R&D Implementation Whitepaper will be developed and shared with the Federal Facilities Council, the Real Property Council, the Federal Energy Management Program (Sustainability Council) and with individual agencies for their review and comment. Following a short period of stakeholder input to the major themes contained in the whitepaper, a decision will be made by the Subcommittee as to whether a full whitepaper should be developed that would provide guidance to all federal agencies as to the priorities, costs, and procedures that should be followed to successfully begin implementing new technologies in future federal building projects.

Bill Brodt provided additional detail on the challenges faced by federal agencies. Key issues include convincing senior agency decision-makers to accept new technologies and approaches and to provide budget and accounting flexibility to invest in new technologies that will be more cost effective and resource efficient. Related issues include establishment of a timeline for implementing new technologies across federal building stock over the next 20 to 40 years, i.e., 2030 or 2050 respectively.

Information is needed on new technologies in the pipeline and nearing commercialization which should be factored into short-term development and renovation plans. Additionally, gaps in current resource-efficient technologies result may result in implementation and performance problems. Examples were also given of simple technologies such as those that accurately measure system performance that may serve as examples of low-cost investments that have potential to greatly improve building performance. There exists a real need to establish a dialog between the R&D community and building owners, operators, and maintenance staff.

A potential strategy was outline that focus on 1) identifying low-risk technologies 2) new R&D technologies that are close to commercialization 3) policies and financial strategies needed for approval and procurement 4) strategies to foster executive-level commitment 5) methods to disseminate information on successful projects, 6) prioritization and timeline for the introduction of new technologies 7) creation of new or modification of existing regulatory requirements 8) Lifecycle Cost Analysis approaches, and 9) approach to gaining recognition by congressional appropriators.

Return on investment remains an important component to a successful strategy and must be justified and documented. Other barriers as identified in Chapter 6 of the Federal R&D Agenda report must also be address.

The Working Group suggested that the Subcommittee organize a short series of regional workshops designed to attract leading facility managers as a means to disseminating information on the R&D and implementation strategies. Speakers

would publicize the R&D roadmaps and strategies (as outlined above), and success stories and case studies of recent projects.

The desired outcome of this effort will be to further disseminate R&D results, energize senior management and policy officials, and encourage operations & maintenance (O&M) staff to embrace new technologies. These activities must become institutionalized in organizations as, for example, already exists at the USPS. There also exist a “risk dynamic” that must be overcome for new technologies to be broadly and freely adopted.

Questions arose regarding whether the BTRD Subcommittee is the right group to be leading this effort. Matt Gray (DOE) highlighted that groups such as DOE’s FEMP Program have well established programs designed to help federal agencies use more resource-efficient technologies. These groups meet every two months, encourage outreach, and have a range of well-attended working groups. Gray also noted that the existing groups do not focus heavily on the R&D component, new technologies that are close to commercialization, or timelines and strategies for introducing new emerging technologies. Gap-analysis in the existing technologies in use is also needed.

DOE also has plans for a Green Star for Buildings program. The Commercial Building Alliance is another DOE program that may also leverage a technology implementation plan. Dion offered to arrange a presentation on the Alliance at a future meeting.

Action Item: Jerry Dion will contact Kevin Kampschroer regarding GSA interests in supporting this potential new activity area for the BTRD.

Action Item: Paul Domich will modify the existing scoping document to reflect the refined focus.

Summary: The Working Group will focus on the existing gap analysis and technology prioritization as the basis for the implementation strategy. This work will be coordinated with GSA and DOE/FEMP to ensure that the efforts are complementary and non-overlapping. The Subcommittee will explore regional workshops to interact with leading facility owners, operators, and managers. T

Future Speakers: The Subcommittee will actively seek speakers to address the members at future meetings. Practicing experts in integrated building systems, urban planning and design, and energy-focused pilot programs will be actively sought for future meetings.

Action Item: Dale Manty (EPA) and Jerry Dion will assist in identifying the future speakers.

Closure: Domich thanked the agency representatives for their participation and contributions.

(Please note that the final report and the public releasable set of Workshop materials are now available on the public buildingstechnology website. The full set of presentations is available on the password-protected BTRD website.)

http://www.bfrl.nist.gov/SBT/
user name: sbtuser
password:

(email domich@cip-consulting.com for the password)