

Buildings Technology Research and Development Workgroup Meeting

March 25, 2008

Location: 950 L'Enfant Plaza DOE

Time: 1:30-3:30 p.m.

Attendees¹

Shyam Sunder

Jerry Dion

Kevin Hurst

Paul Domich

Dru Crawley

Alan Schroeder

Mark Halverson

Patrick Hughes

Paul Torcellini

Bobbie Lippiatt

Andy Persily

Steve Bushby

Hunter Fanney

John R Weber

Ken Sandler

Alison Kinn

Dale Manty

Dana Bres

Martin Weiland

Russell Conklin

Donna McIntire

Ewa Lewandowska

William Brodt

Peter Kelley

Mila Kennett

Agency/Office

DOC/NIST

DOE/EE-Buildings

EOP/OSTP

DOC/NIST

DOE/EE-Buildings

DOE/EE-Buildings

PNL

ORNL

NREL

DOC/NIST

DOC/NIST

DOC/NIST

DOC/NIST

Architect of the Capitol

EPA/Green Buildings

EPA/OFEE

EPA/ORD

HUD/PD&R

GSA

DOE/CCTP

DOS/OBO

Smithsonian

NASA

DOS/OBO

DHS/S&T

BTRD Co-chair

BTRD Co-chair

BTRD Ex-Sec

Next Meeting: April 17, 2008, 1:30 - 3:30 PM, 950 L'Enfant Plaza DOE)

April 17, 2008

May 15, 2008

June 19, 2008

July 17, 2008

August 21, 2008

September 18, 2008

October 16, 2008

November 20, 2008

December 18, 2008

¹ Active Members not attending identified in light gray

Introductions: Workgroup Co-chairs Dru Crawley (DOE) and Paul Domich (NIST) opened the meeting of the Buildings Technology Research and Development (BTRD) workgroup welcoming the agency representatives and thanking them for their participation. Agency participants provided brief self-introductions.

Review of Minutes: Minutes from the previous February 8th meeting were distributed for correction and comment.

Proposed 2008 Workshop: Dru Crawley briefed the Subcommittee on the spring 2008 workshop. The workshop date has been set for the 1½ day conference for May 15-16, 2008 and will be held

Date and Time: Thursday, May 15, 8:30 a.m. – 5:00 p.m.
Friday, May 16, 8:30 a.m. – noon

Place: Forrestal Auditorium (GE-086)
Forrestal Building
U.S. Department of Energy
Washington, D.C.

and will focus on stakeholder input to Federal R&D Agenda for Net Zero Energy, High Performance Green Buildings. At maximum of 200 participants will be accepted on a first come – first served basis. Doug Brookman (Public Solutions, Inc) will be serving as the meeting facilitator for the workshop. Simone Katz and David Rathbun are assigned to help with the Workshop Announcement and registration.

Action Item: Paul Domich will send current workshop material for the development of the Workshop Announcement.

Action Item: EPA, OSTP, DOE and DOC will seek high-level departmental speakers to kick-off the workshop.

Committee on Technology Presentation: Shyam Sunder provided an overview of a presentation covering the BTRD Subcommittee accomplishments and future activities to be given to the NSTC Committee on Technology (COT), the oversight committee to the BTRD. Included in the presentation is a draft “vision statement” (see below) containing four stretch goals for the BTRD. Agency representatives were asked to provide input on the vision statement or to provide agency concurrence prior to the April 16th (now rescheduled to April 22) COT meeting. General consensus and approval was given at that time by participating BTRD representatives.

Review of Timeline and Deliverables: Domich provided a review of the established timeline and deliverables for the development of the Federal R&D

Agenda Report. The first complete draft document is expected by April 17th, 2008. This draft will be circulated to OSTP and OMB for a preliminary review prior to the 2010 budget review cycle. The refined draft will be then circulated to participating NSTC agencies for final agency review and sign-off. The final approved document will be publicly available in August 2008.

Review of Progress: Paul Domich provided a high-level overview of the report status. The current draft document version v-8 was reviewed by the Interagency Sustainability Working Group / FEMP for their review and comment. Domich also performed “in person” interviews with representatives from VA and DHS (and members of the BTRD Subcommittee) soliciting their input. Overall the report is considered to be well-written and conceived. General comments also included the recommendation to include the campus and community-levels issues where appropriate and to mention building design (form) considerations. Hospitals and healthcare facilities were identified as a special subset of commercial/federal buildings with 24/7 operational loads and requirements. Reviewers also suggested that the title of the report be changed. The new title agreed upon was “Federal R&D Agenda for Net Zero Energy, High Performance Buildings”. Other detailed comments and suggested changes will be shared with the lead writers.

Domich reviewed several new tables appearing in the Appendix including a table on Agency roles in Research, Development, Measurement Standards, Demonstration, and Implementation. A second table was suggested that will list agency roles in each of the six goals contained in the report. The table of organizations involved in net zero energy and high performance green buildings was discussed and reorganized.

Action Item: Section writers will be tasked with a careful final review of their sections. Attention is to be given to correctness of the edited text, references, abbreviations, and definitions. Draft quality graphics are needed along with sidebar information.

Action Item: Section writers are requested to provide changes to their sections by April 4, 2008 for incorporation in the next draft document.

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

BTRD R&D Vision

Enable design of new buildings and retrofit of existing buildings that over the life cycle:

- ❖ produce as much energy as they consume (i.e., net zero energy) while significantly reducing greenhouse gas emissions
- ❖ double service life of building materials, products, and systems while minimizing life cycle impacts
- ❖ halve use of domestic water (e.g., to 50 gal/day/person or less) while maximizing water recycling and rainwater harvesting and minimizing stormwater runoff
- ❖ achieve breakthrough improvements in indoor occupant health, productivity, and comfort