

Minutes (tentative as of 1-2-15)

GBI Consensus Body Meeting #2

BSR/GBI 01-201X

Chicago, IL

Thursday, November 13, 2014 1:30 PM CT to 5:00 PM CT

And

Friday, November 14, 2014 8:00 AM CT to 11:30 AM CT

Attendance:

No.	Name	Organization(s)	9-5-14	11-13-14	11-14-14
1	Greg Bergmiller	S/L/A/M Collaborative	X	X	X
2	Paul Bertram	Kingspan Insulated Panels, Inc.	X	X	X
3	Allan Bilka	International Code Council	X	X	X
4	Jeff Bradley	American Wood Council	X	X	X
5	William Carroll	Occidental Chemical Corp.	X		
Alt	D’Lane Wisner	D’Lane Wisner (Voting Alternate for William Carroll)		X	X
6	Chris Dixon	NBBJ (rep. self)	X	X	X
7	Nicole Dovel-Moore	CTA Architects Engineers	absent	X	X
8	Amber Dzikowicz	NSF International	X	X	X
9	David Eldridge	Grumman/Butkus Assoc.	X	X	X
10	William Freeman	Resilient Floor Covering Institute	X	X	X
11	Don Horn	GSA		X	X
Alt:	Lance Davis	GSA (Voting Alternate for Don Horn)	X		
12	Josh Jacobs	UL Environment	X	X	X
Alt:	Bill Hoffman	UL Environment (Voting Alternate for Josh Jacobs)		X	X
13	Greg Johnson	Johnson Consulting Services, Greenspace Alliance, Outdoor	X	X	X

		Power Equipment Assn.			
14	Leslie Kahn	Admin. Office of the U.S. Courts	X	X	X
15	Malee Kaolawanich	NIH (rep. self)	absent	absent	absent
16	Paul Karrer	AIA	X	X	X
17	Charles Kibert	University of Florida	X	X	X
18	John Koeller	Alliance for Water Efficiency	X	X	X
19	Jennifer Kowalonek	Alfred Benesch & Company	X	absent	absent
20	Michael Lehman	ConTech Lighting	X	X	X
21	Tom Meyer	NEBB	X	resigned	
22	Tien Peng	National Ready Mix Concrete Assn.	X	X	X
23	Bernadette Reyes	Clark Construction Group	X	absent	absent
24	Angela Rivera	URS Corporation (rep. self)	X	absent	absent
25	Jane Rohde	JSR Assoc. Inc., Vinyl Institute	X		
Proxy	Jeff Bradley	AWC (served as proxy for Jane Rohde)		X	X
26	Julie Sobelman	Independent Consultant	X	absent	absent
27	Kent Sovocool	Southern Nevada Water Authority	X	X	X
28	Steve Strawn	JELD-WEN	X	X	X
29	George Thompson	Chemical Compliance Systems, Inc.	X	X	X
30	Angela Tin	American Lung Assn.	X	X	X
31	Douglas Tucker	Misubishi Electric Cooling & Heating	X	X	X
32	Erika Winters Downey	American Institute of Steel Construction	X	X	X
TOTALS			30/32	27/31	27/31
Visitors					
	Martha Van Geem	Self	X	X	X
	Jonathon Humble	American Iron & Steel Institute	X		
	Kathleen Almand	National Fire Protection Assn.	X		

	Anne Bevan	Green Circle Certified	X		
	Abby Brokaw	American Lung Assn.	X	X	X
	Michael Jouaneh	Lutron Electronics		X	X
	Susan McGlaughlin Gitlin	U.S. EPA		X	X
	Dave Panning	BIFMA		X	X
	Doug Wolf	The Weidt Group		X	X
	Mike Cudahy	PPFA		X	X
	Brent Mecham	Irrigation Assn.		X	X
	Melanie Stanton	Turfgrass Producers International			X
	Staff/Consultants				
	Wayne Trusty	Chair	X	X	X
	Vicki Worden	GBI Secretariat, Worden Associates, Inc.	X	X	X
	Ron Jarnagin	Consultant	X		
	Jerry Yudelson	GBI President	X		
	Tom White	GBI Staff	X	X	
	Micah Thomas	GBI Staff	X		
	Emily Randolph	Secretariat Asst., Worden Associates, Inc.	X	X	X

Thursday, November 13, 2014

Welcome & Roll Call

Chair, Wayne Trusty, welcomed participants. Roll call established quorum and participants introduced him/herself stating name and organization(s) represented. The antitrust statement was reviewed and participants were requested to comply with it fully. Don Horn and GSA/EPA were thanked for hosting this meeting, Paul Bertram of Kingspan was thanked for sponsoring the refreshments, and Angela Tin of American Lung Association was thanked for offering to host future Consensus Body (CB) meetings in Chicago.

When asked no one objected to the meeting being recorded for the purpose of accurate minutes.

Worden noted that the public can participate as observers/visitors in both CB meetings and Subcommittee calls. CB member are the only ones permitted to vote at CB meetings. Likewise, appointed Subcommittee members are only permitted to vote during Subcommittee calls.

Motion: A motion was made, seconded and carried to approve the minutes from the September 5, 2014 meeting.

Abstaining: Don Horn, Bill Hoffman, Steve Strawn

Administrative Procedures and Related Matters

A description of procedures for meeting notifications and the distribution of materials was provided by Worden. Materials released just prior to the meeting will include an updated agenda, anti-trust statement, roster of consensus body and expected attendees. It was explained that reading materials would be listed and provided on the Dropbox site used for Subcommittee information sharing. For in-person meetings, there will also be a logistics document made available with information on ground transportation, itinerary for gatherings, food options, and other relevant details.

The agenda was reviewed with no changes made.

The membership roster was reviewed, noting that it is published online denoting interest categories and the organizations each individual is representing.

Worden stated that:

- GBI procedures require review of the membership roster at least annually;
- Notification has been received that Rachel Minnery of AIA would like to replace Paul Karrer as the sitting CB member from AIA;
- Paul Karrer would be participating as a voting member for the current meetings, with a ballot to make an official change following the meeting;
- Tom Meyer of NEBB, an original member of the CB appointed to serve as Chair of the Energy Subcommittee, has issued his resignation from the CB and as Chair of the Energy Subcommittee due to work-related priorities;
- David Eldridge had consented to take over as Chair of the Energy Subcommittee and the balance of the committee was not substantially impacted;
- There were now 31 sitting CB members and that quorum was a majority or 16;
- Voting alternates (appear on the original application and were approved at the time of the election of the Consensus Body) and proxies (may vary from meeting to meeting but must be from same interest category); and
- At these meetings, there were two voting alternates (Bill Hoffman for Josh Jacobs and D’Lane Wisner for William Carroll) and one member voting via proxy (Jeff Bradley would vote on behalf of Jane Rohde).

GBI 01-2010 Standard – Then vs. Now & Current Working Draft

The CB and Subcommittees have access to two documents:

- ANSI/GBI 01-2010 Standard approved in March of 2010; and
- A Working Draft document (BSR/GBI 01-201X) that the Subcommittees are now using and that incorporates updates that were made in 2013 to the Green Globes rating system.

Changes made from the 2010 Standard were reviewed by section, highlighting general changes, (e.g., streamlined pathways and simplified point calculations), as well as specific changes made to each section, most notably:

- Additional paths added in the Energy section (BEQ, ASRHAE 90.1, and Energy Star Target Finder); and
- Changes in the Materials section to reflect the fact that the Athena EcoCalculator, referred to in the 2010 Standard, is no longer supported; and
- The Working Draft updated to include multi-attribute standards/certifications.

Worden reviewed the approach to minimum percentage of points required for compliance as outlined in the 2010 Standard, and explained how the apportionment of points was determined in the 2010 Standard at the level of environmental assessment areas. The GBI at that time contracted with experts in the management of voting processes and held a meeting at the National Institute of Standards and Technology (NIST) where CB members and the public were invited to discuss, debate, and vote on which categories warranted more points (or higher priority) than the others.

With regard to finalization of the revised Standard and the updating of the Green Globes rating system for new construction, the GBI Board has committed to updating the Green Globes on-line tool immediately after completion of the revision of the Standard, which is also a rating system. The on-line tool delivers the Standard/rating system to users in a more user-friendly manner than a multiple-page document. Where the Standard may say, “The building incorporates XYZ...,” the on-line tool would translate to a Q&A format such as, “Does the building incorporate XYZ...” Otherwise the document and the tool should be equal. To help facilitate changes to the Standard and resulting on-line tool, GBI will apply to ANSI to allow “continuous maintenance” of the Standard.

Based on user and assessor feedback, the Subcommittees will be challenged to help ensure that criteria in the Standard are “assessable,” using simple approaches to conveying requirements, just as code organizations evaluate criteria as “enforceable.”

Discussion also dealt with:

- How to tackle the issue of prerequisites vs. minimum point requirements in each section vs. stating a threshold for minimum compliance based on a code in each assessment area (e.g., ASHRAE 90.1 as a minimum for Energy and ASHRAE 62.1 for Indoor Environment);
- The fact that if minimum performance thresholds are not set by citing a code, the GBI Standard will then need to include information from specific codes, which could lead to being too repetitive with existing codes;
- The need to ensure that the Standard applies to multiple building types and budgets without setting the bar so high as to discourage incremental improvement in all buildings; and

- Setting minimum performance thresholds for Energy, Water, and Indoor Environment that would be required for achievement of one, two, three or four Green Globes.

Developments & Relevance of Standards, Certifications, Programs, and Tools to GBI's Revision Process

ASHRAE 189.1 and BEQ

David Eldridge presented on ASHRAE 189.1, which is intended to provide a code enforceable assessment of what is a green building, and applies to the same buildings as 90.1. It excludes low-rise residential and is an alternate path in the International Green Construction Code (IgCC). It was noted that the current GBI working draft has both performance and prescriptive paths and one of the topics of discussion in the GBI Energy Subcommittee would be how much to let them overlap. It was also noted that certain codes may require commissioning. Even though Green Globes may not require commissioning, if it references a particular code it may in effect be including a requirement for commissioning – a matter that needs to be considered by the Subcommittees.

Eldridge also presented on Building Energy Quotient (bEQ), a program developed by ASHRAE based on trends in Europe to help ensure that buildings in the leasing realm have accurate information conveyed on energy and IEQ performance.

Federal Guiding Principles

Don Horn presented on Federal Guiding Principles, noting that Green Globes has a Guiding Principles Certification Program. There was an MOU signed on January 24, 2006, with Guiding Principles (which began developed-development three years before that) to be a common set of green building practices that agencies could do. The Principles were based around the following 5 basic principles, which at the time excluded site issues:

1. Use Integrated Design
2. Enhance Indoor Environmental Quality
3. Reduce Environmental Impact of Materials
4. Optimize Energy Performance
5. Protect and Conserve Water

One year later in 2007, President Bush signed Executive Order (EO) 13423 that referenced the MOU. The EO indicated that 15% of the Federal capital asset building inventory would need to meet the Guiding Principles by the end of FY 2015. In December of 2008, the Office of Management & Budget (OMB) and Office of Federal Environmental Executive (OFEE) through the Council on Environmental Quality (CEQ) issued a High Performance and Sustainable Building Guidance, which was really a revised Guiding Principles that applied to both new and existing buildings. Then in October of 2009, President Obama issued EO 13514 requiring that new construction, major renovations, repairs or alterations of inventory ~~should strive to~~must meet Guiding Principles by end of FY 2015 and that the agency make annual progress toward 100 percent conformance.

Horn also noted that assessing compliance to the Guiding Principles, now and in the future, is up to individual agencies. He suggested that ~~means being able to correlate~~ GBI's criteria in the Standard correlate to achievement of the overarching principles used to create the Guiding Principles as well as to specific performance objectives contained in the Executive Orders.

Horn noted that rating system providers would need to: "Include a verification system for post-occupancy assessment of the rated buildings to demonstrate continued energy and water savings at least every four years after initial occupancy." It doesn't have to be recertified every four years, there just needs to be some way to follow up and monitor performance.

He also noted that under Certification Level, as addressed in the DOE rule, "The building must be certified to a level that promotes the high performance sustainable building guidelines referenced in Executive Order 13423 "Strengthening Federal Environmental, Energy, and Transportation Management" and Executive Order 13514 "Federal Leadership in Environmental, Energy and Economic Performance."

Product Transparency

William Freeman presented on product transparency. He detailed developments in the market. He stated that at the 2012 GreenBuild meeting the first issue of the Health Product Declaration (HPD) was shared and manufacturers were put on notice that design firms were going to start requesting information on hazards related to ingredients. One of his concerns was that HPDs are not based on finished products, they are about raw materials that may never be found in the finished product. The second issue was that the HPDs are based on hazards such as ingredients that are known as carcinogens but pose no end risk to the user. The Resilient Floor Covering Institute has led an effort to develop a more risk-based approach to ingredient transparency. They have initiated creation and public comment of an ASTM standard on Product Transparency Declarations (PTDs). He notes that the HPD Collaborative or board does not include any product manufacturers. By contrast the ASTM process allows for input from all stakeholders.

D'Lane Wisner spoke about product transparency from the perspective of the chemical industry. He agreed the desire for improving products and increasing awareness of hazardous ingredients used in products is a trend that is here to stay. He described the concerns of some manufacturers about the proprietary nature of the information that is being asked to be shared within the HPD and noted that 90% of material/product creation involves chemistry. He stated that hazard-only tools and hazard-only lists are somewhat analogous to single-attribute standards/certifications for which the market is moving away.

A suggestion was made to address ingredient risk vs. hazard transparency issues in an informative appendix.

EPDs

Wayne Trusty spoke about environmental products declarations (EPD). Cradle to gate is one kind of EPD that covers impacts from extraction to processing, manufacturing and packaging at

plant gate. Cradle to grave EPD takes it from extraction through to ultimate disposal of the product including what happens on site at construction, transportation, materials to install or maintain the product, the reference service life for the products, and maintenance and end of life. Comparisons can only be made where an EPD is cradle to grave or cradle to gate with scenarios that include functional units that can be compared.

At this point, it was stated that encouraging product comparisons using EPDs is still complicated and all we can do is request a list of EPDs to accompany product selection. It was stated that including EPDs in rating systems creates incentives to continue product transparency.

Friday, November 14, 2014

Quorum was reestablished for Day 2 of Meeting #2. Trusty reminded participants that the meeting will be recorded for the purpose of accurate minutes.

Whole Building LCA

Trusty addressed issues that were not completed on the first day of the meeting. On whole building LCA, he discussed ASTM E2921 to provide an understanding of whole building life cycle assessment. He stated this standard encourages comparing a reference design for the building in the chosen location with the same functionality and size, and requiring that a design team use LCA tools to consider changes to the building that could reduce the environmental impacts before coming up with a final design. E 2921 was written to keep the playing field as level as possible so that a reference building is as similar as possible to the actual resulting building. Trusty suggests that E 2921 is an appropriate standard to reference in the GBI Standard.

Subcommittee Reports

Materials and Principles Discussion

Charles Kibert presented on the progress of the Materials and Resources Subcommittee, explaining the aspirational statement that is under discussion. Kibert explained his desire to base the document, specifically the Materials section, on overarching principles including minimize resource depletion, minimize ecosystem impacts, minimize impact on human health and quality of life, minimize waste in production and construction.

It was discussed that the mere discussion of principles in the Subcommittee and consensus process can help shape the thought process for what is included in the Standard and keep participants in a similar mindset on what to include or not during review of public comments. It was also noted that guiding principles should not be normative but could be mentioned in a preface or informative appendix.

Motion: A motion was made, seconded, and passed to ask each Subcommittee to evaluate the concept of principles for an overriding concept for the Standard and come back with feedback for possible incorporation into the Standard and how it would apply to their Subcommittee.

Abstain: Paul Bertram

Kibert then reviewed a draft of the Materials section. The group is considering moving section 10.7 to 10.10 out of the Standard because they are in line with best practices in construction and difficult to assess. The Subcommittee believes they can be better addressed under Project Management if not eliminated altogether. Other discussion took place on the desire to streamline the section and the Standard itself overall.

Energy

David Eldridge presented on the progress of the Energy Subcommittee. The main headings will likely remain similar and the section will continue to address demand and metering. There will continue to be a focus on performance vs. prescriptive with more separation between the two. He indicated the industry standard is ASRHAE 90.1 and that will be a focus in the document. He discussed the challenges with defining net zero consistently and indicated the Subcommittee would continue to discuss opportunities to reward buildings that achieve the highest energy savings. Concerns around renewable energy were discussed. It was noted that with climate zones changing, the criteria that eliminates certain zones for specific credits should be changed.

Martha Van Geem presented on the shift in climate zones and addition of climate zone 0. She encouraged Subcommittees to ensure they use and reference the updated ASRHAE maps.

Water Subcommittee

Kent Sovocool presented on the progress of the Water Subcommittee. He noted they are reviewing the current water consumption calculator and are comfortable with continuing prescriptive references to EPA's Water Sense. He indicated there would be changes to the section addressing cooling towers. He indicated the committee also is reviewing a section on hot water that came from another Subcommittee. He indicated the Site and Water subsections would reconcile areas of overlap. Kibert suggested there also be coordination between Materials and Water Subcommittees. Benchmarking water consumption was discussed and noted it would be looked at later by the Water Subcommittee.

Site Subcommittee

Gregg Bergmiller presented on the progress of the Site Subcommittee. He stated that there is great deal of need for cooperation between the sections. He suggested considering what kind of expert is needed to review each section and trying to organize credits so that they are more easily found by the relevant expert. To this end, he asked that the site transportation credits be moved back to the Site Subcommittee from where they are currently in the Energy section. He reviewed several of the areas for potential overlap with the Site and Water Subcommittees, such as watershed, irrigation, and stormwater, and noted he would cooperate with the other sections in review of these issues.

The concept of whether to award teams for the decision on where the site is located was discussed with differing views on how much teams can influence site selection. Other discussion took place on how much lifestyle issues would play a role in the Site section and

whether participation in master planning could be rewarded. Additionally, the role of plant selection was discussed and concerns were voiced about how the Standard will address resilient plant issues. It was noted the Subcommittee would continue to discuss these issues.

Project Management

Worden reported that the Subcommittee has met several times and would be reviewing its section along with several sections that it has been asked to take on by other Subcommittees. She noted the group has just gotten started but that they are seeking additional expertise on how to approach review of the commissioning section. The role of commissioning and its importance to the owner for risk management purposes was noted. It was suggested to consider having a separate area for commissioning.

Indoor Environment

Mike Lehman reviewed progress on the indoor environment section noting that all the references are outdated. He reviewed the discussion to date, including streamlining the approach to eliminate paths and just have selection criteria, as well as how to allow for innovative technologies. He also discussed the fact that the section includes some criteria that are more outdoor emissions focused. He noted the lighting section and daylighting issues are under discussion. He stated that an access to HVAC issues section would be referred to the Project Management section and a domestic hot water issue was referred to the Water Subcommittee. Concerns around EMF issues were also discussed and will be under consideration by the Subcommittee.

Worden noted that the Emissions section, which was focused on outdoor emissions, still needs to be evaluated by the consensus body and that perhaps the Indoor Environment Subcommittee can find time to review it and make preliminary recommendations.

Future Meetings

Worden noted that all public meetings are posted on GBI's website, which also provides tentative agendas. She noted that there are 250-350 stakeholders on GBI's public email list and they are notified of updates and developments. Public meetings and public comment periods are announced also in ANSI's *Standards Action* newsletter. She encouraged everyone to review GBI's website for the latest updates. She requested that members of the public that wish to be included in public meetings make requests as far in advance as possible (procedures encourage 10 days prior to a meeting).

The next meeting of the full consensus body was discussed as taking place on January 7.

Additional Discussion Topics

Minimum percentage of points for compliance per section and overall vs. prerequisites

Following significant discussion on this topic, three suggestions were made for moving forward:

- Subcommittees discuss minimum performance codes that may apply to their sections;

- Subcommittees discuss the concept of minimum compliance requirements for the overall Standard; and
- Evaluation should be done once most of the content is crafted to determine how the criteria will work against real building projects and determine if we can make some general statements about types of performance that will be required to achieve one, two, three and four Green Globes.

Chair Trusty encouraged the Subcommittees to consider these issues and hopes to be able to have a motion and a vote presented at the January 7 CB meeting.

Overall point allocation to each assessment area

It was stated that the other decision we should make at our next meeting is how to determine the overall point allocation for each environmental assessment area. Trusty asked each Subcommittee to discuss this further in anticipation of a decision on January 7. Worden suggested the Subcommittees discuss general rankings of criteria within their sections as point allocations can happen after it is determined how many total points are available.

Timeline

Worden noted that she hopes to see content developed to a point that it can be shared with the full consensus body by January 31, 2015. The goal is to conduct the first public comment review of the Standard in the early part of second quarter of 2015. Two public comment periods are expected and the hope is to publish the ANSI-approved Standard early in 2016.

Adjournment

Motion: A motion was made, seconded and approved to adjourn the meeting at 11:25 CT.

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