

BIFMA Sustainability Assessment Standard Stakeholder Meeting
Tuesday August 22 and Wednesday August 23, 2006
Draft Meeting Summary

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Please go to <http://BIFMA.org/public/SusFurnStd.html> for BIFMA Sustainability Assessment Standard documentation.

Bill Stough called the meeting to order and welcomed the group. Jaclyn Bowen read the anti-trust statement. The group went around the room giving self-introductions. Bill Stough reviewed the agenda. He stated that that an addition to the agenda is a chair's meeting scheduled at 4pm on Tuesday.

Tuesday August 22, 2006

I. NSF Announcements

Jane Wilson stated that NSF International just received ISO 14001 certification. An ISO 14001 environmental management system is meant to develop a systematic management approach to the environmental concerns of an organization. The goal of this approach is continual improvement in environmental management. She also announced that NSF is seeking LEED certification on the new construction next door. The LEED (Leadership in Energy and Environmental Design) Green Building Rating System is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

Jane Wilson and Jaclyn Bowen submitted an abstract entitled, "Development of American National Standards for Sustainable Products" for the ASTM Symposium on Common Ground, Consensus Building and Continual Improvement: Standards and Sustainable Building. They just received an acceptance letter on this abstract and will be presenting at the symposium in April of 2006 as well as submitting an individual article for publication in the Journal of ASTM International (JAI).

Jane Wilson also indicated that she had received a few inquiries about the upcoming NIST/ Industry Forum on Emerging Chemical-Related Regulations on US Manufacturers. This forum will be held on September 26-27 at the National Institute of Standards and Technology (NIST) campus in Gaithersburg, MD. The event will identify ways in which the business, scientific and standards communities can cooperate to better anticipate, prepare for and respond to the increasing number of chemical control regulations imposed on industry.

Jane Wilson also announced that during the Sustainable Carpet Stakeholder meeting held on Thursday July 27, 2006, a task group entitled “Global Integration” was created. The charge of this task group is to work with other key members of NSF Sustainability Stakeholders groups (carpet, furniture, textiles and flooring product) to work to harmonize sections that may overlap the different standards. Stay tuned for more details.

II. Review of July 2006 Meeting Summary

Bill Stough reviewed the July 26th meeting summary and questioned if any corrections/changes needed to be made.

Motion: Gabe Wing motioned to accept the July 2006 meeting summary. Mike Zimmerman seconded.

Discussion: None.

Vote: All in favor.

Motion passed. July 2006 Meeting Summary is accepted.

Stakeholders requested that paper copies of the meeting minutes be available at future meetings.

III. Work Group Co-Chairs Identification/Approval

Bill Stough pulled up the task group lists from the BIFMA website. He suggested assigning co-chair roles to others on the work group in case the chair cannot attend a meeting or conference call. The Co-Chairs agreed upon for each task group are as follows:

- Work Group 1-Human and Ecosystem Health
 - Denise Van Valkenburg, Steelcase
 - Gabe Wing, Herman Miller
- Work Group 2-Energy Efficiency and Renewable Energy
 - John Shank, Kimball
 - Anne Saliers, izzydesign
- Work Group 3-Natural Resources
 - Mark LaCroix, Interface Fabrics
 - Jim Kozminski, Haworth
- Work Group 4-Social Responsibility
 - Bill Foley, Interface Fabrics
 - Larry Dykuis, Herman Miller

Brad Miller and Bill Stough requested that Jaclyn Bowen send them updated lists of task group members.

III. Review of Master Document Revisions

Bill Stough walked the Stakeholder group through the recent changes to the master document. He stated that a name for this document still needed to be established. The major changes are as follows:

- Updates to the Scope;
- Additional definitions have been inserted as recommended by the task groups;
- Updates to the Elements, Prerequisites and Credits have been included as applicable to each task group; and
- Design for the Environment and Life Cycle Parameters have been incorporated and will be discussed in further detail later in the meeting.

He encouraged all task group chairs to use the most recent version of the draft standard when making changes. Following a conference call, all task group chairs should send Bill Stough their revised language to incorporate into the master draft. Prior to face-to-face meetings, he will post the updated draft on the BIFMA website and circulate the revised draft to Jaclyn Bowen to send out with the meeting agenda. Brad Miller stated that he would post the most recent version of the draft standard in a word document on the BIFMA website. This should help ensure that the work groups are using the most recent version of the standard when making revisions.

Bill Stough asked Work Group Chairs to identify any important issues they would be addressing in their work group meetings. The following comments were provided:

- Jim Kozminski said a major issue for the Natural Resources Group is how to handle wood as a renewable resource;
- Denise VanValkenburg said the Human & Ecosystem Health Work Group would be discussing how to handle emissions; and
- John Shank said the Energy Efficiency and Renewable Energy Work Group would be discussing how to develop credits for calculating embodied energy, how to validate some of the intent statements, and how to approach greenhouse gas issues.

IV. Open Discussion on Prerequisites, Credits and Certification Levels

Larry Dykuis proposed two motions. The first one relates to the structure of the standard relating to pre-requisites and credits. The motion reads as follows:

To earn certification to the BIFMA SFAS, the applicant product must meet all the prerequisites and meet the requirements of a minimum number of credits. Beyond the prerequisites, there is no minimum

number of credits from any of the four major categories required to earn certification. The required credits can come from any of the 4 categories. All credits in the standard have the same weighting or value toward certification. Work groups should target the following maximum number of credits for each major section:

Human and Ecosystem Health – 30

Water and Natural Resources – 30

Energy and Energy Efficiency -20

Social Responsibility – 15

Innovation -5

Larry Dykuis explained that it is essential to discuss this at some point for three reasons:

- 1) To give guidance to the task groups;
- 2) Give structure to the standard; and
- 3) Find a way to strike a balance between comprehensiveness and costly auditing

The stakeholder group discussed various approaches to credits such as establishing a fixed number for a more simple approach like pass/fail criteria. Kathleen Vokes questioned the logic behind the point distributions. Larry Dykuis explained that Human and Ecosystem Health and Natural Resources had the most intensive quantity of parameters to consider. Social Responsibility is a newer concept so the requirements are more introductory.

Paul Chalmers suggested that for the sake of easy mathematical housekeeping, task groups may want to consider allotting points and then have the points divided by 2 or 3 at the end if needed. This will allow users of the standard to work with whole numbers up until the time of final point calculation.

The stakeholder group discussed Innovation credits. The stakeholder group agreed that a task group needed to be formed to establish and describe Innovation credits. Larry Dykuis suggested having each of the work groups put this on their agenda. Once the individual task groups get close to wrapping up, they would be at a good place to examine what would be considered going above and beyond the requirements and thus, worthy of innovation credits. Mary Ellen Mika agreed. Bill Stough suggested that a new work group on innovation be created and stated that he would allow for some time on the September agenda for the stakeholder group to discuss identification of the characteristics needed to obtain innovation points. Toni Stein and Deborah Dunning both stated that they would be interested in helping out with this effort. If others are interested, please contact Bill Stough.

Motion: Toni Stein motioned to accept the proposed motion as recommended by Larry Dykuis. Randy Carter seconded.

Discussion: None.

Vote: All in favor.

Motion passed. Task groups should use the above proposed breakdown of point distribution when drafting language.

The second motion related to certification levels and read as follows:

There will be four levels of achievement or certification available within the standard. Assuming 100 total points, the number of credits required to achieve each level are:

<i>Green</i>	<i>35</i>
<i>Silver</i>	<i>48</i>
<i>Gold</i>	<i>61</i>
<i>Platinum</i>	<i>74</i>

If the actual number of credits deviates from 100, requirements for each level will be adjusted proportionately.

Some members of the stakeholder group found that “Green” was misleading since it could be interpreted as being the highest level. Bronze was discussed as a possible alternative. No changes were made in the proposal as it was deemed too early to decide on the number and levels of conformance. However, since there was a consensus with the point distribution as proposed it was decided not to offer a motion at this time, but to ask the task groups to use this as guidance until further guidance is required.

V. Background Information on Life Cycle Thinking

Bill Stough shared the difference between Life Cycle Thinking and Life Cycle Assessment.

Life Cycle Assessment (LCA) is a tool for the systematic evaluation of the environmental impacts of a product or service system through all stages of its life cycle. An LCA is generally quantitative and requires that the results be normalized to a functional unit. AN LCA is inclusive of both product and process. An LCA is a tool that can be used to implement Life Cycle Thinking (LCT.)

LCT is a conceptual approach that addresses environmental problems from a whole-systems or holistic perspective. The fundamental difference to an LCA is that the results are not normalized to a functional unit, and the results may be expressed qualitatively or quantitatively.

The term life cycle refers to the major activities in the course of the product’s life span from its manufacture, use, and maintenance, to its raw disposal including the raw material

acquisition required to manufacture the product. A LCT analysis can encompass the entire life cycle of a product or a truncated scope (e.g. gate-to-gate, or the economic or social impact).

Please see the LCA background document prepared by SRG on the BIFMA website for more details.

VI. Position on Using LCA Tools

Larry Dykuis proposed the following motion on the use of Life Cycle Analysis Tools and Data:

LCA thinking and concepts shall be encouraged in the development of the standard and individual credits within the standard. Credit requirements can be designed to use LCA data as the means to earn credits within the standard. Credit requirements will not be designed in a way that use of LCA data is the sole means of determining conformance for any pre-requisite or credit within the standard. Credit requirements will also not be designed in a way that dictates the use a one particular LCA methodology or tool.

Clinton Boyd explained the difference between LCA and Life Cycle Thinking as follows. For an LCA, two materials are compared. This is done by identifying the inputs, assigning factors to each impact category, and assigning the material a number. This end number represents the ecological footprint as documented in the scope. For life cycle thinking, you can don't have to perform a quantitative analysis. If you decide to reduce energy consumption, you can require the use of an alternative energy supply. A manufacturer wouldn't just consider the efficiency of the product, but also the green house gas emission. However, an unintended consequence of life cycle thinking is that if you only look at the impact of one product and/or one ingredient, you may shift the impact onto another feature of the product that is not being created with life cycle thinking in mind.

Deborah Dunning state that IDCE does not support giving credits for product LCAs that do not encompass all the environmental impacts identified by the EPA Science Advisory Board or equivalents.

After spending a full year studying a possible streamlined LCA methodology proposed by EcoBalance, they concluded that it lacked the scientific robustness essential for use for reliable product design, evaluation and comparison. She was concerned after studying materials presented by Paul Chalmers at the July BIFMA Stakeholder's Group Meeting. These concerns are as follows:

- 1) A lack of a commonly agreed upon standard for product LCAs to be used in connection with the BIFMA Sustainable Furniture Standard, resulting in avocados being compared with grapefruit;

- 2) Confusion among purchasers as to the scope and parameters of a product LCA for which credits are given, resulting in less trust in the Standard than you're hoping to achieve in the marketplace.

Essentially, Deborah Dunning explained that to ensure a level playing field, those who elect to participate in the creation of an LCA should be permitted to do so independent of the tools they use to form one.

The stakeholder group suggested establishing common language and processes. The stakeholder group discussed having LCAs as prerequisites, but decided that while having an LCA in place may be one way to earn a specific credit, it need not be the only way. The stakeholder group discussed ideas such as having the 2007 version of the standard address some aspects of LCA but have it be open to additional development moving forward. The stakeholder group also felt that it might be advantageous to form a group to put a grant proposal to get funding.

Clinton Boyd stated that the standard should give credits to manufacturers for Life Cycle Thinking. He did encourage task groups to keep Life Cycle thinking in mind when developing credits. This way Life Cycle thinking will be part of the conceptual framework. He also discouraged setting a specific threshold number. He felt that if a manufacturer performed an LCA to determine the contents of their product, this is a transparent means of showing Life Cycle thinking. Gabe Wing questioned how a manufacturer would be handled if they paid the money to have a LCA established post-construction.

Laura Rauwerda stated that the word "integration" or "system" should be added to the motioned and that extra credit for an LCA could be given under Innovation credits. Larry Dykuis summarized it as giving credit for the activity and not the performance. Larry Dykuis agreed to go back to the drawing board and redraft the language to share with the stakeholders on Wednesday.

Stakeholders agreed that the motion would not prevent work groups from giving credits for conducting an LCA or for completing components of an LCA, but will not give credits for achieving a specific point level in an LCA.

Prior to breaking out into individual work group session, Anne Saliers requested that each work group look at their prerequisites. She stated that some small businesses might not be able to meet these requirements. She requested that all work groups keep in mind that this standard should encourage continuous improvement, but if the standard has too many barriers to entry, many small businesses may not be able to participate.

Wednesday August 23, 2006

VII. General Session – Review Work Group Progress

Bill Stough started the meeting by reviewing a few points of discussion that were brought up during the work group meetings. The first question was if the ANSI process requires the standard and the guideline to be created and put through the process at the same time.

Jane Wilson responded that a guidance document can be created at any time and it does not have to go through the ANSI process. Larry Dykuis stated that the Draft Standard for Trial Use that was created for Sustainable Carpets has a guidance document. He asked where those could be found.

NSF 140- DSTU- Sustainable Carpet Assessment Draft Standard can be found at the following site:

http://www.nsf.org/business/standards_and_publications/pdf/NSF_140-05-DS.pdf

The SCS guidance documents for the carpet standard (see under "Related Materials") can be found at the following link:

<http://www.sccertified.info/workspaces/sccarpet.html>

Craig Bren asked if the various sustainability standards being created by NSF International should be harmonious. Brad Miller stated that the Global Integration task group described yesterday might be a place where areas of similarity and difference could be identified.

The stakeholders next discussed Larry's Dykuis motion on the use of Life Cycle Analysis Tools and Data. He proposed the following revised motion:

Integrated life cycle thinking and concepts shall be encouraged in the development of the standard and individual credits within the standard. Regular credit requirements or innovation credit guidelines can be designed to reward use of:

- *life cycle inventory and/or*
- *life cycle assessment..*

Prerequisites will not require any type of LCI or LCA work. Credit requirements will not be designed to use quantitative LCA outcomes as thresholds for earning credits. Credit requirements shall be based on the ISO 14040 series or the equivalent, and will also not be designed in a way that dictates the use of any one particular life cycle tool.

The stakeholders decided to leave the motion as originally suggested, and have the reference to ISO as a separate motion. It was also suggested to define "tools."

Motion: Larry Dykuis motioned to accept the proposed language. Clinton Boyd seconded.

Discussion: None.

Vote: All accepted.

Motion passed.

The stakeholder group divided into work group sessions and reconvened for a wrap –up session.

VIII. Adjournment

Bill Stough stated that the next meeting is scheduled for Tuesday September 19th and Wednesday September 20th. The meeting will take place from 9am-4pm on the first day and from 8:30-12pm on the second day. If task groups need to meet in the afternoon of the second day, they can do so.

The stakeholders asked Jaclyn Bowen to refer them to a different hotel for the next meeting. Jaclyn Bowen stated that she would refer them to the Hampton Inn and to stay tuned for the meeting announcement for more details.

Denise Van Valkenburg stated that the CA Resources Board was getting together in August to review information on the proposed regulation relating to emissions criteria. A public comment period was made available which ends in November. A conference call was also scheduled. Denise Van Valkenburg and Randy Carter may attend the next meeting. Please contact Denise for more details.

The October meeting will be in Ann Arbor but will take place at Paul Chalmer’s organization, National Center for Manufacturing Sciences. More details to follow.

Brad Miller stated that he would be working with Jaclyn Bowen to begin circulating applications for the formation of a Joint Committee. NSF and BIFMA are tentatively planning on having the following categories on the Joint Committee.

- Regulatory/Academia
- Users or General Interest (this will include NGOs and the design/architecture community)
- Suppliers
- Manufacturers

Brad Miller is to send Jaclyn Bowen a cover memo that explains the focus of this Joint Committee.

Several work groups set up their next calls. The dates are as follows:

Work Group Number	Name	Next meeting?
1	Human and Ecosystem Health	Sept. 6: 10am-1pm (ET)
2	Energy Efficiency and Renewable Energy	Sept. 8: 1pm-4pm (ET)
3	Natural Resources	TBD
4	Social Responsibility	TBD

Bill Stough requested that all chairs review the draft meeting summaries as soon as possible when Jaclyn Bowen circulates them. He also requested that task group members review the summary and let Jaclyn know if there were any key points of discussion that were not incorporated.

Action Items:

- Jaclyn Bowen is to send the updated task group lists to Brad Miller for inclusion on the BIFMA website
- NSF and BIFMA need to discuss their ASTM Abstracts to make sure their efforts aren't duplicated.
- BIFMA should begin establishing a name for the Master Document/Draft Standard
- Establish an Innovation task group
- Bill Stough should wait to hear from Jaclyn Bowen for more details on the Global Integration task group.
- All stakeholders should contact Bill Stough if they are interested in being a members of an Innovation task group.
- Jane Wilson needs to research the SCS sustainable carpet guidance document to circulate to the BIFMA stakeholders for review.
- NSF/BIFMA to work on circulating Joint Committee applications.

Attendees:

In Person:

Bowen, Jaclyn- *NSF International*-
Boyd, Clinton- *Sustainable Research Group*
Bren, Craig- *Tuohy Furniture*-
Carter, Randy- *Steelcase Inc.*-
Chalmer, Paul- *National Center for Manufacturing Sciences*
Dykhuis, Larry- *Herman Miller Inc.*
Earnest, Matt- *Interface Fabrics*
Foley, Bill- *Interface Fabrics*
Fraser, Mary- *BASF Corporation*
Haase, Tracy- *Indiana Furniture*
Kozminski, Jim- *Haworth*
Lang, Ron- *National Center for Manufacturing Sciences*
Mika, Mary Ellen- *Steelcase Inc.*
Miller, Brad- *BIFMA International*
Rauwerda, Laura- *State of Michigan DEQ*
Reardon, Tom- *BIFMA International*
Saliers, Anne- *izzydesign*
Shank, John- *Kimball International*
Stevens, Fred- *Group Dekko*
Stough, Bill- *Sustainable Research Group*
Van Valkenburg, Denise- *Steelcase Inc.*
Wilson, Jane- *NSF International*
Wing, Gabe- *Herman Miller Inc.*
Worthy, Karen- *Global Contract Inc.*
Zimmerman, Michael- *Sauder Woodworking*

Via Conference Call:

Jenkins, Peggy- *CA Air Resources Board*
Lesnet, Scott- *HNI Corporation*
Manzo, Catherine- *USEPA*
Miller, Scott- *Knauf Insulation*
Newett, Lou- *Knoll Inc.*
Rabiah, Janan- *ACT*
Steady, Scott- *Air Quality Sciences, Inc.*
Stein, Toni- *California DHS*
Syed, Sharmin- *USEPA*
Vokes, Kathleen- *USEPA*
Workman, Shayla- *USEPA*