Resilient Floor Covering Institute

November 21, 2011

BY EMAIL
Mr. Ken Sandler
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Office of Federal High Performance Green Buildings
US General Services Administration (GSA)
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Re: ***Green Building Certification System Review***

Dear Mr. Sandler:

The Resilient Floor Covering Institute (RFCI) appreciates the opportunity to provide comments on the Green Building Certification System Review Project being undertaken by the General Services Agency (GSA), which was reported at the Green Building Advisory Committee (GBAC) meeting on November 9, 2011. RFCI is a non-profit trade association that represents manufacturers of vinyl composition tile, vinyl tile, sheet vinyl, rubber, and linoleum flooring products and suppliers of raw materials, additives, and sundry flooring products (e.g., adhesives) for the North American market. A list of RFCI members is attached in Appendix I.

RFCI seeks to educate the public and policymakers about the durability, affordability, and environmental benefits of resilient flooring use in new construction and renovations. RFCI has long been an advocate of green product selection and sustainable building practices based on life-cycle assessment and sound science principles. To this end, RFCI has developed two sustainability programs under which hard surface flooring products may qualify. These are: (1) FloorScore® which recognizes flooring products meeting the stringent low VOC emission requirements of the California Section 1350 indoor air quality program based on independent laboratory testing and third party certification;[1] and (2) NSF-332 – Sustainability Assessment Standard for Resilient Floor Coverings, an ANSI accredited standard which provides different certification levels (certified, silver, gold, and platinum) for flooring products meeting

[1] *See* http://www.rfci.com/index.php?option=com_content&view=article&id=80&Itemid=79.

sustainability requirements for product design, manufacturing, end-of-life management, corporate governance, and innovation.[2]

As explained below, RFCI strongly believes that GSA's recommendation to the Department of Energy (DOE) of green building certification systems should include Green Globes, which fully meets the required statutory criteria for use by federal agencies. However, GSA's recommendation should not include the Living Building Challenge system, which falls short in many critical areas in meeting the mandated criteria.

I. GSA FIVE-YEAR REVIEW OF FEDERAL GREEN BUILDING CERTIFICATION SYSTEMS

Section 436(a) of the Energy Independence and Security Act of 2007 (EISA), 42 U.S.C. § 17092, established the Office of Federal High-Performance Green Buildings (OFHGB) within GSA. GBAC was created within the OFHGB to "provide advice and expertise" to the Director of OFGHB in carrying out his duties under EISA. EISA § 494.

One of GSA's key functions under EISA, through the OFHGB and with the assistance of GBAC, is to evaluate and recommend to DOE "a certification system that the [OFHGB] Director determines to be the most likely to encourage a comprehensive and environmentally-sound approach to certification of green buildings," *id.* § 436(h), and the highest appropriate level of certification under the recommended system, *id.* § 433(a). After considering OFHGB's findings, DOE is directed by Section 433(a) of EISA to promulgate rules establishing "revised Federal building energy efficiency performance standards" for new or renovated federal building. These rules must include identifying a certification system and level which DOE "determines to be the most likely to encourage a comprehensive and environmentally-sound approach to certification of green buildings." *Id.*

GSA fulfilled its initial obligation under EISA in a letter dated April 25, 2008 in which it recommended the use of the Leadership in Energy and Environmental Design (LEED) system developed by the U.S. Green Building Council (USGBC) and LEED's silver rating as the minimum certification level. This recommendation was based on a report by Pacific Northwest Laboratory in 2006 which evaluated five green building rating systems.

DOE has since been in the process of developing the required green building energy efficiency performance standards, which include identifying the green building certification systems and certification level for use by federal agencies. On May 28, 2010, DOE issued its proposed standard, which is presently under review by the Office of Management and Budget (OMB) and is expected to be published as a final rule by the end of the year.[3]

Section 436(h) of EISA provides that GSA must conduct a new study every five years to "compare and evaluate" green building certification systems. As with the initial study, EISA

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2 *See* http://www.rfci.com/index.php?option=com_content&view=article&id=91&Itemid=4.

3 DOE Proposal, *Energy Efficiency and Sustainable Design Standards for New Federal Buildings, Solar Hot Water Requirements, Water Efficiencies, and Green Building Ratings*, 75 Fed. Reg. 29933 (May 28, 2010) (RIN 1904-AC13).

gives GSA five enumerated criteria that a green building certification system must meet: (1) "the ability and availability of assessors and auditors to independently verify the criteria and measurement of metrics at the scale necessary to implement [a green building certification system for federal Agencies];" (2) "the ability of the applicable standard-setting organization to collect and reflect public comment;" (3) "the ability of the standard to be developed and revised through a consensus-based process;" (4) "an evaluation of the robustness of the criteria for a high-performance green building," which includes credit for promoting efficient and sustainable use of water, energy, and other material resources, use of renewable energy, improved indoor air quality, thermal comfort, and acoustics, and use of low-emission materials; and (5) "national recognition within the building industry." ESIA § 436(H). These criteria are the same ones DOE must use in promulgating federal government-wide green building standards. *See id.* § 433(a).

As reported at the GBAC November 9th meeting, GSA has further distilled these statutory review criteria into the following categories: (1) Independence (assessors have no stake in the outcome); (2) Availability of assessors to review buildings; (3) Verification of the certification process; (4) Transparency (documented approach for including public comments in the standard development and updates); (5) Consensus-Based per OMB Circular A-119; (6) Robustness (efficient and sustainable use of water, energy, and other natural resources, and criteria for indoor air quality and renewable energy use); (7) System Maturity (tracks past occupancy performance and consistently updated); (8) Usability (affordable, available, and easily understood to use); and (9) National Recognition (recognized academically and in the private market and federal sector).

The requirement that recommended certification systems be consensus-based (EISA § 436(h)(2)(D)) is predicated on conformity with Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTA), which mandates that federal agencies "use technical standards that are developed or adopted by voluntary consensus standard bodies," unless the standard is "inconsistent with applicable law or otherwise impracticable." The meaning of this statutory dictate in NTTA § 12(d) is elaborated in OMB Circular A-119, which obligates federal agencies to make use of "voluntary consensus standards . . . in their procurement and regulatory activities."[4] Voluntary consensus standards are defined as standards that are open, incorporate a balance of interest, observe due process, include an appeals process, and are based on consensus.

As reported at the GBAC's November 9th public meeting, GSA is currently in the midst of conducting its five-year review of its initial 2008 green building certification system recommendation to DOE. GSA has conducted an initial screening of potential green building certification systems based on three criteria that meet the "minimum expectations" of a green building certification system: (1) employ whole building evaluation; (2) available in the U.S.; and (3) use third-party certification. GSA reported that three systems passed the "minimum expectations" criteria: (1) LEED; (2) Green Globes developed by the Green Building Initiative (GBI); and (3) the Living Building Challenge (LBC) developed by the International Living

[4] OMB Circular A-119: *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities* is available at http://www.whitehouse.gov/omb/circulars_a119.

Building Institute (ILBI). GSA will now further evaluate these systems based on the five EISA criteria, as elaborated in GSA's nine review criteria categories discussed above. GBAC has been asked to provide its input regarding the GSA recommendation, and GSA plans to submit its recommendations to DOE by December 30, 2011. At the GBAC meeting, GSA invited public comment on the Green Building Certification System Review Project, which RFCI does in this letter.

II. GSA MUST RECOMMEND TO DOE ANY GREEN BUILDING CERTIFICATION SYSTEM THAT MEET THE EISA CRITERIA

As a fundamental principle, GSA is not limited to recommending to DOE only one commercial green building certification system for use across the entire federal government to the exclusion of other systems which meet the EISA statutory criteria. Given the wide diversity of governmental buildings and the different points of emphasis in various certification systems, a one-size-fits-all certification system is not advisable or even workable for all projects. It is important that federal decision-makers be able to select the most appropriate green building certification system for any particular project provided that all of the available options satisfy the relevant statutory criteria.

In its pending proposed rulemaking, DOE recognized this principle and acknowledged the value of affording federal agencies a choice of qualifying green building certification systems.[5] Rather than selecting a single mandatory certification system, DOE's proposed rule would allow federal agencies to make use of any system that satisfies minimum criteria set forth in the proposal. *See* 75 Fed. Reg. 29933, 29944 (May 28, 2010) (proposed to be codified at 10 C.F.R. § 433.9). In explaining its decision, DOE states that it "believes that agencies would be provided the flexibility to choose the green building rating system that best fits their needs as long as the system meets the criteria set in this rulemaking." *Id.* at 29939. In a 2009 report, the General Accounting Office explained that DOE had been informed by various federal agencies that they "wanted the flexibility to choose the green building rating system that best suits their needs."[6]

In addition to providing agencies with choices, allowing the use of more than one qualifying green building certification system will foster competition among systems which will spur innovation. For example, the development of energy credits for USGBC's LEED rating systems apparently were driven by competition from Green Globes. Likewise, competition among certification systems will lead to reduced certification and verification costs to the benefit of the federal government and other building owners.

Accordingly, GSA should recommend to DOE any green building certification system which meets the EISA statutory criteria. Thus, for example, LEED should not be the only certification system recommended simply because it is the most widely used system. However, as a corollary, the Agency should <u>not</u> recommend a certification system that falls short in

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[5] The RFCI comments supporting this approach were submitted to DOE on August 10, 2010, and are posted in the proposed rule's docket folder at www.regulations.gov as Docket ID: DOE-EERE-OT-2010-0007-0063.

[6] GAO, *Federal Energy Management: Agencies Are Taking Steps to Meet High-Performance Federal Building Requirements, but Face Challenges* 48 (Oct. 2009), *available at* http://www.gao.gov/new.items/d1022.pdf.

satisfying the mandated criteria. As a result, as explained below, the GSA recommendation should include the Green Globes system, which meets or exceeds all relevant criteria, but should not include the LBC system, which falls short in a number of critical areas.

III. GSA SHOULD RECOMMEND GREEN GLOBES TO DOE BECAUSE IT FULLY SATISFIES ALL EISA CRITERIA

Green Globes incorporates life-cycle assessment principles in evaluating the "greenness" of buildings as a whole and does not inappropriately engage in single-attribute deselection of particular building materials. It fully meets all of the relevant EISA criteria, as further elaborated by GSA (i.e., "Independence," "Availability," "Verification," "Transparency," "Consensus Based," "Robustness," "System Maturity," "Usability," and "National Recognition").

Green Globes more than meets GSA's "Transparency" and "Consensus based" criteria which require documented proof of public participation in the development of the standard and compliance with OMB Circular A-199 (i.e., openness, balance of interest, due process, appeals process, and consensus). On March 21, 2010, Green Globes for New Construction became the first green building certification system to receive accreditation from the American National Standards Institute (ANSI) as an American National Standard.[7] To achieve accreditation, Green Globes had to be developed using ANSI's rigorous due process- and consensus-based process. For example, a 30-member Green Globes technical committee was used, representing a wide array of interests including green building users (e.g., American Institute of Architects, Virginia Department of General Services), building material producers (e.g., Steel Recycling Institute, American Forest and Paper Association, RFCI), and other interested parties (e.g., U.S. Environmental Protection Agency, Center for Sustainable Building Research at the University of Minnesota). The technical committee was supported by various subcommittees composed of subject-matter experts. The standard went through several drafts which were made available for public comment, and responses were provided to the public comments. The final standard was the product of a consensus reached by the technical committee based on input from the subcommittees and the public. By being ANSI-accredited, Green Globes also fully complies with Section 12(d)(1) of NTTA, which provides that "all Federal Agencies and departments shall use technical standards that are developed or adopted by voluntary consensus standards bodies."

Green Globes earns high marks on the "System Maturity" criterion, which is demonstrated by frequent revisions and the use of latest tools. Green Globes' predecessor system was first developed in 1996 by a consortium of Canadian governmental representatives, industrial concerns, academics, and environmental groups. The system was transformed into a web-based assessment tool in 2000. Green Globes was introduced to the United States in 2004 by GBI. It underwent a significant overhaul in 2010 when it became the first ANSI-certified green building standard. Since its inception in 1996, Green Globes has undergone a continual process of revision and improvement.

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[7] *ANSI/GBI 01-2010: Green Building Assessment Protocol for Commercial Buildings.*

Green Globes amply satisfies GBAC's "National Recognition" criterion. Since its introduction in the United States in 2004, Green Globes has been garnering widespread nationwide use. Currently, at least four federal agencies use Green Globes—GSA, U.S. Department of Veterans Affairs (VA), Department of State (State Department), and Health and Human Services Administration (HHS). Twenty-five states now recognize the use of Green Globes either by legislation or through regulatory programs. *See* Appendix II. 89 buildings have been certified under Green Globes New Construction standard, including buildings for significant entities such as the National Institute of Health, University of Arkansas, Drexel University, Whole Foods Market, Inc., Pfizer Inc., and Fairfax County, Virginia. Similarly, 99 buildings have been certified under the Green Globes Existing Building standard for entities including GSA, VA, State Department, Capital One, Dow Chemical, and the Civic Opera of Chicago. Thus, Green Globes' national prominence is demonstrated by the many federal and state governmental entities, commercial and industrial concerns, and universities that have chosen Green Globes to meet their green building certification needs.

Green Globes is a comprehensive guide and evaluation tool that also fulfills GSA's "Robustness," "Availability," "Usability," "Independence," and "Verification" criteria. The user-friendly certification system utilizes a web-based, interactive guide for users constructing or renovating buildings, which makes it to be more cost-effective than other competing rating systems. Currently, 183 certified Green Globes Professionals are available to assist parties seeking certification. The online guide provides for the evaluation of environmental impacts of new construction, while factoring in life-cycle analyses, on a 1,000 point scale, which allows performance-based ratings on a scale of one to four globes. Green Globes allows for easy verification of results. The robustness of the system is expressed by the seven categories on which new construction is evaluated: energy, indoor environment, site, water, resources, emissions/effluents, and project management.[8] Prior to granting Green Globes certification, a third-party assessor selected by GBI (rather than the party seeking certification) reviews the building's documentation and conducts an onsite inspection. Overall, Green Globes more than satisfies the EISA statutory criteria and should be recommended by GSA to DOE.

IV. GSA SHOULD NOT RECOMMEND LBC BECAUSE IT FAILS UNDER THE EISA STATUTORY CRITERIA IN CRITICAL AREAS

As relevant background, according to LBC, the first version of the LBC system was written by one author, Jason F. McLennan (co-creator of the Pharos Project), and adopted by the Cascadia Region Green Building Council (a chapter of USGBC) in August 2006, three months after it was presented to them by McLennan. ILBI, *Living Building Challenge 2.0* 1, 47.[9] The current system, LBC 2.0, was authored by McLennan and Eden Brukman and launched in August 2009. *Id.* Although it is claimed that the revision to LBC involved "significant input from practitioners throughout North America," LBC provides no explanation of who actually participated in the revision process. *Id.* at 1. The LBC system is administered by ILBI, which is the umbrella organization for the LBC and the Cascadia Green Building Council.

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[8] The evaluation categories addressed in the tool for existing buildings are the same, except they do not include a category for the project site.

[9] *Available at* https://ilbi.org/lbc/standard.

Unlike Green Globes and LEED, LBC aspires to use the "precautionary principle" as the guide for all building materials decisions in the system. *Id.* at 28. LBC relies on a "Red List" developed by the Pharos Project to prohibit the use of specified materials and chemicals in building products based on single-attribute "hazard" concerns. This list was apparently developed without regard to whether the particular products cause any exposure to the listed chemicals or the risk assessment profile of the product (hazard plus exposure). The Red List prohibition includes polyvinyl chloride (PVC) and phthalates, both of which are important constituent materials of vinyl flooring. LBC's building materials decisions do not use life-cycle assessment, which more appropriately considers cradle-to-grave impacts of multiple environmental considerations (e.g., IAQ, energy, ozone depletion) in making material building decisions.

In marked contrast to Green Globes, the LBC system fails to meet the EISA criteria, as elaborated by GSA, in a number of critical areas. Perhaps most importantly, there is no evidence that the development of LBC was either "consensus based" through compliance with OMB Circular A-119 or "transparent" through the use of a documented approach for the inclusion of public comments. The OMB Circular states that consensus-based standards are developed by "domestic or international organizations which plan, develop, establish, or coordinate voluntary consensus standards using agreed-upon procedures." (emphasis added). Such standard-setting bodies, according to the Circular, incorporate openness, balance of interests, due process, appeals processes, and consensus among interested parties. However, there is no indication that the creation and update of LBC included any of these requirements.

As reported by the Environmental Building News, "[u]nlike any other rating systems, LBC has no formal advisory committees or balloting procedures; Cascadia staff and a small group of advisors have made decisions about the structure and content of the rating system."[10] Certainly, the absence of committees and voting procedures to develop this certification system is the antithesis of the required openness and agreed-upon due process procedures which would ensure a consensus-based system based on the broad input of interested parties. While LBC states that there was "significant input from practitioners" during the drafting of LBC 2.0, there is no indication who these parties were, what interests they represented, or how much input they actually had. LBC did not contact RFCI or any other vinyl product industry group we are aware of about participating in the development or update of the LBC system—a system RFCI certainly had a strong interest in because it includes a Red List material avoidance requirement that prohibits the use of most vinyl flooring in LBC-compliant buildings. Moreover, LBC has made it difficult for outside parties to assess their system by securing much of their information behind a paywall on their website accessible only to members, which creates additional questions about the openness of LBC.

In the absence of a representative cross section of interested parties in the LBC development and update process, LBC cannot begin to meet the necessary "balance of interest" requirement. And there is no evidence of due process protection and an appeals process for interested parties.

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[10] Environmental Building News (June 2009).

Lastly, a system that appears to be largely the product of two persons, according to LBC 2.0, and "Cascadia staff and a small group of advisors," according to Environmental Building News, cannot be consensus-based. For this criterion, OMB Circular A-119 requires the participation of a collection of interested parties who have the opportunity to lodge objections to the proposed system and to receive responses to those objections. This requirement has not been met in the development and update of LBC. Accordingly, LBC cannot begin to satisfy GSA's "Consensus based" and "Transparency" criteria and does not meet the "voluntary, consensus based" requirements of Section 12(d) of NTTA governing the adoption of private standards by the federal government.

LBC also is inadequate when assessed against GSA's other criteria.[11] With a total of only four buildings certified since 2006, it cannot be said to have achieved "national recognition" or display "system maturity." While the LBC website says that more than 80 projects are currently in some phase of design, construction, or operation, it will be a long time before certifications for those projects are obtained because LBC requires at least 12 months of occupancy and operation before certification. Likewise, there is no indication about how many trained LBC assessors are available to review building projects or the level of the assessors' independence. Overall, LBC is a relatively new and untested system, especially when viewed in comparison to the long track record of Green Globes.

Many of the criteria set forth in the LBC would be wholly inappropriate, unworkable, or cost-prohibitive in the context of most federal agency projects. For example, LBC limits projects to brownfields or greyfields, which may not be available in all areas. It requires the incorporation of food production within the project site—a requirement that is superfluous in many rural areas and not feasible in many urban areas. All of a building's non-potable water supply must come from captured water or closed loop water systems, which may not be possible in all areas. Offsite mitigation, called "habitat exchange," is required in the form of hectare-for-hectare protection of land in perpetuity to offset the footprint of the project. This requirement may dramatically increase the cost of many projects, as will the requirement that 100% of energy be supplied by onsite renewable energy sources and a requirement for the purchase of carbon credits.

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For the reasons outlined above, RFCI urges GSA to recommend Green Globes to DOE for use as an approved green building certification system. Green Globes meets all relevant criteria and would afford agencies a valuable option in the selection of an appropriate green building certification system. However, GSA should not recommend LBC because it fails most of EISA's statutory criteria and does not meet NTTA requirements.

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[11] RFCI's comments are limited to publicly available information.

Please contact me or RFCI's counsel, Bill Hall of Venable LLP (contact information below), if you have any questions or if you would like to discuss this further.

Sincerely,

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Attachments

APPENDIX I

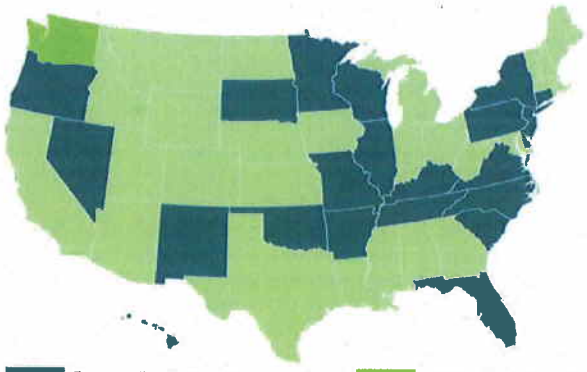
RESILIENT FLOOR COVERING INSTITUTE (RFCI)
REGULAR MEMBERS

Amtico International Inc. – Atlanta, Georgia
Armstrong World Industries, Inc. – Lancaster, Pennsylvania
Centiva – Florence, Alabama
Congoleum Corp. – Mercerville, New Jersey
IVC US – Dalton, Georgia
Mannington Mills – Salem, New Jersey
Roppe Corporation, USA – Fostoria, Ohio
Tarkett, Inc. – Chargin Falls, Ohio
Vinylasa – Col. Granjas, Mexico

ASSOCIATE MEMBERS

BYK USA Inc. – Wallingford, Connecticut
Cascades Lupel – Saint-Bruno, Quebec, Canada
Chapco/H.B. Fuller – Aurora, Illinois
Eastman Chemical Company – Kingsport, Tennessee
ExxonMobil Chemical Company – Houston, Texas
Ferro Corporation – Cleveland, Ohio
Formosa Plastics Corp. – Livingston, New Jersey
Gerflor North America – Arlington Heights, Illinois
Halstead International (Metroflor Corp.) – Norwalk, Connecticut
Karndean International LLC – Export, Pennsylvania
LG Hausys America, Inc. – Atlanta, Georgia
Mapei Corporation – Lavel, Quebec, Canada
Mexichem – Bogota, Columbia
Owens Corning – Toledo, Ohio
Penn Color – Doylestown, Pennsylvania
Polyone Corporation – Avon Lake, Ohio
W.F. Taylor Company – Mt. Juliet, Tennessee
W.W. Henry Company – Aliquippa, Pennsylvania
XL Brands, Inc. – Resaca, Georgia

States with Laws Recognizing Green Globes



Green Globes Recognized

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Minnesota
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New Mexico
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Oklahoma
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South Carolina
South Dakota
Tennessee
Utah
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Washington
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Trending Positive

Oregon

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- Learn about Continual Improvement for Existing Buildings
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- Green Globes, an Alternative to LEED
- History of Green Globes
- Green Globes Training Materials
- Presentation: Green Globes NC and CIEB Overview

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