# FOUNDATIONS OF LED



## I. INTRODUCTION

USGBC's vision is that "buildings and communities will regenerate and sustain the health and vitality of all life within a generation." USGBC's Mission, "to transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life" builds on this vision through the development and improvement of the LEED rating system.

This document, the LEED Foundations Document, defines the purpose, development and implementation process and procedures for the LEED Green Building Rating System. The LEED Foundations Document is an evolving design for market-transformation to be achieved through the implementation and ongoing development of LEED and the processes, procedures and infrastructure that support it. As with LEED, this document is a work in-progress, updated on an as-needed basis as LEED evolves to ensure that LEED remains the benchmark for leadership in market transformation of the built environment.

The LEED Foundations Document is required reading for all LEED Committee members and is also recommended for all LEED subcommittee members and the USGBC Board of Directors.

The environmental footprint of the constructed human environment is massive. LEED was created to provide the people who design, build, and operate buildings with an organized, consensus benchmark for defining and evaluating green buildings. LEED is a document intended to transform the way people practice design, construction, and operations of buildings and is written by the people it is transforming. As professional practice, technology, products, and services evolve, as will LEED.

### M. WHAT IS LEED?

#### 1. Overview

Developed by the <u>U.S. Green Building Council (USGBC)</u>, the LEED® Green Building Rating System<sup>™</sup> is a framework for identifying, implementing, and measuring green building and neighborhood design, construction, operations, and maintenance.

LEED is a voluntary, consensus-based tool which serves as a guideline and assessment mechanism for the design, construction, and operation of high-performance, green buildings and neighborhoods. LEED rating systems currently address commercial, institutional, and residential building types as well as neighborhood development.

LEED seeks to optimize the use of natural resources, promote regenerative and restorative strategies, maximize the positive and minimize the negative environmental and human health impacts of the buildings industry, and provide high quality indoor environments for building occupants. LEED emphasizes integrated design, appropriate integration of existing technology, and use of state of the art strategies to advance expertise in green building and transform professional practice.

The LEED Green Building Rating System is voluntary, consensus-based, and market-driven. The technical basis on which LEED is built seeks a balance between requirement of existing best practice and voluntary incorporation of leadership strategies. LEED sets a challenging yet achievable set of whole building and neighborhood benchmarks that define green building.

#### 2. LEED Mission

LEED encourages and accelerates global adoption of sustainable and green building and neighborhood development practices through the creation and implementation of a universally understood and accepted benchmark encompassing existing and new standards, tools, and performance criteria.

#### 3. USGBC Strategic Goals

- Sustainable Cities and Communities: Catalyze and lead the building sector's active participation in the movement to achieve sustainable cities and communities.
- Climate and Natural Resources: Lead the dramatic reduction and eventual elimination of building construction and operations' contribution to climate change and natural resource depletion.
- Green Building Marketplace: Accelerate green building demand, delivery, and accessibility.
- Public Policy: Advocate for effective and comprehensive green building policy and codes

- at all levels of government.
- International: Advance green building around the world by developing certification capacity, sharing knowledge, and collaboratively advancing regionally appropriate and effective green building practices and policies.
- Organizational Excellence: Leverage USGBC's organizational structure and capacity to support and catalyze the market transformation required to achieve its mission.

#### 4. LEED Strategic Goals

#### The LEED Green Building Rating System will strive to:

- Promote the tangible and intangible benefits of green buildings, including environmental, economic, human health, and social benefits over the life cycle of buildings.
- Achieve high profile and successful product launches.
- Earn widespread and routine endorsement by private and public real estate industry leaders and stakeholders.
- Earn widespread and routine endorsement by Federal, State, and Local Government and adoption as a vehicle for policy development and implementation.
- Deliver superior customer service that is professional, timely, and targeted to the customer's needs.
- Offer a comprehensive portfolio of programs to meet the diverse needs of the real estate industry.
- Develop innovative technical tools and support services for LEED products.
- To consolidate LEED as the standard for green building practices for our homes, nonresidential buildings, and developments throughout the U.S.
- To support International adaptations of LEED with interested international organizations, such as green building councils.
- Lead the industry state of knowledge about practical implementation of the most up-todate and practical innovations.
- Improve LEED performance criteria as the industry gains experience with integrated design, green construction, and sustainable operations and maintenance.

#### 5. History & Background

Following the formation of the U.S. Green Building Council in 1993, the organization's members quickly realized that the sustainable building industry needed a system to define and measure "green buildings." USGBC began to research existing green building metrics and rating systems. Less than a year after formation, the members acted on the initial findings by establishing a committee to focus solely on this topic. The composition of the committee was diverse; it included architects, real estate agents, a building owner, a lawyer, an environmentalist, and industry representatives. This cross

section of people and professions added a richness and depth to both the process and to the ultimate product.

The first LEED Pilot Project Program, also referred to as LEED Version 1.0, was launched at the USGBC Membership Summit in August 1998. After extensive modifications, LEED Green Building Rating System Version 2.0 was released in March 2000, with LEED Version 2.1 following in 2002 and LEED Version 2.2 following in 2005. This first series of rating systems was developed to largely address the needs of owner-occupied new construction commercial buildings.

As LEED has evolved and matured, the program has undertaken new initiatives. In addition to a rating system specifically devoted to building operational and maintenance issues, LEED addresses the different project development and delivery processes that exist in the U.S. building design and construction market, through rating systems for specific building typologies, sectors, and project scopes: Core & Shell, New Construction, Schools, Existing Buildings: Operations & Maintenance, Neighborhood Development, Retail, Healthcare, Homes, and Commercial Interiors.

Project teams interact with the Green Building Certification Institute (GBCI) for project registration and certification. GBCI was established in 2008 as a separately incorporated entity with the support of the U.S. Green Building Council. GBCI administers credentialing and certification programs related to green building practice. These programs support the application of proven strategies for increasing and measuring the performance of buildings and communities, as defined by industry systems such as LEED.

The green building field is growing and changing daily. New technologies and products are being introduced to the marketplace, and innovative designs and practices are proving their effectiveness. In order to drive this change, the LEED rating systems and reference guides will also evolve. Project teams must comply with the version of the rating system that is current at the time of their registration.

# III. HOW LEED IS DEVELOPED

#### 1. Overview

Since its launch in 2000, LEED has been evolving to address new markets and building types, advances in practice and technology, and greater understanding of the environmental and human health impacts of the built environment. These ongoing improvements to LEED are developed by USGBC member-based volunteer committees, subcommittees, and working groups, in conjunction with USGBC staff, and are then subject to review and approval by the LEED Steering Committee and the USGBC Board of Directors prior to a vote by USGBC membership. The development process is based on principles of transparency, openness, and inclusiveness.

#### 2. Consensus

LEED is developed by USGBC member-based volunteer committees, subcommittees, and working groups in conjunction with staff. LEED development follows a structure that includes a balanced representation of stakeholders and management of conflict of interest, to ensure that the development of LEED is transparent and consensus-based. The LEED committee structure balances market needs and constraints with consistency and technical rigor in the development and improvement of the credits within LEED, to ensure the quality and integrity of the LEED brand. The balloting process of new versions with the USGBC membership reinforces the open consensus process. The appeal procedures that are implemented by USGBC further support the consensus process and ensure the fair treatment of affected stakeholders. All of these measures are essential to protecting and enhancing the integrity, authority, and value of LEED.

#### 3. Continuous Improvement

LEED is updated through continuous improvement, which involves a regular development cycle for revisions to the rating system and a Pilot Credit Library where proposed credits are tested and evaluated before they can be considered for incorporation into the LEED consensus process for approval by USGBC membership. Substantive revisions to LEED may go through pilot testing but must undergo public comment and USGBC member ballot. Substantive revisions are considered anything other than simple errors and corrections to LEED.

#### There are three basic types of LEED development:

 Implementation and Maintenance of Current Version includes the improvement of LEED through the correction and clarification of credit language. It also includes fixing more substantive inaccuracies and omissions which require a more rigorous review and approval process.

- 2. **Adaptations** to the existing version include the ability for both specific space types and international projects to be addressed through the creation of credit adaptations. This allows new paths to be introduced in existing credits to meet the needs of projects that would otherwise be unable to utilize the requirements in LEED.
- 3. Next Version is the comprehensive improvement phase of LEED development through a periodic evaluation and revision process. This phase includes multiple avenues for stakeholder input and final approval by USGBC membership. The ideas generated during the development of next version LEED credits are often pilot tested by LEED project teams prior to ballot. The test process is described in more detail below.

#### Each distinct type of LEED development is described below.

#### i. Implementation & Maintenance of Current Version

Implementation and Maintenance of the current version of LEED includes two primary types of activity:

#### 1. LEED Addenda

USGBC may issue periodic addenda to the LEED content. Addenda to LEED include both substantive and non-substantive changes to language. These are meant to clarify, correct, interpret and provide alternative language to aid in the implementation of LEED.

#### 2. LEED Updates

USGBC may issue periodic updates to LEED content. Updates include substantive changes to the rating system as part of the regular evolution of LEED and shall be done in accordance with the LEED balloting procedures.

The processes for developing addenda and updates are outlined in Appendix 3 of this document.

#### ii. LEED Adaptations

The process for adaptations of the existing rating systems and their credits is designed to provide an efficient and streamlined approach for responding to the particular needs, constraints, and opportunities of different project types. By limiting the scope of adaptations, USGBC can respond to far more project types, thereby enhancing the market transformation potential of LEED.

Limiting the scope of the adaptation is important for two reasons: First, it ensures that the workload for staff, volunteers, and consultants will be manageable. Second, it keeps the revisions within the bounds of changes that can be implemented between ballots of version changes and identifies changes that must go through the consensus process. Scope

will be defined in three ways:

- Number of credits that can be changed
- Types of changes that can be made
- Time that can be spent on the adaptation

#### **Market Sector/Project Type Adaptations**

Working groups will be created by the LEED Steering Committee to address market sector/project types identified as priorities. These working groups will include appointed members who will represent various perspectives and membership categories and who have relevant expertise. They will be supported by USGBC staff and consultants.

#### iii. Next Version

The LEED Rating System will be updated on a regular development cycle which restarts when the previous version is approved by USGBC Membership.

Next Version allows for the public to provide ideas for rating system improvement from the beginning of the next version development process. At all stages of the development process, feedback from USGBC membership is requested to help shape the improvements of LEED and allow for openness and transparency. The LEED committee structure maximizes the opportunities for member participation through member-comprised subcommittees and working groups that focus on addressing specific issues within the rating system.

Once approved for public comment, the Next Version rating system will follow the Balloting Procedures outlined in Appendix 2.

#### iv. Piloting

Revised by the Board of Directors on March 26, 2015

The LEED Pilot Credit Library is a rating system development tool established to encourage testing of new and revised LEED credit and prerequisite language, alternative compliance paths, and new and innovative green building technologies and concepts. An effective infrastructure for the Pilot Library facilitates refinement of LEED credits and enhances the effectiveness of LEED.

Pilot testing of new ideas in LEED encourages continuous improvement of the LEED rating system by establishing incentive for continued innovation of green building practices. The Pilot Credit Library allows USGBC to test and refine elements such as proposed prerequisites and credits as well as alternative compliance paths to existing credits before they are introduced into the core rating systems.

The LSC, with recommendations from the Pilot Credit Committee, determines which proposed new or substantially changed prerequisites and credits are piloted and shall approve final language before prerequisites or credits are placed in the Pilot Credit Library. The LSC will also approve appropriate pilot credits, once tested and evaluated, for inclusion in the core rating systems. The Pilot Credit Library is a complement to the formal public comment and ballot process used by USGBC to develop and refine LEED, and serves as a form of public comment.

A Pilot Credit Committee established by LSC works with staff on the facilitation of proposed credits, prerequisites, and alternative compliance paths into the Pilot Credit Library, and also on forming recommendations for moving a Pilot Credit into the core rating systems or innovation catalog. Pilot credits are evaluated according to a general evaluation plan intended to determine if revisions to credit language are necessary before the conclusion of the pilot test period. The Pilot Credit Committee will make recommendations to LSC on a regular basis to ensure consistency and timeliness with new pilot credit availability and transition of approved pilot credits into the core rating systems or innovation catalog.

At the conclusion of the pilot period, the Pilot Credit Committee will review a report that staff writes on the pilot process feedback to date. Based on their review of each pilot credit, the Pilot Credit Committee should recommend to the LSC either closing the pilot credit; keeping it in the pilot credit library; moving it to the innovation catalog for consideration in future versions of the rating systems; or incorporating it into the current rating systems as a new compliance path. If the Pilot Credit Committee recommends including the pilot credit in the innovation catalog or as a new compliance path in the current rating systems, staff will request approval of the final language from LSC. Pilot testing of credits can, and often will, be concurrent with the public comment and ballot process of the LEED rating systems. All pilot credits and prerequisites shall follow the Pilot Procedures in Appendix 1.

#### 4. GLOBAL APPROACH TO LEED

#### Approved by USGBC Board of Directors 9/8/10

USGBC has developed a global approach to LEED that will leverage the knowledge, technical abilities and enthusiasm of partner organizations around the world in the establishment of LEED internationally. This approach recognizes LEED as a global rating system for green building that meets the needs of different countries while maintaining stringency and consistency in a single tool. USGBC's vision for LEED internationally is based on three core principles:

- Global Consistency Maintaining consistency of the technical stringency and certification process of LEED across the world;
- Regional Approach to Prerequisites and Credits Providing opportunity for countries to
  collaborate on the establishment of regional alternative compliance paths to LEED
  requirements that meet the unique needs of a particular region. This collaboration will
  begin with reference standards, and be expanded to address other appropriate prerequisite
  and credit components over time.
- Local Support & Outreach Building partnerships to provide resources, education, training and support for LEED at a local scale, while acknowledging the possibility of local adaptations in the future.

A LEED International Roundtable will advise on the approach to global consistency, regional standards, and other regionally-appropriate alternative compliance paths.

#### 5. LEED STRUCTURE

The LEED Green Building Rating System is voluntary, consensus-based, and market-driven. Based on existing and proven technology, it evaluates environmental performance from a whole building perspective over a building's or neighborhood's life cycle, providing a definitive standard for what constitutes a green building in design, construction, and operation.

The LEED rating system is designed for rating new and existing commercial, institutional, and residential buildings as well as neighborhood development. It is based on accepted energy and environmental principles and strikes a balance between known, established practices and emerging concepts.

#### i. Minimum Program Requirements

Minimum Program Requirements (MPRs) are minimum characteristics that a project must possess in order to be eligible for LEED Certification. These requirements define the types of buildings that the LEED Green Building Rating System was designed to evaluate, and taken together serve three goals:

- 1. To give clear guidance to customers
- **2.** To protect the integrity of the LEED program
- **3.** To reduce complications that occur during the LEED Certification process.

LEED Certification may be revoked from any project upon gaining knowledge of noncompliance with any applicable Minimum Program Requirement. The purpose of these requirements is to ensure an understanding of the fundamentals of green building.

#### ii. Rating System Structure

The following categories are used in the LEED Rating System:

**Sustainable Sites** 

**Water Efficiency** 

**Energy and Atmosphere** 

**Materials and Resources** 

**Indoor Environmental Quality** 

**Awareness & Education (Homes)** 

**Location and Linkages (Homes)** 

**Smart Location and Linkages (ND)** 

Neighborhood Pattern and Design (ND)

**Green Infrastructure and Building (ND)** 

**Innovation in Design/Operations** 

**Regional Priority** 

The LEED rating system is based on a 100 point scale with 10 bonus points available for innovation in design, exemplary performance, or achievement of credits identified as having regional importance in a project's location. LEED project certification is awarded according to the following scale:

40-49 Points Certified
50-59 Points Silver
60-79 Points Gold
80 + Points Platinum

#### iii. Credit Structure

#### All LEED standards contain four principal types of requirements:

- **Prerequisites:** Required elements, all of which must be met before a project can be considered for LEED certification.
- **Core Credits:** Specific actions a project may take in the categories described above. All Core Credits are voluntary, but each level of LEED certification requires that certain thresholds of credits used must be met.
- **Innovation Credits:** Bonus credits given for exemplary performance beyond Core Credit performance levels or implementation of innovative actions that confer significant environmental benefits not covered in the rating system.
- Regional Priority Credits: Bonus credits that acknowledge the importance
  of local conditions in determining best environmental design, construction,
  and operations practices.

The credits and prerequisites in all LEED versions are presented in a common format. This structure is considered part of the LEED brand and should be retained in all LEED

#### versions:

- Intent
- Requirement

This also helps those familiar with previous version of LEED to learn the new rating system and helps to maintain consistency in the assessment processes.

As knowledge of sustainable design, construction, operations, and maintenance practices increases and improved methods are developed to structure credits, LEED will evolve and these changes will be implemented within the rating system. This development will introduce some temporary incompatibility between new and existing credits, however because USGBC expects to update the system on a regular cycle, consistency will be restored throughout the rating system.

All credits and prerequisites must use the structure and format described above. All credits and prerequisites shall achieve comparable stringency to maintain LEED as a tool for market transformation.

#### LEED prerequisites and credits must be written to be:

- Clear
- Concise
- Objective
- Doable
- Documentable
- Verifiable

New credits shall be performance-based rather than prescriptive wherever possible, but also practicable for the market being addressed.

#### iv. Weightings

In LEED, the allocation of points is split between direct human benefit and direct environmental benefit. These benefits are based on the potential effect of each credit with respect to a set of impact categories. Examples of these categories include global warming, greenhouse gas emissions, fossil fuel use, toxins and carcinogens, air and water pollutants, and indoor quality. The types of impacts are quantified and the resulting allocation of points among credits is called credit weighting.

Credits that most directly address the prioritized impacts are given the greatest weight. Credit weights also reflect a decision by LEED to recognize the market implications of point allocation. The credit weightings process will be reevaluated for each new version to incorporate changes in values ascribed to different building and neighborhood impacts and types, based on both market reality and evolving scientific knowledge related to development.

#### v. Regionalization

To provide incentive to address geographically specific environmental issues, LEED includes bonus points for the achievement of credits identified as addressing an issue of regional importance in the project's location. USGBC regional councils and chapters participate in identifying credits in LEED to be considered as Regional Priority Credits. Regionalization is re-evaluated during every LEED development cycle to determine the best method for addressing geographically-specific issues, both within the United States and internationally.

#### 6. BALLOTING

Revisions to credits and prerequisites in the LEED rating system that require ballot shall follow the Balloting Procedures in Appendix 2.

#### 7. APPEALS TO THE LEED RATING SYSTEM

Appeals to balloted rating system content shall follow the Appeals Procedures in Appendix 4.

#### 8. LEED SUPPORTING TOOLS

USGBC develops and maintains tools to support the LEED rating system, including reference guides, LEED Online, and workshops and educational courses. These tools are meant to educate and provide the necessary information for project teams to have a robust understanding of LEED. These supporting tools are regularly updated to reflect the improvements made to LEED through the development cycle.

#### i. Reference Guides & Supplements

The LEED Reference Guides are manuals that guide a LEED project from registration to certification in the design, construction, operations and maintenance of new or substantially renovated commercial or residential buildings and neighborhood development. The reference guides are a tool for LEED projects, incorporating guidance for the implementation of rating systems. The reference guides include detailed information on the process for achieving LEED certification, detailed credit and prerequisite information, resources, and standards for the LEED rating systems. For each credit or prerequisite, the guide provides: intent, requirements, point values, environmental and economic issues, related credits, summary of reference standards, credit implementation discussion, timeline and team recommendations, calculation methods and formulas, documentation guidance, examples, operations and maintenance considerations, regional variations, resources, and definitions.

Supplements are smaller guides designed to address market sector/project type adaptations and include the information necessary to successfully submit for LEED

certification. These are meant to provide additional information not covered in the related reference guides and are not meant as stand-alone tools.

#### ii. LEED Online

LEED Online is the primary resource for managing the LEED documentation process. Through LEED Online, project teams can manage project details, complete documentation requirements for LEED credits and prerequisites, upload supporting files, submit applications for review, receive reviewer feedback, and ultimately earn LEED certification. LEED Online provides a common space where members of a project team can work together to document compliance with the LEED rating system. With the exception of projects registered under LEED for Homes, all projects must be certified using LEED Online.

#### iii. Workshops & Education

USGBC offers workshops and educational programs to educate members and project teams about LEED. These programs provide awareness, understanding, application, and implementation of the LEED and range from general green building principles to case studies and credit achievement strategies.

# IV. LEED COMMITTEES

#### 1. Overview

As a member-driven organization, USGBC committees are the primary means by which the organization develops consensus-based programs to serve the green building industry. The USGBC membership is an essential part of LEED rating system development, relying on volunteers to provide the technical and market expertise necessary to create a robust leadership tool for green design, construction, operations and maintenance of buildings and communities. The LEED committee structure is developed to maximize the opportunities for USGBC member involvement and utilize their relevant expertise.

In addition to recommending policies to the USGBC Board, LEED committees and subcommittees have primary responsibility for the development, implementation, and revisions of LEED.

#### 2. USGBC Policies & Procedures for Committees

LEED committees and subcommittees must adhere to the policies and procedures set forth by the Board of Directors in the *USGBC Policies and Procedures for Committees* document. This document outlines requirements for committees and subcommittees, such as formation approval, balance, transparency, and conflict of interest, and can be found at www.usgbc.org.

#### 3. Committee Structure

The LEED Steering Committee (LSC) is a standing committee of the USGBC Board of Directors. The LSC may establish two types of groups to focus on specific LEED content areas:

- **Subcommittees** are 'standing committees' of the LSC or of an established subcommittee that perform subject-based work. These subcommittees may propose working groups to work on specific credits, prerequisites, or issues within the LEED rating system as part of LEED Continuous Improvement. Subcommittees shall address the technical, market, and implementation issues of LEED.
- Working Groups are groups that come together for the completion of a specific task
  with a clearly defined scope to be accomplished in a set period of time. Working groups
  are established by the LSC or a subcommittee and must adhere to all parameters set by
  the LSC.

Additionally, a LEED Development Network will be established to encourage participation by individuals interested in LEED development work and to facilitate involvement with the process.

#### 4. LEED Steering Committee Charter

#### Constitution

The LEED Steering Committee is a standing committee of the Board of Directors, consistent with Article XI of the USGBC Bylaws. The work of the Committee is governed by this Charter, as approved by the USGBC Board.

#### **Purpose**

The LEED Steering Committee (LSC) is an integrated group of volunteers and staff charged with developing and maintaining the LEED rating system as a leadership tool, preserving the integrity of the LEED rating system, and ensuring the use of the consensus process to evolve the LEED rating system in accordance with the Mission, Guiding Principles, and Strategic Plan of USGBC.

#### Three principles guide LEED Steering Committee activities:

- 1. LSC will conduct itself in a way that ensures transparent, participatory, and effective governance.
- 2. LSC will ensure LEED remains technically rigorous, market relevant, and leadership oriented.
- 3. LSC will ensure collaboration among LEED committees, working groups, and staff.

#### **Roles and Responsibilities**

LSC works to establish the strategic direction and oversight for the LEED program, ensure that LEED project performance meets the goals of LEED, and perpetuate LEED's evolution based on project experience, building market maturity, and technological advancements. Specifically, LSC:

- 1. Sets policy for development of LEED.
- 2. Sets priorities for how LEED is developed.
- 3. Approves framework for LEED development that ensures technical rigor while considering market leadership and feasibility.
- 4. Establishes and charges LEED committees and working groups to develop LEED and support LEED implementation and maintenance.
- 5. Adjudicates LEED committee and working group issues during LEED development.
- 6. Approves committee- and working group-recommended improvements to LEED.

#### Additionally, LSC will have the following roles:

- 1. Governance: LSC will maintain consistency, consensus, openness, and transparency
  - Maintain and propose updates to the *Foundations of LEED* as required.
  - Record, approve and distribute official committee meeting minutes.
  - Communicate with the USGBC Board, Executive Committee of the Board, and LEED committees and working groups regarding activities and decisions and determinations made by LSC.
  - Direct LEED committees to ensure proper execution of their responsibilities in conformance with the *Foundations of LEED* and the *USGBC Policies and Procedures for Committees and Working Groups*.

- Constitute and direct LEED working groups to ensure proper execution of their responsibilities in conformance with the *Foundations of LEED* and the *USGBC Policies* and *Procedures for Committees and Working Groups.*
- **2. International:** LSC will collaborate with USGBC staff to ensure the technical rigor of LEED is maintained as it is applied in other countries.
- **3. Education:** LSC will liaise with appropriate committees and working groups to ensure information about LEED development, implementation, and market expansion is readily available.
- **4. Emerging Issues:** LSC will work collaboratively with internal and external stakeholders to address priority issues not described above to facilitate the advancement of LEED in the buildings industry; LSC and staff will collaborate to identify lead responsibility for new issues.

#### Membership

LSC is structured to represent the different technical and market issues involved in the development, implementation, and maintenance of LEED. LSC is made up of volunteers as voting members and USGBC staff as voting and non-voting members, outlined below.

#### **Volunteer - Voting Members**

- Chair
- Immediate Past Chair
- Incoming Chair
- Chair of the Technical Committee,\* ex officio
- Chair of the LEED Advisory Committee,\* ex officio
- Chair of the Pilot Credit Committee,\* ex officio
- Up to 5 Appointed Members At-Large

#### Staff - Voting Member\*\*

• USGBC SVP or Higher

#### Staff - Non-voting Members\*\*

- Up to 4 senior staff from USGBC
- A designated representative from GBCI

\*The Chairs of the Technical, LEED Advisory, and Pilot Credit Committees may designate their Vice-Chairs as their voting substitutes in LSC meetings they are unable to attend. These member substitutes are encouraged to attend LSC meetings as non-voting members when their voting member is present.

\*\*In conformance with *USGBC Policies and Procedures for Committees and Working Groups*, the USGBC CEO names, and the Executive Committee appoints, staff as members of the LSC.

#### Officers

A volunteer Chair heads the LSC. A volunteer Incoming Chair and volunteer Immediate Past Chair support the Chair. These three positions are officers.

#### **Terms and Term Limits**

Volunteer Members. The terms for LSC volunteer members from Committees are determined by their terms as Chairs or Vice Chairs of the Committees they represent. The terms for at-large LSC members are: an initial 1-year term, followed by a 2-year term, and then a 1-year term. LSC recommends these appointments and Executive Committee appoints these members based on identified needs for specific expertise and/or experience.

Officers. The LSC officers follow an automatic succession process such that the Incoming Chair succeeds the position of Chair upon the expiration of term, resignation, or discharge of the Chair. The Chair succeeds the position of Immediate Past Chair upon the expiration of his or her term as Chair. Each officer term is one year. The Executive Committee of the USGBC Board of Directors appoints the Incoming Chair.

Term limits for volunteer members of LSC are four consecutive years, or up to six consecutive years for officers, in conformance with the *USGBC Policies and Procedures for Committees and Working Groups*.

#### **Committees and Working Groups**

LSC is empowered to create subcommittees and working groups in conformance with *USGBC Policies* and *Procedures for Committees and Working Groups*.

#### **Filling Vacant Seats**

Vacancies arising in the LSC Committee representative seats are filled by the volunteer member's Vice-Chair on the Committee s/he represents. Where automatic succession cannot occur due to discharge or resignation, etc., the Executive Committee of the USGBC Board may fill such vacancies. In conformance with the *USGBC Policies and Procedures for Committees and Working Groups*, vacancies arising in at-large volunteer seats are filled by the Executive Committee and vacancies arising in staff LSC seats are filled by the Executive Committee at the recommendation of the USGBC CEO.

#### Meetings

LSC will meet as needed by conference call and through in-person meetings. *USGBC Policies and Procedures for Committees and Working Groups* cover policies for voting, declaration of conflicts, meeting attendance, and other committee procedures. USGBC staff will provide LSC with administrative support.

#### **Communications**

In addition to the regular posting of minutes, LSC will provide periodic strategic communications regarding LEED. All public statements from LSC shall be approved by, and released through, USGBC's communication team.

#### **Public Openness and Transparency**

Notices regarding committee work of general interest will be posted to the USGBC website and be accessible to USGBC members and non-members. This shall include:

- LSC meeting minutes
- Notices of proposals to establish or change LEED rating system criteria
- Notices about updates to the LEED rating system posted for public comment and/or ballot
- Notice of committee vacancies, formation of new committees and working groups, and public events

# V. MODIFICATIONS TO THIS DOCUMENT

All modifications, revisions, or updates to this document must be approved by the LEED Steering Committee and the USGBC Board of Directors. Appendices may be approved as separate documents and must follow the approval process outlined in each appendix.

# VI. APPENDIX 1: PILOTING

#### Revised by the Board of Directors March 26, 2015

The LEED Pilot Credit Library is a rating system development tool established to encourage testing of proposed and revised LEED prerequisite credit language, alternative compliance paths, and new and innovative green building technologies and concepts. An effective infrastructure for the Pilot Credit Library facilitates refinement of LEED credits and allows for the continuous improvement of LEED. The Pilot Credit Library facilitates the introduction of proposed prerequisites and credits to LEED. This process allows USGBC to test proposed prerequisites and credits, and receive market feedback and general comments on them. The LSC, with recommendations from the Pilot Credit Committee, will determine which proposed prerequisites and credits, including versions of future LEED credits, must be pilot tested, and shall approve final language before proposed credits or prerequisites are placed in the Pilot Credit Library.

The Pilot Credit Committee consults with staff on the Pilot Credit Library and facilitates the evolution of proposed credits and prerequisites during the pilot test period. The Committee shall include up to 19 appointed and/or elected members approved by the LSC. This Committee includes technical and market experts to represent a range of knowledge of the industry; the experts must be able to work in an objective manner. As needed, the Committee consults with experts in relevant LEED subcommittees or working groups. In addition, the Committee consults with specific subject matter experts to ensure that the requisite technical expertise is brought to bear in the evolution of credits in the Pilot Credit Library.

Pilot testing of credits can, and often will, be concurrent with public comment and ballot process of the core LEED rating system. The Pilot Credit Library is a complement to the formal public comment and ballot process used by USGBC to develop LEED, and serves as a form of public comment.

The process for Pilot Credit proposals from LEED subcommittees and working groups to progress through the LEED Pilot Credit Library will consist of the following steps:

- A proposed prerequisite, credit, substantive revision or alternative compliance path to an
  existing credit is suggested for inclusion in the Pilot Credit Library and submitted to USGBC
  staff.
- 2. USGBC staff brings proposals to Pilot Credit Committee. The Committee, in conjunction with staff, will initiate a review process for proposed prerequisites and credits that warrant further consideration for inclusion in the Pilot Credit Library. The Pilot Credit Committee will engage Technical Advisory Groups and LEED committees as necessary during this evaluation.
- **3.** The Pilot Credit Committee will submit a recommendation on the proposed prerequisite or credit to the LSC for inclusion in the Pilot Credit Library. If approved, the LSC will determine

- the applicable testing parameters for each credit.
- **4.** For proposed prerequisites, credits and alternative compliance paths recommended for LSC approval into the Pilot Credit Library, the Committee will:
  - a. Prepare an evaluation plan that establishes the specific feedback process and evaluation criteria, consulting with other LEED committees as necessary.
  - Track the progress of the proposed prerequisite or credit as it is piloted.
     Collect and analyze project team feedback to evaluate Pilot Credit effectiveness and market feasibility;
  - c. Propose revisions to the proposed prerequisite or credit as needed during the pilot process to reflect lessons learned and to enable testing of the "final" version of the proposed prerequisite or credit. These changes will be reviewed by the LEED Sub-committees and other Working Groups as appropriate.
  - d. When a pilot credit is at least one year old, staff will prepare a report summarizing the results of the pilot, including information on the number and types of pilot participants, achievement of evaluation criteria, changes to the proposed language during the pilot and rationale, and other information that will guide the LSC in its decision on final approval.
- 5. For year-old pilot credits, the Pilot Credit Committee will make a recommendation to LSC for one of the following outcomes: closing the pilot credit; keeping it in the pilot credit library; moving it to the innovation catalog for consideration in future versions of the rating systems; or incorporating it into the current rating systems as a new compliance path. LSC will have final approval on pilot credit decisions.
- **6.** If LSC approves the pilot credit for inclusion in the innovation catalog and/or a draft update to the rating systems and no public comment and ballot process is underway, the pilot credit will remain in the innovation catalog until the next public comment and ballot cycle begins.

# VII. APPENDIX 2: BALLOTING

#### Approved by the USGBC Board of Directors September 11, 2009

LEED is developed in a manner that ensures openness, transparency and consensus. Any substantive changes to LEED including the addition, deletion, or substantive revision of prerequisites, credits or credit point values, must be developed and balloted pursuant to the procedures below. Amendments to LEED shall follow a separate process.

- 1. The LEED Steering Committee (LSC) will review and approve any draft for public comment.
- The USGBC Board of Directors will approve the draft for public comment and subsequent USGBC member ballot.
- 3. The draft will be published for public review and comment on the USGBC website. USGBC members will be notified of the comment period and an announcement will be made to the public. Any member of the public who has or creates a free a site-user account on the USGBC website may review and comment on the draft.
- 4. Web-based comments will be accepted within a 45 day public comment period through an online form displayed on the USGBC website. The comment form will require respondents to reference specific paragraphs or sections of the draft and will include provisions for submitting substantive and procedural comments. Project team feedback gathered during the course of testing of credits and prerequisites in the Pilot Credit Library is considered, by its nature, to be equal to a comment submitted via the online USGBC website form. Comments that are outside of the scope of the proposed changes in the draft will not be considered. Only comments submitted through either the public comment forum or the Pilot Credit Library process will be accepted. Hard copy letters, faxes, email comments, etc. will not be responded to.
- 5. Comments will be collated and reviewed. Consideration will be given to expressed objections made by commenters and evaluation will be done as to whether to make revisions to the credits based on the comments.
- 6. The comments received, without commenter name or organization will be posted on the USGBC website along with a response to each comment and all changes to the draft as approved by LSC.
- 7. If any substantive revisions are made to the draft released for the initial public comment period, a revised draft will be published on the USGBC website for additional public comment after further review approval by LEED Steering Committee. The revised draft will be made available for web-based comment for 30 days through the online form on the USGBC website.
- 8. Additional comments will be collated and reviewed. Consideration will be given to expressed objections made by commenters and evaluation will be done as to whether to make revisions to

- the credits based on the comments. Comments will not be accepted outside of the web-based form. Comments submitted that are outside of the scope of the proposed changes in the draft will not be considered.
- 9. On the basis of substantive and/or procedural comments, the LEED Steering Committee may remand any part or the whole of the proposed action for an additional comment period repeating steps 3-9 as it deems necessary. If a third public comment period is necessary, it will be open for 20 days; a fourth public comment period for 15 days.
- 10. If no additional substantive revisions are made, the LSC will determine whether the draft should proceed to balloting.
- 11. Notice will be provided to USGBC members that a consensus body is being formed. Employees of USGBC member organizations in good standing will be allowed to sign up to become part of the consensus body for a period of 30 days preceding the ballot period.
- 12. The consensus body will be reviewed to ensure it is balanced; no single interest category (producer, user, general interest as defined by the Board of Directors) shall make up a majority of the consensus body. If necessary, the LSC shall appoint voters from and among USGBC member organizations which have not already elected to become part of the consensus body so as to balance the consensus body.
- 13. Upon approval by the LEED Steering Committee the proposed draft will be submitted to the consensus body for an online vote which shall remain open for 30 days.
- 14. The ballot shall utilize proportional voting, by which an employee of a USGBC member organization in good standing who has signed up for the consensus body and has a site-user account on the USGBC website linked to the member organization may cast a proportional share of the vote for that member organization. Each USGBC member organization is allowed one vote
- 15. Each member of the consensus body shall vote one of the following positions:
  - a. Affirmative
  - b. Affirmative, with comment
  - c. Negative, with reason
  - d. Abstain
- 16. All negative votes without reason or with reason not related to the draft shall count toward quorum but shall not be factored into the numerical requirements for consensus.
- 17. All comments submitted with ballots will be reviewed by the LSC.
- 18. A ballot is approved by the consensus body if:
  - a. A majority (more than 50%) of the members of the consensus body casts a vote, including abstentions; and
  - b. A minimum of two-thirds of votes cast are affirmative votes; and
  - c. A majority of votes cast by members of the consensus body in each interest category

(producer, user, general interest) are affirmative votes.

- 19. The number of affirmative, negative, and abstaining votes will be reported to USGBC membership. If the draft passes, the approved version will be published. If the item fails, it may be resubmitted for ballot at a later date.
- 20. An item may be withdrawn by the USGBC Board of Directors or the LSC at any time during the above-described process.

# VIII. APPENDIX 3: CHANGES

#### Approved by the USGBC Board of Directors November 8, 2009

USGBC may issue periodic addenda and/or updates to LEED content (i.e., credits, prerequisites or credit point values) in accordance with the processes outlined below. These processes consider the type of issue and the appropriate individual or party to address the proposed change. Updates requiring balloting will follow a separate process.

#### Addenda

Addenda are changes to LEED that include both substantive and non-substantive changes. A request for addenda may come from USGBC staff, the Green Building Certification Institute (GBCI) or LEED committees and may be applied to the current version of LEED on a regular basis without following LEED balloting procedures. LEED projects are required to use current addenda available at time of registration.

**Substantive Changes** to LEED content include corrections, interpretations and alternative compliance paths that may substantively change the way a given requirement is achieved or meant to be achieved. All proposed substantive changes must be brought to the appropriate LEED committee for review and recommendation. Substantive changes will go into effect immediately, but will be subject to comment and ballot in the next available LEED ballot.

- 1. **Corrections** fix unintentional inaccuracies, errors and/or omissions in content.
- 2. **LEED Interpretations** define or expand upon existing content to provide clarity where a misunderstanding of language has occurred.
- 3. **Alternative Compliance Paths** (ACPs) provide additional options to content that address unique project needs and advancements in science and technology.

**Non-substantive Changes** to LEED include grammatical and typographical changes in content that further refine or correct unclear wording and do not substantively change the way a given requirement is meant to be interpreted. Non-substantive changes may include spelling, grammar and punctuation changes as well as language rearrangement and/or reformatting. Non-substantive changes do not need input from LEED committees.

#### **Updates**

Updates to LEED include substantive changes to content that are part of the regular evolution of LEED. Updates cannot be integrated into LEED content unless approved through the LEED balloting

procedures. To be considered an update to LEED, a change must meet any of the following criteria:

- Creation of new credits or prerequisites
- Revisions to the point value of a single credit or credit category
- Modifications to existing credit or prerequisite language as part of deliberate, next version improvements that change stringency or technical rigor

Updates to LEED may be placed in the LEED Pilot Credit Library for testing and refinement prior to ballot.

# IX. APPENDIX 4: APPEALS

#### Approved by the USGBC Board of Directors September 11, 2009

Any party with a direct and material interest, who may be adversely affected by actions or inactions inconsistent with the USGBC procedures with regard to the development, approval, revision, reaffirmation, or withdrawal of a LEED Green Building Rating System, may appeal to the USGBC Executive Committee of the Board.

Only appeals of a procedural nature shall be considered by the Executive Committee of the Board. Such appeals shall not be based on the merits of substantive comments regarding the technical content of the rating system. The appellant has the burden of proof of showing that proper procedures were not followed.

All appeals must be initiated within 30 calendar days of the action or at any time with respect to an inaction alleged to be inconsistent with these procedures. Requests for appeal must be in writing and shall state the nature of the objection(s) with supporting evidence and proposed remedial actions. If the appellant is unable to provide all such appeals materials within 30 calendar days, the appellant shall request an extension from the Executive Committee, and shall provide a justification therefore, within the 30 calendar days, or shall forfeit the right to further appeal. The Executive Committee shall determine, in their sole discretion, whether to grant such additional time, and if so, how much time to grant and shall so notify the appellant.

The appeal materials shall be accompanied by a filing fee of \$1000. This fee may be waived or reduced upon sufficient evidence of hardship. Parties wishing to request a fee waiver shall provide such request and supporting materials to the Executive Committee along with their notice of intent to appeal. Such fee shall be returned in the event that the Executive Committee returns a resolution or final determination favorable to the appellant.

As promptly as possible and no later than 30 calendar days after receipt of the written request for appeal, the Executive Committee shall respond in writing to the appellant, acknowledging the appeal, and identifying any actions which will be undertaken to resolve the appeal. If the appellant is not satisfied with the Executive Committee's attempt to resolve the appeal without a hearing, the appellant may request a hearing within 15 business days of receiving the written response.

In the event an appellant seeks a hearing, the Executive Committee shall direct the Appeals Panel, made up of at least three individuals who have no vested interest in the outcome, to review and decide the appeal. Such a hearing shall be convened within 30 days of receipt of the request and may be convened in person or by teleconference at the discretion of the panel. There is no right to appear before such Panel, though the Panel may allow such appearance if requested by the appellant.

If the Appeals Panel finds merit in the appeal, it may recommend that all or some portion of the process be repeated, or provide for further procedures to correct the nonconforming procedural action or inaction. If the Appeals Panel determines the appeal lacks merit, it may recommend that the Executive Committee dismiss the appeal. The Appeals Panel shall issue such recommendation to the Executive Committee within 30 calendar days of the hearing.

The Executive Committee, working with the USGBC Board of Directors and LEED Steering Committee as appropriate, shall render its decision in writing within 30 calendar days of receiving the Appeal's Panel's recommendation. The appellant shall be notified of the decision by the Executive Committee in writing including a short statement identifying the basis of such decision. The decision rendered by the Executive Committee shall be final.