

Home Energy Ratings and Green Buildings

US Green Building Council's LEED-H Program

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Home Energy Ratings and Green Buildings Overview

1. USGBC Background, RESNET/USGBC MOU
Richard Faesy
2. LEED-H Background, Update, Specifications
and Verification Procedures *Jay Hall*
3. How Home Energy Raters Can Get Involved?
Kristin Shewfelt

Environmental Impact of Buildings in the US*

- 65.2% of total U.S. electricity consumption ¹
- > 36% of total U.S. primary energy use ²
- 30% of total U.S. greenhouse gas emissions ³
- 136 million tons of construction and demolition waste in the U.S. (approx. 2.8 lbs/person/day) ⁴
- 12% of potable water in the U.S. ⁵
- 40% (3 billion tons annually) of raw materials use globally ⁶ yet 5% of the world's population

* Commercial and residential

Green Buildings Benefits

Environmental benefits

- **Reduce the impacts of natural resource consumption**

Economic benefits

- **Improve the bottom line**

Health and safety benefits

- **Enhance occupant comfort and health**

Community benefits

- **Minimize strain on local infrastructures and improve quality of life**

Green Buildings

More Benefits

Competitive first costs

- **Integrated design allows high benefit at low cost by achieving synergies between disciplines and between technologies**

Reduce operating costs

- **Lower utility costs significantly**

Optimize life-cycle economic performance

Reduce liability

Improve risk management

What is “Green” Design?

Design and construction practices that significantly reduce or eliminate the negative impact of buildings on the environment and occupants in five broad areas:

- ✓ Sustainable site planning
- ✓ Safeguarding water and water efficiency
- ✓ Energy efficiency and renewable energy
- ✓ Conservation of materials and resources
- ✓ Indoor environmental quality

US Green Building Council (USGBC)

Mission

To promote the design and construction of buildings that are environmentally responsible, profitable, and healthy places to live and work.

The organization's activities...

- *Integrate* building industry sectors
- *Lead* market transformation
- *Educate* owners and practitioners

USGBC is...

- ✓ A national nonprofit organization
- ✓ A diverse membership of organizations
- ✓ Consensus-driven
- ✓ Committee-based product development
- ✓ Developer and administrator of the LEED® Green Building Rating System
- ✓ Multi-million \$ budget

RESNET and USGBC's

Memorandum of Understanding

Purpose

- ✓ To define the collaborative relationship between the US Green Building Council (USGBC) and the Residential Energy Services Network (RESNET).
- ✓ To defines the tasks, roles, and schedule, required to effectively deliver green rating services to the USGBC's LEED for Homes initiative.

Scope

- ✓ Agreements to support:
 - (1) LEED for Homes Program Providers and
 - (2) LEED for Homes “Green Raters”

RESNET and USGBC's

Memorandum of Understanding

RESNET's Agreements

1. Actively promote the advanced training of HERS Providers and Raters to enable them to qualify to become LEED for Homes Program Providers and LEED Homes Raters.
2. Actively promote the accreditation of LEED for Homes Program Providers and LEED for Homes Raters.
3. Maintain data on LEED for Homes-related trainings and accreditations completed by HERS Raters, and to share that data with USGBC.
4. Work collaboratively with USGBC to continually improve and update the LEED for Homes training.
5. Work collaboratively with USGBC to continuously refine or improve the LEED for Homes initiative.
6. Use the Partnership and the LEED for Homes brand to promote sustainable home design and construction.
7. Promote adherence to the LEED for Homes Guidelines

RESNET and USGBC's

Memorandum of Understanding

USGBC's Agreements

1. Provide current LEED for Homes policies, requirements, and training curriculum.
2. Work collaboratively to continually refine and improve LEED for Homes policies, accreditation requirements, and accreditation processes.
3. Work collaboratively to continually refine and improve LEED for Homes trainings (including both curriculum development and delivery mechanisms).
4. Work collaboratively to continuously refine or improve the LEED for Homes initiative.
5. Increase awareness of the LEED for Homes brand.
6. Provide RESNET with current LEED for Homes news, information, and reference documents.
7. Provide RESNET with public recognition.

RESNET and USGBC's

Memorandum of Understanding

Next Steps

Revenue: Sharing of revenues between the MOU Partners.

Information: Sharing of information.

Scheduling and Resources: Availability and commitment of resources need to meet proposed schedules.

Market-Based Approach: Encourage market competition among LEED-Home Raters in each market and include green home rating models currently in place

Quality Assurance: Agreement on quality assurance policies and procedures, and ultimate responsibility for enforcement of them.

What's Next?

- Jay Hall:
 - LEED-Homes Update
- Kristin Shewfelt:
 - Opportunities for Raters
- Q&A