



2<sup>ND</sup> ANNUAL

USGBC IDAHO CHAPTER  
BOISE VALLEY HABITAT FOR HUMANITY  
**ECO-HOUSE**  
DESIGN COMPETITION



U.S. GREEN BUILDING COUNCIL  
**IDAHO CHAPTER**



**Habitat**  
for Humanity®

## Overview:

This is the second annual Eco-House Design Competition, put on by the USGBC Idaho Chapter in partnership with the Boise Valley Habitat for Humanity (BVHFH). This competition provides an applied learning experience in the principles of integrated design, sustainability, innovation, social consciousness, as well as the LEED® Green Building Rating System™.

Both the USGBC Idaho Chapter and The Boise Valley Habitat for Humanity recognize that financially vulnerable individuals, families, and neighborhoods are particularly in need of the benefits that sustainable design and green building practices bring. This design competition challenges entrants to design homes that demonstrate both short-term and long-term affordability, a high quality of life for their residents, and replicable strategies that contribute to our understanding of how to build affordably, efficiently and with minimal impact on the environment.

## Objectives:

- To further educate the development and building community about high performance, and affordable home building.
- To empower students and professionals to become future leaders in the green building movement.
- Highlight the efforts, and initiative of design students and professionals of the green building movement in Idaho.
- Promote collaboration from many building disciplines and experience levels to reach a common goal.
- Promote and exhibit exemplary designs from both students and professionals.
- Utilize LEED® as an achievable guideline for building design and performance.
- Recognize and award students and professionals for their dedication, creativity, innovation, and commitment to sustainable design.

## Schedule:

Registration opens!	February 4 <sup>th</sup>
Kick-off Event	March 4 <sup>th</sup>
Mid-Event	May 6 <sup>th</sup>
Registration Deadline	June 3 <sup>rd</sup>
Submissions Due	July 1 <sup>st</sup> , 5:00pm
Judging	2 <sup>nd</sup> Week of July
Awards Ceremony	August 5 <sup>th</sup>

### **The Competition:**

Entries are requested for the design of an affordable single-family home that meets the requirements of USGBC's LEED for Homes Platinum-level certification being less than or equal to 1,172 square feet of living space. Prizes will be awarded for the top three designs selected by a panel of judges to be selected from the local community from a diverse range of professional background. Participants are expected to submit a LEED for Homes Checklist with supporting narrative for credits attained. They will also be expected to submit realistic estimations of annual water and energy consumption with supporting narrative and calculations. Boise Valley Habitat for Humanity, USGBC Idaho Chapter and the design team shall all have rights to use submitted project material in whole or in portion to be used for promotional material and future BVHFH home design and neighborhood development.

### **Eligibility:**

The second annual Eco-House Design Competition is open to both students and professionals regardless of age or graduation date. Entries may come from either a team or an individual. Teams can be composed exclusively of students, professionals, or a mixture of both. Entrants are encouraged to consult with others, but no credit or acknowledgement will be given to non-entrant individuals or companies who participate. **Interdisciplinary teams are strongly encouraged.**

### **Requirements:**

1. Floor area within the building envelope must not exceed 1,172 square feet. Exterior elements are restricted only by cost and zoning requirements.
2. The house must demonstrate the ability to achieve Platinum certification in USGBC's LEED for Homes Rating System.
3. Total costs, excluding labor (volunteer), must not exceed \$95,000. Land value is excluded from this price point.
4. Designs should carefully consider the context of the residential area and its adjacency to commercial corridor.
5. The site should be designed to accommodate 15 residential lots as well as public space for all neighborhood residents.
6. Select a specific lot from your site for your single family residence. Designs should carefully consider their ability to be replicated across the entire site development with little modification as well as the relationship of the house to the street and neighbors.
7. Designs should strongly consider how the lot's landscape will interact with the built structure and provide site plans showing integration between these elements. Landscape does not need to be considered within the \$95,000 price point.
8. Designs must be ADA compliant.
9. Entries must include proposed methods for educating occupants about energy and water usage.

### Programmatic Requirements:

- ✓ 3 bedrooms (one Master)
- ✓ 2 bathrooms
- ✓ Full kitchen (refrigerator, dishwasher, stovetop, oven, kitchen sink)
- ✓ Laundry
- ✓ Living area
- ✓ Dining area
- ✓ Outdoor living space (does not count towards the square footage requirements)

### Required Submittals:

1. **Neighborhood Development Plan** showing access road to all 16 lot locations and public space. Show location of home on each site to illustrate setback and special relationship between homes. Overall master site plan should show necessary surrounding context to inform design decisions.
2. **Plans and Sections** that include site information while conveying interior and exterior spatial organization, programmatic relationships, site design considerations, landscaping and other relevant details.
3. **Wall Sections** that describe the building envelope and extend from roof to foundation, clearly illustrating material assemblies, critical components and joints, structural considerations, details related to building openings, and other key aspects of the design.
4. **Additional Diagrams** (any scale) that describe concepts, systems and strategies.
5. **Perspectives/Axonometrics/Collages** that show how the design engages its context. Designers should make a site visit and conduct an analysis, providing photos and indications of scale to represent their consideration of the neighborhood context.
6. **Completed preliminary LEED for Homes checklist** that shows all prerequisites met along with expected point totals in each credit category.
7. **Cost Estimation Template** (provided) to demonstrate ability to build within the \$95,000 limit. Entrants may attach a single page to the cost estimate to discuss overall construction cost strategies, to describe innovative financing approaches to green design features, and to explain departures from the given template.

### **Judging Criteria:**

The jury may comprise architects, landscape architects, engineers, planners, builders, community advocates and neighborhood residents. The judges will be selected by the Emerging Professionals Committee of the USGBC Idaho Chapter.

1. Complies with lot size, programmatic requirements and square footage parameters
2. Considers the neighborhood context, as determined by the jury.
3. Demonstrates an ability to achieve LEED Platinum rating. Emphasis will be placed on measures that will lower occupancy costs, including utilities and maintenance.
4. Thoughtful methods for educating occupants about energy and water usage are included.
5. Provides a realistic cost estimate that does not exceed \$95,000.
6. Shows evidence of input gathered from a variety of disciplines.

### **Awards:**

Design teams will receive recognition for their participation through submission being displayed at the awards ceremony as well as various USGBC Idaho Chapter sponsored events throughout the following year as well as on the chapter web site. Jurors will award prizes for first, second and third place consisting of a commemorative plaque and monetary award. The monetary awards are as outlined:

- **1<sup>st</sup> Place**                      **\$1,000**
- **2<sup>nd</sup> Place**                        **\$500**
- **3<sup>rd</sup> Place**                         **\$250**

### **Registration:**

The cost of registration is \$30 per team (3 max.) wishing to participate in the competition must register by June 3<sup>rd</sup>. Information and payment must be received by this date. Registration may be completed by emailing your registration information to [larry05myers@gmail.com](mailto:larry05myers@gmail.com). Please include the following information: team name; team leader; name, email and phone number for each team member.

### **Contact Information:**

If you have any questions regarding competition details, registration, schedule, etc... please refer to the competition website and the FAQ. For additional information or questions please contact the competition coordinator, Larry Myers: [larry05myers@gmail.com](mailto:larry05myers@gmail.com)