

Sustainable Building Design and Construction Committee Charter

Overview

The *Sustainable Building Design and Construction Committee* is charged with the task of developing a set of university-wide [Central Campus and Medical School] guidelines for the design and construction of high-performance, long-term, and cost-effective facilities that support and advance the mission of the university while minimizing the impact on the environment and human health. The proposed guidelines will be developed for application at all phases of the design and construction process from planning to construction.

Seven broad categories that will be evaluated include:

1. Site design, planning and management
2. Energy use and greenhouse gas emissions – efficiency and renewable energy standards
3. Water management – conservation and quality
4. Life Cycle Implications – materials and embodied energy
5. Indoor environmental quality
6. Implications for transportation systems
7. Construction and demolition debris recycling and disposal

Committee recommendations will consider:

1. Lessons learned from the Engineering Research Building [ERB], Chemistry Research Building [CRB], the School of Forestry and Environmental Studies Building [FES], Medical School C-wing renovation and Molecular and Development Biology Building [MCDB]
2. Lessons learned from other universities – Harvard, Princeton, Stanford
3. Development of a theoretical benchmark project, representing a “zero impact building”.
4. Evaluation of various systems of sustainable building design and construction guidelines
 - Phase I
 - a. Option 1 - The adoption and implementation of LEED standards and certification for all new construction and renovation \geq \$4 million (77% of \$'s spent, 24% of number of projects)
 - b. Option 2 - The adoption and implementation of LEED standards, without any certification requirement.
 - c. Option 3 - The creation and implementation of Yale specific Sustainable Design guidelines.
 - Phase 2
 - d. The adoption and implementation of related guidelines to projects \leq \$4 million (23% of \$'s spent, 76% of number of projects)
5. Staff development and LEED accreditation for # of Yale staff
6. Development of a comparative cost benefit analysis for various sustainable building design and construction alternatives
 - a. Net Present Value of the life cycle of sustainability investments vs. industry standard design
 - b. Other benefits from implementation of sustainable design and construction practices
7. The integration of the recommendations from the other three Sustainability Committees – Transportation, Energy and Integrated waste management.

Deliverables & Schedule

Phase I:

- a. Data gathering and benchmarking
- b. Analysis of the data collected

Phase II:

- a. Recommendations to AVP of Construction & Renovation
- b. Approval of recommendations by F&A V.P., Provost, and Yale Officers
- c. Implementation on projects \geq \$4MM

Leadership and Committee members

Membership and participation on the committee will be for 6 months. At the end of each academic year, a review process will take place to assess the progress and determine the needs and next steps.

Jerry Warren, Sponsor
David Spalding, Chairperson

AVP Facilities - Construction & Renovation
Program Manager – Construction & Renovation

Mark Malkin, Project Manager
Ginger Chapman
Jim Axley
Julie Newman
Ben Shepherd
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Project Manager – Construction & Renovation
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