

**APPROPRIATIONS REQUEST FORM
OREGON HOUSE DELEGATION
FISCAL YEAR 2010**

DEADLINE FOR SUBMISSION: FEBRUARY 13, 2009

PLEASE NOTE: As required by the House Appropriations Committee, all requests will be made public on the requesting Member's website.

1. **Project Title:** Green Building Research Laboratory
2. **Organization Name and address:** Portland State University
PO Box 751
Portland, OR 97207
3. **Primary Contact name, phone number, mobile phone number, fax number and email:**

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4. **Project Location Address (if different from Organization):**
N/A
5. **Please describe the requesting organization's main activities, and whether it is a public, private non-profit, or private for-profit entity:**

Portland State University, Oregon's largest university serving over 27,000 students, enhances the intellectual, social, cultural and economic qualities of the community by providing access to a quality liberal education for undergraduates and an appropriate array of professional and graduate programs. The university conducts research and community service that support a high quality educational environment and reflect issues important to the region. It actively promotes the development of a network of educational institutions and other organizations to serve the community. Portland State University is a public institution and is part of the Oregon University System, a state agency.

6. **Briefly describe the activity or project for which funding is requested (please keep to 500 words or less.)**

The Green Building Research Lab (GBRL) at Portland State University is a university-industry partnership for the advancement of the green building industry. **The lab's mission is to develop and test new green building technologies, provide workforce training, and facilitate the adoption of energy efficient technology throughout the building industry.** The link between the university and industry creates a two-way path for the flow of information vital to the success and growth of the green building industry. The

laboratory is responsive to research needs and directions articulated by industry partners, and disseminates research results and technological breakthroughs to industry partners for implementation in practice. GBRL works in partnership with the Oregon University System and has received initial investment from Portland State and Oregon BEST.

7. Has this project received federal appropriations funding in past fiscal years?

NO

7a. If yes, please provide fiscal year, Department, Account, and funding amount of any previous funding.

N/A

8. Federal agency and account from which funds are requested (Please be specific – e.g. Department of Housing and Urban Development, Economic Development Initiatives account):

Department of Energy, Energy Efficiency and Renewable Energy

9. What is the purpose of the project? Why is it a valuable use of taxpayer funds? How will the project support efforts to improve the economy and create jobs in Oregon?

With the building sector consuming 40% of all energy within our economy and the growing desire to move toward energy independence there is no question that green buildings can play a key role. For example, LEED®-certified green buildings have been demonstrated to reduce energy consumption by 20 to 40% compared with non-LEED® buildings. Further advances in green building technologies will improve these numbers and reduce barriers to market penetration of green building technologies. In order to realize the potential for the green building movement, however, it will be crucial that we also put in place the mechanisms to train the clean-tech workforce of the future. This includes green-building focused programs related to building science, architecture, and engineering as well as the development of continuing education opportunities for those currently in the workforce.

Located in the heart of the nation's green building capitol, Portland State University has a strong core of researchers actively engaged in green building and built environment research. This includes faculty in Mechanical Engineering, Civil & Environmental Engineering, Electrical Engineering, Architecture, and the College of Urban and Public Affairs. Recent research in green buildings has included funding from the National Science Foundation, other federal sources, private companies, and non-profit foundations. Most recently, in a national call for research proposals, the US Green Building Council received 216 pre-proposals, reviewed 39 full proposals and funded 13 projects – including one at Portland State University, representing the only funded project in the northwest. This is a testament to PSU's growing prominence in green building research.

PSU also has extensive relationships with several nationally-known green building development and architectural/engineering design firms (e.g., Interface Engineering, PAE consultants, Glumac, Gerding Edlen, David Evans and Associates). In discussions with several of these potential partners we have received enthusiastic support for establishing the laboratory and preliminary input

regarding the research directions that would be a high priority for the industry. These discussions have also been informed by the “*National Green Building Research Agenda*” report generated by the US Green Building Council. Throughout these beginning stages, we have identified a long list of potential partners and member companies throughout the state (and beyond). These include the many design/build firms, architectural firms, and energy consulting firms in the region. There are also significant opportunities for partnering with other entities such as the non-profit New Buildings Institute in southern Washington, the lighting research labs of both PNNL (in Portland) and the University of Oregon (Architecture), as well as an energy efficiency branch of Bonneville Power.

With respect to workforce training, there are a number of key courses across the university that can contribute to the educational goals of the GBRL. In particular, the Department of Mechanical and Materials Engineering has a vibrant curriculum centered around Building Science. GBRL faculty affiliates will continue to develop new courses to support this workforce training, with an emphasis on interdisciplinary education. We will also seek to develop continuing education opportunities including workshops and certificate programs. All of our educational initiatives will be informed by input from industry leaders.

**10. Have you requested funding for this project from other Members of Congress?
If so, who?**

The University hopes that this request will be supported by the entire delegation.

11. Funding Details:

a. Total project cost (all funding sources and all years):

\$1.65 Million

b. Amount being requested for this project in Fiscal Year 2010:

\$1 Million

c. What other funding sources (local, regional, state) are contributing to this project or activity? (Please provide specific dollar amount or percentage.)

* Oregon Built Environment and Sustainable Technologies Signature Research Center (OR BEST): \$300k

* Portland State Center for Sustainable Processes and Practices (CSP2): \$351k

d. Do you expect to request federal funding in future years for this project?

Not at this time.

**e. Breakdown/budget of the amount you are requesting for this project in FY 2010.
(e.g. salary \$40,000; computer \$3,000):**

Salary+Fringe: \$585k

Equipment: \$258k

Minor equipment/supplies: \$33k

Tuition waivers: \$54k

f. Please list public or private organizations that have supported/endorsed this project:

* PAE Consulting Engineers

* Interface Engineering

* Glumac

* Oregon BEST

g. Is this project scalable? (i.e. if partial funding is awarded, will the organization be able to use the funds in FY 2010?):

YES