

Call for Projects for Commercial Building Partnerships

November 2009

Is your organization interested in being nationally recognized for its energy-efficient operations and green buildings, achieving higher rates of return on investment through lower operating and maintenance costs, and leveraging the unparalleled expertise and resources of the Department of Energy and its array of National Laboratories?

If so, consider applying for the **Commercial Building Partnership** program—the Department of Energy’s flagship effort to demonstrate the viability of net-zero energy commercial buildings throughout the United States. The five million commercial buildings in the United States consume 18 percent of the nation’s primary energy at a cost of \$170 billion each year and contribute 1.05 gigatons of CO₂ emissions. The Department is seeking leaders that want to demonstrate a highly energy-efficient building project and, in doing so, inspire and enable the commercial building sector to pursue similar advancements.

PROGRAM SUMMARY

The U.S. Department of Energy’s (DOE) Commercial Buildings Team is soliciting proposals for its Commercial Building Partnership (CBP) Program, which is part of the Net-Zero Energy Commercial Building Initiative (for more information about the initiative, go to: CommercialBuildings.Energy.gov). The objective of the program is to accelerate market adoption of currently available and near-ready energy saving technologies into standard design practice for commercial buildings, as well as the related operations, maintenance, and monitoring activities needed to attain high levels of performance. Working with the Commercial Building Partner, the DOE Commercial Team will make a business case for such investments by showcasing the building projects selected for this program.

Successful candidates will be recognized as Commercial Building Partners and provided with no-cost technical support from the Department’s National Laboratories to develop, incorporate, test, and share energy-efficient designs and practices. The array of options available and the final building performance will be documented in the form of a case study project report so that others in the commercial building sector can learn from this experience. In order to represent this diverse audience, DOE may select proposals from a variety of commercial building owners and operators (i.e., municipalities, states, academic institutions, nonprofits, private businesses, and federal agencies).

DOE’S COMMITMENT TO ITS PARTNERS

DOE will establish and fund a Commercial Building Technical Assistance Team (CBTAT) to work directly with each Partner to create opportunities for significant energy efficiency measures at the proposed project site(s). CBTATs will be headed by a particular National Laboratory and empowered by DOE to leverage the support of expert design consultants (e.g., A/E firms, HVAC consultants, and controls experts) at no cost to the Partner. Together, the CBTAT and Partner’s design-build team will provide baseline energy assessments, review design concepts and equipment specifications, conduct commissioning activities, design and debug controls and operation sequences,

and develop monitoring and energy management systems. The CBTAT will also prepare individual case study reports following testing and monitoring of new and retrofit buildings to verify energy performance and demand, and environmental and cost targets.

It is important to note that DOE cannot pay for any Partners’ construction costs, equipment purchases, or additional fees charged by their contractors or design team. While CBTAT services are provided free of charge, Partners must demonstrate a minimum of 20 percent cost sharing related to the project. Proposers should also note that under this call for projects, only buildings in the United States are eligible.

PROGRAM CRITERIA

There are two categories of Partners: 1) Large Portfolio Partners, which own or operate a significant number of buildings of a similar type (i.e., chain stores, hotels, academic institutions), and 2) Exemplary Project Partners, which seek to design or retrofit a building to achieve exemplary performance, regardless of the size of their building portfolio. In both instances, DOE aims to encourage replication of the best features and practices undertaken in the target project(s) in similar commercial buildings throughout the United States.

The method in which widespread efficiency improvements are replicated by the two types of Partners, however, is quite different. Large Portfolio Partners are expected to adopt improvements that meet their business model throughout their existing portfolio of similar existing and/or new buildings. Exemplary Project Partners, on the other hand, are meant to inspire other commercial building owners and operators of similar buildings to make equivalent efficiency improvements. In this case, the Partner is expected to sufficiently facilitate outreach efforts and promotion of their project by DOE for a reasonable expectation of exposure in the commercial building sector.

Resources are available to establish a limited number of Commercial Building Partnerships during the 2009 solicitation. While all building types will be considered, a number of

excellent proposals might not be selected at this time. In this case, applicants may wish to consider resubmitting their proposals in future solicitations, which are likely to include increasingly stringent performance requirements.

Proposals for the 2009 solicitation will be evaluated on a competitive basis to determine which best fulfill the current objectives of the Commercial Building Partnership program. Once accepted, projects will be evaluated at regular intervals using a Stage-Gate process to ensure that critical program requirements are met on time and on budget. Assistance at the start of the project and continued assistance on subsequent phases will be contingent upon satisfactory results during each stage of the Stage-Gate process, as well as funding availability.

Successful candidates will demonstrate the following in their proposals:

I. Baseline Requirements for all Commercial Building Partners

- A. Building type or mix of energy efficiency and renewable energy strategies in the proposed project contributes to a suite of building types and solutions for the Commercial Buildings Program
- B. Description of the Partner's membership and participation in a Commercial Building Energy Alliance, or a written expression of intent to become involved
- C. List of key participants responsible for producing prototypical plans, such as the engineer, architect, energy consultant, commissioning agent, etc., to ensure there is sufficient technical capacity to complete the project
- D. Identification of a representative with authority to discuss the strategy for the project and the business criteria used to determine which level of efficiency will be pursued (i.e., baseline ROI)
- E. Letter on behalf of senior decision-makers committing:
 - to achieve project goals and share design/retrofit plans with CBTAT staff
 - to provide 20 percent in-kind, cost share, and affirmation that sufficient resources are available to accomplish the project
 - to either negotiate a non-disclosure agreement or sign a waiver within one month of project acceptance in the CBP program.
- F. Adoption of updated building codes for commercial buildings that meet or exceed the most recently published ANSI/ASHRAE/IESNA Standard 90.1, or achieve equivalent or greater energy savings. (This applies only to government applicants from a jurisdiction that has the authority to adopt building codes.)

II. Additional Requirements by Partnership Type

Large Portfolio Partner Requirements

A. Identify specific projects in the following categories that are "design-ready" to serve as the initial demonstration for energy efficiency improvements:

1. Design, construct, and commission a new building that achieves 50% energy savings relative to ASHRAE Standard 90.1-2004; AND

Retrofit an existing building that achieves 30% energy savings relative to either a) the median energy performance of the company's building stock, or b) the median energy performance from the EIA Commercial Building Energy Consumption Survey (CBECS) for a similar building type

OR

2. Retrofit two or more building systems to achieve significant energy savings throughout the Partner's building portfolio. May include cost-effective utilization/integration of on-site renewable energy technologies and innovative project financing mechanisms such as power purchase agreements, lease to own, etc.

B. For #1: A commitment on behalf of senior decision-makers to pursue energy savings opportunities throughout their new and existing building portfolio, subject to the constraints encountered with the initial demonstration project and consistent with the Partner's business model; and b) at the completion of each demonstration project, a description of when the energy efficiency improvements will be implemented throughout the portfolio of similar buildings.

Exemplary Project Partner Requirements

Identify a specific project in at least one of the following categories that is "design-ready" to serve as the demonstration for energy efficiency improvements:

1. Design, construction, and commissioning of a new building that achieves net-zero energy use
2. Retrofit of an existing building that achieves 50% energy savings relative to the median energy performance from the EIA Commercial Building Energy Consumption Survey (CBECS) for a similar building type
3. Retrofit of an existing campus (e.g., higher education, corporate headquarters, hospital complexes) to achieve net-zero energy use.

III. Preferences for All Commercial Building Applicants

(An illustrative list of features that may be considered in the selection process, in addition to the aforementioned requirements.)

- A. Building types that result in the greatest energy efficiency gains relative to other building types
- B. Innovative public/private and other partnerships or coalitions to reduce building energy use with the potential to serve as national models
- C. Buildings that will be open to the public for education and demonstration purposes
- D. Demonstrated workforce development benefits of project
- E. Alignment with local government transportation and land-use strategies intended to reduce energy consumption, including mixed-use, transportation-oriented development (near rail and/or bus lines), and reducing employee commute times or reliance on automobiles (e.g., provide bicycle storage facilities)

- F. Other sustainability attributes (exceeding regulatory requirements):
 - 1. Efficient water management
 - 2. Innovative and effective treatment of stormwater runoff
 - 3. Use of environmentally preferable building materials
 - 4. Reuse of existing materials
 - 5. Integration with nearby natural systems and habitats
 - 6. Measures to address indoor environmental quality
 - 7. Other measures that demonstrate a more efficient use of resources and address a building's impact on the environment.

All proposals for the 2009 solicitation of Commercial Building Partnerships must be submitted via the online application (http://www.commercialbuildings.energy.gov/project_call.html) no later than January 15, 2010. *Incomplete submissions or submissions received after January 15, 2010, may be considered in future 2010 CBP evaluations.*

For more information about this solicitation, contact cbp@commercialbuildinginitiative.net.

commercialbuildings.energy.gov

**Commercial Building
Initiative**

EERE Information Center

1-877-EERE-INF (1-877-337-3463)

www.eere.energy.gov/informationcenter

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