

ESTIMATED FUNDS AVAILABLE: \$500,000

ESTIMATED NUMBER OF PROJECTS: Up to six

FUNDING CEILING: The Federal share of the cost for any individual project will not exceed \$100,000.

COST SHARE: 20% cost share is required. Higher project cost sharing will be considered favorably.

BACKGROUND AND OBJECTIVES: Building America is an industry-driven, cost-shared program for development and improvement of new and existing residential buildings that result in higher quality, energy efficient housing. Systems engineering approaches are used to improve production techniques, products, and technologies while maintaining profitability and competitiveness of home builders and product suppliers. The primary function of this program is research, technology implementation, and technical support for making houses more energy efficient. There are seven Building America consortia represented by architects, engineers, builders, equipment manufacturers, material suppliers, community planners, mortgage lenders, and contractor trades with one team leader directing each team. By having all building disciplines working together, Building America is able to research whole building systems to create higher efficiency system performance packages. More description of the Building America Program and the list of contacts for the consortia can be found at:

http://www.eere.energy.gov/buildings/building_america/

State representatives know what building practices and housing types need the most improvement in their region. The Building America Program has also identified many areas needing research. The formation of teams including State representatives, Building America consortia, and other local organizations greatly assists in developing a strategy to meet State and Building America goals.

PROJECTS REQUESTED/TECHNICAL AREA OF INTEREST: This Technical Area's goal is to assist (through funding support and program technical direction) in the development and implementation of energy efficient measures in new and existing residential houses. This goal will be best achieved through cooperative projects involving State, building industry members, and Building America teams to conduct housing research projects and accelerate market adoption of advanced residential building practices and products.

Two broad, strategic categories will meet this goal. The first one is projects that result in energy efficiency increases of at least 40% for new and 30% for existing houses as compared to standard houses built to local codes. The second is the development of strategies that accelerate adoption and continued use of energy efficient building practices and products into the residential building industry.

Research projects should include field testing on whole house systems, however, laboratory research projects on individual components will also be considered. The 40% and 30% target levels are for whole house system energy efficiency increases. For example, installing a new system for home and hot water heating that, when combined with other energy efficiency construction measures, reduces energy use by 40% as compared to typical practices would be acceptable. A typical approach might do some or all of the following: develop an optimized

design, test the designed house, redesign it, and test again. The work would then be presented to the DOE Building America Program to publish results and create ways to get the results into regular building practice such as with a design manual or training curriculum.

The second strategy focuses on accelerating the adoption and ensuring continued use of energy efficient building practices and products in the residential building industry. State assistance in encouraging builder tests using Building America's proven techniques and technologies is sought. Successful strategies can be linked with Energy Star certifications or other Federal, state, or regional marketing programs. Strategies involving partnerships with Universities and extension services, home builder associations, green builder organizations, manufacturers, distributors, retailers, community action agencies, other pertinent non-profit agencies, and/or other entities with a network of training, technical assistance, or marketing capabilities is favorable. Proposals should include an outline of a sustainable, holistic, strategic plan that includes Building America proven training, technical assistance, and multilevel marketing or market research. Other benefits such as reduced material costs should also be specified as they will increase the likelihood that the energy saving practice will be adopted.

Teams must work with Department of Energy headquarters and Building America laboratories (the National Renewable Energy Laboratory and the Oak Ridge National Laboratory) to coordinate reporting and publicity. States are encouraged to work with Building America consortia to expand their expertise in energy-efficient building design and construction.

EVALUATION CRITERIA: Applications will be evaluated according to the following criteria:

1. Clear understanding of building-industry needs, statement of project goals and objectives, and stated deliverables and measures of long-term success. Building-industry involvement by support letters, proposal development, project execution, and evidence of the ability to organize and host events, if proposed. **(Weight 20)**
2. Demonstrated match of the application focus with the activities and focus of one or more of the Building America consortia. **(Weight 20)**
3. Capabilities of the team as shown by past successful involvement with cost-shared public/private partnership projects as well as team members' education, experience, and previous success. Advancement of technologies that have improved energy efficiency while minimizing costs or achieving other Building America goals. **(Weight 30)**
4. Viability of approach for achieving proposed objectives. **(Weight 20)**
5. Cost of the proposed project accurately reflects anticipated project benefits; degree to which proposed cost share exceeds the minimum required; and Federal funding requested. The value of buildings that are built may be used as cost sharing. In-kind services such as general office costs or building values, for example, are less favorable than a direct, project financial contribution. **(Weight 10)**

SPECIAL REQUIREMENTS

Federal funding received may not be used for building materials, construction, or labor used in construction or renovation.

Awarded Federal funds may not be used by the Building America consortia. The application should, however, contain an estimated value and type of assistance the Building America team is expected to provide. These efforts are not unlimited and are subject to review and approval of Building America program management.

