



## **MEMORANDUM OF UNDERSTANDING**

**Between**

**THE AMERICAN INSTITUTE OF ARCHITECTS**

**And the**

**UNITED STATES DEPARTMENT OF ENERGY**

### **I. Purpose**

The purpose of this Memorandum of Understanding (MOU) is to continue the general working agreement between The American Institute of Architects (AIA) and the United States Department of Energy (DOE) (herein jointly “Parties”). This MOU is intended to extend the productive working relationship between the two organizations that began with the execution of an earlier MOU in 1996, which has expired.

### **II. Background**

DOE and the AIA recognize that communities are a major focal point for energy consumption and that buildings, forming a large part of the built environment, account for approximately 35 percent of total energy consumption in the United States.

Professional architects have an essential role to play in achieving energy-efficiency improvements in all types of buildings, and the AIA represents the architectural profession, with a membership of over 70,000. The AIA has been advancing the values of architects and architecture for more than 140 years through AIA technical resources, education programs, and as the collective voice of the profession.

DOE develops strategic relationships with professional organizations, industry trade associations and other groups in order to establish a cooperative basis to promote smart

growth in communities, energy-efficient, environmentally-responsive buildings and to further the goals of the President's National Energy Policy.

The DOE and the AIA wish to continue joint work on energy and environmental issues related to the built environment, including the following:

- < Promoting quality of life and global economic opportunities through internationally recognized high performance design and energy-efficient structures;
- < Expanding the diversity of energy use and generation, particularly the increased use of solar, wind, biomass, geothermal and other renewable, clean energy sources at the community level;
- < Reducing the environmental impact of the built environment on regional landscapes, water resources and watersheds, and the impact of pollution on global climate change;
- < Creating buildings conducive to resource efficiency, through material conservation and reuse, including recycled and environmentally-friendly materials and products; and building communities with connections to the natural landscape; and
- < Improving quality of the indoor environment and occupant productivity through the use of advanced lighting and mechanical systems techniques and environmentally responsible building operations and maintenance.

### **III. Understandings**

The AIA and DOE have identified areas of interest that lend themselves to collaborative activities, primarily in the areas of professional development, public outreach, and research and development (including demonstration and deployment.)

#### **1. Professional Development**

The AIA and DOE plan to continue their jointly designed and deployed outreach programs. Since 1979, the AIA and DOE have delivered workshops featuring energy-efficient architecture, building codes and standards, and sustainable design workshops to over 35,000 practitioners. The education and training, often offered within the AIA accredited continuing education program, has helped architects, engineers, public officials, and building owners to integrate energy efficiency and renewable/clean energy in the design process, giving them the tools to make better buildings.

In the previous MOU, DOE and the AIA anticipated the establishment of a standard of excellence in understanding and implementing energy and environmental considerations in the built environment. The spectrum was intended to be broad, including site selection, regional and urban design, and energy efficiency. It would embody energy reduction; selection of environmentally responsible materials and recycling; indoor air quality issues; commissioning, operation and maintenance; and renovation, adaptive re-use, historic preservation and related issues. With the support of DOE and expertise from the AIA Committee on the Environment, this standard, "Leadership in Energy and Environmental

Design” (LEED), has since been developed under the auspices of the U.S. Green Building Council. The AIA will support continued efforts to enhance LEED and other credible rating standards, and the development of advanced modeling tools such as DOE’s Energy 10, DOE 2/Energy Plus, and case study methodologies. The AIA and DOE will undertake activities to encourage integration of these design tools and rating systems into architectural practices.

Since the AIA requires continuing education for its member architects, this requirement will continue to provide an expanded audience for AIA/DOE workshops and other educational programs and tools. The Parties also believe that additional opportunity for integrating energy and environmental strategies is extant within the other Professional Interest Areas (PIA) represented by various AIA Committees. The AIA and DOE will introduce these strategies to a larger body of building design professionals over the course of this MOU. DOE and the AIA recognize that the development of reliable metrics will be central to maintaining the design leadership of these professionals, and will work cooperatively to identify and collect metrics that affirm results and attribution to this collaborative effort.

In the two decades since the launch of AIA/DOE workshops, a new generation of designers has entered the profession to address integrated practice issues in the U.S. and globally. To ensure that this collaborative effort continues to inform subsequent generations of design professionals, the AIA and DOE will focus on educating architecture students within the professional development area as this MOU moves forward. Specifically, the AIA and DOE will seek to:

- ⟨ Introduce architecture students to DOE portfolio programs that emphasize buildings and communities, such as Rebuild America and others that promote energy efficiency, renewable energy, and environmental responsibility, and provide opportunities to engage these students in specific projects.
- ⟨ Incorporate smart growth, environmental responsibility, and green buildings as criteria in design competitions for students.
- ⟨ Coordinate program information and outreach with the American Institute of Architecture Students (AIAS), Association of Collegiate Schools of Architecture (ACSA), and the National Organization of Minority Architects (NOMA) journals and other publications; and provide topical speakers to these organizations for their conventions, seminars, and workshops.
- ⟨ Put more focus on student education vis-à-vis sustainability issues at the AIA National Convention.

By encouraging university-level educational programs to foster energy and environmental considerations in architecture, engineering, planning, finance, and related approaches in other fields of academic learning, the AIA and DOE will garner support for DOE initiatives, and will promote rapid transfer of these design and planning skills to the profession.

## **2. Public Outreach**

The AIA and DOE plan to continue their collaboration in public outreach. Accomplishments under the previous MOU included the deployment by the AIA of symposia addressing a range of energy and green building topics. The symposia have reached close to 70,000 participants

addressing topics such as community smart growth, building energy use, indoor air quality, water management, and environmentally sensitive materials.

Previous joint activities with DOE included the National Environmental Design Charrettes and Mainstreaming Green Symposia in 1997 and 1999. As a result of successfully launching the annual AIA Top Ten Green Projects Program, the AIA adopted sustainable design and energy efficiency resolutions at its annual conventions in 2000 and 2001. Future joint symposia and outreach will include a variety of energy and environmental issues and next-generation resources development.

The AIA and DOE also will seek to promote other programs' efforts in energy efficiency and green design. For example, The National Endowment for the Arts, in one of its design competitions for public buildings, is considering setting aside half of that competition's budgeted funds to underwrite energy-efficient school design. The AIA and DOE can and will actively support this program and others like it, by providing technical assistance and other aid as requested.

### **3. Research and Development (Including Demonstration and Deployment)**

DOE and the AIA, which have been partners through a 25-year history of successful research and development initiatives addressing energy efficiency and renewable energy issues, plan to continue this work. Critical research is still needed to support knowledge development and distribution. To support this effort, DOE and the AIA will collaborate on the development of demonstration projects and design tools.

The AIA and DOE will select for analysis leading examples, including those from the AIA Top Ten program, to demonstrate the metrics associated with environmental performance. The AIA will continue to support DOE program demonstration activities and participate in technology transfer activities included in: High Performance Commercial Buildings Roadmap implementation, Solar Decathlon, Building America, Rebuild America (including EnergySmart Schools), Labs21. The AIA will also disseminate the results.

The AIA will continue to support energy and constructed environment investigations at the DOE National Laboratories for research, development, and distribution of design tools. This envisions refinement and distribution of tools and best practices for the implementation of energy-efficient and environmentally superior design, including energy simulations, environmental material assessment and specification, construction waste reduction, building commissioning and performance-based auditing and contracting to address the specific needs of architects, engineers and facility owners/operators throughout the building lifecycle.

## **IV. Conditions**

This MOU is not a contractual nor a financial obligation instrument, but broadly states basic understandings between the two parties about the tasks and methods for performing them. It is not an endorsement of the AIA nor of its programs. It cannot be used to obligate or commit funds nor cited as the basis for the promise of nor transfer of funds. Activities undertaken between the parties requiring the obligation or transfer of financial resources shall be subject

to separate agreements between DOE and the AIA with regard to DOE's financial support for AIA programs, or vice versa, and these will be made subject to the availability of funds. Direct communication between the AIA and DOE involved in managing the work will be utilized in setting forth specific arrangements for program implementation. Collaboration under this MOU shall be in accordance with the applicable statues and regulations governing the respective parties.

**V. Authorities**

DOE enters into this MOU under the authority of the Department of Energy Organization Act (Pub. L. No. 95-91), section 646, 42 U.S.C. § 7256, and the Energy Reorganization Act of 1974 (Pub. L. No. 93-438), section 107(a), 42 U.S.C. § 5817(a).

**VI. Effective Date and Administration**

This MOU will become effective upon signature by the Secretary of Energy and the President of The American Institute of Architects or their designees. It may be modified or amended by written agreement between both parties, and such amendments shall become part of, and shall be attached to this MOU. This MOU shall terminate at the end of three (3) years unless revised or extended at that time by written agreement of the parties. It may be terminated at any time by either party, upon 90 days written notice to the other. Its provisions will be reviewed annually and amended/supplemented if mutually agreed upon in writing.

Signed:

  
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FOR  
Spencer Abraham  
Secretary, U.S. Department of Energy  
FOR THE DEPARTMENT OF ENERGY  
OF THE UNITED STATES OF  
AMERICA

  
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FOR  
Gordon Chong  
President, American Institute of Architects  
FOR THE AMERICAN INSTITUTE OF  
ARCHITECTS

(date) October 4, 2002

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