

# AIA 2030

## SUSTAINABILITY ACTION PLAN

William Rawn Associates, Architects, Inc.  
February 1, 2013



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# COMMITMENT LETTER

**WILLIAM RAWN ASSOCIATES**  
**Architects, Inc.**

**10 Post Office Square, Suite 1010**  
**Boston, MA 02109 617.423.3470**

February 2, 2011

Paul W. Welch Jr., Hon. AIA  
Interim EVP/CEO  
The American Institute of Architects  
1735 New York Ave., NW  
Washington, DC 20006-5292

Dear Paul:

William Rawn Associates, Architects, Inc., a 50-person firm located in Boston, Massachusetts, is hereby signing on to the AIA 2030 Commitment program and its goal of carbon-neutral buildings by the year 2030.

The places where we live, work, and play represent the largest sources of greenhouse gas emissions in America, as well as around the world. The design and construction industry has made significant strides toward creating high performance buildings of all types and uses. As a result, the industry is positioned to have a profound impact by continuing to foster high building performance and reducing building-related greenhouse gas emissions.

As architects, we understand the need to exercise leadership in creating the built environment. We believe we must alter our profession's practices and encourage our clients and the entire design and construction industry to join with us to change the course of the planet's future. A multi-year effort will be required to alter current design and construction practices and realize significant reductions in the use of natural resources, non-renewable energy sources, and waste production and promote regeneration of natural resources..

We therefore commit William Rawn Associates, Architects, Inc. to take the following steps which are part of the AIA 2030 Commitment program:

- Within two months of the commitment date, establish a team or leader to guide the development and implementation of the firm's plan
- Within six months of signing the commitment, the firm will implement a minimum of four operational action items from the list provided. These actions will be undertaken while the long-term sustainability plan is in development
- Within one year of signing the commitment, the firm will develop a sustainability action plan that will demonstrate progress toward the AIA's 2030 goals.
- Make a summary of our sustainability action plan and annual progress reports available publicly by providing them to the AIA for website posting and distribution

We also support the critical need for more consistent and more rigorous metrics related to actual building performance. We further commit our firm's assistance to the AIA and others in the ongoing development of effective metrics and standards for reporting purposes. It is understood that reporting through the AIA 2030 Commitment program must respect the confidentiality of information about specific clients, projects, and proprietary tools.

We look forward to working with you and our professional colleagues to achieve the goals of the 2030 Commitment.

Sincerely,

A handwritten signature in black ink, appearing to read "D Johnston". The signature is fluid and cursive, with a long horizontal stroke at the end.

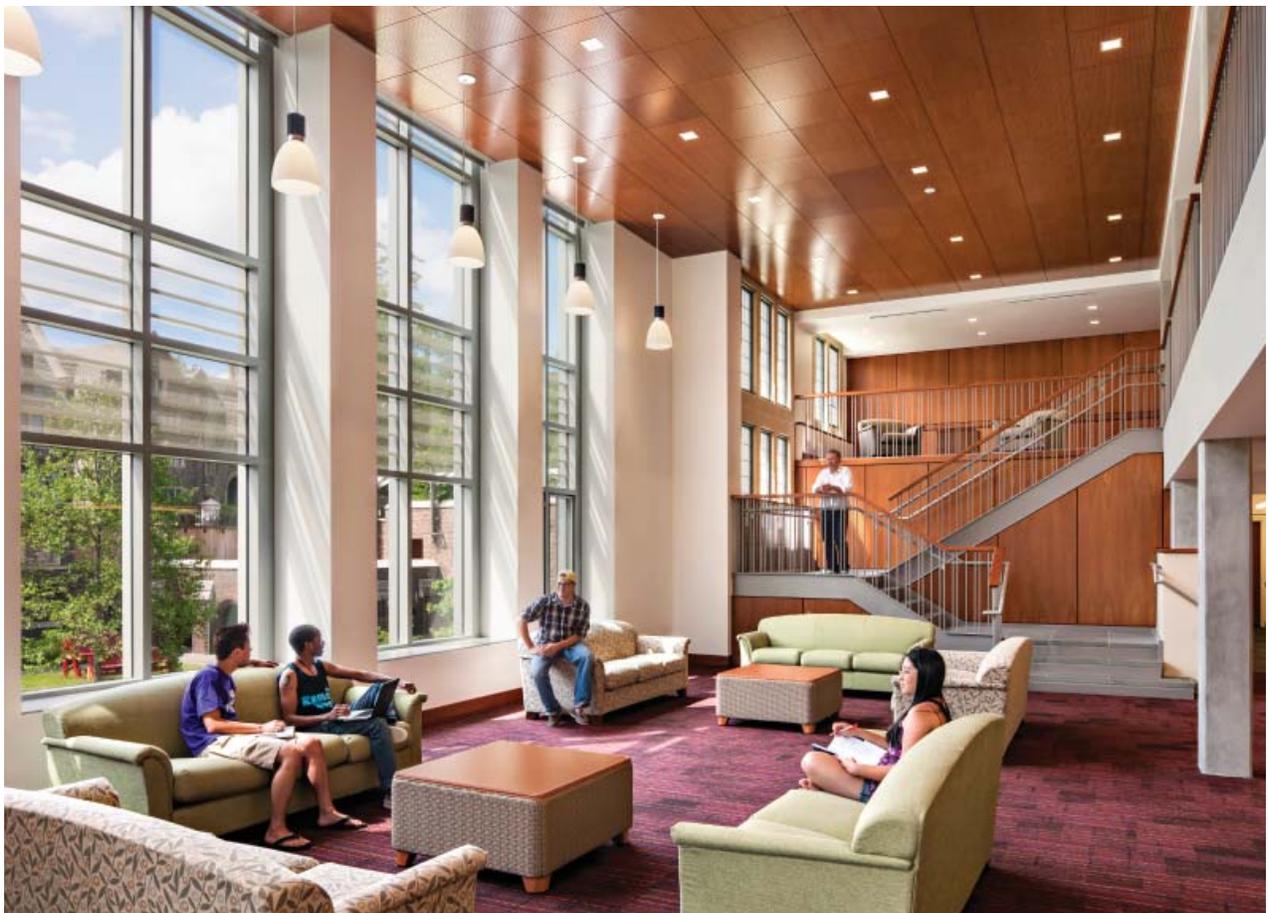
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University of Virginia Band Rehearsal Hall, 2011, LEED Gold



K4 Residence Hall at Duke University, 2012, LEED Silver

# SUSTAINABLE PRACTICE

Sustainable design has been central to our design practice since the firm was founded. We view our commitment to sustainability as an extension of our focus on “patterns of place.”

As LEED Certification becomes more common in our body of work, we have learned to use it as a useful tool for guiding our clients through key design decisions and setting priorities during budgeting exercises.

We see the 2030 Commitment, with its emphasis on attention to energy and water consumption, as an extension of our own practice of gathering post-occupancy data and an aid to quantitatively assess and continually improve our performance.

We have extensive experience with sustainable design technologies, including high-performance envelopes, efficient mechanical systems, and specialized technologies such as double-skinned curtain walls and green roofs.

In the “Architect 50,” ARCHITECT Magazine’s annual ranking of the Top 50 Architecture Firms in the country, William Rawn Associates was ranked:

- #1 in 2009 Design, Sustainability and Business, and #4 for Sustainability
- #2 in 2012 Design, Sustainability and Business, (no sustainability rankings)
- #3 in 2011 Design, Sustainability and Business, and #1 for Sustainability in 2011



## TOP 10: SUSTAINABLE

Rank	Firm
1 *	WILLIAM RAWN ASSOCIATES
1 *	MITHUN
3	ROSS BARNEY ARCHITECTS
4 *	PGAL
4 *	FRANK HARMON ARCHITECT



# SUSTAINABLE PRACTICE

## LEED CERTIFIED PROJECTS: 6 LEED GOLD PROJECTS AND COUNTING . . .



### **US Courthouse** Cedar Rapids, IA

This new U.S. Federal District Court will house district, magistrate, and bankruptcy courts, supporting clerk's facilities and various other ancillary facilities, including chambers for three appellate court judges and congressional offices. It recently achieved LEED Gold Certification by focusing on an energy-efficient envelope, strategically employed daylighting, and a smart siting strategy.



### **Tufts University Sophia Gordon Hall** Medford / Somerville, MA

The project received a grant from the Massachusetts Technology Collaborative for solar thermal and photovoltaic systems. Sustainability strategy includes an innovative education program that allows users to observe the building's use of resources through real-time displays in the building's public spaces.



### **MIT Graduate Student Residence Hall** Cambridge, MA

The first **LEED Gold certified** building at MIT, this 550-bed residence hall is developed on a brownfield site and incorporates numerous sustainable features, including daylighting to 90% of spaces, innovative storm water use for irrigation, as well as a web-based education and monitoring system.



### **Wheelock College Campus Center and Student Residence** Boston, MA

This **LEED Gold certified** project provides 125 new student beds, a 250-seat dining facility for the entire campus, and various student facilities. Its green design features include a green roof, extensive use of daylighting, and energy wheel heat recovery.



### **Napa Pipe Redevelopment (LEED Gold New Development - Pilot Program)** Napa, CA

Master Planning and site design of 3000+ units of mixed-type housing for this 157-acre, redevelopment of an industrial site facing the Napa River (New Development Stage 1). Open spaces, including a vibrant town center surrounded by restaurant, retail, and housing uses, are mixed throughout the development, encouraging views of the Napa River and surrounding Napa Valley hills.

## Experience with Other LEED Certified and Equivalent Projects



- University of Virginia, Band Rehearsal Hall LEED Gold
- Cambridge Public Library LEED Silver
- Duke University, K4 Residence Hall LEED Silver
- Schwartz Student Center, Milton Academy LEED Certified
- Grinnell College, East Campus Residence Halls LEED Certified
- Mount Auburn Cemetery Horticultural Center **Tracking LEED Platinum**
- Harvard Business School, Tata Hall Tracking LEED Gold
- 8 Projects Tracking LEED Silver
- 1 Project Tracking LEED Certification
- 2 Projects Designed to LEED Silver Certifications
- 2 Projects Designed to LEED Certification Standards

# 2030 COMMITMENT: PROJECTS

William Rawn Associates is committed to buildings participating in the civic or public realm — buildings in the city or buildings in important public landscape settings, such as Tanglewood. We have always believed that successful architecture has a responsibility to engage not only its physical context, but also the public realm. We see the 2030 Challenge as a logical extension of that philosophy as well as an excellent metric to begin collecting data to quantify the energy-use performance of our projects.



Roundrels explaining sustainable design elements at Milton Academy serve as a teaching tool.

Energy Data Reporting: We have begun collecting data to quantify energy, lighting, and water-use data to track using the 2030 Annual Reporting Tool. In 2011, we achieved a 24.1% reduction of energy use from national averages. In 2012, 596,071 gsf or 45.4% of our total projects met target. The following strategies will help us continue to improve, project by project.

- We are conducting a sustainable-design charrette for each project during schematic design or earlier to help client set goals and determine strategies collaboratively with the consultant team.
- We encourage clients to include energy modeling on all projects.
- Providing education and outreach for clients (especially for our public and educational clients) has long been important to us. We believe that outreach helps to magnify the impact of any given sustainable design measure included in a project by using it as a teaching tool.
- We have often done post-occupancy reviews with occupants. Recently we have shifted our focus toward sustainability & energy/water performance as a way of learning from past successes and where we can improve, as well as identifying specific problems that can be solved.
- We are working to incorporate more sustainable-design information into our marketing materials so that clients know us as a sustainable practice
- Going forward we will standardize record keeping to simplify data collection and analysis, even when energy modeling is done by outside consultants

# STAFF DEVELOPMENT

Staff development is a crucial part of integrating sustainable design into our design process, ensuring that all architects and designers share a common set of goals and knowledge of best implementation strategies. WRA has established several office policies to promote this shared knowledge:

- The 2030 Challenge Action Plan will be shared with all staff
- All design staff are required to become LEED Accredited Professionals within three months of joining the firm. This requirement has been made part of the standard language in offers of employment. The office supports staff becoming accredited by hosting study sessions, paying for the exams, as well as credential maintenance, and giving paid time off to take the exam.
- We have recently begun our In-house continuing education led by senior staff. Topics planned for 2013 Lessons Learned Sessions include:
  - Project review of recent sustainable projects by their project architects
  - In-depth seminar on high-performance curtainwall design and detailing
  - Round-up of new green technologies
  - Roundtable sharing of different teams' experiences with energy modeling in the design process.



Staff development: LEED exam study sessions (LEED Jeopardy)

# 2030 COMMITMENT: OPERATIONAL ACTIONS

**Our office has implemented** a number of operational actions since making the 2030 Commitment. We will continue to add to the list, taking on two additional steps each year, and periodically evaluate our performance for the actions we've already taken.

## Office Energy Use

- Implement office policy of shutting down all computers at night
- Install occupancy sensors in meeting rooms and other common spaces
- Replace any existing CRT monitors with LCD monitors
- Replacement of incandescent lamps with fluorescent
- Procurement of Energy Star rated equipment and appliances\*

## Waste Reduction and Supplies

- Reduce paper consumption by using electronic documents and forms. On all of our new projects we implement electronic submittal exchange, greatly reducing paper use and shipping during the contract administration phase.
- Institute a firm-wide single-stream recycling policy
- Implement policies for purchasing environmentally friendly office supplies
- Implement policies for purchasing environmentally friendly kitchen supplies
- Implement policies for purchasing environmentally friendly cleaning supplies
- Reduce paper consumption by implementing printing policies (i.e. printing double-sided, print drafts on discarded paper)\*
- Replace bottled water with chiller connected directly to the tap water supply\*

## Transportation

- Encourage employees to take public transit to job sites and meetings
- Encourage digital meetings and web conferencing to reduce number of in-person meetings with consultants

\*New in 2013





Harvard Business School, Tata Hall, Tracking LEED Platinum