

# Wisconsin Green Building Project Profile

Wisconsin Energy Conservation Corporation  
431 Charmany Drive  
Madison, WI 53719

## BACKGROUND

After nearly 25 years of innovative energy initiatives, WECC took on the challenge of creating its own high-performance commercial office building using the same practices they teach customers every day.

The goal was to show energy-minded developers and business owners how they can build energy efficient, sustainable buildings economically and why being environmentally responsible can be a smart and affordable business decision.

Efficiency and sustainability were the major objectives, and you'll find excellent examples everywhere you look. But what's just as exciting is that they didn't have to sacrifice their budget or employee comfort to achieve them.

The building is approximately 34,250 ft<sup>2</sup> sitting on 5.17 acres in what is known as the Research Park in Madison. The building houses more than 120 employees working for various government agencies.

## RESULTS

ENERGY STAR qualified appliances are used throughout the building. 89.4% of wood used was certified by the Forest Stewardship Council. 94.6% construction waste was recycled. Innovative plumbing fixtures provide a 46% water use reduction. All reduced WECC's energy costs by \$22,000 a year.

Photovoltaic (PV) panels on the roof and PV flags in the parking area generate 19 kW (15%) of the building's electrical energy. Solar panels collect heat for approximately 60% of domestic hot water needs. Purchase of renewable energy for 100% of electrical needs.

High-efficiency heating/cooling system, with adjustable speed drives for return and supply air factored in reducing energy costs by 40%. Ventilation unit recovers almost 60% of the heat and moisture from the exhaust.

Preferred parking for carpools and hybrid vehicles encourages use of environmental transportation methods.

Paint, finishes and adhesives are low VOC, reducing fumes and air pollution.

Natural daylighting optimized through exterior sunshades, interior light shelves and solartubes, providing 75% of work space light.

A combination of pervious paving and landscaping pavers allow rain water to seep into the ground. Three rain garden bioswales and canopy roof garden reduce water run-off.

On site a touch-screen kiosk lets visitors learn about the buildings sustainable features and real time energy usage of gas, electricity and photovoltaics within the building.

WECC has played a critical role in changing the energy and energy efficiency landscape in Wisconsin and the Midwest.

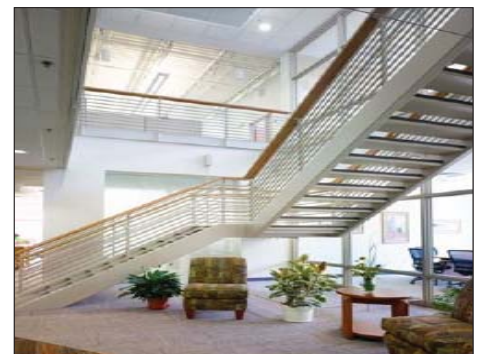
## PROJECT INFORMATION

Date of Completion: March, 2007  
Architect: Eppstein Uhen Architects  
Owner: Wisconsin Energy Conservation Corporation  
General Contractor: Vogel Bros. Building Company  
Consultants:

- Energy: Arnold & O'Sheridan, Inc.
- Engineer: Mike Schmidt, Arnold & O'Sheridan
- Structural: Mike Schmidt, Arnold & O'Sheridan, Inc.
- Mechanical: Dan Green, Arnold & O'Sheridan, Inc.
- Landscape: Eppstein Uhen Architects
- Environmental: The Bruce Company of Wisconsin Inc.
- Electrical: Arnold & O'Sheridan, Inc.
- Plumbing: Arnold & O'Sheridan, Inc.
- LEED Advisor: Greg Franta, RMI/ENSAR Built Environments
- System Controls: Johnson Controls
- Commissioning: Svein Morner, Sustainable Engineering, Inc.

## Green Building Awards

- 2008 LEED-NC certified Gold
- 2008 "Best Green-Built Project" Merit Award from In-Business Magazine's Commercial Design Award
- 2008 Special Citation - Sustainability & Energy Efficiency (SE2) Leadership Award
- 2008 Build Wisconsin Award - The Associated General Contractors



For more information about the building please check out the website <http://www.weccusa.org/main/aboutbuildinginfo/title/WECC%27s%20headquarters> or the Architect portfolio website [http://www.eua.com/portfolio/project\\_detail.cfm?m=31&id=357](http://www.eua.com/portfolio/project_detail.cfm?m=31&id=357)