



GREEN BUILDING TOURS

LEED® Facts

Energy Center II Houston, Texas

LEED® for Core & Shell Gold Certification awarded June 2009

Gold	36*
Sustainable Sites	7/15
Water Efficiency	3/5
Energy & Atmosphere	5/14
Materials & Resources	7/11
Indoor Environmental Quality	9/11
Innovation & Design	5/5

*Out of a possible 61 points

ENERGY CENTER II HOUSTON, TEXAS 306,000 SF

19% energy reduction

41% water use reduction

47% local regional materials



PROJECT PROFILE

Energy Center II

Efficiency in the Energy Corridor

Energy Center II becomes the largest LEED® Gold certified speculative office building in Houston and the first in Houston's Energy Corridor submarket

PROJECT DESCRIPTION

Located adjacent to I-10 and Dairy Ashford, Energy Center II is an office building totaling 306,000 square feet strategically located within Houston's Energy Corridor. Energy Center II was completed in February 2009 and is currently 56% leased to tenants that include WorleyParsons Group, CARBO Ceramics and Northern Offshore. Combined with its sister asset, Energy Center I, a 332,000 square foot office building leased to Foster Wheeler USA that is certified LEED Silver, the entire 638,000 square foot project is the largest speculative office development completed in Houston in six years.

SUSTAINABLE SITES (7/15)

■ Provided open spaces, pedestrian areas and a water feature, together exceeding the footprint of the building and garage providing a campus-like setting ■ Storm water equipment was installed to treat over 90% of the storm events ■ Highly reflective roofing materials were used on 100% of the roof to reduce costs associated with cooling and HVAC equipment ■ Bicycle racks and showers were installed providing alternate transportation opportunities ■ Preferred parking is designated for low-emitting and fuel efficient vehicles

WATER EFFICIENCY (3/5)

■ Drip irrigation was installed in lieu of sprinklers in the planting beds to reduce water use ■ Native and adaptive plants were used to reduce the amount of irrigation and fertilizers and pesticides used on the site ■ Low flow plumbing fixtures and dual flush water closets were installed in all bathrooms resulting in 40% reduced water consumption

ENERGY & ATMOSPHERE (5/14)

- Installed high efficiency chillers which, based on initial whole building energy simulation models, project the building to operate approximately 19% more efficient than baseline A Building Management System was installed to monitor and record tenant electrical consumption
- To minimize ozone depletion the building does not use any CFC based refrigerants

MATERIALS & RESOURCES (7/11)

■ Regional and local materials accounted for 47% of the building cost ■ 23% of the building materials used were manufactured with recycled content, a few of the largest contributors were steel, metal studs, glass, window framing ■ As a percent of cost, 94% of all new wood used in Energy Center I was FSC Certified ■ 77% of the construction waste was diverted from landfills to recycling centers

INDOOR ENVIRONMENTAL QUALITY (9/11)

■ A CO2-based demand controlled ventilation system is utilized to control the amount of outside air brought into the building ■ Indoor composite wood and agrifiber with no urea-formaldehyde were chosen for minimal contribution of volatile organic compounds to the building atmosphere ■ 100% of occupants enjoy access to views via high performance glass system ■ Increased ventilation is provided to tenant space to improve occupant comfort and productivity ■ During construction, procedures were followed to ensure the quality of the indoor air by minimizing the ability for dust and debris to enter the ventilation system

INNOVATION IN DESIGN (5/5)

■ A green cleaning program was implemented in the building, the program provides specifications for processes and products that are to be utilized by the cleaning contractors and incorporates corresponding training and contract considerations with selected contractors ■ The requirements for local/regional materials and reduction of potable water were exceed by 35% and 21% respectively ■ A non-chemical, pulsed-power, water treatment system was used to treat the building condenser water thereby eliminating the release of chlorine, zinc and phosphates into the atmosphere

ABOUT TRAMMELL CROW COMPANY

Trammell Crow Company, founded in 1948, is one of the nation's leading developers and investors in real estate. It has developed or acquired over 500 million square feet of buildings with a value exceeding \$50 billion. As of June 30, 2009, Trammell Crow Company had over \$6.6 billion of projects in process or in its pipeline. Trammell Crow Company is an independently operated subsidiary of CB Richard Ellis Group, Inc., the world's largest commercial real estate services firm (based on 2008 revenues). For more information visit www.TrammellCrow.com.

"We develop environmentally responsible buildings because they increase value for our investors and meet the long term objectives of our tenants, employees and the communities in which we live."

Adam Saphier, LEED® AP Principal, Trammell Crow Company





Owner: Trammell Crow Company Principal Global Investors

Architect: HOK Architects
MEPF Engineer: Wylie Engineers
Structural Engineer: Haynes Whaley
Contractor: Manhattan Construction
Commissioning Agent: Wylie Cx

Project Size: 306,000 SF **Completion:** February 2009

Photographs Courtesy of: David Shutts

ABOUT LEED

The LEED Green Building Rating System is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S.Green Building Council's Web site at www.usgbc.org to learn more about how you can make LEED work for you.