

# **GREEN BUILDING TOURS**

July 16, 2010

Urban Land Institute

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## **One Shell Plaza**

### **PROJECT BACKGROUND**

One Shell Plaza is a 1.5 million-square-foot Class A office property in downtown Houston that is owned, managed and originally developed by Hines. Designed by renowned architect Bruce Graham with the Chicago office of Skidmore, Owings & Merrill and completed in 1971, the 50-story One Shell Plaza was the first major high-rise project by Hines and is now proud recipient of a LEED-EB Certification. As a testament to its design quality and operational excellence, Shell Plaza achieved LEED Gold certification with only modest upgrades. Executive Vice President and CEO of Hines' Southwest Region Mark Cover said, "The tenants in Shell Plaza are progressive and committed to providing their employees with the healthiest and most productive workplace possible. In turn, our property and engineering managers must constantly ensure that tenant space meets those rising expectations."

#### **SUSTAINABLE SITES (5/12)**

One Shell Plaza implemented an exterior maintenance and outdoor integrated pest management plan which greatly reduced the use of chemicals and non-biodegradable detergents, and managed water runoff to minimize possible contaminants in water returning to ground and/or entering Houston's bayous. • The paved surfaces surrounding the building are highly reflective paving material with a Solar Reflectance Index (SRI), greatly reducing the concrete heat island effect on our city. • 28% of all building occupants use an alternative method of commuting to and from work.

#### WATER EFFICIENCY (7/10)

One Shell Plaza has a system of meters and sub-meters on the water-using systems in the building, allowing for effective tracking of water use and detection of leaks within the systems, minimizing waste of potable water. • Converting to high-efficiency water fixtures reduced water consumption by more than 2.5 million gallons per year. • A "water chemical treatment plan" is utilized for the building HVAC system which not only allows for the efficient use of water, but also ensures systems are performing at optimum efficiency, therefore using less energy.

#### **ENERGY & ATMOSPHERE (22/30)**

With an energy star score of 89, One Shell Plaza is 43% more efficient than if it were operating at the national average for energy performance. • An extensive commissioning process was undertaken to determine what building systems could be operated more efficiently or upgraded to maximize energy efficiency. • A building automation system allows One Shell Plaza to efficiently use and track its energy use. • 54% Green power renewable energy certificates were purchased providing for new development of green power equal to the buildings usage for two years. • Carbon emissions were reported by the building to a third party to prove the buildings reductions of green house gasses beyond the national average.

#### **MATERIALS & RESOURCES (6/14)**

The property currently recycles paper, cardboard, aluminum, plastic, glass, light bulbs, and durable goods such as computers, monitors, copiers, microwaves, furniture, etc. • 100% of the building's "durable goods" were either reused or recycled, therefore diverted from going into a landfill. • Where possible, One Shell Plaza uses low-mercury content light bulbs. • Construction events are monitored at the building to make sure the proper supplies are being purchased, that the waste is being sorted and recycled, and that building tenant indoor air quality is not being compromised.

#### **INDOOR ENVIRONMENTAL QUALITY (11/19)**

A comprehensive green cleaning program is in place at One Shell Plaza, featuring sustainable cleaning chemicals and recycled paper products, green equipment which reduces particulates and reduces noise pollution, and cleaning policies designed to minimize any negative health effects which may be caused by cleaning or cleaning products. • A comprehensive high-performance green cleaning program is in place and cleaning effectiveness is tracked regularly to ensure that policies and products are being used correctly.

#### **INNOVATION & DESIGN (7/7)**

In addition to their many "exemplary performance" credit achievements, One Shell Plaza received a special "Innovation in Operations" credit with their Hines Green Office education program, helping tenants understand how they can contribute to reducing their carbon footprint and operating "green".





Owner: **Hines** Manager: **Hines** LEED Consultant: **Kirksey** Engineering & Commissioning: **TMD** Photography by: **Aker/Zvonkovic Photography** 

#### ABOUT LEED® and ENERGY STAR®

The LEED<sup>®</sup> Green Building Rating System<sup>™</sup> offered by the U.S. Green Building Council is the national benchmark for the design, construction, and operations of high-performance green buildings. An ENERGY STAR qualified facility meets strict energy performance standards set by the EPA and uses less energy, is less expensive to operate, and causes fewer greenhouse gas emissions than its peers.



