

**LEED® EB
Certified**

**Toyota Center
Houston, TX**

Certified Silver 47

Sustainable Sites 5/12

Water Efficiency 5/10

Energy & Atmosphere 12/30

Materials & Resources 8/14

Indoor Environmental
Quality 10/19

Innovation & Design 7/7

*Out of a possible 92 points

TOYOTA CENTER

115 Trees

\$70,000 Saved annually with lighting retrofits

63 Electric Submeters

33,287 Square feet of landscaped area
In an Urban environment

3,147 Tons of Greenhouse Gas
reduced in 2008



BOX OFF

PROJECT PROFILE

Toyota Center

The Green Team

PROJECT BACKGROUND

Toyota Center is currently pursuing LEED Existing Building Operations and Maintenance certification on the arena located in downtown Houston, Texas. Along with the Toyota Center team and the LEED consultant, many other service partners have been involved in this detailed plan intended to capture and maintain efficiencies of operation.

Since opening in October 2003, Toyota Center has set a new standard for sports and entertainment, becoming one of the premier live entertainment venues in the nation. Laid over the span of four city blocks, Toyota Center is home to the NBA's Houston Rockets and the AHL's Houston Aeros. Toyota Center also plays host to the nation's top concerts and touring shows. Toyota Center also plays host to the nation's top concerts and touring shows. Winner of the Allen Award for Civic Enhancement by Central Houston in 2003, "Rookie of the Year" by the Harlem Globetrotters in 2004 and a finalist for Pollstar Magazine's "Best New Concert Venue" award, Toyota Center welcomed more than 1.5 million fans during its first year alone. Toyota Center is highlighted by large open windows and some of the most comfortable seats of any arena anywhere. The arena's playing surface is set nearly 32-feet below street level giving Toyota Center the largest lower level of any arena in the nation. Coupled with the exclusive Lexus Lounge and Red and White Bistro's superior food and service, Toyota Center offers something for everyone making it the hottest spot for sports and entertainment in Houston.

Toyota Center became aware of the need for reducing energy costs, through the initial efforts for cost reductions LEED EBOM became a focus point for becoming sustainable. With the efforts of Toyota Center's staff, energy usage has consistently dropped annually and from the efforts regarding LEED EBOM even further reductions are coming.

In keeping with Leslie Alexander's vision of sustainability and operational efficiency, the Houston Rockets and Toyota Center have been working to gain certification within the LEED-EB: O&M program. We have always been aggressive with our approach to energy management, recycling, and reduction of waste. Toyota Center has a unique opportunity to serve as an industry leader in the future of sustainability. We are operating in a more environmentally-conscious manner and educating the millions of patrons that attend Toyota Center events each year regarding ways they can help. Our organization takes great pride in being recognized as one of the country's leading innovators of green practices among sporting and entertainment venues. Tad Brown, Chief Executive Officer Houston Rockets Toyota Center

FEASIBILITY PHASE

The certification project began by conducting detailed fact-gathering meetings with the Toyota Center project team in order to collect information and review the needs and requirements for the project. After determining priorities, a basic project framework was constructed and a budget projection was made. Included in the budget projections were project costs and, where applicable, payback estimates. Budgets and paybacks were generated during weekly team meetings and were approximated based upon project team experience, rough bids from contractors, and feedback from others involved with the Toyota Center campus. The team identified areas such as recycling to pursue for the long term although a credit was not achieved for this initial certification.

LEED REGISTRATION AND DOCUMENTATION PHASE

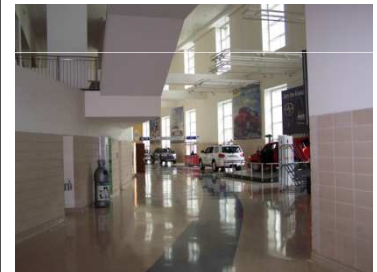
Based on the LEED feasibility study the project was approved by the owner. The project team divided its key personnel into the following "Discipline Champion" teams: Green Cleaning, Recycling and Sustainable Purchasing; Water Efficiency, Energy Efficiency and Commissioning; Building Rules and Regulations, Construction Rules and Regulations, and Building Standards; Commuting/transportation; and Site/Landscaping. Weekly meetings are conducted with a pre-designated team, with the goal of each team meeting at least once per month.

The project team has approached the challenge of such a large project by cultivating the cooperation of contractors and the general public to participate in areas such as recycling and purchasing sustainable products. Although sustainable products are now required by the owner in construction projects, practices such as recycling cannot be required of general public attending events. However, the project team has been successful in encouraging participation by highlighting the economic and societal benefits of responsible practices. Commissioning was performed to identify projects to conserve energy, improve reliability and the quality of the indoor environment and has the potential for a good payback.

Upon examination, many of the items in LEED EBOM certification were already being performed by the Toyota Center management staff but needed to be documented and clarified. Seemingly the most important item the project team has identified for the success of this project is the necessary cultural shift which must occur with both event attendees and concessions to make LEED EB certification a reality.

Through our efforts with "Green Games", aggressive recycling, public outreach initiatives featuring Rockets players, environmental support efforts, and many other programs, we are providing a significant educational support mechanism to our community and fans alike.

Tad Brown
Chief Executive Officer
Houston Rockets
Toyota Center



Toyota Center allows for expansive concourses filled with light.

Operator:
Clutch City Entertainment, Inc.
LEED Consultant:
Reihl Engineering, LLC
Project Size: 775,000 SF



Appropriate landscaping for our region and shade welcome guests of Toyota Center.

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.