



# Texas 3-step

Boeing's Houston site proves to be a triple performer when it comes to the environment **By Adam Morgan and photos by Elizabeth Morrell/Boeing**

In a quiet setting deep in the heart of Texas, Boeing employees often spend the lunch break outside. Here they stroll along man-made ponds surrounded by tall Texas pines that provide shelter to several native wildlife, including birds, squirrels, deer, frogs and ducks.

This peaceful setting is the Bay Area Boulevard building—the cornerstone of Boeing's Houston site. The 339,000-square-foot (31,500-square-meter) building sits on a 21-acre (8.5-hectare) lot tucked away in a wildlife environment at the border of metropolitan Houston and the wetlands of the Texas Gulf Coast.

Recognized in 2008 by the local ABC news affiliate as one of "Houston's Best Places to Work," the Houston site is viewed by many employees as a great setting to keep morale

high amid the fast-paced, bustling city life.

"This is a place where employees can see how important our environment truly is and the positive impact it can have on our daily lives," said LaDonna Handugan, Systems engineer for Boeing's International Space Station program and Community Involvement co-chair for REACH Houston, a networking organization for recent college graduates and new hires at Boeing.

With more than 2,500 employees, the Houston site serves as the official headquarters for Boeing Space Exploration, which includes Boeing's Constellation, International Space Station and Space Shuttle programs. Combat Systems, Global Services & Support, and Boeing Research & Technology are also represented at the site.



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Employee action to preserve the environment received recognition recently when the Houston site achieved not only its LEED and ISO 14001 certifications but also its ENERGY STAR labeling for the Bay Area Boulevard building—the first Boeing building to achieve LEED Gold status for existing construction and the first site to carry all three of these major environmental standards.

“These certifications lay the foundation for continually improving our environmental performance for reducing pollution and waste, increasing recycling rates and improving energy efficiency,” said Brewster Shaw, vice president and general manager for Boeing Space Exploration and Houston site leader.

Reaching this level of environmental achievement did not happen overnight.

After Boeing bought the six-story granite and glass building in 2004, a planning team began looking into ways to provide a more comfortable work environment and minimize the building’s energy consumption, according to Bill Richard, Houston Site Services manager.

By retrofitting the air-conditioning and heating systems, along with installing more-efficient lighting and automated controls, energy consumption at this

facility was reduced by more than 2 million kilowatt hours annually, or enough electricity to power about 170 homes.

“Like much of the work we perform in Houston, the upgrades we’ve made to our building operations are on the cutting-edge of technology,” said Paul Diggins, Houston site director.

For example, if employees work outside peak hours, they can call a phone number, enter their area’s code and expected duration for which they’ll need light, and the lights will automatically stay on during the set time.

The building air-conditioning control system is pretty smart, too. It learns over time and tunes itself to maximize efficiency by monitoring many variables such as heat loads from people and lights, outside humidity, and air temperature. The system has saved the site \$250,000 per year since it was installed in 2007.

For more information on Boeing’s environmental efforts, view the company’s 2009 Environment Report at [www.boeing.com/environment](http://www.boeing.com/environment) or visit the Environment Information Center at <http://ehs.web.boeing.com/enviro> on the Boeing intranet. ■

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**PHOTOS: (Far left)** The Bay Area Boulevard building in Houston is the first Boeing facility to be recognized for achieving three environmental standards. **(Above left)** Rick Rivas checks air-conditioning control system gauges at the Houston site. **(Above right)** Employees often take their breaks walking trails on the 21-acre (8.5-hectare) Houston site. From left are David Miller, Cables & Fluids Verification engineer; LaDonna Handugan, Systems engineer; and Daniel Nishimura, Business & Planning analyst—all with Boeing’s International Space Station program.

**The U.S. Green Building Council’s** Leadership in Energy and Environmental Design, or LEED, green building certification system is the foremost program for the design, construction and operation of green buildings. The International Organization for Standardization, or ISO, established the ISO 14001 as a global standard to continually improve an organization’s environmental goals. The ENERGY STAR program, which is co-sponsored by the U.S. Environmental Protection Agency and the Department of Energy, is dedicated to helping businesses and homeowners save money and protect the environment through energy-efficient products and practices.