Sustainability for Owners

SUSTAINABILITY SERVICES

ENERGY STAR® Benchmarking

Transwestern recognizes that a strategic approach to energy management begins with tracking a property's performance and identifying opportunities for savings. Understanding the energy and water usage of different space types associated with a typical building (such as office, retail, data centers, office server rooms, parking) is integral to sustainable and efficient building operation.

What is the ENERGY STAR Program?

ENERGY STAR, a joint effort of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy, compares the energy performance of a building against similar buildings in similar climates. Buildings are scored on a scale of one to 100 based on energy consumption and other building information. Buildings with a score of 75 or more are eligible for the ENERGY STAR Label. An ENERGY STAR Labeled building meets strict standards set by the EPA for energy performance, lighting and indoor air quality, uses less energy, is less expensive to operate and causes fewer greenhouse gas emissions than its peers.

How ENERGY STAR Can Help You

In the simplest terms, energy-efficient buildings are more competitive. Energy costs are the single largest expense for owners of commercial buildings. When buildings are more efficient, energy costs are lower, which translates into higher returns. Benchmarking a building's energy performance is the first step to reducing energy consumption.

How Transwestern Can Help You

Utilizing the ENERGY STAR Portfolio Manager™ tool, Transwestern Sustainability Services (TSS) is able to assess energy efficiency, water consumption and carbon emissions. TSS assists owners and property management teams with benchmarking facilities through three levels of service.

LEVEL I

TSS reviews the building's existing ENERGY STAR Portfolio Manager account for errors, such as misidentified and excluded space types.

LEVEL II

Many inaccurate scores exist within accounts due to mislabeled space types and meter entries. For a Level II audit, TSS works with the property team to obtain a full set of building plans; all building meters (primary and sub-meters); information on meter-monitored systems; and at least two years of utility invoices (electric, gas, water, district steam, emergency generator fuel). The team reviews the plans and verifies all existing Portfolio Manager entries for inaccuracies.

LEVEL III

The property team sends TSS the building plans and all required information in order for TSS to provide the building with an ENERGY STAR Portfolio Manager account. The sustainability team inputs all data for building plans, space types, meters and utility invoice information.

TSS then assists in developing performance metrics and provides cost savings comparisons for recommended energy conservation methods. Additionally, TSS assesses individual meter consumption to identify potential savings opportunities and cut both peak costs and off-peak costs. The property management team and building owner can also use the information to accurately track performance over time and identify other potential savings opportunities in the future.

Award-Winning Experience

ENERGY STAR AWARD 2013
PARTNER OF THE YEAR
Sustained Excellence

Transwestern has been recognized by ENERGY STAR for 11 consecutive years: as a Partner of the Year in 2004 and 2005 and a Sustained Excellence recipient in 2006 through 2014 – the first third-party commercial real estate services provider to achieve both.

Sustained Excellence Awards are given to a select group of organizations that have exhibited outstanding leadership year after year. These winners have reduced greenhouse gas emissions by setting and achieving aggressive goals and employing innovative energy efficiency approaches. These awards recognize ongoing leadership across the ENERGY STAR program, including energy-efficient products, services, new homes and buildings in the commercial, industrial and public sectors. Award winners are selected from nearly 20,000 organizations that participate in the ENERGY STAR program.

CASE STUDY:
Glen Hills Middle School – Glendale, Wis.

Built in 1971, Glen Hills Middle School is a three-story brick facility that accommodates fourth through eighth grades. Amenities include a swimming pool and two air conditioned gyms. In 2008, the school set a goal to improve overall building efficiency and coordination between building systems. Glen Hills utilized ENERGY STAR Portfolio Manager to track energy and cost improvements, but did not see the results it expected. In September 2011, TSS benchmarked Glen Hills to determine the existing efficiency of the building, which scored a 66. Over the next eighteen months, TSS helped the school to bring its rating up to a 92 as of December 2012 through commissioning the building's systems and correcting the school's ENERGY STAR Portfolio Manager account.

Glen Hills Middle School – Glendale, Wis.
Certified LEED Platinum in 2012

BENCHMARKING HIGHLIGHTS

- Reviewed building systems and operations, all building automated system (BAS) run times and set points, time schedules and sequence of operations.
- Reprogrammed BAS sequence to more closely match the operating hours of the school, reducing run times by 267 hours per week.
- Reduced chiller run time to match the occupancy periods, cutting 16 hours per week.
- Discovered that hot water boilers were installed incorrectly, causing the boilers to run constantly while maintaining a water loop temperature of 200°F. Reprogrammed the boilers' run times and lowered the water temperature to manufacturer recommendations.
- Reprogrammed solar collection system with the BAS to save natural gas consumption on heating the pool year-round.
- Performed after-hours audit to determine what building equipment, classroom equipment and lighting was left on overnight. More than half of classroom equipment was powered during unoccupied periods. By encouraging staff to power down equipment, off-peak electrical consumption has been reduced.
- Corrected all entries in ENERGY STAR Portfolio Manager once commissioning process had been completed, bringing the school's score up 26 points.

QUANTIFIABLE RESULTS

- 14 percent reduction in energy consumption per year.
- $43,607 energy cost savings per year.
- 1,781,490 kBtu reduction per year.
- Improved ENERGY STAR rating from 66 to a 92 in an 18-month period.