

ENERGY STAR

Benchmarking & Certification Advantages

for

Meeting California's Energy Efficiency Requirements

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ENERGY STAR Benchmarking & Certifications Advantages



Who Needs a High-Performance Building in California? You do!

- **AB32, the California Global Warming Solutions Act of 2006** – Requires California to reduce its GHG emissions by 15 percent to 1990 levels by 2020.
- **Zero Net Energy (ZNE) Goals** – Are targeting the reduction of GHG emissions for all new and existing commercial buildings to 40 percent below 1990 levels by the year 2030.

ENERGY STAR Benchmarking & Certifications Advantages



California Requires Your Existing Buildings to be Energy Efficient. And Prove It!

- **AB 1103: Mandatory Energy Usage Disclosure Law** – Approved in 2007 and mandates energy benchmarking and energy disclosure for non-residential buildings for property transactions.
- **AB 758: Comprehensive Energy Efficiency in Existing Buildings Law** – Approved in 2009 and requires proof of significant energy savings in existing non-residential buildings by 2020.

ENERGY STAR Benchmarking & Certifications Advantages



What You Don't Know About Meeting These Requirements Will Hurt You!

- **AB 802: Mandatory Energy Usage Disclosure Law Replacement** – Approved in 2015 now makes it much easier to access 12 months of energy use data from your local utility service providers.
- **SB 350: Clean Energy & Pollution Reduction Act** – Approved in 2015 to double energy efficiency savings by 2030 and create a building energy-use benchmarking and disclosure program.

ENERGY STAR Benchmarking & Certifications Advantages



So Where Do My Building(s) Stand and Rank for Energy Usage and Efficiency?

- How can you meet these aggressive energy reduction goals if you don't benchmark your buildings for energy use and efficiency? If you haven't already benchmarked your buildings—the time to do so is now!
- **Energy Reduction Targets Ahead:**
 - 2020 by 15 percent
 - 2030 by 40 percent
 - 2050 by 80 percent

Cost Effective ENERGY STAR Benchmarking

ENERGY STAR Portfolio Manager calculates annual energy consumption which can be compared to other similar facilities using the International Facility Management Association's (IFMA) benchmarking data.



- Evaluate and track a facility's energy consumption
- Help identify underperforming facilities
- Generate an ENERGY STAR score
- Track energy savings from implementation of energy efficient measures
- Evaluate potential energy saving measures for a facility

Setting Up a Facility for an ENERGY STAR Score



After registering as a Portfolio Manager user, the next step is to create a facility in Portfolio Manager and populate the necessary data for the building with the following:

- Essential building information
- Break out space uses that are fundamentally different from the defined core building space
- Twelve (12) months of monthly energy consumption data

Rating System



EPA uses a 1-100 scale from a survey by the DOE every 4 years called the Commercial Building Energy Consumption Survey (CBECS) based on the following building characteristics:

- Environmental
- Financial
- GHG Emissions
- Energy Use
- Water Use

Rating System (is on the “Curve”)

ENERGY STAR®
PortfolioManager®



- From 1 to 49
- From 50 to 74
- From 75 to 100

ENERGY STAR Building Categories

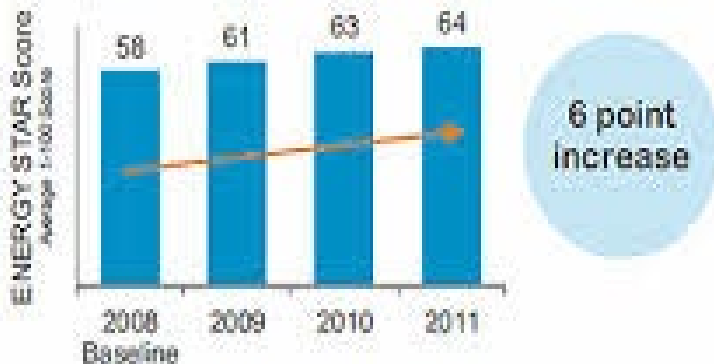
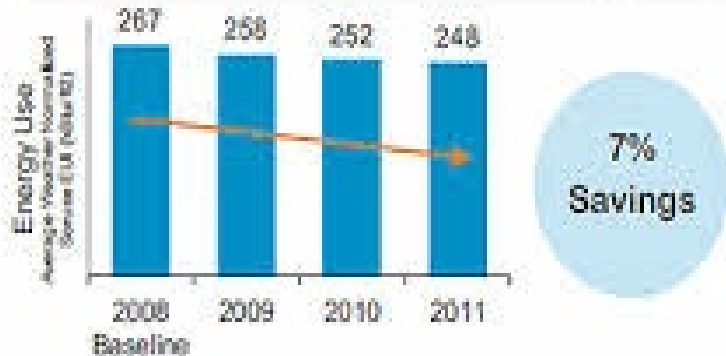


- Bank branch
- Barracks
- Courthouse
- Data center
- Distribution center
- Financial office
- Hospital (general medical & surgical)
- Hotel
- K-12 school
- Medical office

ENERGY STAR Building Categories (cont'd)



- Multi-family housing
- Non-refrigerated warehouse
- Office
- Refrigerated warehouse
- Residence hall/ dormitory
- Retail store
- Senior care community
- Supermarket/grocery store
- Wastewater treatment plant
- Wholesale club/supercenter
- Worship facility



Understanding the Facility's Performance

- From 1 to 49 = First Category
- From 50 to 74 = Second Category
- From 74 to 100 = Third Category

First Category Ranking and Performance Goals



- Score between 1 and 49
- Performing below average
- Wake-up call, underperforming
- Steps to improvement may be costly
- Investment in energy-efficient equipment
- Implement best practices for the maintenance and operation of the equipment
- Greatest potential for energy and greenhouse gas reductions

Second Category Ranking and Performance Goals



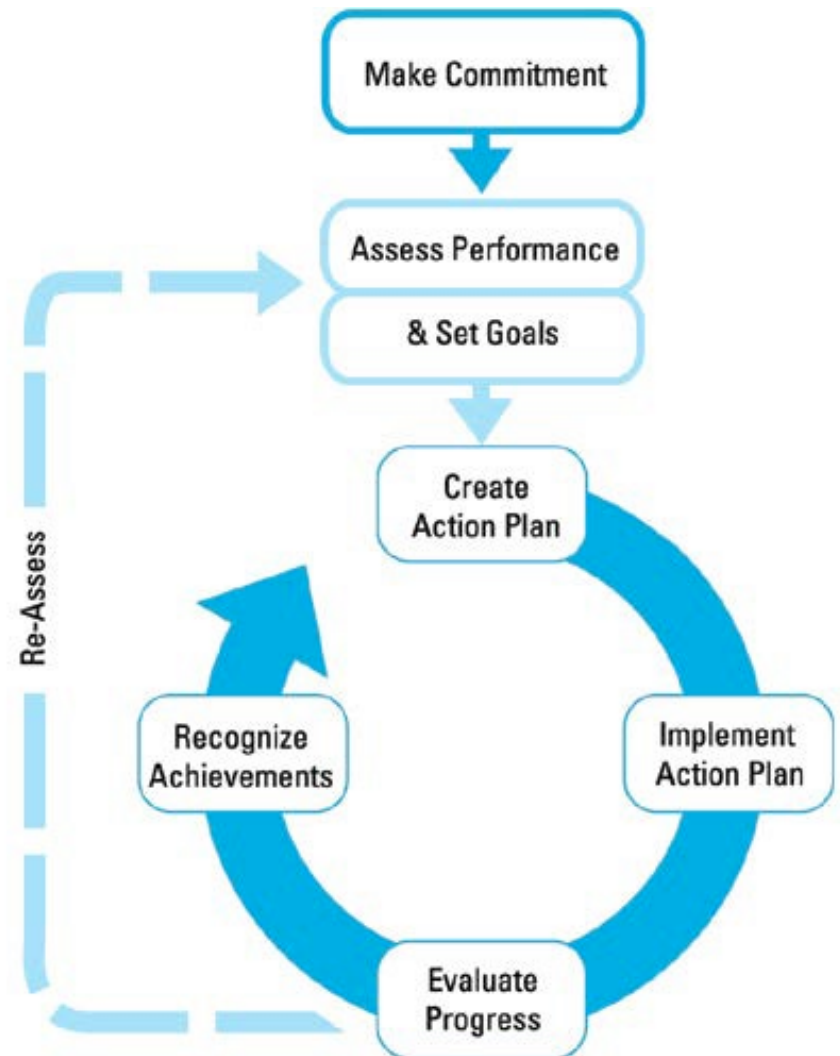
- Score between 50 and 74
- Performing at average or above average levels
- Steps for improvement not be as intensive as the first category
- Goal is to tighten up the operation of the facility
- Optimize the performance of the building's equipment for maximum energy efficiency
- Some equipment upgrades may be necessary

Third Category Ranking and Performance Goals



- Score between 75 and 100
- Performing significantly better than their peers
- Eligible to receive the ENERGY STAR certification
- Boasts reduced energy consumption and improved operating efficiency
- Use Portfolio Manager to track further improvements in operations and equipment

ENERGY STAR Guidelines for Energy Management: 7 Steps



STEP 1: Commit to Continuous Improvement

To establish their energy program, leading organizations form a dedicated energy team and/or energy champion and institute an energy policy.



- **Appoint an Energy Director**
- **Establish an Energy Team**
- **Institute an Energy Policy**

STEP 2: Assess Performance

Understanding current and past energy use is how many organizations identify opportunities to improve energy performance and gain financial benefits.



- **Gather and track data**
- **Establish baselines**
- **Benchmark**
- **Analyze**
- **Technical assessments & audits**

STEP 3: Set Goals



Setting clear and measurable goals is critical for understanding intended results, developing effective strategies, and reaping financial gains.

- **Determine scope**
- **Estimate potential for improvement**
- **Establish goals**

STEP 4: Create an Action Plan



Successful organizations use a detailed action plan to ensure a systematic process to implement energy performance measures.

- **Define technical steps and targets**
- **Determine roles and resources**

STEP 5: Implement the Action Plan

Gain the support and cooperation of key people at different levels within the organization is an important factor for successful action plan implementation.



- **Create a communication plan**
- **Raise awareness**
- **Build capacity**
- **Motivate**
- **Track and monitor**

STEP 6: Evaluate Progress



Evaluation results used by many organizations to create new action plans, identify best practices, and set new performance goals.

- **Measure results**
- **Review action plan**

STEP 7: Recognizing Achievements



Provide and seek recognition for energy management achievements as a proven step for sustaining momentum and support for your program.

- **Providing internal recognition**
- **Receiving external recognition**



Benefits of ENERGY STAR Label Certified Buildings

- 5% - 10% average lower energy and utility costs
- 35% less operating costs than similar buildings
- \$2.40/sf. average higher rental and lease rates
- 3.6% average higher occupancy rates
- 68% of adults prefer energy saving firms



CLW Enterprises Energy Challenge

Are you and your organization's goals to:

- ✓ Lowering your energy and utility costs by 5% - 10% on average?
- ✓ Achieving up to 35% less operating costs than similar buildings?
- ✓ Receiving \$2.40/sf. average higher rental and lease rates?
- ✓ Realizing 3.6% on average higher occupancy rates?
- ✓ Increasing customer/partner loyalty from the 68% of adults who prefer energy saving firms?

Great! CLW Enterprises can help.

CLW Enterprises Can Economically Help You Achieve Your Energy Efficiency and Cost Saving Goals.

Getting your existing building ENERGY STAR benchmarked and/or certified has many benefits and working with a **Green Building Facilitator (GBF)** with a **LEED AP O+M** credential as well as the International Facility Management Association's (IFMA) **Facility Management Professional (FMP)** credential can be an excellent choice for your facility.

Want to be your organization's energy star—but don't have the time and resources to utilize ENERGY STAR's comprehensive program to evaluate and measure your building's energy usage and efficiency? No problem!

CLW Enterprises can set up your **ENERGY STAR Portfolio Manager** website portal, input the necessary data, issue the evaluation reports, and provide the energy cost saving recommendations for a one-time-fee of \$1,500 to \$2,500 per building. That's a minimum cost to savings return on investment (ROI) of at least 5 to 1 against future energy cost savings.

For more information about these services and how to benchmark and/or certify your building(s), please contact **Corey L. Wilson** at **CLW Enterprises** at (951) 415-3002 or email me at CLWEnterprises@att.net or visit my website at www.CLW-Enterprises.com.



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