Tools, Resources and Services available through the United States Environmental Protection Agency
(adapted from EPA Web site April 2008)

Portfolio Manager

Portfolio Manager is an interactive energy management tool that allows healthcare facilities to track and assess energy and water consumption across an entire portfolio of buildings in a secure online environment. Portfolio Manager can help set investment priorities, identify under-performing buildings, verify efficiency improvements, and receive EPA recognition for superior energy performance.

Portfolio Manager helps track and assess energy and water consumption within individual buildings as well as across the entire building portfolio.

Portfolio Manager enables a hospital to benchmark building energy performance, assess energy management goals over time, and identify strategic opportunities for savings and recognition opportunities.

Energy Star

ENERGY STAR is a voluntary program established in 1991 by the EPA. It enables organizations of all types to achieve their best in energy efficiency

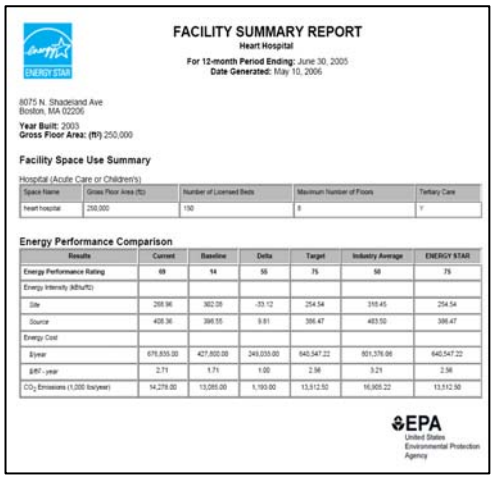
The public's recognition of the ENERGY STAR Brand has significantly increased since the program's inception. Currently, over 60% of the U.S. public recognizes this blue logo as the symbol for energy efficiency and that recognition is growing more each year.

Traditionally there have been barriers to understanding a facilities energy performance.

- There has not been a way to compare performance between facilities or technologies used
- There has not been a way to measure results in a meaningful standardized approach
- There has not been a means for unbiased third party verification

The ENERGY STAR program addresses all of these issues.

Just as EPA has developed ways by which we measure the fuel efficiency of cars, EPA has also developed a way to measure the energy efficiency of buildings. It is called the national energy performance rating system, which provides a 1 to 100 rating for a building.



FACILITY SUMMARY REPORT

Heart Hospital

For 12-month Period Ending: June 30, 2005
Date Generated: May 10, 2006

8075 N. Shadeland Ave
Boston, MA 02206

Year Built: 2003
Gross Floor Area: (ft²) 250,000

Facility Space Use Summary

Hospital (Acute Care or Children's)

Space Name	Gross Floor Area (ft2)	Number of Licensed Beds	Maximum Number of Floors	Tertiary Care
heart hospital	250,000	150	8	Y

Energy Performance Comparison

Results	Current	Baseline	Delta	Target	Industry Average	ENERGY STAR
Energy Performance Rating	69	14	55	75	50	75
Energy Intensity (kBtu/ft2)						
Site	268.96	362.08	-93.12	254.54	316.45	254.54
Source	408.36	396.55	9.81	386.47	483.50	386.47
Energy Cost						
$/year	676,555.00	427,800.00	249,055.00	640,547.22	801,376.06	640,547.22
$/ft² - year	2.71	1.71	1.00	2.56	3.21	2.56
CO_2 Emissions (1,000 lbs/year)	14,279.00	13,085.00	1,193.00	13,512.50	16,905.22	13,512.50

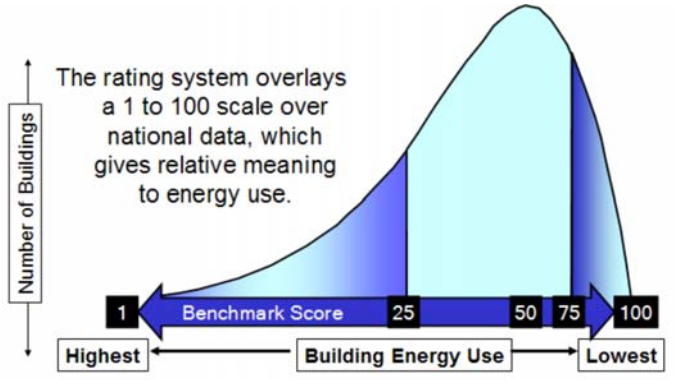
EPA
United States Environmental Protection Agency

Similar to the sticker on every new car, hospitals can now generate a FACILITY SUMMARY REPORT Statement of Energy Performance in Portfolio Manager.

It's a one-page STANDARDIZED DOCUMENT that captures vital information about your facilities' energy performance over a 12 month period

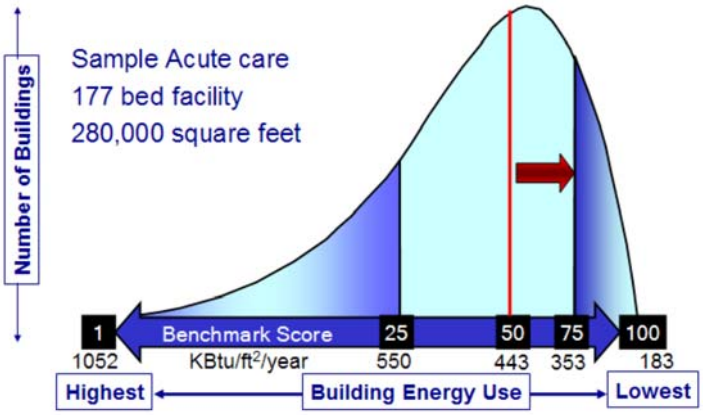
It is in a clear, concise, and user-friendly format.

Some organizations use it as a quarterly reporting document.



The Energy Performance Rating System is a scale from 1 to 100. And regardless of the sector, each building will fall somewhere along this curve in terms of energy performance. 50 is the industry average for each sector, and the top performers will be closer to 100…. while the low performers will be closer to 1

For an acute care 177 bed facility with a gross square footage of 280,000 ft2, the average energy intensity is 443 Kbtu/ft2/year. In this particular example 550 has a rating of 25, which means that in this case it is a poor performing healthcare campus.



If a healthcare campus has a rating of 50, or an average campus, and you wanted to know how much of a energy reduction would be needed to get to a 75, in this particular example, 443 minus 353 is an energy reduction of 90 kBtu/ft2/year.

(It is important to note that this number will be different for different sized hospitals and different locations.)

Although the rating system is not a diagnostic tool, nor does it identify specific buildings on campus as “good” or “bad” energy performers, it does provide general guidance on what to do next.

For campuses or medical offices with ratings in one of the bottom two quartiles (from **0 to 50**), **capital investment** opportunities will be strongest. Lower ratings can enable the facility to leverage capital for high performing energy investments.

For those campuses or medical offices scoring in the third quartile (**50 to 75**), some **optimization of existing systems, operations and maintenance** would be needed to improve energy performance.

For those facilities scoring in the top quartile (75 to 100), the opportunity to be recognized exists and there is a good opportunity to demonstrate lessons learned that can be applied to other facilities. In a multi-campus situation, the poorer performing campuses can learn about technologies and operations practices and procedures that can help improve performance.

Often people say they know their building is inefficient because it’s old, and others who assume their building is efficient because it’s new. The fact is, that is often not the case. .Very often brand new facilities that were thought to be built efficiently, some even built green, have rated very low on this scale.

So why doesn’t superior technology guarantee superior performance? Studies by EPA and others point to a significant mismatch of building systems as a very important reason for poor performance.

If equipment is oversized, they are not achieving their optimal rated efficiency. Also, systems that are not integrated, or have improper installation, tuning, poor maintenance or no attention paid to operations will cause increased energy use in facilities. Building commissioning helps to verify that proper equipment is installed and that they are operating at the intended performance level.

The point is that we don't know how our facilities perform in terms of energy efficiency until we benchmark and compare.

After making strides in energy management, a valuable piece of both E2C and ENERGY STAR **is the opportunity for recognition.**

Individual buildings that achieve a rating of 75 or higher with at least 12 months of continuous data qualify for the ENERGY STAR label.

Pictured here is an image of the ENERGY STAR Label for buildings. If the facility qualifies, the label can be displayed on the hospital or MOB to send a positive message and convey performance excellence to employees and the community.

For new buildings design goals for energy performance can be set with the Target Finder tool. In addition, recognition of designs which are intended to achieve a rating of 75 or higher is available. The actual plans can be designated as "Designed to Earn the ENERGY STAR."

ENERGY STAR has annual **Partner of the Year Awards** that are designed to recognize those organizations that have shown strong commitment to energy efficiency and have promoted ENERGY STAR. Past winners include Johnson Controls, The Trane Company, Servidyne Systems, and Avista Advantage.

Green Power Partnership

The EPAs Green Power Partnership works with a wide variety of leading organizations — from Fortune 500 companies to local, state and federal governments, and a growing number of colleges and universities. The following Top Partner Rankings highlight the annual green power purchases of leading organizations within the United States and across individual industry sectors.

These green power purchases help reduce the environmental impacts of electricity use and support the development of new renewable generation capacity nationwide. Purchase amounts reflect U.S. operations only and are sourced from U.S.-based green power resources. Organizations can meet EPA purchase requirements using any combination of three different product options (1) Renewable Energy Certificates, (2) On-site generation, and (3) Utility green power products.

Climate Leaders Partnership

EPA's Climate Leaders is an industry-government partnership that works with companies to develop long-term comprehensive climate change strategies. Partners set a corporate-wide greenhouse gas (GHG) reduction goal and inventory their emissions to measure progress. By reporting inventory data to EPA, Partners create a lasting record of their accomplishments. Partners also identify themselves as corporate environmental leaders and strategically position themselves as climate policy continues to unfold.

By becoming a Climate Leader, a healthcare organization can:

- Be identified as an environmental leader
- Increase energy efficiency and reduce energy costs

- Create a lasting record of accomplishments
- Receive technical assistance to complete a GHG inventory
- Improve management of GHG emissions and their associated risks
- Become a well-informed player in the climate change policy discussion

Partners commit to:

- Develop a corporate-wide GHG inventory including all emission sources of the six major gases
- (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) using the Climate Leaders GHG Inventory Protocol
- Set an aggressive corporate-wide GHG emissions reduction goal to be achieved over the next 5 to 10 years
- Develop a corporate GHG inventory management plan
- Report annual inventory data and document progress towards their reduction goal
- Publicize their participation, reduction goal, and accomplishments achieved through the program

In return, EPA provides recognition, including:

- National press events
- Public service announcements in major business and consumer publications
- Speaking engagements at industry conferences
- Articles in trade publications
- Case studies highlighting Partner achievements
- Full page corporate profile on the Climate Leaders Web site