

## ENERGY STAR Portfolio Manager

ENERGY STAR Portfolio Manager is an online tool created by the U.S. Environmental Protection Agency (EPA) to measure and track energy and water consumption as well as greenhouse gas (GHG) emissions. It can be used to benchmark the performance of one building or a whole portfolio of buildings against the national averages by entering the energy and water consumption data, cost information, and operational use details. Many buildings can also receive a 1 - 100 ENERGY STAR score. This score compares the building's energy performance to similar buildings nationwide. A score of 50 represents median energy performance, while a score of 75 means the building performs better than 75 percent of its peers nationwide and may be eligible for ENERGY STAR certification.

### What's New?

Portfolio Manager was originally released in 2000 and has experienced tremendous growth in users and capabilities since then. In July 2013, EPA launched a comprehensive upgrade for Portfolio Manager including:

- Improved collaboration with advanced sharing and reporting functions
- Custom tabs that let you plan and set goals to track both current and future projects
- Performance upgrades, enhanced ease-of-use and powerful new features
- Easier data entry with enhanced graphics, wizards and prompts
- Improved usability with more intuitive navigation

### Benchmarking Your Building's Energy Performance

Many people are familiar with the phrase "you can't manage what you don't measure". It is important to monitor energy and water consumption of your building to reduce operating expense and energy waste. You can easily benchmark your building's energy performance and compare it with the national average for a similar type building using Portfolio Manager. It would be helpful to have the following information handy before you create a Portfolio Manager account:

- Building Information
  - Property type and function of the building
  - Name, street address, zip code
  - Gross floor area
  - Use details (operating hours, number of computers, workers on the main shift, etc.)
- Utility Data (at least 12 consecutive months)
  - Energy consumption and cost (natural gas, electricity, water, renewable energy, etc.)

## Entering data into Portfolio Manager

There are few different options for adding buildings and updating data in Portfolio Manager.

1. *Manual entry for one building* - You can add one building at a time or update data for one building at a time by using the 'Add a Property' icon and input your energy data using 'Add Another Meter' icon in the 'Meters' tab.
2. *Spreadsheet upload* - If you are already using Excel to track data or you have a lot of buildings, you may want to import your data straight from Excel. For large portfolios, this feature helps cut the time that would otherwise be required to add each building manually. To enter your properties for the first time, you can use the 'upload and/or update multiple properties' link. You can also use the spreadsheet feature to add meters, add bills, edit basic information, and update use details.
3. *Web services* - Many leading energy services companies and utilities can exchange data directly with Portfolio Manager. These companies can upload your energy data and also extract key performance metrics such as the ENERGY STAR score.

## Energy Performance Results

After inputting the building information and utility data into Portfolio Manager, you can review the building performance and set a baseline or target under the 'Goals' tab. An example of the metrics comparison for a property or building against its target and the national median is shown below.

Metric	Baseline (Mar 2013)	Current (Aug 2013)	Target*	Median Property*
ENERGY STAR score (1-100)	70	72	75	50
Source EUI (kBtu/ft <sup>2</sup> )	56.3	52.9	52.3	72
Site EUI (kBtu/ft <sup>2</sup> )	34.1	49.6	31.7	43.6
Source Energy Use (kBtu)	986207.1	926649.3	916139.1	1261224
Site Energy Use (kBtu)	597329.7	868843.2	555288.9	763741.2
Energy Cost (\$)	10504.7729	957.564616	9765.433949557386	13423.461690553035
Total GHG Emissions (MtCO <sub>2</sub> e)	60.5274858	47.19481915	56.2674858	77.3446878

An ENERGY STAR score is the measure of the building's energy performance compared to similar buildings nationwide. The Site EUI or energy use intensity is a measure of the total energy used by the property per square foot. This is obtained by dividing the total energy consumption of the building (including electricity, natural gas, steam, chilled water consumption, etc. converted to kBtu) by the total square footage. Energy Cost, which is a significant portion of any building's operating expense is the annual cost associated with the selected 12-month time period for the property or building. The matrix also gives Source Energy Use or the total amount of all the raw fuel required to operate the property, including losses that take place during generation, transmission and distribution of the energy. Total GHG Emissions from the building's energy use is also listed.

## ENERGY STAR Certification

Applications for ENERGY STAR certification can be completed and submitted through the Portfolio Manager website. Buildings that earn a score of 75 or more should consider pursuing the certification. Currently, only certain types of buildings are eligible to receive ENERGY STAR certification and these are listed below. There are some additional criteria that need to be met in order to receive the certification which depends on the building type. If all the requirements are met, the building will have an 'Apply for ENERGY STAR certification' icon next to its ENERGY STAR score.

### *Property Types Eligible for ENERGY STAR Certification*

- ✓ Bank Branch
- ✓ Courthouse
- ✓ Data Center
- ✓ Distribution Center
- ✓ Financial Office
- ✓ Hospital (General Medical & Surgical)
- ✓ Hotel
- ✓ K-12 School
- ✓ Medical Office
- ✓ Non-Refrigerated Warehouse
- ✓ Office
- ✓ Refrigerated Warehouse
- ✓ Retail Store
- ✓ Residence Hall/Dormitory/Barracks
- ✓ Senior Care Community
- ✓ Supermarket/Grocery Store
- ✓ Wholesale Club/Supercenter
- ✓ Worship Facility

## Reporting and Sharing

The updated reporting feature allows you to generate documents that summarize important energy information and building characteristics. These include statement of energy performance, ENERGY STAR scorecard, data verification checklist, statement of energy design intent and coming soon, the progress & goals report. These documents can be used to help satisfy LEED for Existing Buildings (LEED-EB: O&M) requirements, document performance in energy service contracts, communicate energy performance with tenants, owners, or potential buyers, provide transparency and accountability to demonstrate strategic use of capital improvement funding, and demonstrate savings for an individual building quickly and accurately.

Sharing properties and data is fast and easy with Portfolio Manager. The sharing feature allows you to pass information to colleagues or other partners that are helping you to improve the performance of your portfolio. You have the capability to limit information that you share and control the level of access. Portfolio Manager also has a built-in financial tool that allows users to compare cost savings across buildings in their portfolio. By being able to quickly and clearly get figures that show cumulative investments in facility upgrades or annual energy costs, you'll be better informed to make strategic decisions about how to manage your buildings.

## Other news...

### **Building Operator Certification class providing great learning opportunity for Rebuild Michigan participants**

A Building Operator Certification (BOC) course is underway at Grand Rapids Community College and a number of Rebuild Michigan program participants are enrolled. The Rebuild Michigan program, which is administered by the Michigan Economic Development Corporation, Michigan Energy Office, assists public schools, colleges, universities, local governments, public housing authorities, nonprofits, and small commercial for profit businesses in achieving energy efficiency in their buildings through cost-effective changes. BOC is a nationally recognized training and certification program that focuses on giving building operators tools to research and pursue efficient operational methods, particularly for HVAC and lighting systems. The Michigan Energy Office offers an incentive for [Rebuild Michigan program participants](#) to earn BOC certification.

Each BOC class is taught by an instructor that specializes in that subject, and all are considered industry experts in facility maintenance and operation. They are skilled educators too with an average of 10 years of instruction experience in the workplace. “The instructors have a lot of real-world experience; this is one of those classes you look forward to attending because it really keeps your attention,” said Grand Haven Charter Township Public Services Director Mark VerBerkmoes. “I’m learning a lot.”

Rebuild Michigan participants are encouraged to watch [www.boccentral.org](http://www.boccentral.org) for information on Michigan Energy Office and utility BOC incentives, class schedules, and tuition information. For more information, contact Karen Wieber at [wieberk7@michigan.gov](mailto:wieberk7@michigan.gov) or 517-335-3756.

### **Save the Date for Special Event!**

Please save the date to join the Energy Services Coalition - MI Chapter and the Michigan Economic Development Corporation for our 3<sup>rd</sup> Annual Awards event. Join us to hear from organizations in Michigan that have used energy savings performance contracting (ESPC) for building improvements, learn how your organization can benefit, and celebrate energy efficiency successes. For more information and to RSVP for the event, contact Karen Wieber at [wieberk7@michigan.gov](mailto:wieberk7@michigan.gov) or 517-335-3756.

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