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## PORTFOLIO MANAGER - QUICK REFERENCE GUIDE

**DATA CENTERS** 

### **Rate Your Energy Performance**

Use the EPA's ENERGY STAR energy performance rating system within Portfolio Manager to rate the energy performance of your data center facilities on a scale of 1-100. Rate all of your facilities and update the data regularly to take control of your energy consumption. See page two for eligibility and data needed.

# USE PORTFOLIO MANAGER STEP-BY-STEP



SILF	ACTIVITY	ACTION
1	Access Portfolio Manager	www.energystar.gov/benchmark
2	Access your account <ul> <li>Create a new account</li> <li>Login to an existing account</li> </ul>	<ul> <li>Click REGISTER next to "New User?"</li> <li>Enter user name and password and click LOGIN. From the "Welcome" page, click ACCESS MY PORTFOLIO.</li> </ul>
3	Add a new property	Click ADD A PROPERTY on the "My Portfolio" page.
4	Specify property type	Select the appropriate option and click CONTINUE.
5	Enter general building data	Enter all required information and click SAVE.
6	Enter space use data	Go to "Space Use" section and click ADD SPACE.
		Enter a space name, select the space type, and do not change the effective date. Click CONTINUE.
		<ul> <li>Enter all required data, including IT energy configuration and consumption. Click SAVE.</li> </ul>
		Repeat until all square footage has been accounted for. For more information, see "Helpful Hints" section on next page.
7	Enter total building energy use data	Go to "Energy Meters" section and click ADD METER.
		<ul> <li>Enter meter name, energy type, and units. Answer remaining questions (typically accept all defaults.) Click SAVE.</li> <li>Select desired number of meter entries and a start data</li> </ul>
		Click CONTINUE.
		Enter energy use. Click SAVE.
		Repeat for all fuel types used in the building.
8	Review and interpret results	At the top of the "Facility Summary" page, review your results in the "Facility Performance" section.
9a 9b	Manage account and apply for recognition	<ul> <li>View your baseline and current ratings, generate a Statement of Energy Performance, set performance targets.</li> </ul>
		<ul> <li>Share data, apply for the ENERGY STAR, create a building profile, and perform other administrative tasks.</li> </ul>

ACTION

WWW.energystar.gov/benchmark E-mail: buildings@energystar.gov

#### **ELIGIBILITY CRITERIA**

- Applies to spaces specifically designed and equipped to meet the needs of high density computing equipment such as server racks used for data storage and processing.
- Typically these facilities require dedicated uninterruptible power supplies (UPS) and cooling systems.
  - \* It should not be used to represent a server closet or computer training area.

#### DATA NEEDED

- Building address including zip code
- Year built
- Gross floor area
- IT Energy Configuration
  - \* Assesses how the UPS is used and determines how IT energy must be entered into Portfolio Manager.
  - \* Meter is required at either the UPS output (preferred) or PDU (power distribution unit) input.
  - \* If there is no UPS or more than 10% of non-IT load on the UPS, alternative IT energy configurations can be selected from a drop-down menu.
- Annual IT Energy
  - \* Measures total amount of energy required by the server racks, storage silos, and other IT equipment.
  - \* Requires 12 months of IT energy (in kWh), with no gaps or overlaps between meter entries, measured at the point indicated in the IT energy configuration section (output of the UPS preferred).
  - \* Monthly measurements are recommended, roughly on schedule with utility readings, if possible.
- At least 12 consecutive months of total building energy use and cost data for all fuel types, with no gaps or overlaps between meter entries.

*Cost data is optional and is not used in the calculation of an energy performance rating.* 

#### **HELPFUL HINTS**

- Facilities dedicated to the operation of the data center should include gross floor area of the entire building, including raised floor computing space, server rack aisles, storage silos, control console areas, battery rooms, mechanical rooms for cooling equipment, administrative office areas, elevator shafts, stairways, break rooms and restrooms.
- For data centers located within larger buildings (e.g., offices):
  - \* IT energy consumption should be measured at the output to the UPS (preferred), or metered according to one of the selected IT energy configurations.
  - \* Be sure to first check if your UPS or PDU already provides the capability to collect needed monthly IT energy consumption (kWh) data before installing a new energy meter.
  - \* If there is no existing metering capability between the UPS and PDU, a meter must be installed.
  - \* Data centers that are 10% or less of the gross floor area can use Portfolio Manager generated estimated annual IT energy consumption until a meter is installed; estimates are only permitted until June 2012.
  - \* Multiple data centers within a building can be aggregated into one space in Portfolio Manager if the IT energy configurations in all data centers are identical. Make sure to aggregate the gross floor area and IT energy consumption of each data center.

#### **Rating Interpretation**

Use your rating to set improvement goals and create an action plan. If your building's energy performance rating was:

- **1–49** After implementing aggressive low-cost operational changes, you may need to invest in improving IT equipment efficiency and lowering the internal heat load, accompanied by reductions to the support and cooling load to enhance energy performance.
- **50–74** Simple, low-cost operations and maintenance practices, combined with equipment upgrades, could yield significant savings.
- **75–100** Gain recognition for your achievements and continue implementing best practices.

#### **FEATURES**

 Control account access and editing rights. On the right side of the "Facility Summary" page, go to "Sharing Data" (see 9b on page

Sharing Data Add user to share this Facility Modify list of users Transfer Facility to another user View entire Access List for this Facility

one). Click ADD to delegate access to your property to other users while retaining your access as well. Click TRANSFER to assign another user the role of "Building Data Administrator" for your property.

- Group facilities within an account. Organize properties into groups (e.g., by region, by facility type). From the "My Portfolio" page, click CREATE GROUP.
- Generate a Statement of Energy Performance. Use this resource as a management report and transactional document. Above the "Facility Performance" section of the "Facility Summary" page (see 9a on page one), click GENERATE A STATEMENT OF ENERGY PERFORMANCE.
- Track ratings and eligibility for the ENERGY STAR. From the "Facility Summary" page, under the "General Information" section (see 9a on page one), check "Eligibility for the ENERGY STAR" and click APPLY if applicable.
- Track Water Meters. At the bottom of the "Facility Summary" page, click ADD METER next to "Water Meters."
- E FRAGUERTLY View online answers to Frequently Asked Questions.
- Email the system for technical assistance.
- Access online user-support information.

### www.energystar.gov/ benchmark



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