

Benchmarking with ENERGY STAR®

U.S. Environmental Protection Agency (EPA) 2009



Washington Climate Change and Energy Efficiency Legislation



ESSSB 5854

 Climate Pollution Reduction - Energy Efficiency, an act aimed at reducing climate pollution in the built environment

ESSSB 5560

 State Agencies - Emission Reduction, an act related to state agency climate leadership

Executive Order 05-01

Establishes Sustainability and Efficiency Goals for State Operations

Executive Order 07-02

Washington Climate Change Challenge

Executive Order 09-05

Washington's Leadership on Climate Change



ESSSB 5854: Climate Pollution Reduction - Energy Efficiency



Summary of Main Portfolio Manager-related requirements:

- By 1/1/2010, GA shall establish a state Portfolio Manager master account.
- By 7/1/2010, each qualifying public agency shall:
 - Create energy benchmark for each public facility using Portfolio Manager
 - Report to GA, the EPA national energy performance rating
 - Link all accounts to the state Portfolio Manager master account
- By 7/1/2010, GA shall:
 - Make reports available through the Portfolio Manager Web site
 - Develop a technical assistance program to facilitate energy audits
- Beginning 12/1/2012, GA shall prepare a biennial report summarizing the statewide Portfolio Manager master account data.
- By 7/1/2012, qualifying public agencies must undertake a preliminary energy audit.



Benchmarking



- Benchmarking through ENERGY STAR allows you to:
 - Compare one building against a national sample of similar buildings
 - Compare all of your buildings of a similar type to each other
 - Set priorities for use of limited staff time and/or investment capital





Benchmarking



Portfolio Manager

- ➤ Benchmark the energy use of all of your buildings receive an energy use intensity (EUI). Many buildings are eligible to receive energy performance ratings on a 1-100 scale.
- ➤ Track changes in energy and water use over time in single buildings, groups of buildings, or entire portfolios.
- > Track and report cost savings and CO₂ emissions.
- > Apply for the ENERGY STAR.
- www.energystar.gov/benchmark





Ratable Space Types



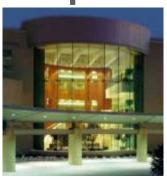
K-12 Schools



Offices



Hospitals



Supermarkets



Hotels



Retail Stores



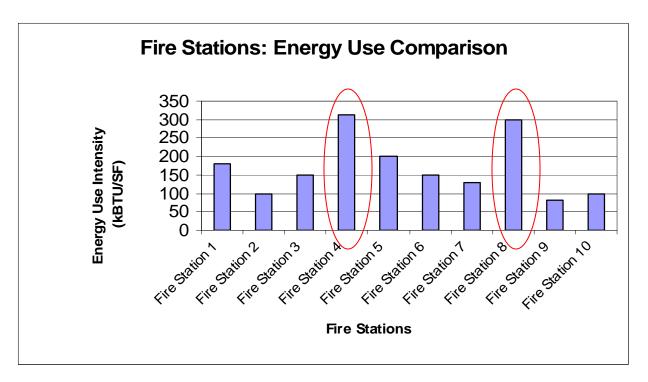
Others include: Warehouse, Residence Halls, Courthouses, Medical Offices, Financial Centers/Banks, and Wastewater Treatment Plants



Identify Best Opportunities and Set Improvement Goals



- Identify under-performing buildings to target for energy efficiency improvements.
- Estabish baselines to set goals and measure progress





Track Progress Over Time



- Set a baseline and monitor energy efficiency improvements over time
- View percent improvement in weather-normalized energy use intensity.
- Track reductions in greenhouse gas emissions.
- Monitor energy and water costs

| Facility Name | Current Source Energy Intensity | | Change from Baseline: Adjusted | Chang | a from Baseline: Energy Use Intenz | ıty | Change from Baseline: GHG | Total Energy Cost per Sq. Ft. (US |
|-----------------------|------------------------------------|---|--------------------------------|-------|------------------------------------|-----|---------------------------------|-----------------------------------|
| Facility Name | (kBtu/Sq. Ft.) | • | Energy Use (%) | | (kBtu/Sq. Ft.) | • | Emissions (MtCO ₂ e) | Dollars (\$)) |
| Fire Station 1 | 160.1 | | -12.3 | | -6.1 | | -275.86 | \$0.30 |
| Fire Station 2 | 172.6 | | -18.3 | | -10.7 | | -488.62 | \$0.37 |
| <u>Download</u> in Ex | el | | | | | | | , |



Document Savings Results



- Provide transparency and accountability to help demonstrate strategic use of capital improvement funding.
- Quickly and accurately demonstrate savings for an individual building or entire portfolio:
 - Energy use
 - GHG emissions
 - Water use
 - Energy costs
- Download performance metrics from Portfolio Manager into Excel.
- Generate a Statement of Energy Performance (SEP) for each building, summarizing important performance indicators, including energy intensity and CO₂ emissions.
- Generate an Energy Performance Report showing reductions in key indicators over a user-specified time period.

Visit <u>www.energystar.gov/benchmark</u> to get started



Before You Start



Collect building information

Building Identifiers

Name, street address, zip code for weather normalization

Space Type Data

- Other Space Types (space types that do not currently receive a rating such as museums, fire stations, etc.): Square footage
- Office: Square footage, hours of operation, Number of workers on main shift, # of PC's, Percent of gross floor area that is air conditioned, heated
- See <u>Benchmarking Toolkit</u> for space data required for other ratable space types

Energy Use

 Building specific invoice information from all purchased energy.
 Begin with at least 11 consecutive months for each fuel type for the same period and update with monthly usage data.



How to Access Portfolio Manager







• Enter building and energy consumption information into Portfolio Manager.

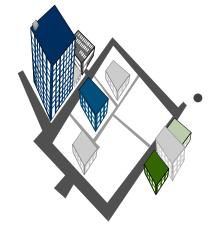


Bulk Data Upload

 Upload large sets of building data in Portfolio Manager using an Excel template.



 Use Service and Product Provider to have the rating automatically integrated into your energy information and bill handling system



Utility-based Automated Benchmarking

- Option 1: Provide utility data
- Option 2: Provide automated benchmarking services

Portfolio Manager

Four Simple Steps



- 1. Create a Portfolio Manager account
- 2. Add a property
- 3. Add a space
- 4. Add energy meters





Creating, Editing and Accessing a Portfolio Manager Account









Visit www.energystar.gov







Home > Buildings & Plants

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Millard Fillmore Gates Hospital 3 Gates Circle Buffalo, NY 14209

Buildings & Plants

Improving the energy efficiency of the places where we work, play and learn helps us save energy, save money, and fight global warming. Look for facilities that have earned the ENERGY STAR — the national mark of excellence in energy performance — and know with confidence that the facilities are energy efficient and have a smaller carbon footprint.

View All Labeled Facilities

Getting Started for...

Commercial Real Estate

Corporate Real Estate

Government

Healthcare

Higher Education

Hospitality

Industrial

K-12

Retail

Small Business

Congregations

Service & Products Providers

Utilities & Energy Efficiency Program Sponsors

Strategy

Guidelines for Energy Management

Get started by applying our proven strategy to set performance goals, create and implement action plans, assess performance and progress, and recognize your organization's achievements.

Commercial Building Design

Make energy performance a priority in your next building's design. Use <u>Target Finder</u> to set your energy performance target.

Green Buildings and Energy Efficiency

Make sure your buildings deliver environmental and financial results.

New! Toolkit and Expanded Sign Up!

Quick Finder

Target Finder

ENERGY STAR Challenge

ENERGY STAR Leaders

Earn the ENERGY STAR

Purchasing & Procurement

Service Providers Directory

Find Labeled Buildings and

Communications Materials

Training





PORTFOLIO MANAGER

EPA's system for helping you track and improve energy efficiency across your entire portfolio of buildings.

New User? Register

Username:

Password:



Forgot your username?

Forgot Your Password?



WHAT'S NEW IN PORTFOLIO MANAGER

ENERGY STAR Labeled Building Press Release Announcement Learn More

Water Treatment and Distribution Facilities

The EPA is pleased to announce the addition of Water Treatment and Distribution Facilities to Portfolio Manager. Learn More

Portfolio Manager Enhancements (Spaces Not Eligible to Receive a Rating)

Portfolio Manager now provides users the ability to manage buildings that are eligible to receive a rating as well as those that are not - all within the same online platform. Learn More

ENERGY STAR Labeled Buildings





Ada County Courthouse & Administration

200 W Front Street Boise, ID 83702

Read Profile

About Portfolio Manager

- Learn what Portfolio Manager can do for your organization
- Take the Portfolio Manager Tour
- Explore some Frequently Asked Questions about our October 1, 2007 Updates
- Train on how to use Portfolio Manager
- ements to benchmark your facility
- Import facility data

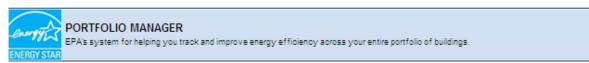
Success through ENERGY STAR

- Learn about ENERGY STAR Leaders that have improved organization-wide
- Take the ENERGY STAR Challenge improve your buildings' energy efficiency by 10%
- Find buildings that have earned the ENERGY STAR

Contact Us | Privacy Policy | Browser Requirements **Buildings & Plants**







Account Information

Please complete the following information to set up your account in Portfolio Manager.

| ★ REQUIRED | |
|-------------------------------|---------------------------------------------------------------------------------|
| *Username: | |
| Your password must be between | 8 and 32 characters in length (letters and numbers only; no special characters) |
| *Enter Password: | |
| *Re-Enter Password: | |
| | |
| *First Name: | |
| | |
| *Last Name: | |
| *E-mail: | |
| Title: | |
| Organization: | |
| Address: | |
| | |
| • | |
| City: | |
| State: | <u> </u> |
| ZIP Code: | |
| Country: | United States |
| Phone: | |





| to the second | the second second | | 12.25 | | | 6 200 |
|---------------|-------------------|--------|--------------|------|------------|----------------|
| Indicate vour | organization's | annual | activity for | each | commercial | facility area: |

| *Manage/Upgrade: | ٧ |
|------------------|---|
| *Own: | ¥ |
| *Develop/Build: | ٧ |

(Optional) Master Account Feature (for Sharing Facilities)

By selecting the checkbox below, you will add your username and organization name to the Portfolio Manager Master Account registry. Master Accounts are intended to help users who need to track a large number of facilities managed by other Portfolio Manager users. Examples of appropriate use of the Master Account designation include:

- An association running an energy efficiency campaign might use a Master Account to track the progress of its members.
- A local or state government running an energy efficiency campaign might use a Master Account to track the progress of its
 constituents.
- A company or organization that is benchmarking a large number of facilities might create a Master Account to track the performance of its entire organizational portfolio.

By identifying your account as a "Master Account", your user and organization name will display for ALL Portfolio Manager users who wish to share facilities. Users who want to share facilities with you will be able to view and select your user and organization name during this process.

Those needing to share only a small number of buildings are encouraged to use Portfolio Manager's regular sharing feature and are asked NOT to set up a Master Account. Learn more about Master Accounts.

Display my user and organization name to ALL Portfolio Manager users who wish to share facilities with my account.





Editing an Account













Home > My Portfolio > Account Information

Account Information

* REQUIRED

Please complete the following information to set up your account in Portfolio Manager.

| *Username: | COOKBOOK2 |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If you wish to change your pas fields blank. | sword, do so here. Your new password must be between 8 and 32 characters in length (letters and numbers only; no special characters). Otherwise, leave these |
| Enter Password: | |
| Re-Enter Password: | |



Accessing Your Account















Home

Welcome to Portfolio Manager

Access My Portfolio >

Skip this page on next login

You're in good company when you use EPA's Portfolio Manager to manage the energy performance of properties you own, manage, or hold for investment. Thousands of organizations have used Portfolio Manager to benchmark the energy performance of their buildings, track improvement, and apply for recognition from EPA:

- Top-performing buildings can earn the ENERGY STAR, the national symbol for protecting the environment through energy efficiency; and
- Organizations with building portfolios that show a 10%, 20%, 30% (or more) reduction in normalized energy use or achieve a 75 rating average, can earn ENERGY STAR Leaders recognition.

Portfolio Manager provides a secure environment for centralized and decentralized organizations to share facilityspecific energy information, with features that allow you to group buildings, view average ratings across a group, control access to building data, and more.

Building Types eligible for energy performance rating include:

- Offices
- Bank/Financial Institutions
- Courthouses
- K-12 Schools
- Hospitals (Acute Care and Children's)
- Hotels
- Retail Stores
- Supermarkets
- Residence Halls/Dormitories
- Warehouses
- Medical Offices

News and Announcements

ANNOUNCEMENT:

Important Notice Portfolio Manager System Down Time

Portfolio Manager will be UNAVAILABLE intermittently for maintenance on Saturday, March 1st, 2008.

Water Treatment and Distribution Facilities

The EPA is pleased to announce the addition of Water Treatment and Distribution Facilities to Portfolio Manager. Water Utilities will now be able to track and improve energy consumption and emissions by entering and managing data in Portfolio Manager. Learn More

Portfolio Manager Enhancements (Spaces Not Eligible to Receive a Rating)

Portfolio Manager now provides users the ability to manage buildings that are eligible to receive a rating as well as those that are not - all within the same online platform. Learn More

Applying for the ENERGY STAR just got easier!

Portfolio Manager now allows you to apply for the ENERGY STAR for a single building or multiple buildings at once. Learn More











PORTFOLIO MANAGER













Home > My Portfolio

| Portfolio Averages | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|--|--|--|
| Baseline Rating: 40 Current Rating: 14 Facilities Included: 6 Facilities Included: 7 | | | | | |
| Portfolio Adjusted Percent Energy Reduction: No Reduction Facilities Included: 9 | | | | | |
| Averages are weighted by Total Floor Space. <u>More about Baselines</u> <u>More about Adjusted Percent Energy Reduction</u> | | | | | |
| | dent Energy Neobotron | | | | |
| Portfolio | Averages stewater Treatment Facilities) | | | | |
| Portfolio | Averages | | | | |
| Portfolio Adjusted Percent En | Averages stewater Treatment Facilities) Current Rating: 61 | | | | |

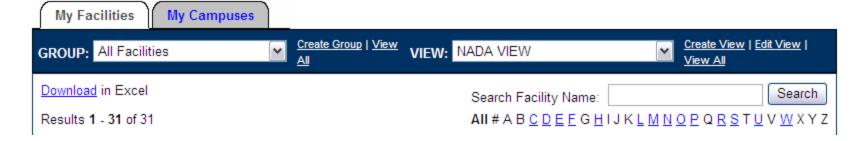
Add a Property

Work with Facilities

Import Facility Data Using Templates Update Multiple Meters **Share Facilities** Request Energy Performance Report

Apply for Recognition

Apply for the ENERGY STAR **ENERGY STAR Leaders**





Add a Property

Property Type

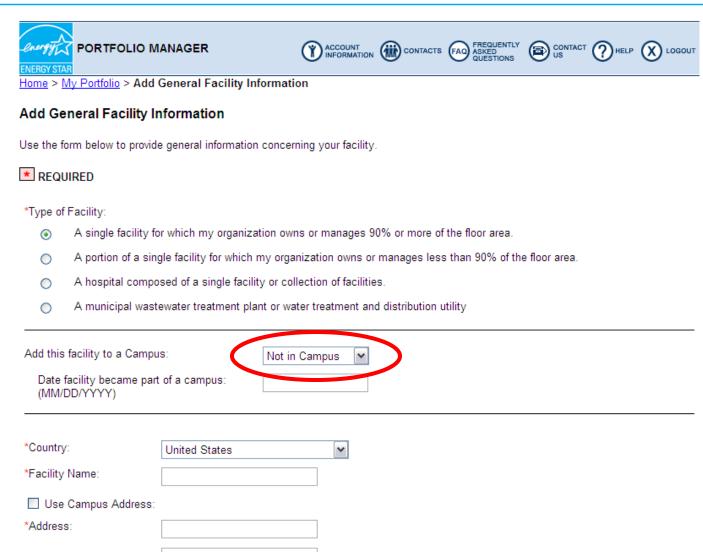
What kind of property would you like to add?

- single facility for which my organization owns or manages 90% or more of the floor area.
- A portion of a single facility for which my organization owns or manages less than 90% of the floor area.
- A hospital composed of a single facility or collection of facilities.
- O A municipal wastewater treatment plant or water treatment and distribution utility
- A campus or other collection of multiple facilities at the same geographic location. What is this?









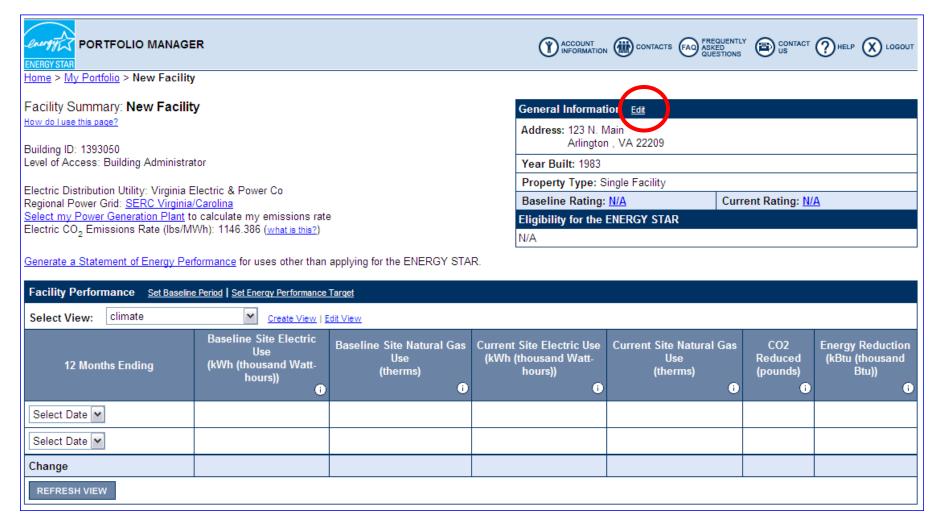




| | *Country: | United States | |
|---|----------------------------------------------------------------|----------------------------------------------|--|
| | *Facility Name: | | |
| | Use Campus Address: | | |
| | *Address: | | |
| | | | |
| | *City: | | |
| | *State: | Select State | |
| | County: | | |
| (| *ZIP Code: | | |
| | *Year Built: | | |
| | Select the Organization the Add/Edit Contacts and Organization | | |
| | Select a primary Service Add/Edit Contacts and Orga | and Product Provider for this facility: None | |
| | | CANCEL | |

Editing a Property









Adding and Editing a Space



Adding a Space

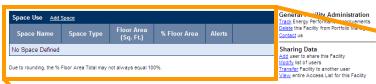


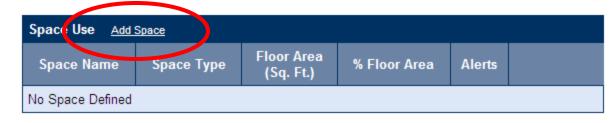
Electric Distribution Utility: Niagara Mohawk Regional Power Grid: NPCC Upstate IV Select my Power Generation Plant to calculate my emissions rate Electric CO₂ Emissions Rate (lbs/MWh): 819.684 (what is this?)

| Property Type: Single Facility | | | | | | |
|--------------------------------|---------------------------------|--|--|--|--|--|
| Baseline Rating: N/A | Current Rating: N/A | | | | | |
| Eligibility for the ENERGY S | Eligibility for the ENERGY STAR | | | | | |
| N/A | | | | | | |

Generate a Statement of Energy Performance for uses other than applying for the ENERGY STAR.







Due to rounding, the % Floor Area Total may not always equal 100%.



Adding a Space





Home > My Portfolio > New Building > Add a Facility Space

Add a Facility Space

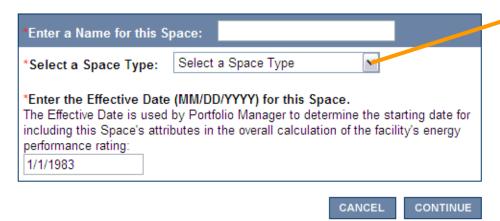
This facility must have at least one defined space and all defined space(s) must account for 100% of the facility's floor area combined. Define more than one space if:

1) A portion of the facility is unique (e.g., a restaurant within a building predominantly used as a this Space:

2) Usage patterns are unique (e.g., one tenant uses the facility much longer hours than others).

Note: If your space is not listed below, please select "Other." You will have an opportunity to fu following page. More information about selecting space types

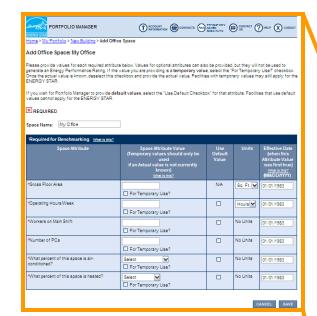
* REQUIRED



Select a Space Type Select a Space Type Date Bank/Financial Institution used |Courthouse ine the startin tion of Hotel/Motel be rating: K-12 School Medical Office Office Residence Hall/Dormitory Retail Supermarket/Grocery Warehouse and Storage Computer Data Center Other Parking Swimming Pool

Adding a Space





| Space Name: Office | | | | |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|-----------------------------------------------------------------------------------------------------|
| *Required for Benchmarking What is | this? | | | |
| Space Attribute | Space Attribute Value (Temporary values should only be used if an Actual value is not currently known) <u>What is this?</u> | Use Default Value | Units | Effective Date (when this Attribute Value was first true) What is this? (MM/DD/YYYY) |
| *Gross Floor Area | ☐ For Temporary Use? | N/A | Sq. Ft. | 01/01/1889 |
| *Weekly operating hours | ☐ For Temporary Use? | | Hours 🕶 | 01/01/1889 |
| *Workers on Main Shift | ☐ For Temporary Use? | | No Units | 01/01/1889 |
| *Number of PCs | ☐ For Temporary Use? | | No Units | 01/01/1889 |
| *What percent of this space is air- conditioned? | Select For Temporary Use? | | No Units | 01/01/1889 |
| *What percent of this space is heated? | Select For Temporary Use? | | No Units | 01/01/1889 |



Editing a Space



| Space Use Add Space | | | | | |
|---------------------|------------|----------------------------|--------------|--------|--------------|
| Space Name | Space Type | Floor Area (Sq. Ft.) | % Floor Area | Alerts | |
| My Office | Office | 100,000 | 100 | | Delete Space |
| Total | | 100,000 | 100 % | | |

More than 50% of your building is defined as Office. This building cannot be rated. You will be compared to the national average of Office. Click to learn more.



Editing a Space



Edit Office Space: My Office

To edit a space attribute, please select the "Edit" link at the far right of each row.

★ REQUIRED

*Space Name:

My Office

CANCEL

SAVE

| Current Space Attribute Values What is this? | | | | | | | | |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|-----------------------------------------------------------------------------------------------|-----------------|-------------|--|--|
| Space Attribute | Space Attribute Value (Temporary values should only be used if an Actual value is not currently known) What is this? | Use Default Value | Units | Effective Date (when this Attribute Value was first true) What is this? (MM/DD/YYYY) | Last Updated By | \bigcirc | | |
| Gross Floor Area (required for benchmarking) | 100000.0000 | N/A | Sq. Ft. | 01/01/1983 | сооквоок2 | <u>Edit</u> | | |
| Operating Hours/Week (required for benchmarking) | 65.0000 | | Hours | 01/01/1983 | сооквоок2 | <u>Edit</u> | | |
| Workers on Main Shift (required for benchmarking) | 20.0000 | | | 01/01/1983 | сооквоок2 | Edit | | |
| Number of PCs (required for benchmarking) | 20.0000 | | | 01/01/1983 | сооквоок2 | <u>Edit</u> | | |
| What percent of this space is air-conditioned? (required for benchmarking) | 50% or more | | | 01/01/1983 | сооквоок2 | <u>Edit</u> | | |
| What percent of this space is heated? (required for benchmarking) | 50% or more | | | 01/01/1983 | сооквоок2 | <u>Edit</u> | | |



Editing a Space





PORTFOLIO MANAGER











Home > My Portfolio > WA Test Office > Edit Office Space Attribute

Edit Office Space Attribute: Test Office

Please provide a value for the attribute below. If the value you are providing is a temporary value, select the "For Temporary Use?" checkbox. Once the actual value is known, deselect this checkbox and provide the actual value. Facilities with temporary values may still apply for the ENERGY STAR.

Do you want to undate this auripute value with new data, or correct data mistakes?

Use this option if the attribute's value has changed recently. Use this option if you entered an incorrect value by mistake and need to correct it. Update: This attribute changed recently. Correct: This attribute was entered in error.

| Edit Space Attribute Willate Unio: | | | | |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|----------------------|-----------|-------------------------------------------------------------------------------------------------------|
| Space Attribute | * Space Attribute Value (Temporary values should only be used if an Actual value is not currently known) What is this? | Use Default Value | Units | * Effective Date (when this Attribute Value was first true) What is this? (MM/DD/YYYY) |
| Gross Floor Area (required for benchmarking) | 50000 For Temporary Use? | N/A | Sq. Ft. ▼ | 01/01/1959 |

CANCEL

SAVE



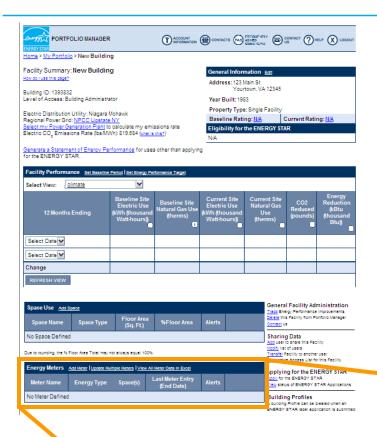


Adding and Editing Energy Meters



Adding Energy Meters









Adding Energy Meters



| Add Energy Meter | | Ordert on France Tree | la a |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------|
| *Enter the Meter Name: | | Select an Energy Type Select an Energy Type | <u> </u> |
| *Apply this meter to the follo | wing (check all that apply); | Electricity Natural Gas Fuel Oil (No. 2) | |
| Office | | District Steam District Chilled Water - Electric-Driven Chiller | |
| Select the Meter Type: | | District Chilled Water - Absorption Chiller using Natural Gas | |
| *Energy Type: | Select an Energy Type | District Chilled Water - Engine-Driven Chiller using Natural Gas | |
| *Units: | Select Units 🕦 | Propane Liquid Propane Other | |
| | cility Energy Use? total energy use by including this meter s facility's total energy use will inflate the actual value | Kerosene Fuel Oil (No. 1) Fuel Oil (No. 4) Fuel Oil (No. 5 and No. 6) | |
| Is this meter currently activ | Diesel (No. 2) Coal (anthracite) | | |
| *Will an Energy Service Prov YOs No ⊙ | rider provide data for this meter through Automated Benchmarking Services? | Coal (bituminous) Coke Select Units | |
| *Select the Energy Service Prov Select an Energy Service Prov What is the meter ID given by th (Please contact the Energy Ser | rovider | Select Units ccf (hundred cubic feet) cf (cubic feet) Gallons kBtu (thousand Btu) kcf (thousand cubic feet) | |
| Temporary Energy Data | | KLbs. (thousand pounds) | |
| * Are temporary values bein | kWh (thousand Watt-hou MBtu (million Btu) MCF(million cubic feet) MLbs. (million pounds) | ırs) | |
| | | CANCEL SAVE MWh (million Watt-hours pounds therms ton hours | i) |
| O EDA | | tons | |



Adding Energy Meters

















Home > My Portfolio > New Building > Add Meter Entries

Add Meter Entries: E1

Please select the number of meter entries to add and enter the start date for these meter entries.

▼ REQUIRED

| Select Number of Meter Entries to be added and Start Date for first entry: | | | | |
|----------------------------------------------------------------------------|-----------------------------|-------------|---------------------------|--|
| Meter Entries to Add | *Start Date (MM/DD/YYYY) | Energy Type | Units | |
| 12 Month(s) | | Electricity | kWh (thousand Watt-hours) | |
| | | | CANCEL CONTINUE | |



Entering Energy Use

















Home > My Portfolio > New Building > Enter Energy Use

Enter Energy Use: E1

Please enter the energy use for each meter entry below. Portfolio Manager requires that entries are for consecutive time periods; only one day of overlap or one day of gap can exist between meter entries to be eligible to generate an Energy Performance Rating.

If you are accounting for "sold" energy, indicate this by entering a negative energy use for the appropriate time period.

Meter Information

Fuel Type: Electricity (kWh (thousand Watt-hours)) Space(s): Entire Facility

| Start Date (MM/DD/YYYY) | End Date (MM/DD/YYYY) | Energy Use (kWh (thousand Watt-hours)) | Cost-US Dollars (optional) |
|----------------------------|--------------------------|-------------------------------------------|-------------------------------|
| 10/29/2008 | 11/28/2008 | (KYIII (210032113 YIGU 110313)) | s |
| 11/29/2008 | 12/28/2008 | | s |
| 12/29/2008 | 01/28/2007 | | s |
| 01/29/2007 | 02/28/2007 | | s |
| 03/01/2007 | 03/28/2007 | | s |
| 03/29/2007 | 04/28/2007 | | s |
| 04/29/2007 | 05/28/2007 | | s |
| 05/29/2007 | 08/28/2007 | | s |
| 08/29/2007 | 07/28/2007 | | s |
| 07/29/2007 | 08/28/2007 | | s |
| 08/29/2007 | 09/28/2007 | | s |
| 09/29/2007 | 10/28/2007 | | s |



Editing Energy Meters

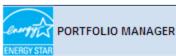


| Energy Meter | Energy Meters Add Meter Update Multiple Meters View All Meter Data in Excel | | | | | |
|--------------|---------------------------------------------------------------------------------|-----------|--------------------------------|--------------------------------------------------|---------------------|--|
| Meter Name | Energy Type | Space(s) | Last Meter Entry (End Date) | Alerts | | |
| Meter 1 | Electricity (kWh (thousand Watt-hours)) | My Office | 12/31/2005 | Data > 120 days old. Less than one year of data. | <u>Delete Meter</u> | |



Editing Energy Meters

















Home > My Portfolio > New Building > Edit Energy Use

Edit Energy Use: E1

Please enter the energy use for each meter entry below. Portfolio Manager requires that entries are for consecutive time periods; only one day of overlap or one day of gap can exist between meter entries to be eligible to generate an Energy Performance Rating.

If you are accounting for "sold" energy, indicate this by entering a negative energy use for the appropriate time period.

Meter Information Edit

Fuel Type: Electricity (kWh (thousand Watt-hours))

Space(s): Entire Facility

| | | | | Download N | Meter Data in Excel | | |
|-----------------|--------------------------|--------------------------|-------------------------------------------|-------------------------------|---------------------|--|--|
| Edit Energ | Edit Energy Use: | | | | | | |
| | | | | | | | |
| Add Meter i | Entries | | | | | | |
| Remove Entry | Start Date (MMDDYYYY) | End Date (MM/DD/YYYY) | Energy Use (kWh (thousand Watt-hours)) | Cost-US Dollars (optional) | Last Updated By | | |
| | 03/01/2007 | 03/28/2007 | 2000.00 | s 100 | сооквоок2 | | |
| | 01/29/2007 | 02/28/2007 | 1000.00 | g 50.00 | сооквоок2 | | |
| | 12/29/2008 | 01/28/2007 | 2500.00 | g 125.00 | COOKBOOK2 | | |
| | 11/29/2008 | 12/28/2008 | 2000.00 | s 100.00 | COOKBOOK2 | | |
| | 10/29/2008 | 11/28/2008 | 1000.00 | g 50.00 | сооквоок2 | | |





Adding Meter Entries





PORTFOLIO MANAGER

ACCOUNT INFORMATION CONTACTS FAQ PREQUENTLY SKED US CONTACT HELP X LOGOUT US US OF THE PROPERTY OF THE PROPERT







Home > My Portfolio > HED Focus Test > Edit Energy Use

Edit Energy Use: 1345678912-E

Please enter the energy use for each meter entry below. Portfolio Manager requires that entries are for consecutive time periods; only one day of overlap or one day of gap can exist between meter entries to be eligible to generate an Energy Performance Rating.

If you are accounting for "sold" energy, indicate this by entering a negative energy use for the appropriate time period.

Meter Information Edit

Fuel Type: Electricity (kWh (thousand Watt-hours))

Space(s): Entire Facility

Download Meter Data in Excel **Edit Energy Use:** Add Meter Entries Remove **Start Date** End Date **Energy Use** Cost - US Dollars Last Updated (kWh (thousand Watt-hours)) Entry 08/27/2008 by COOKBOOK2 03/16/2008 04/15/2008 80000.00 \$ 6000 \$ 6000 08/27/2008 by COOKBOOK2 02/16/2008 03/15/2008 80000.00 08/27/2008 by COOKBOOK2 01/16/2008 02/15/2008 80000.00 \$ 6000 08/27/2008 by COOKBOOK2 12/16/2007 01/15/2008 80000.00 \$ 6000 08/27/2008 by COOKBOOK2 11/16/2007 12/15/2007 80000.00 \$ 6000 08/27/2008 by COOKBOOK2 10/16/2007 80000.00 \$ 6000 11/15/2007



Removing Data



| | | | | | Download Meter Data in Excel |
|------------------|----------------------------|--------------------------|-------------------------------------------|---------------------------------|------------------------------|
| Edit Energy Use: | | | | | |
| Add Meter En ies | | | | | |
| Remove Entry | Start Date (MM/DD/YYYY) | End Date (MM/DD/YYYY) | Energy Use (kWh (thousand Watt-hours)) | Cost - US Dollars (optional) | Last Updated |
| V | 03/16/2008 | 04/15/2008 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| | 02/16/2008 | 03/15/2008 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| ✓ | 01/16/2008 | 02/15/2008 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| ✓ | 12/16/2007 | 01/15/2008 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| | 11/16/2007 | 12/15/2007 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| | 10/16/2007 | 11/15/2007 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| V | 09/16/2007 | 10/15/2007 | 80000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| | 08/16/2007 | 09/15/2007 | 70000.00 | \$ 6000 | 08/27/2008 by COOKBOOK2 |
| | 07/16/2007 | 08/15/2007 | 70000.00 | s | 08/27/2008 by COOKBOOK2 |
| | 06/16/2007 | 07/15/2007 | 70000.00 | \$ | 08/27/2008 by COOKBOOK2 |
| | 05/16/2007 | 06/15/2007 | 70000.00 | \$ | 08/27/2008 by COOKBOOK2 |
| | 04/16/2007 | 05/15/2007 | 70000.00 | \$ | 08/27/2008 by COOKBOOK2 |





Example





Courthouse Test

Facility Summary: **Courthouse Test**

How do I use this page?

Home > My Portfolio >

Building ID: 1416155

Level of Access: Building Data Administrator

Electric Distribution Utility: Virginia Electric & Power Co (change)

Regional Power Grid: SERC Virginia/Carolina

Select my Power Generation Plant to calculate my emissions rate Electric CO₂ Emissions Rate (lbs/MWh): 1146.386 (what is this?)

Generate a Statement of Energy Performance for uses other than applying for the ENERGY STAR.

| General Information Edit | | |
|----------------------------------------|--|--|
| Address: Herndon, VA 20120 | | |
| Year Built: 2005 | | |
| Property Type: Single Facility | | |
| Baseline Rating: 88 Current Rating: 88 | | |
| Eligibility for the ENERGY STAR | | |
| Eligible to Apply for the ENERGY STAR | | |

ACCOUNT CONTACTS FAQ ASKED QUESTIONS

| Facility Performance Set Baseline | Facility Performance Set Baseline Period Set Energy Performance Target | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------|-------|------------|----------------------|--|--|
| Select View: Summary: Energy | Select View: Summary: Energy Use Create View Edit View | | | | | | |
| Current Rating (1-100) Current Site Energy Intensity (kBtu/Sq. Ft.) Current Site Energy Energy Intensity (kBtu/Sq. Ft.) Current Source Energy Intensity (kBtu/Sq. Ft.) Current Source Energy Reduction per Sq. Ft. (kBtu/Sq. Ft.) Energy Reduction per Sq. Ft. (kBtu/Sq. Ft.) | | | | | Energy Use Alerts | | |
| December 2007 (Current) | 88 | 50.3 | 117.5 | 1.3 | 0.8 | | |
| August 2007 (Baseline) | 88 | 51.7 | 119.2 | No Savings | No Savings | | |
| Change 0 1.4 1.7 -1.3 | | | | | | | |
| REFRESH VIEW | REFRESH VIEW | | | | | | |

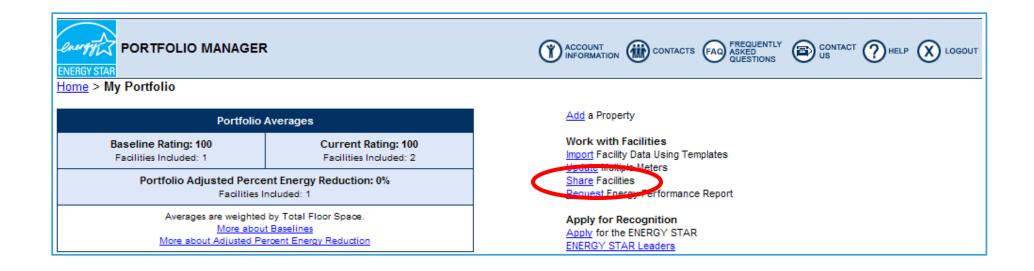




Sharing Facilities













Home > My Portfolio > Share Facilities (Step 1)

Select User or Master Account

Users with whom you share facilities will now be able to see your name and e-mail address on their Facility Summary page for that shared facility. In addition, users will also have the option to select your name and email address to appear in their custom views. Select Cancel if you do not wish to share any facilities.

Portfolio Manager provides the ability to share multiple facilities from your account with other users of the system in a single transaction. Users with whom access is being shared or removed MUST have a Portfolio Manager user account. To share facilities, select a Portfolio Manager user in Step 1.

If you are only removing access to facilities in your account, select "Remove this User's Access" in Step 1 after selecting a user from the Current Access List or enter a username in the textbox. You will then be able to select all of the facilities from which you want to remove this user's access.

| STEP 1: Select the account to which you want to grant access, modify existing access or remove access rights. |
|---------------------------------------------------------------------------------------------------------------|
| Portfolio Manager User: |
| User from my current access list: Select User |
| - OR - |
| Enter Portfolio Manager Username: |
| - OR - |
| Select a Portfolio Manager Master Account: |





| Energy ENERG | PORTFOLIO MANAGER | ACCOUNT INFORMATION CONTACTS FAD FREQUENTLY SKED CONTACT HELP X LOGOUT | | | | | |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 1922 | > My Portfolio > Share Facilities (Ste | | | | | | |
| CTE | P 2: Select the set of Access Rights | you want to provide this User. | | | | | |
| Acc | ess Role | Access Rights | | | | | |
| • | Facility/Profile Editor | (1) Edit all Data for this Facility; (2) Generate a Statement of Energy Performance; (3) Submit an ENERGY STAR Building Application; (4) Create/Edit a Building Profile | | | | | |
| 0 | acility Editor | 1) Edit all Data for this Facility; (2) Generate a Statement of Energy Performance; (3) Submit an ENERGY STAR Building Application; May NOT create/edit a Building Profile | | | | | |
| 0 | O Profile Editor 1) Create/Edit a Building Profile; May NOT edit any other data for this facilty, generate a Statement of Energy Performance or submit an ENERGY STAR Building Application | | | | | | |
| 0 | Read Only | Read Access only; May NOT edit any data for this facilty, generate a Statement of Energy Performance, submit an ENERGY STAR Building Application or create/edit a Building Profile | | | | | |
| Opt | ional Rights (rights that are added to | the selected access role) | | | | | |
| 100000000000000000000000000000000000000 | this user set a baseline for the shar e: There is only one baseline date per f | | | | | | |
| (Not | Can this user provide access to the shared facilities with other users? O Yes O No (Note: A user cannot delegate any access role greater than their own. See table above. All users who are given this right will be able to assign this right to other users.) | | | | | | |
| | Can this user delete the shared facilities from your account? O Yes O No (Note: This right is reserved only for Facility/Profile Editors or Facility Editors.) | | | | | | |
| | | | | | | | |
| STF | P 3: Specify the group from this use | er's account to place the shared facility(ies). <u>Learn more</u> about sharing into groups. | | | | | |
| Ma | Main Portfolio 🗸 | | | | | | |
| | | | | | | | |
| | | CANCEL CONTINUE | | | | | |



















Home > My Portfolio > Share Facilities (Step 1) > Share Facilities (Steps 2 and 3) > Share Facilities (Step 4)

Select Facilities to Share with State of H Clean Energy

Select all facilities for which you would like to provide this user with access. To remove access, uncheck the checkbox next to that facility. Note: you will only be able to share facilities that you currently have access to share.

The access role and rights you selected in Step 2 are:

Access Role: Facility/Profile Editor

Able to Set Baseline? Yes

Able to Delegate Access? No

Able to Delete Facility? No

Accessible to User through: Main Portfolio

The "Current Access Level" columns allow you to see whether this user has already been provided access to this facility by you or another user. If you choose to change the access role here, your selection will replace the current access role.

If the access role or optional rights for a particular facility listed below in the "New Access Level" columns do not match those listed above, you do not have access to share that facility at the level you have chosen in Step 2. You can either choose to select the recommended access role/rights listed in the "New Access Level" columns below or provide a different level of access to that user at a later date.

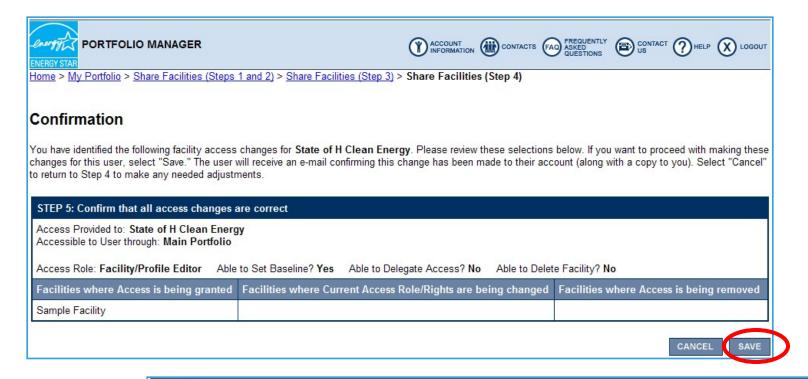
| STE | STEP 4: Select all facilities in your account that you would like to share with State of H Clean Energy. | | | | | |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------|------------------------------|----------------------|-------------------------|-------------------------------------------------|
| Select Facilities to Share (uncheck to Remove Access) | | Facility Name | Current Access L | Current Access Level | | |
| | | | Access Role (provided by) | Optional Rights | Access Role | Optional Rights |
| | | Corbin's School | None | None | Facility/Profile Editor | Set Baseline? Yes Delegate? No Delete? No |
| | | Sample Facility | None | None | Facility/Profile Editor | Set Baseline? Yes Delegate? No Delete? No |



CANCEL

CONTINUE











The Campus Feature of EPA's Portfolio Manager



Portfolio Manager's Campus Feature



- Get started at www.energystar.gov/benchmark
- Provides a central view of all campus facilities
- Calculates combined energy usage based on combined floor space
- Energy usage can be derived from both campus-level meters (used by multiple facilities) and separate meters for individual facilities



Process for Creating Campuses



- Add a property (individual buildings, campus, etc.)
- Add space types
- Add utility meters
- Create a campus
- Add meter associations



Create a Campus



1) Add a Property: From the My Portfolio page, click Add a Property.





Add a Property



- 1) Select the last option: A campus or other collection of multiple facilities at the same geographic location.
- 2) Click the Continue button. The Add General Campus Information page will open.















Home > My Portfolio > Add a Property

Add a Property

Property Type

What kind of property would you like to add?

- O A single facility for which my organization owns or manages 90% or more of the floor area.
- O A portion of a single facility for which my organization owns or manages less than 90% of the floor
- O A hospital composed of a single facility or collection of facilities.
- O A municipal wastewater treatment plant or water treatment and distribution utility
- O A campus or other collection of multiple facilities at the same geographic location. What is this?

CANCEL

CONTINUE

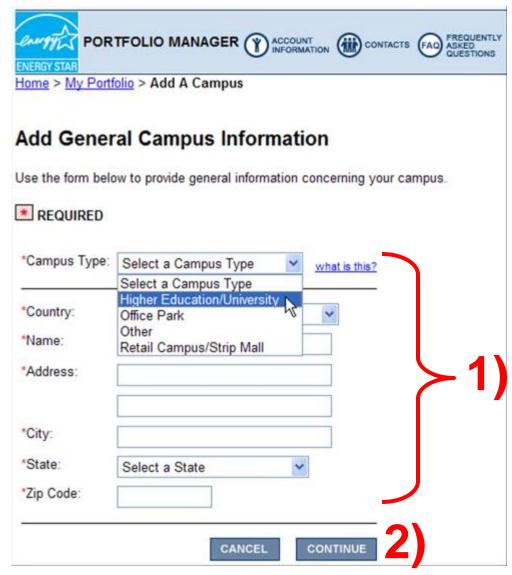


Add General Campus Information



- 1) Complete the form by selecting a campus type and entering full address information.
- 2) Click Continue.

If the campus type is not Higher Education /University, the Add Campus Facilities screen will open (skip to Slide 6).

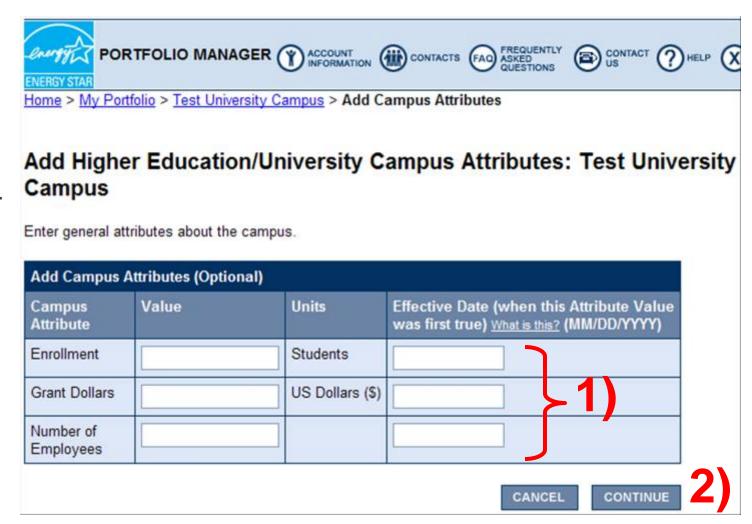




Add General Campus Information



- 1) Enter attribute values and effective dates (attribute data is optional, and there are no default values).
- 2) Click Continue.



Add Campus Facilities

- 1) Check the facilities to be associated with this campus, and enter the date the facilities became part of the campus.
- 2) Click Continue (not shown here).

Note: You can continue without any facilities selected and choose to add facilities later. If facilities were selected. and if the facilities have energy or water meters, the "Add Campus Facilities: Add Meter Associations" page displays.













Home > My Portfolio > Test University Campus > Add Campus Facilities

Add Campus Facilities: Test University Campus

Select Facilities

From the list of available facilities below, please select all facilities that will be added to this campus. that are part of another campus are not eligible.)

Add New Facility

| | Date Facility Became Part of Campus | Facility Name | Address | Total Floor Space (Sq. Ft.) | Building Type |
|---|----------------------------------------|-----------------------|-----------------------------------------|-----------------------------------------|------------------|
| | | ABC Courthouse | 123 Justice St. Sample, IL 12345 | 100000 | |
| | | ABC K-12 School | 123 Children Dr. Sample, IL 12345 | 100000 | K-12 School |
| V | | ABC Residence Hall | 123 University | 0 | |

Add Campus Meter Associations



1) Indicate which facility meters should be added to the campus total.

NOTE: Yes should be selected if the facility is on a separate meter, and the meter should be added to the campus total in order to generate accurate energy usage for the entire campus. No should be selected if the facility is sub-metered and the energy usage is duplicative of a campus-wide energy meter.

2) Click Save.



PORTFOLIO MANAGER (Y) ACCOUNT INFORMATION









Home > My Portfolio > Test University Campus > Add Campus Facilities > Add Meter Associatio

Add Campus Facilities: Test University Campus

Add Meter Associations

You have indicated that the following facilities should be added to the campus. Please indicate:

- 1) Which Campus-level meters (if any) each new facility should be associated with, and
- Which Facility-level meters (if any) should be added to the Campus total.

| Add Facility Meters To Campus Totals | | | | |
|--------------------------------------|-----------------|---------------------------------|--|--|
| Facility Name | Facility Meters | Add To Campus Total? | | |
| My Buildings 1 | Elec1 | O Yes, add to campus total No | | |
| | NGas1 | O Yes, add to campus total No | | |
| My Office Building | Electir1 | O Yes, add to campus total No | | |
| Office Sample #1 | 12 | ○ Yes, add to campus total ③ No | | |
| | one | O Yes, add to campus total No | | |
| Other Test Space | Electric-1 | O Yes, add to campus total No | | |

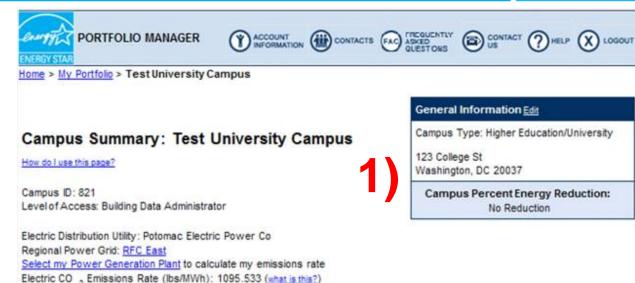


Campus Summary Page



This page is an executive summary of all energy performance-related data for a campus. The page displays the following:

- 1) General Information:
 Displays Campus Type,
 address, and Percent
 Energy Reduction
 calculation. Also provides
 an Edit link to Edit
 General Campus
 Information.
- 2) Campus
 Performance: Compares
 campus data from two
 different time periods.



| Select View: | MyV | ew 💌 | | | | | | |
|---------------|------|----------------------------------------------------|------------------------------|-----------------------------------------------------|-----------------------------|----------------------------------------------------|------------------------------------------------------|--|
| 12 Months End | ling | Current Site Energy Intensity (kBtu/Sq. Ft.) | Current Rating (1-100) | Baseline Site Energy Intensity (kBtu/Sq. Ft.) | Target Rating (1-100) | Energy Reduction (kBtu (thousand Btu)) | Energy Reduction per Sq. Ft. (kBtu/Sq. Ft.) | |
| May 2005 | ~ | 1.3 | N/A | 0.0 | N/A | N/A | N/A | |
| May 2004 | ~ | 19.9 | N/A | 0.0 | N/A | N/A | N/A | |
| Change | | -18.6 | | 0.0 | | | | |

Campus Summary Page (continued)



| Higher Education/University Campus Attributes (Optional) | | | | | |
|----------------------------------------------------------|-------|-----------------|----------------|--|--|
| Attribute | Value | Units | Effective Date | | |
| <u>Enrollment</u> | 10000 | Students | 01/01/2000 | | |
| Grant Dollars | | US Dollars (\$) | | | |
| Number of Employees | 3000 | | 01/01/2000 | | |

1)

General Campus Administration

View Campus Facilities
Add Campus Facilities
Remove Campus Facilities
Delete Campus
Contact Us

Sharing Data

Share this campus with another user Modify user permissions Transfer this campus to another user

| Campus Energy | Meters Add Mete | View All Meter Data in Excel | | |
|-------------------|-----------------|--------------------------------|--------|--|
| Meter Name | Energy Type | Last Meter Entry (End Date) | Alerts | |
| No Meters Defined | | | | |

2)

| Campus Water Meters Add Meter View All Meter Data in Excel | | | | | | |
|--------------------------------------------------------------|-------|-----|--------------------------------|--------|--|--|
| Meter Name | Units | Use | Last Meter Entry (End Date) | Alerts | | |
| No Meters Defined | | | | | | |

2) Utility Meters: This is a summary of data related to the energy use of the facility. From these sections you can Edit Campus Energy Meters, Edit Campus Water Meters, delete meters, or view all meter data in Excel.

1) Campus
Attributes: This
section only
displays if the
Campus Type is
Higher Education/
University and
displays current
values.

Click on an attribute to go to the Edit Higher Education/University Attributes page.

Campus Summary Page (continued)



| Higher Education/University Campus Attributes (Optional) | | | | | |
|----------------------------------------------------------|-------|-----------------|----------------|--|--|
| Attribute | Value | Units | Effective Date | | |
| Enrollment | 10000 | Students | 01/01/2000 | | |
| Grant Dollars | | US Dollars (\$) | | | |
| Number of Employees | 3000 | | 01/01/2000 | | |

| Campus Energy Meters Add Meter View All Meter Data in Excel | | | | | | |
|---------------------------------------------------------------|--------|------|--------------------------------|--------|--|--|
| Meter Name | Energy | Type | Last Meter Entry (End Date) | Alerts | | |
| No Meters Defined | | | | | | |

| Campus Water Meters Add Meter View All Meter Data in Excel | | | | | | | |
|--------------------------------------------------------------|-------|-----|--------------------------------|--------|--|--|--|
| Meter Name | Units | Use | Last Meter Entry (End Date) | Alerts | | | |
| No Meters Defined | | | | | | | |

General Campus Administration

View Campus Facilities
Add Campus Facilities
Remove Campus Facilities
Delete Campus
Contact Us

Sharing Data

Share this campus with another user Modify user permissions
Transfer this campus to another user

1) General Campus Administration: These links allow a user access to perform high-level functions for the facility, including **Viewing Campus** Facilities, Adding Campus Facilities, Removing Campus Facilities, and Deleting Campuses.

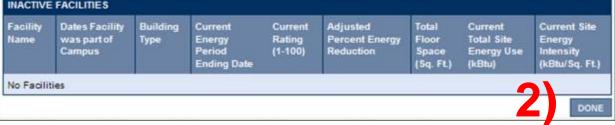


View Campus Facilities Page

energy STAR

- 1) This page shows one table for active facilities and another for inactive facilities. Click on a facility name to go to the Facility Summary page.
- 2) Click the Done button. You will be returned to the Campus Summary page.









Additional Resources



Learn More at ENERGY STAR.GOV

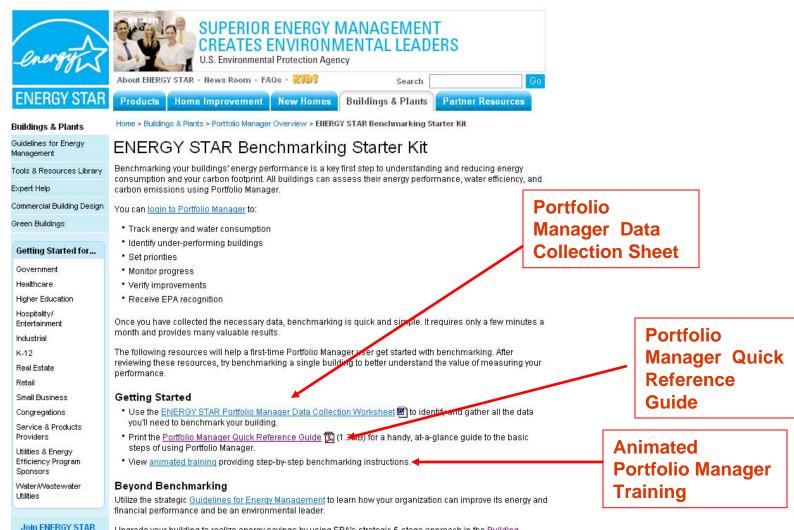


- ENERGY STAR Home Page www.energystar.gov
- ENERGY STAR for Buildings www.energystar.gov/buildings
- Portfolio Manager
 www.energystar.gov/benchmark
- Portfolio Manager Login Page https://www.energystar.gov/istar/pmpam/



Benchmarking Starter Kit





Upgrade your building to realize energy savings by using EPA's strategic 5-stage approach in the Building

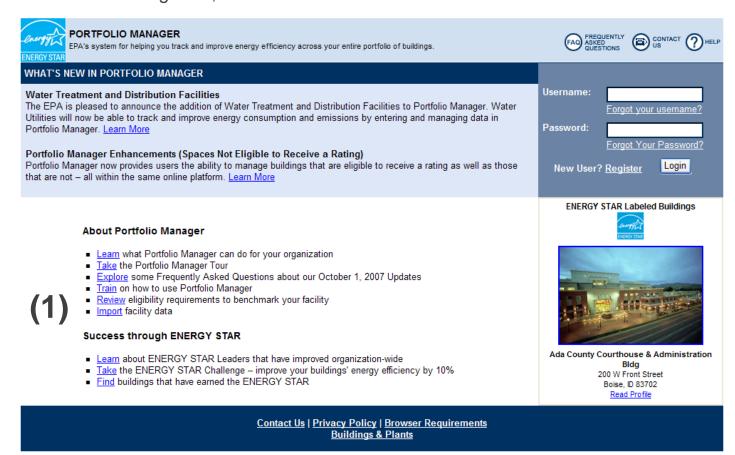
View a guick list 📆 (2.9MB) of ENERGY STAR resources for buildings.



Downloading Import Templates



(1) Click the <u>Import Facility Data</u> link, and on the next screen, right click on the desired template link. Select "Save Target As," and follow the instructions.





Training Opportunities



- EPA offers free online interactive training with WebEx, including:
 - ENERGY STAR Overview
 - Benchmarking Energy and Water Use
 - Financing Energy Efficiency Improvements
 - And many more!
- Visit <u>www.energystar.gov/buildingstraining</u> for a detailed list of training opportunities.



For More Information



Visit www.energystar.gov/government

E-mail <u>buildings@energystar.gov</u>

If you have any questions, please contact:

Katy Hatcher, US EPA hatcher.caterina@epa.gov (202) 343-9676

Leslie Cook, US EPA cook.leslie@epa.gov (202) 343-9174

The Cadmus Group, Inc. (EPA contractor)

Kudret Utebay Kudret.utebay@cadmusgroup.com (703) 247-6138 Colin Dunn Colin.dunn@cadmusgroup.com (703) 247-6121

