Minnesota Large Buildings Energy Benchmarking Program

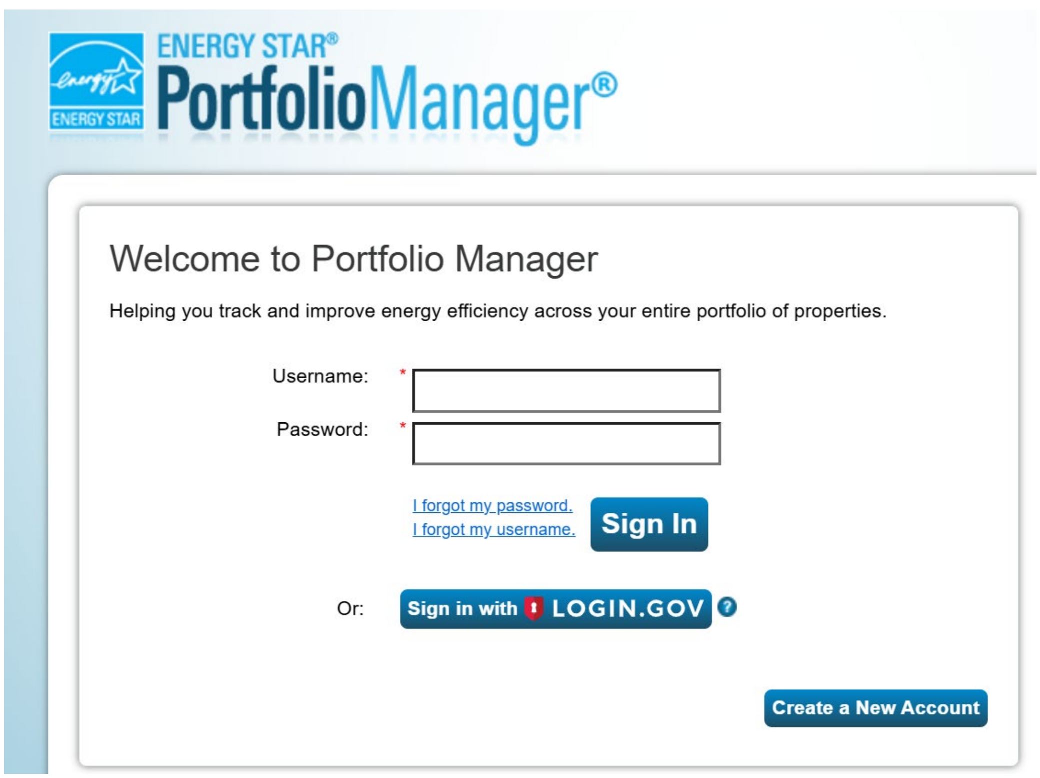
Benchmarking How-to Guide

Step-by-step compliance instructions for building owners to benchmark building energy usage through ENERGY STAR® Portfolio Manager® (ESPM).

Step 1. Create an Account in ENERGY STAR® Portfolio Manager®

To comply with the Minnesota Large Buildings Energy Benchmarking Program, covered building owners must create an ENERGY STAR® Portfolio Manager® (ESPM) account in order to enter and report annual whole-building energy usage.

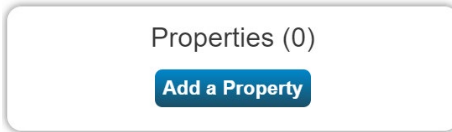
1) Go to the ESPM sign up page
2) Create a unique username and password. You cannot change your username after your account is created. For organizations with multiple properties, create a "corporate" account which "owns" all of the properties.
3) Enter information "About Yourself" and "About Your Organization." Use a company email that is easily accessible.
4) In the box asking "Do you want your Account Name (and username) to be searchable by other Portfolio Manager users?" Choose "Yes."
5) Select "Create My Account" at the bottom of the page.



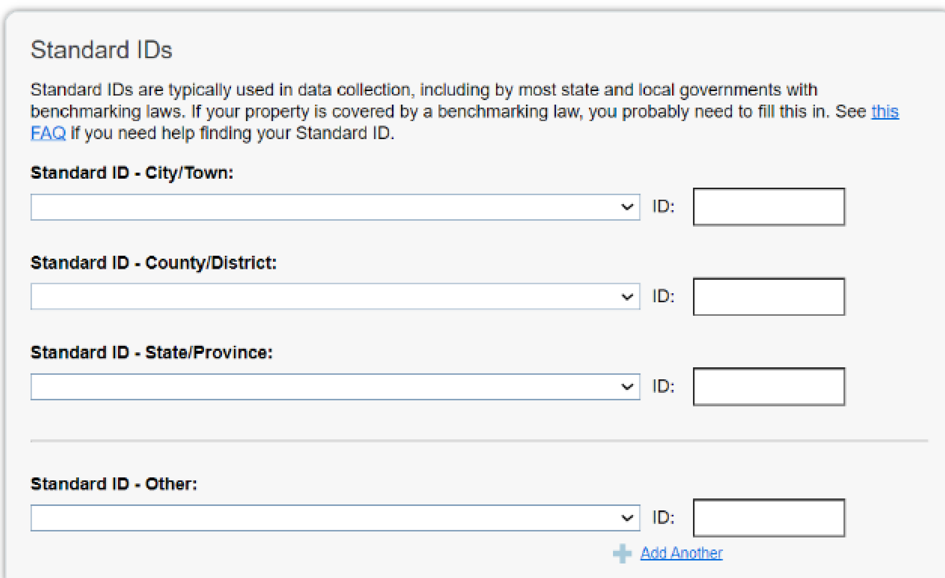
Step 2. Add Property in ENERGY STAR® Portfolio Manager®

Once an account is created, owners can add their building(s) by following these steps:

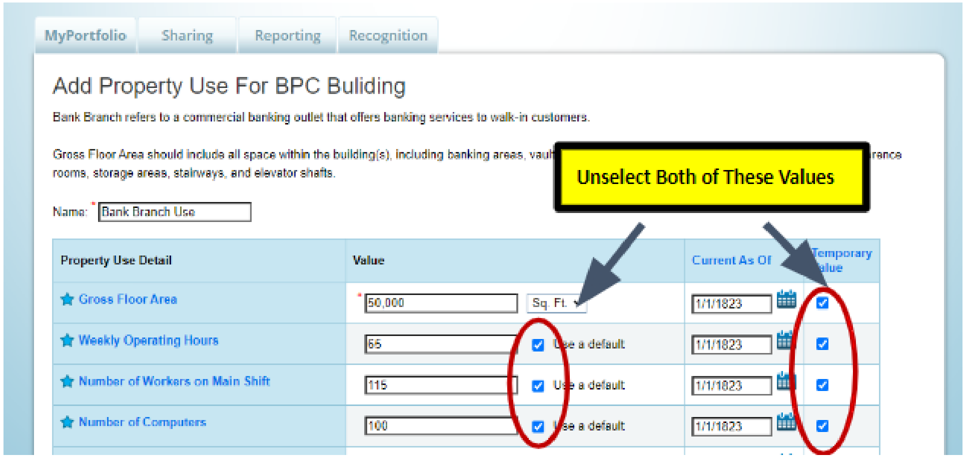
1) Log in to ENERGY STAR® Portfolio Manager. ® Select "Add a Property"



2) Enter your property's applicable characteristics
3) Select "Get Started!"
4) Enter Basic Property Information
5) Enter your State of Minnesota Building ID**.** To find your ID, use the **building ID lookup tool**. Select "State of Minnesota" from the "Standard ID – State/Province" dropdown menu. Ensure you **capitalize** the "**MN**" and **do not** add any spaces or special characters.
    a. You can also add your building ID after you set up your account by selecting the "Details" tab on your building's account in Portfolio Manager and locating the "Unique Identifiers" box on the left and selecting "Edit."



6) Select "Continue"
7) Enter property use details
    a. **Do not** select "Use a default"
    b. **Do not** select "Temporary Value"
    c. **Do not** change "Current As Of" dates



8) Select “Add Property”

Step 3. Upload Whole-Building Utility Data

Building owners must upload the previous calendar year (Jan 1 through Dec 31) of whole-building energy to Portfolio Manager. There are 3 different ways to upload your utility bills into Portfolio Manager – auto-upload, spreadsheet, and manual entry. If you have Xcel Energy, CenterPoint, and/or Minnesota Power please refer to their how-to guides on how to link your building’s ESPM account with their auto-upload service. Once established and your data has been uploaded into your meters, proceed to Step 4. Run the Data Quality Checker.

If your building’s energy provider is neither Xcel, CenterPoint, or Minnesota Power you can upload your data via spreadsheet or manual upload by proceeding to Step 3A below.

For any questions on how to obtain energy data from your provider or tenant(s), refer to our “How-To Request Utility Data” document or reach out to the **Minnesota Benchmarking Program Help Desk** at support@benchmarkingMN.org.

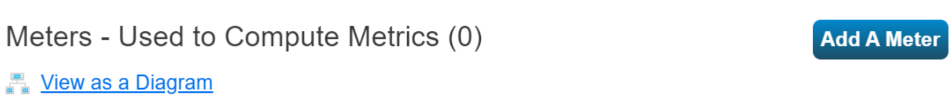
Step 3A. Create a Virtual Meter

A) Electric Meter

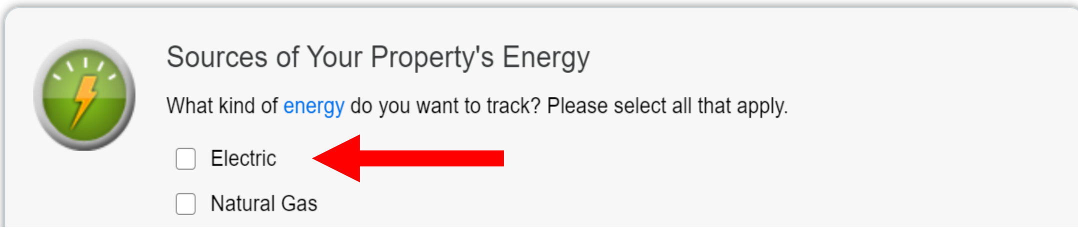
Create a virtual electricity meter in Portfolio Manager following the steps below:

1) Select the “Energy” tab

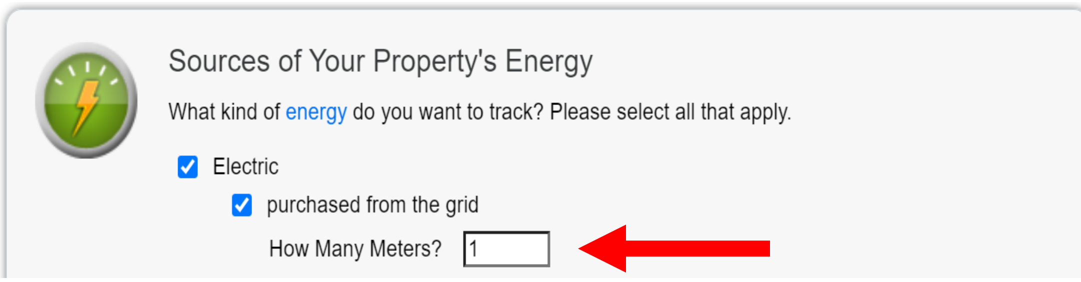
2) Select “Add A Meter”



3) Select “Electric” at the top of the list of energy sources



4) Below the selected “Electric” box, select “purchased from the grid” and enter “1” in the field next to “How Many Meters?”



5) Select “Get Started!”

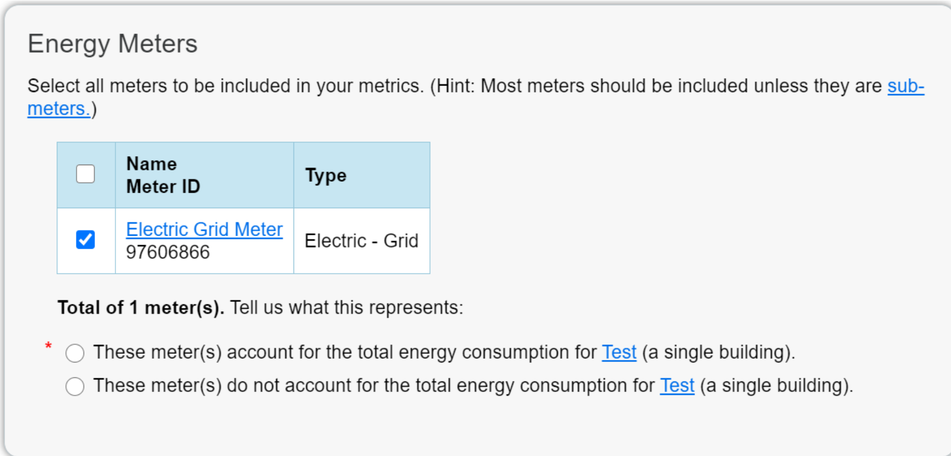
6) Select in the table to enter the following fields for the meter:
   i) Units: The units selected should match those shown on your electric bills, the most common is “kWh (thousand Watt-hours)”
   ii) Date Meter became Active: The start date of the earliest data entry in the meter (e.g., if submitting the 2025 report and your first bill of 2024 started on January 1, the date should be entered as 01/01/2024. This date will remain indefinitely until service ends or changes.)

☐	Meter Name	Type	Other Type	Units	Date Meter became Active	In Use?
☐	Electric Grid Meter	Electric - Grid		kWh (thousand Watt-hours)	01/01/2021	☑

7) Select “Create Meters”

8) Skip the usage entries and Select “Continue”

9) With the box checked next to the meter just created, select “These meter(s) account for the total energy consumption” for this property.



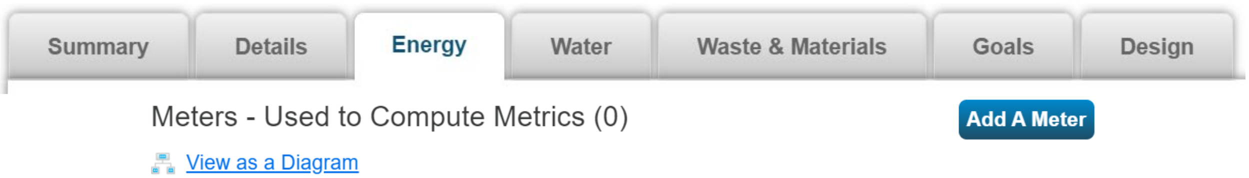
10) Select "Apply Selections"

B) Natural Gas Meter

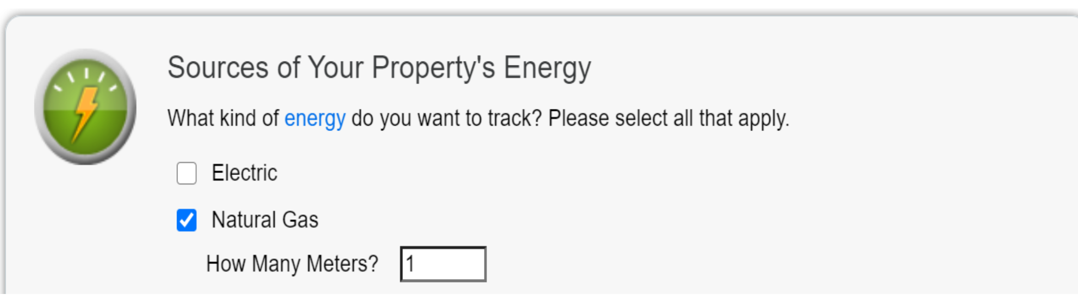
If your property receives natural gas, create a virtual meter in Portfolio Manager by following the steps below:

1) Select the "Energy" tab

2) Select "Add A Meter"



3) Select "Natural Gas" from the list of energy sources
4) Below the selected "Natural Gas" box, enter "1" in the field next to "How Many Meters?"



5) Select "Get Started!"

6) Select in the table to enter the following fields for the meter:
   i) Units: The units selected should match those shown on your bills

ii) Date Meter became Active: The start date of the earliest data entry in the meter (e.g., if submitting the 2025 report and your first bill of 2024 started on January 1, the date should be entered as 01/01/2024. This date will remain indefinitely until service ends or changes.)

☐	Meter Name	Type	Other Type	Units	Date Meter became Active	In Use?
☐	Natural Gas	Natural Gas		therms	01/01/2022	☑

7) Select "Create Meters"

8) Skip the usage entries and select "Continue"

9) With the boxes checked next to the meter(s) just created, select "These meter(s) account for the total energy consumption" for this property

☑	Name Meter ID	Type
☑	Natural Gas 101098583	Natural Gas
☑	Electric Grid Meter 100121918	Electric - Grid

Total of 2 meter(s). Tell us what this represents:

* ◉ These meter(s) account for the total energy consumption for Test (a single building).

○ These meter(s) do not account for the total energy consumption for Test (a single building).

10) Select "Apply Selections"

C) District Hot and Chilled Water

If your building receives district hot and/or chilled water, create a virtual meter in Portfolio Manager by following the steps below:

1) Select the "Energy" tab

2) Select "Add A Meter"

3) Select "District Hot Water" and/or "District Chilled Water" – depending if you receive only one service or both. If you receive district chilled water, select the source energy received from one of the four checkboxes that appears below.
4) Repeat steps 4 through 10 above

D) District Steam

If your building receives steam, create a virtual meter in Portfolio Manager by following the steps below:

1) Select the "Energy" tab

2) Select "Add A Meter"

3) Select "District Steam"

4) Repeat steps 4 through 10 above

Step 3B. Upload Energy Usage

A) Spreadsheet Upload

For spreadsheet upload, the spreadsheet must be a templated single-meter spreadsheet provided by Portfolio Manager (see below). If you are uploading either electric and/or natural gas, make sure you format your data correctly by using the spreadsheet template below:

Electric data single-meter spreadsheet
Natural gas data single-meter spreadsheet

Confirm Data is Entered Properly in the Spreadsheet and Upload into Your Virtual Meter

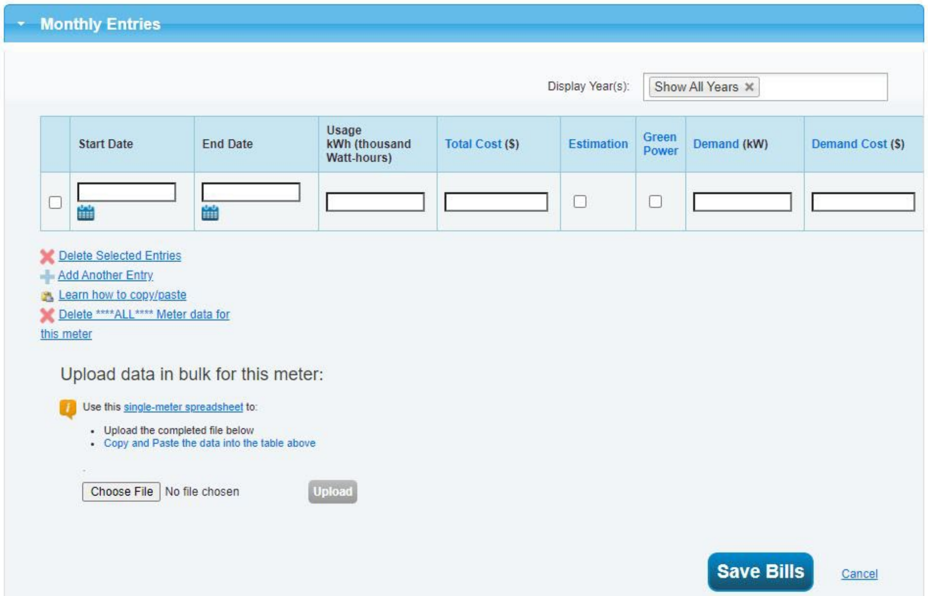
1) Confirm all four (4) "Required" columns are filled out completely. Note that "Estimation" should read as "No."

Start Date (Required)	End Date (Required)	Usage (Required)	Cost (Optional)	Estimation (Required)	Demand (Optional)	Demand Cost (Optional)
1/1/2022	1/31/2022	3654		No		
2/1/2022	2/28/2022	3456		No		
3/1/2022	3/31/2022	3042		No		
4/1/2022	4/30/2022	2456		No		
5/1/2022	5/31/2022	2322		No		
6/1/2022	6/30/2022	2567		No		
7/1/2022	7/31/2022	2896		No		
8/1/2022	8/31/2022	2994		No		
9/1/2022	9/30/2022	2755		No		
10/1/2022	10/31/2022	3089		No		
11/1/2022	11/30/2022	3261		No		
12/1/2022	12/31/2022	3517		No		

Example of filled out electric data spreadsheet for 2022 usage.

2) Save the spreadsheet to your computer (title and location do not matter, as long as you remember where it is saved).

3) Open the relevant virtual meter in Portfolio Manager (electric, natural gas, etc.) and Select "Choose File", then locate and select the spreadsheet you just saved.



4) Select "Upload" to populate the energy usage data from the spreadsheet into your meter.

5) The data will populate into your virtual energy meter. Confirm that the units are entered correctly in the virtual meter for the type of energy you just uploaded. Units of data can be found on your utility bills.

6) Select "Save Bills."

You have now finished uploading data into that meter via the spreadsheet method. Please follow the same steps to upload spreadsheets into other virtual meters if relevant to you.

B) Manual Upload

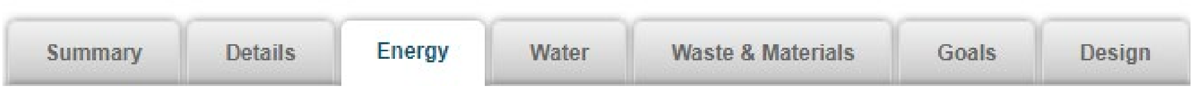
The process of manually uploading your building's energy data is the same for all meters. To enter your building's energy data manually, please follow the appropriate steps outlined below for each meter.

Electric

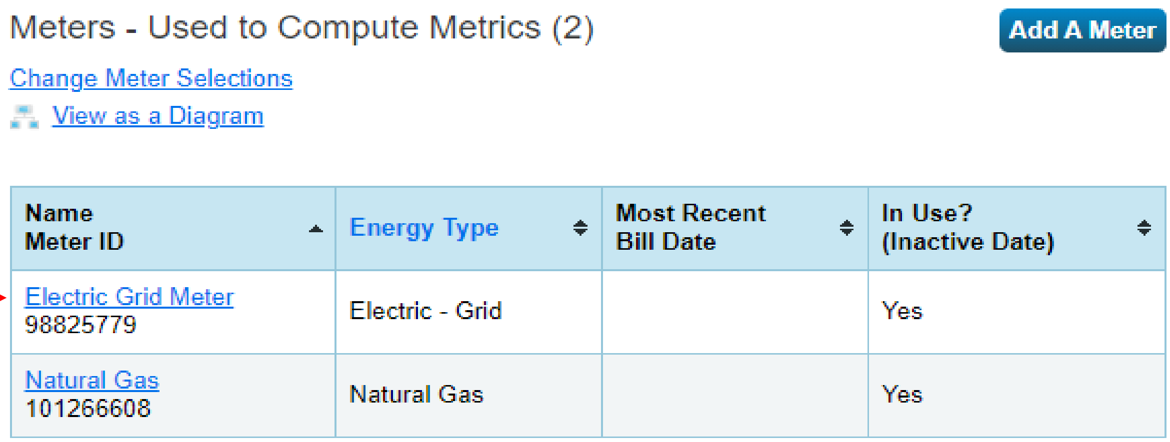
1) Gather or request at least 12-months of electric usage from the previous year (e.g., If you are trying to submit your 2025 report, you will need at least 12-months of data that accounts for the entire 2024 calendar year, January 1 – December 31, 2024)

2) In Portfolio Manager, select your building from the MyPortfolio Dashboard

3) Select the "Energy" tab

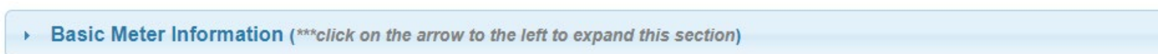


4) Find your meter in the "Meters – Used to Compute Metrics" table. Select the electric meter name to open up your meter.

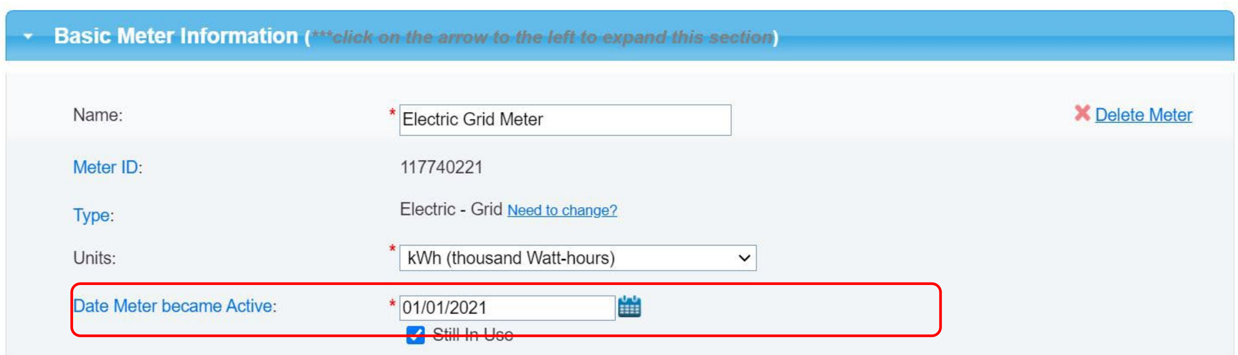


Name Meter ID	Energy Type	Most Recent Bill Date	In Use? (Inactive Date)
Electric Grid Meter 98825779	Electric - Grid		Yes
Natural Gas 101266608	Natural Gas		Yes

5) Within your meter, Select the “Basic Meter Information” arrow to expand this section

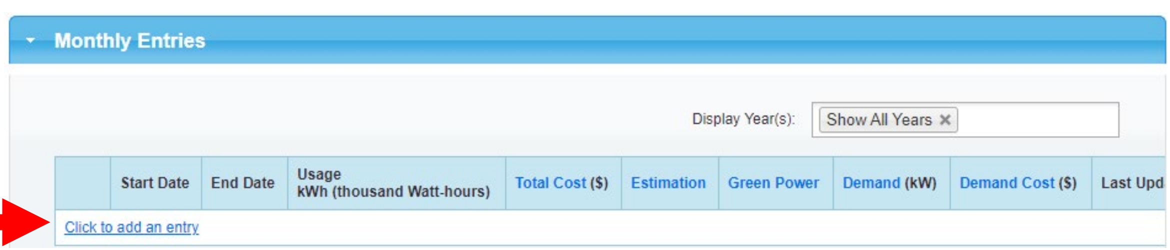


6) Verify the meter “Units” match the units in your energy bills. If correct, no further action is needed. If the units of the data differ from the units selected for your meter, select the “Units” drop down menu and select the correct units to match the data you received.



7) Select “Save Changes”

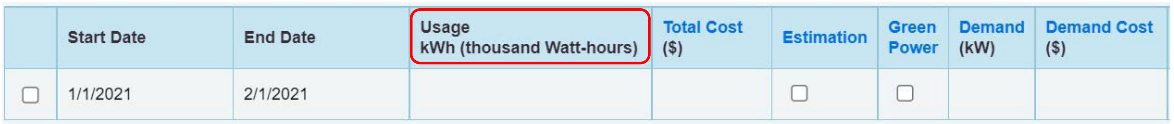
8) Scroll down to view the “Monthly Entries” section and “Select to add an entry”



9) Beginning with your earliest bill date, enter that into the “Start Date” box

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost ($)	Estimation	Green Power	Demand (kW)	Demand Cost ($)
☐					☐	☐		

The “End Date” will then automatically populate, do not adjust it. Select the field under “Usage kWh (thousand Watt-hours)” and enter in that months usage.



	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost ($)	Estimation	Green Power	Demand (kW)	Demand Cost ($)
☐	1/1/2021	2/1/2021			☐	☐		

10) Below the table, select “Add Another Entry”. The next months date range will automatically populate, do not adjust it. Add in the usage data for this month. Repeat this step by Selecting “Add Another Entry” and entering in your usage until you have, at least, a full 12-months of data.

	Start Date	End Date	Usage kWh (thousand Watt-hours)	Total Cost ($)	Estimation	Green Power	Demand (kW)	Demand Cost ($)
☐	1/1/2021	2/1/2021	12,398		☐	☐		
☐	02/01/2021	03/01/2021			☐	☐		

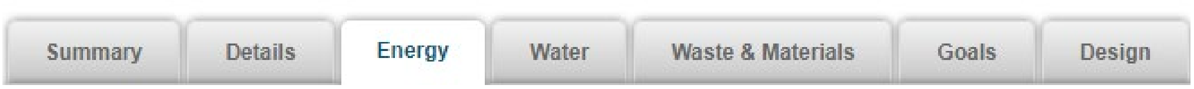
11) Select “Save Bills”

Natural Gas

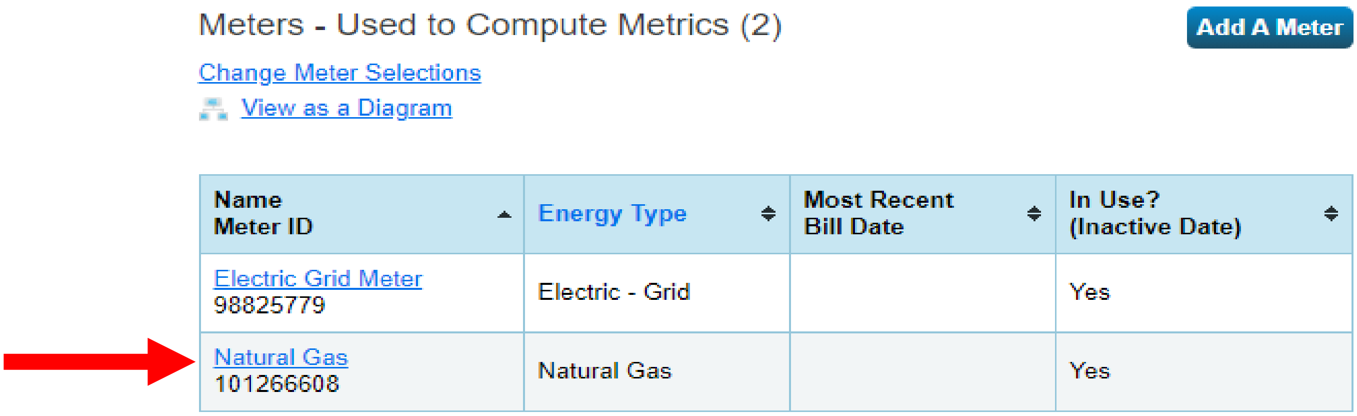
1) Gather or request at least 12-months of gas usage from the previous year (e.g., If you are trying to submit your 2025 report, you will request at least 12-months of data that accounts for the entire 2024 calendar year of January 1 – December 31, 2024)

2) Login to Portfolio Manager and select your building from the MyPortfolio Dashboard.

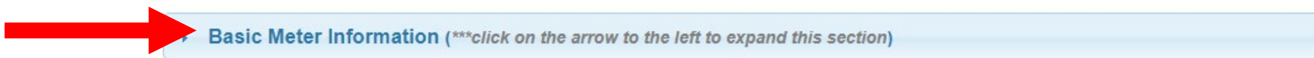
3) Select the “Energy” tab.



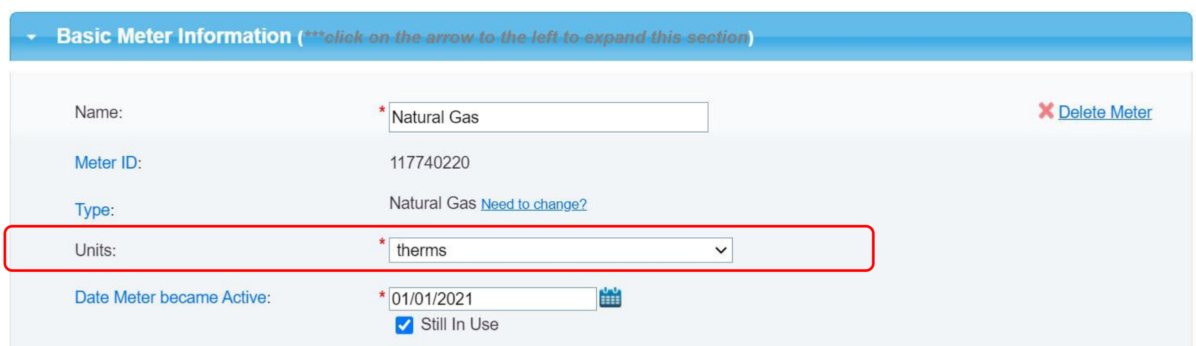
4) Find your gas meter in the “Meters – Used to Compute Metrics” table. Select the meter name to open up your meter.



5) Within your meter, Select the “Basic Meter Information” arrow to expand this section.

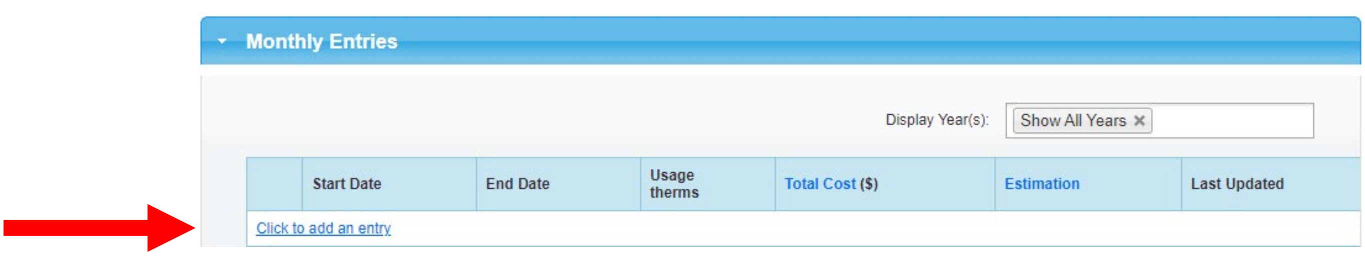


6) Verify the meter “Units” match the units your data was provided in. If correct, no further action is needed. If the units of the data differ from the units selected for your meter, Select the “Units” drop down menu and select the correct units to match the data you received.

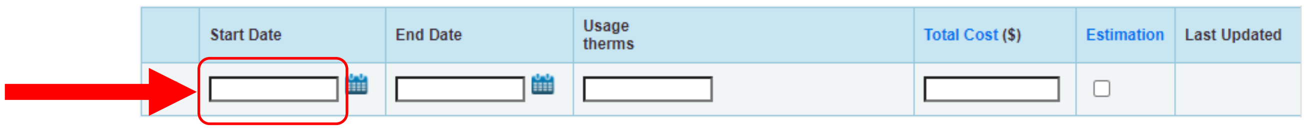


7) Select “Save Changes”

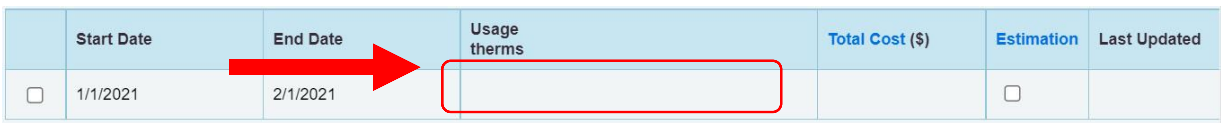
8) Scroll down to view the “Monthly Entries” section and “Select to add an entry”



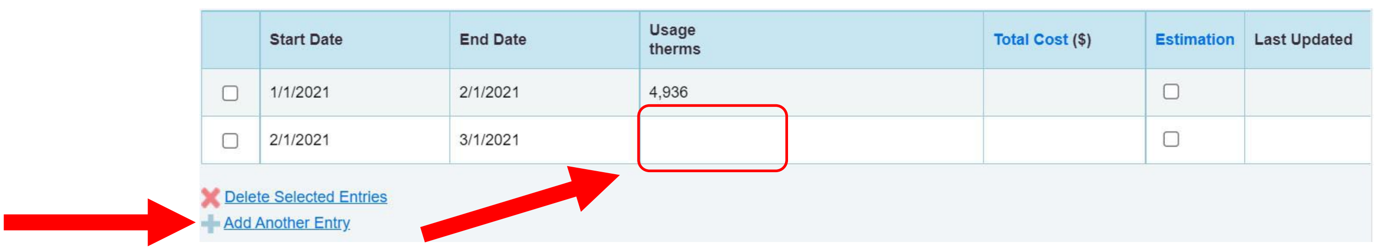
9) Beginning with your earliest bill date and enter that into the “Start Date” box



The “End Date” will then automatically populate, do not adjust it. Select the field under “Usage therms” and enter in that months usage



10) Below the table, Select “Add Another Entry”. The next months date range will automatically populate, do not adjust it. Add in the usage data for this month. Repeat this step by Selecting “Add Another Entry” and entering in your usage until you have, at least, a full 12-months of data.



11) Select “Save Bills”

Step 4. Run the Data Quality Checker

Once you have at least 12 full months (Jan. 1st – Dec. 31st) of whole-building energy data from the previous calendar year in your meters, run the Data Quality Checker to identify common errors in your report before submitting.

1) Login to Portfolio Manager and select your building from the MyPortfolio Dashboard. On the property’s “Summary” tab, scroll down to find the Data Quality Checker and select “Check for Possible Errors.”

2) Select “Dec 31” in the first drop down, then select the previous year in the second drop down (e.g., if the building is submitting the 2025 report, the data reporting year should be set to 2024) then select “Run Checker”

3) Review the list of alerts (if any) and suggestions to address the issue(s). Ignore water, waste and materials alerts.

4) Following the links in the explanations, make corrections or updates to your property details

to address as many alerts as possible.

5) Upon submission, all reports are subject to a quality control review and will be rejected if data input errors are found. If errors are found, owners will be notified and must correct those errors, and resubmit the report to State of Minnesota.

6) Once you have made all applicable changes, re-run the checker to ensure that the alerts have been addressed.

Step 5. Connect and Share Your Data with the State

The State of Minnesota uses ESPM ’s third-party data sharing capabilities. This allows the State of Minnesota to pull data directly from ESPM and run additional data checks. Note: You will only need to complete this action during the initial property setup.

A) Confirm your account information

1) Confirm that your email address in your ESPM account is correct. Select “Account Settings” in the upper right-hand corner of the screen.

2) Confirm that your unique State of Minnesota Building ID has been entered correctly.

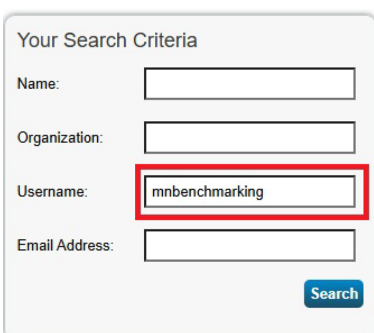
B) Connect your ESPM account with the State of Minnesota

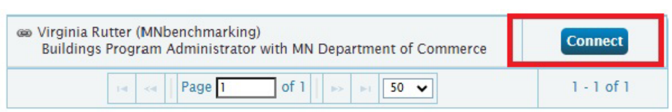
1) Select “Contacts” in the upper right-hand corner of the screen.

2) Select “Add New Contacts.”

3) Search for the username "MNbenchmarking."

4) Select “Connect.”





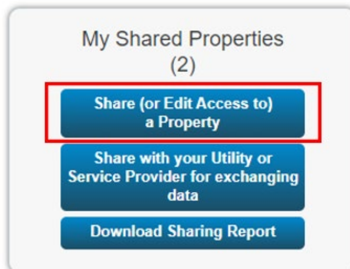
5) A pop-up window appears. Select the “Agreement” box and “Send Connection Request”

Connection requests must be approved before you can share your buildings. ESPM will approve these requests in 30-minute cycles. If you have not received a connection confirmation email within one hour of submitting a request, check to make sure you followed the above steps correctly or contact the Minnesota Benchmarking Program Help Desk.

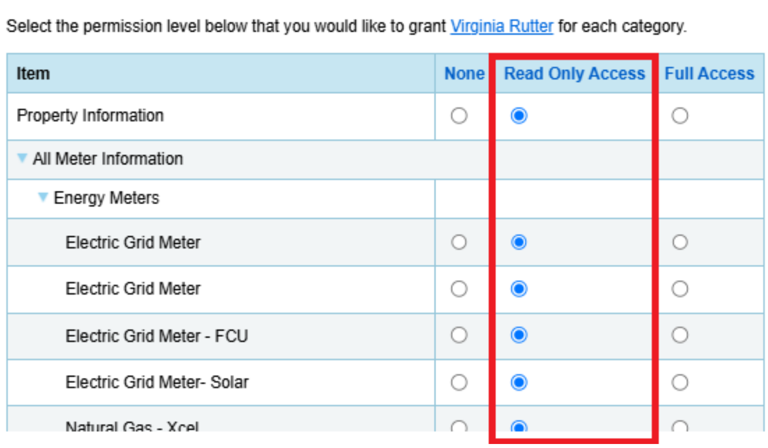
C) Share read-only access to your data with the State of Minnesota.

1) Go to the "Sharing" tab in ESPM.

2) Select "Share (or Edit Access to) A Property."



1) Select your properties and select "Apply Selection"
2) Select "**MNbenchmarking"** as the recipient.
3) Select "Personalized Sharing & Exchange Data ('Custom Orders')." Select "Continue."
4) Select "Exchange Data" for each property.
5) A pop-up window will appear. Specify data attributes and permissions for each property.
    a) Select "Read Only Access" for "Property Information" and "All Meter Information."
    b) Select "None" for "Goals, Improvements, & Checklists" and "Recognition."
    c) Select "Yes" for "Share Forward." **Note:** Enabling "Share Forward" will give the State permission to share data with other State of Minnesota ESPM accounts.



6) Select "Apply Selections & Authorize Exchange."

7) Once you've completed Exchange Data access for each property, select "Share Property(ies)." When the State accepts the shared properties, you'll receive a confirmation email. For additional guidance on sharing properties within ESPM, Select **here**.

Step 6: Complete the Energy Reporting Form in the Large Building Energy Benchmarking Portal

Owners will need to complete the energy reporting form in the **Large Building Energy Benchmarking Portal** for each of their buildings. This form collects required and optional information that cannot be reported to ESPM.

A) Create An Account

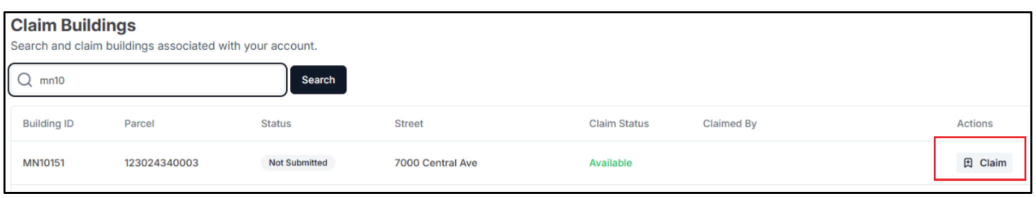
1) Go to the Large Building Energy Benchmarking Portal
2) Select "Register for an account"
3) Fill out the required information.
    1) For "What is your affiliation with the property(ies)?", select the most relevant title
    2) Your username will be your email address
4) Select "Submit"

You will receive an email from support@benchmarkingMN.org when you create your account.

B) Claim Your Building(s)

1) Log in to your account and select the "Claim Buildings" tab.

2) In the Search bar, search for either your building address or building ID. When you have found your property, select "Claim" under the "Claim Property" column. Note: If you cannot find your property, send an email to the help desk (support@benchmarkingMN.org).



Once verified, your property will be added to your account. If the property was previously claimed by another user, the help desk will be notified of the claim request and will reach out by email with further questions to clarify the rightful owner. This process makes sure that 2 reports are not submitted for the same property.

C) Complete the Energy Reporting Form & Submit Your Report

Once you have claimed your building, you will need to complete each section of the energy reporting form. All required questions must be answered to submit a report. If you have more than one building, you must complete this step for each. **Note:** You must complete all of the steps above in this guide before completing this step and submitting your report.

1) Select the “My Buildings/Properties” tab.

2) Reporting Year. Select the relevant reporting year. For example, if you are reporting 2024 data, select the 2025 reporting year.

3) Select the “Submit” button on the right-hand side of the screen. There is one optional section (Property Manager Contact Information) and three required sections (Building Owner Address, Validate Benchmarking Data, and Submit Data to the State of Minnesota) to complete before submitting your report. Make sure to carefully read each section before submitting to ensure your report does not have any errors.

Step 7. Submit Your Report

Once you submit your report, you will receive a notification from the Minnesota Benchmarking Program Help Desk (support@benchmarkingMN.org) within 24 hours on your compliance status. Your building is not “In Compliance” until you have received email confirmation from the Minnesota Benchmarking Program Help Desk. A status of “Pending Revisions” indicates additional action is required to comply

1) After completing all required sections above, select the “Submit Data” tab

2) Select “Submit My Data”