



City and County of Denver

**Energize Denver
Benchmarking and Energy
Performance Requirements**

Buildings 25,000 Square Feet and Larger

**Third-Party Data Verification
Process Guide**

August 2023

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1. INTRODUCTION

Benchmarking is the foundation for building performance standards. In order to measure performance with an energy efficiency policy, the City of Denver's Office of Climate Action, Sustainability and Resiliency (CASR) must receive complete and accurate benchmarking reports that include correct square footage, breakdown of space use types, and energy use data. For the benchmarking reports in the calendar years of performance target evaluation (usually 2024, 2027, and 2030 unless a timeline adjustment has been approved), third-party data verification will be required to be submitted within the benchmarking report submission. Third-party data verification must also accompany a target adjustment application. If the building is already ENERGY STAR® Certified for the calendar year requiring data verification, if the time frame overlaps by six months or more, then the submission can be the verified application.

A data verifier can also assist the building owner with adjusting their benchmarking report so it is normalized for building performance targets (see Technical Guidance Section 2.4.1) or to satisfy the need for data verification of a target adjustment application (see Technical Guidance Section 3.4.6). The data verifier would make these adjustments to the building's benchmarking report before signing off on the Data Verification Checklist.

2. DATA VERIFIER QUALIFICATIONS

The third-party individual verifying the data (Data Verifier) must be a third-party with one of the following licenses, credentials, or certifications, and are in good standing with the authorizing organization:

- Professional Engineer (PE) issued within the United States
- Registered Architect (RA) issued within the United States
- Certified Energy Manager (CEM from AEE)
- Building Energy Assessment Professional (BEAP from ASHRAE)
- Energy Management Professional (EMP from EMA)
- Any other additional Data Verifier license or training program credentials recognized by CASR and posted to its website

A Data Verifier can NOT be:

- The building owner or an employee of the building owner; or
- The building owner's designee, or an employee of that designee, who prepares or submits benchmarking information in ENERGY STAR® Portfolio Manager® (ESPM). For example, if a company is hired by the building owner to complete the benchmarking submission, an employee of that company cannot be the third-party Data Verifier. But that company could subcontract another company to serve as the Data Verifier to make it easier for the building owner to contract this service.
- Exceptions to this rule are listed next.

The following licensees can perform third-party data verification on benchmarking they have previously completed for the building owner:

- Professional Engineer (PE) issued within the United States
- Registered Architect (RA) issued within the United States

3. DATA VERIFICATION YEARS

Third-party data verification is required to be submitted with the benchmarking reports for specific building performance target years, as well as with Target Adjustment applications. The year for which the data is verified will depend on which reason the data verification is being completed. The table

below summarizes the recommended Period Ending Date for Year Verified based on the reasoning for the data verification.

Data Verification Reason	Application Type	Verification Year	Period Ending Date
Benchmarking Performance Evaluation	N/A	If the building's target year is 2024	Dec 31 2024
	N/A	If the building's target year is 2025	Dec 31 2025
	N/A	2027	Dec 31 2027
	N/A	2030	Dec 31 2030
Target Adjustment	Square Footage Correction	Baseline	Dec 31 of Baseline Year
	Building Type Classification	Most Recent	Dec 31 of Most Recent Year
	Inaccurate Energy Data	Baseline	Dec 31 of Baseline Year
	Building Alteration	Most Recent	Dec 31 of Most Recent Year
	More than 3 Property Types	Most Recent	Dec 31 of Most Recent Year
	Operating Hours	Most Recent	Dec 31 of Most Recent Year
	Parking	Most Recent	Dec 31 of Most Recent Year
	Swimming Pool	Most Recent	Dec 31 of Most Recent Year
	Data Centers	Most Recent	Dec 31 of Most Recent Year
	Future Target Adjustments TBD	Most Recent	Dec 31 of Most Recent Year

Aside from the data verification required for benchmarking, the Verification Year will vary depending on the property's records with CASR. Most buildings have the Baseline Year assigned as 2019 (Period Ending Date = Dec 31 2019), but some may have a different Baseline Year assigned by CASR or may have an approved adjustment to update the Baseline Year. The "Verification Year of Most Recent" will be the calendar year of the most recent benchmarking report submitted to CASR. For example, if a Parking Target Adjustment application is submitted in 2025, the data verification included will need to have a Period Ending Date of Dec 31 2024 to align with the 2024 calendar year benchmarking report submitted to CASR by June 1, 2025. If a target adjustment application is filed for more than one reason in the Application Type column above, the verification performed could be for the baseline year OR the most recent year.

4. DATA VERIFICATION PROCESS

Data verification will be completed by connecting with the Data Verifier's account in ESPM, sharing the property, generating a Data Verification Checklist, and having a third-party Data Verifier confirm the information.

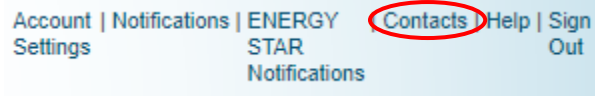
This section covers the following steps to the Data Verification process:

1. Building owner connects with the Data Verifier in ESPM

2. Building owner shares the property with Data Verifier in ESPM
3. Building owner gathers information to support verification
4. Data Verifier confirms benchmarking data
5. Data Verifier generates the Data Verification Checklist
6. Data Verifier completes the Data Verification Checklist

4.1.1 Building Owner Connects with the Data Verifier in ESPM

In order for the data verification to be completed by the Data Verifier remotely, the Data Verifier must be added as a contact in ESPM. To do so, click on “Contacts” in the top right corner of ESPM.



This will bring you to the My Contacts and Organizations page. On this page, click the “Add New Contacts/Connections” button.

My Contacts and Organizations

This is where you keep track of your contacts and/or organizations (i.e. people or companies associated with your properties such as Professional Engineers, Registered Architects, or others with whom you share information). You can add anyone as a contact, regardless of whether they have a Portfolio Manager account and you can share your properties & reports with any of your **connected** contacts. You can “connect” to other Portfolio Manager users by searching for their accounts and sending a connection request.



You will be brought to the “Add Contact” page. On this page, you can search for the Data Verifier’s ESPM account by entering the account Name, Organization, Username, or Email. After the information has been entered, click “Search” at the bottom right.

A screenshot of the 'Connect with an Existing User for Sharing' form. The form has a title and a subtitle: 'Search using any of the criteria below.' Below this are four input fields labeled 'Name:', 'Organization:', 'Username:', and 'Email:'. At the bottom right of the form is a 'Search' button, which is circled in red, and a 'Cancel' link.

This will bring you to the Search Results page with each ESPM contact associated with the information you used to search. Find the Data Verifier’s ESPM account and click “Connect.”

City and County of Denver Department of Public Health and Environment
 (Denver Department of Environmental Health)
 Benchmarking with Denver Dept. of Environmental Health

Connect

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The Data Verifier’s ESPM account will be notified that your connection request has been sent. The Data Verifier will need to login to their ESPM account and click on “Notifications” on the top right.

Account | **Notifications** | ENERGY STAR Notifications | Contacts | Help | Sign Out

The Data Verifier will be brought to the “View All Notifications” page which will display the connection request.

View All Notifications (116)

Incoming Requests (1) | Outgoing Requests (0) | Notices (115)

[Accept](#) [Reject](#)

Type	Notification	Date	<input type="checkbox"/>
	TouchstoneIQ Testing would like to connect with you.	6/16/2023	<input type="checkbox"/>

Page 1 of 1 | 100 | View 1 - 1 of 1

[Accept](#) [Reject](#)

Close

The Data Verifier will need to check the box in the row containing the connection request and click “Accept.”

4.1.2 Building Owner Shares the Property with Data Verifier in ESPM

After the Data Verifier has been added as a contact in ESPM, one or more properties can then be shared with the Data Verifier’s ESPM account. To do so, login to ESPM and click on the “Sharing” tab.

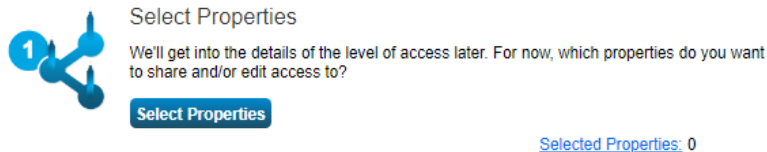
ENERGY STAR® PortfolioManager®

MyPortfolio | **Sharing** | Reporting | Recognition

In the “My Shared Properties” section, click “Share (or Edit Access to) a Property.”



You will be brought to the “Share (or Edit Access to) Properties” page, which has three sections. In the first section, click “Select Properties.”



This will pop-up the “Select Properties” window displaying all the properties you have created in your ESPM account. For each property that will be shared with the Data Verifier, check the box on the left side of the row with the property name.

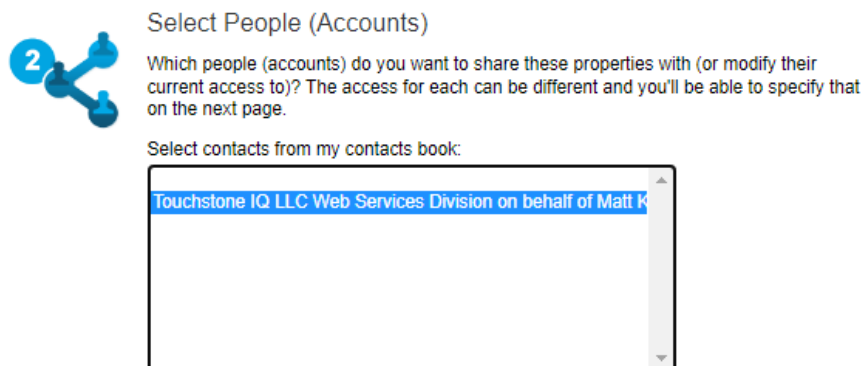
Select Properties

Search:

<input type="checkbox"/>	Name	Property Type	State/Province
<input checked="" type="checkbox"/>	Test Building	Bank Branch	CO

At the bottom of the “Select Properties” pop-up window, click “Apply Selection.”

In the second section, “Select People (Accounts)”, select the Data Verifier’s ESPM account name.



In the third section, “Choose Permissions”, select the bubble by “Personalized Sharing & Exchange Data (“Custom Orders”).”



Choose Permissions

If you only need to choose one permission (because you are doing a single share or you want to give the same permissions for all of your shares), select "Bulk Sharing." If you need to assign different permissions, select the 2nd option.

- * Bulk Sharing ("One-Size-Fits-All") - I only need to choose one permission (either because I am doing a single share OR I want to choose the same permission for all of my share requests).
- Personalized Sharing & Exchange Data ("Custom Orders") - I need to give different permissions for different share requests, and/or I need to give Exchange Data permission.

Continue [Cancel](#)

Click "Continue" at the bottom of the page.

This will bring you to the "Share Your Property(ies)" page to select the permissions allowed for the Data Verifier in ESPM. For each property that will be shared with the Data Verifier, select the bubble under "Full Access."

Name (ID)	No Access	Read Only Access	Full Access	Custom Access	Exchange Data
▼ Test Building (27925101)					
Touchstone IQ LLC Web Services Division on behalf of Matt Klahn	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	

Share Property(ies) [Cancel](#)

Below the table showing the properties, click "Share Property(ies)."

The Data Verifier's ESPM account will be notified that your property(ies) have been shared. The Data Verifier will need to login to their ESPM account and click on "Notifications" on the top right. The Data Verifier will be brought to the "View All Notifications" page which will display the connection request. The Data Verifier will need to check the box in the row containing the connection request and click "Accept."

4.1.3 Building Owner Gathers Information to Support Verification

The Data Verifier may require additional information to the verification process. To support the process, it is recommended to have the following information available to share with the Data Verifier, if possible:

- Building documentation (blueprints, as-built drawings, architectural plans, PCNAs, appraisal or assessments, etc.)
- Rent roll
- Number of utility meters by fuel type
- Copies of at least one utility bill for each fuel
- List of addresses or units within the property
- Online access to utility whole-building aggregation online portals
 - [Xcel Energy Benchmarking Portal](#)
- Additional documentation of any Renewable Energy Credits (RECs), Power Purchase Agreements (PPAs), backup generator usage, electric vehicle (EV) charging, etc.

4.1.4 Data Verifier Confirms Benchmarking Report

As the Data Verifier is checking the benchmarking report, they may assist the building owner in updating their benchmarking data:

- to normalize the data for performance targets (breaking down high-intensity property types),
- to exclude allowable energy uses, or
- correct benchmarking data points (i.e., square footage)

Important guidance for Data Verifiers:

- Data verification does not require an on-site visit, but it is up to the Data Verifier if they feel confident enough to sign the document without an on-site visit.
- Building owners can choose to benchmark their building as one property type following EPA guidance, or they may break down high-intensity property types by square footage. Ask the building owner which methodology they followed before verifying the information.
- For the Indoor Environmental Quality section, Data Verifiers can write in “N/A” for benchmarking report submissions for performance evaluation years. If the data verification is for a target adjustment, the Data Verifier can write in “N/A” if they feel those questions do not apply to the target adjustments requested.
- CASR is not defining a % accuracy of verified square footage that would trigger the building owner needing to submit a target adjustment. If the Data Verifier is uncomfortable with the difference between what they think the square footage of the building is through supplied documentation versus what the building owner states the square footage is in ESPM, the Data Verifier is in their rights to refuse verification of the building.

4.1.5 Data Verifier Generates the Data Verification Checklist

The Data Verification Checklist for a property can be generated on the “Reporting” tab within Portfolio Manager. To access the Data Verification Checklist, login to ESPM and click on the “Reporting” tab.



On the right side of the “Reporting” tab, there is a section displaying standard reports generated by ESPM. Included in this section, you will see the Data Verification Checklist, circled in red below:

MyPortfolio | Sharing | **Reporting** | Recognition

Charts & Graphs

Weather Normalized Source EUI
How much total primary fuel would be required by my properties, under average weather conditions?

ENERGY STAR Performance Documents

- Statement of Energy Performance (SEP)
- Statement of Energy Design Intent (SEDI)
- Data Verification Checklist**
- Progress & Goals Report
- ENERGY STAR Scorecard
- Water Scorecard

Click on this link to access the “Generate and Download Reports” page.

MyPortfolio | Sharing | **Reporting** | Recognition

Generate and Download Reports

Portfolio Manager offers several standard reports for properties that can be useful in communicating your property's progress with others. These reports offer detailed information about your property for a single time period and are presented in a PDF format. [You can view sample reports here.](#)

- ### Select Report(s) to Download

 - Statement of Energy Performance (SEP)
 - ENERGY STAR Data Verification Checklist (energy data only)
 - ENERGY STAR Scorecard
 - Progress and Goals Report
 - Statement of Energy Design Intent (SEDI)
 - Water Scorecard (Multifamily only)
- ### Select Property for Report(s)

Property: *
- ### Select Timeframe for Report(s)

Timeframe: * for:
- ### Select Contacts for Report(s)

Select Property Contacts:

Primary Contact: [Add Contact](#)

Property Owner: [Add Organization](#)

Verifying Professional: [Add Contact](#)

Generate & Download Report(s) [Cancel](#)

Prefer to design your own report?

If none of these reports look like what you need, consider creating a [spreadsheet template](#) to pull the data you want and design your own report outside of Portfolio Manager.

Are you applying for recognition?

Although these reports look similar, if you are applying for either [ENERGY STAR certification](#) or [Designed to Earn](#) recognition, you must generate the required documentation by way of the application process.

Metrics on your Reports

In order to calculate metrics for your property for a given time period, there must be 12 months of complete meter data and property use detail information. If metrics (including the score) cannot be calculated for any reason, they will appear as "N/A" in your report.

This page will automatically have the ENERGY STAR Data Verification Checklist (energy data only) option checked in the first section.

In the second section, select the building requiring data verification by clicking on the “Select Property” dropdown menu. This will display all properties created in and shared with your ESPM account.

In the third section, the timeframe for which the data will be verified is selected. For the years requiring data verification for performance evaluation and benchmarking reporting requirements (2024/2025, 2027, and 2030), from the “Timeframe” dropdown, select “Single Year.” This will display two additional dropdowns showing the end date of a month and the year. In those dropdowns, select Dec 31 and the year for which the data is to be verified. An example for the year 2024 is shown below:

3 Select Timeframe for Report(s)

Timeframe: * Single Year Ending Dec 31 2024

Further details on which year should be selected for each Data Verification and Target Adjustment can be found in Section 3 of this guide.

In the fourth section, select any contacts to be included in the Data Verification Checklist by selecting the contact from the Primary Contact, Property Owner, and Verifying Professional dropdown menus. The Data Verifier’s ESPM account should be selected as the Verifying Professional.

At the bottom of the “Generate and Download Reports” page, click “Generate & Download Report(s)” to generate the Data Verification Checklist.

4.1.5 Data Verifier Completes the Data Verification Checklist

The Data Verification Checklist is separated into the following four sections that will require review by the Data Verifier to be accepted by Energize Denver:

1. Review of Whole Property Characteristics
2. Review of Property Use Details
3. Review of Energy Consumption
4. Signature of Verifying Professional

4.1.5.1 Review of Whole Property Characteristics

The Data Verifier will need to verify the following information for the property:

1. Primary Function: Confirm that the primary use of the building is correctly defined.
2. Location: Confirm that the address is correctly entered for the property.
3. Gross Floor Area (GFA): Confirm the gross floor area is accurate for the property.

NOTE: For the Indoor Environmental Quality section, Data Verifiers can write in “N/A” for benchmarking report submissions for performance evaluation years. If the data verification is for targets adjustments, the Data Verifier can write in “N/A” if they feel those questions do not apply to the target adjustments requested. If the building is already ENERGY STAR Certified for the calendar year requiring data verification, as long as the time frame overlaps by six months or more, then the submission could be the verified application.

4.1.5.2 Review of Property Use Details

For each property use created for the property and submitted with the benchmarking report, the Data Verifier will need to verify the information specific to that use. At a minimum, the following information will need to be verified for each property use:

- Gross Floor Area (GFA): Confirm the gross floor area is accurate for the property use.

If the property is applying for a target adjustment, additional property use details specific to the property use will also need to be verified. For example:

- Operating Hours
- Data Center square footage
- Swimming pool location, size, and type
- Parking square footage and type (Open Parking Lot, Partially Enclosed Parking Garage, Completely Enclosed Parking Garage) and if it uses supplemental heating

4.1.5.3 Review of Energy Consumption

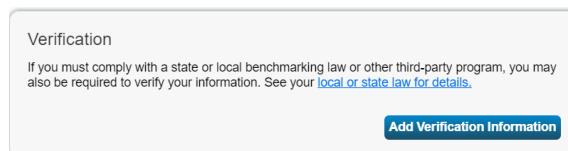
For each energy meter created for the property and submitted with the benchmarking report, the Data Verifier will need to verify the accuracy of the meter entries. At a minimum, the following information will need to be verified:

- Summary of All Associated Meters:
 - Confirm that the meters shown account for the total energy use of the building. Confirm that any additional fuels or on-site solar or wind is defined as necessary.
 - **NOTE:** The total number of meters may differ from the total number of meters on-site. If whole-building aggregated data is provided from the utilities, this is often defined as one meter within ESPM.
 - Confirm that the total energy consumption is accurate for each meter with the full calendar year of data entered for the year being verified.
 - Confirm the meter has the correct units aligned with the units shown on the utility bills or to be used for the whole-building aggregated data provided by the utility.

4.1.5.4 Complete and Sign the Data Verification Checklist


After completing the review of the previous sections, the Data Verifier will need to write their name, the date, and their signature on the final page of the Data Verification Checklist. A stamp is not required for Energize Denver. The building owner should keep the signed checklist on file.

The Data Verifier will also need to enter their credential information as the verifier for the property in ESPM. On the “Details” tab in the Verification section on the bottom of the page, click “Add Verification Information.”



You will be brought to the Verification Information page.

Period Ending Date for Year Verified: *

Date of Verification: * 

Verified By:

Or, enter information directly in the fields below.

Name: *

Title: *

Organization: *

Phone: *

Email: *

Postal Code: *

Professional Designations: *

- Professional Engineer (PE/P.Eng)
- Registered Architect
- CEM
- ASHRAE Building Energy Assessment Professional
- Other
- No Professional Designations

For the “Period Ending Date for Year Verified,” select Dec 31 with the year for which the data is verified as determined in [Section 3.1](#).

For the “Date of Verification,” select the date on which the verification was completed.

For the “Verified By” field, the Data Verifier can be selected as an existing contact after completing the steps described in [Section 4.1.1](#). If the Data Verifier was not added as a contact in ESPM, their information can be entered manually below this field.

After this information has been entered, click Save at the bottom of the page. Once the information has been saved, the information will be submitted to CASR with your annual benchmarking submission. This will be used to confirm that the verification has been completed, as required.

If the data verification is being used for a target adjustment application, download a PDF of the completed Data Verification Checklist, add the Data verifier signature, and submit as an attachment with the application.