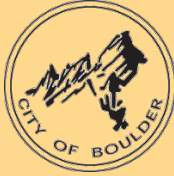# How-to Guide for Boulder's Building Performance Ordinance Rating & Reporting Requirement

Step-by-step compliance instructions for commercial and industrial building owners to rate and report their building energy usage through Portfolio Manager.

Nov. 2015 (Amended February 2022)

Contents

Additional Resources

Boulder Building Performance Help Desk:

(844) 536-4528 | BPOHelpdesk@bouldercolorado.gov

ENERGY STAR Portfolio Manager Quick Start Guide:

http://www.energystar.gov/buildings/tools-and-resources/portfolio-manager-quick-start-guide

ENERGY STAR Help Desk:

https://portfoliomanager.zendesk.com/hc/en-us

Xcel Energy Benchmarking Portal:

www.xcelenergy.com/energybenchmarking

Step 1. Add Your Building in Portfolio Manager

Affected building owners must create a Portfolio Manager account prior to entering annual energy data. To register for a Portfolio Manager account, visit https://portfoliomanager.energystar.gov/pm/signup

Once an account is created, owners can add the building to the account following these steps:

1. In "My Portfolio" click "Add a Property."
2. Select the applicable building characteristics and click "Get Started."
3. Carefully enter read and click any applicable check boxes and then click "Continue."
4. Enter the use details for your building.
   a. You can collect use details from your tenants using the Data Collection Worksheets.
5. If your building has multiple uses, read closely the text in the **Building Use** section.
   a. Add additional space uses to your property by selecting an option in the drop-down menu **Add Another Type of Use**, and then clicking "Add." This will open a different list of attributes for that space type.
6. When you have finished adding uses and details, click "Add Property."

How to Account for Parking. When parking is part of a building, it does not count towards gross floor area, since Portfolio Manager focuses on the energy use of the actual building interior. For example, if you have a building with 100,000 square feet of office space and 20,000 square feet of parking, you should enter a gross floor area of 100,000 square feet into Portfolio Manager. You may be prompted to enter information on parking area, but it will not count towards your gross floor area.

You have two options to receive an ENERGY STAR score for a property with an exterior parking lot or parking garage:

    Option 1.   *Sub-meter your parking and exclude its energy. (*Recommended*)*
- *Do not enter a parking Property Use*
- *Do not enter the energy for your parking in Portfolio Manager*
- *If your parking garage **is physically connected** with your building and part of a single structure, then the **parking (fully or partially enclosed) cannot be more than 75% of the total property GFA**. For example, a property that is 100,000 square feet (SF), with 80,000 SF Parking and 20,000 SF Office is considered a Parking Garage by EPA and cannot receive an accurate ENERGY STAR score or earn ENERGY STAR certification. This limit does not apply to Open Parking Lots.*
- *If your parking garage **is not physically connected** to your building, but rather is a separate structure then there is no limit as to its size.*

    Option 2.   *Benchmark your parking and its energy use.*
- *Add a **Property Use** for your parking.*
  - *Report the Gross Floor Area (GFA) of each type of parking (Fully Enclosed, Partially Enclosed, and Open)*
- *Include all parking energy in your energy meters.*
- *Regardless of physical connection, the GFA of your Parking (Fully Enclosed and Partially Enclosed) **cannot account for more than 50%** of your total Property GFA.*

Review this document for more information on accounting for parking.

Step 2. Assign the Boulder Energy Reporting ID

Each building required to report energy performance under Boulder's Building Performance Ordinance has a unique ID, the **Boulder Energy Reporting ID. Adding this ID to your building ensures the usage reported is attributed to the correct building during compliance checks.**

> *To locate your **Boulder Energy Reporting ID**, review your ordinance notification letter from the City of Boulder, or find your building on the **Affected Building List** on the program website.*

1. To assign the ID, open the **Details** sub-tab for your property.
2. Click "edit" in the box **Unique Identifiers (IDs)** in the bottom left.

3. Within the 'Standard IDs' box find 'Standard ID- City/Town'
4. In the dropdown box, select *Boulder Energy Reporting ID* from the alphabetical list.
5. Enter your Boulder Energy Reporting ID number in the ID box to the right and then click "Save".

You have now assigned your Boulder Energy Reporting ID to your building.

Step 3. Enter your Whole-Building Energy Data

Building owners must report calendar year (Jan 1 through Dec 31) whole-building energy data. This includes whole-building energy consumption of electricity, natural gas, solar, propane, etc. If you receive at least one fuel from Xcel Energy, you can connect to Xcel's Benchmarking Portal to receive automatic upload of aggregated whole-building energy data directly into your Portfolio Manager account. **This is only for fuels which Xcel Energy provides you.**

To connect your Portfolio Manager account with Xcel Energy's portal, follow the Energy Benchmarking Services User Guide or visit http://www.xcelenergy.com/EnergyBenchmarking.

If your building also consumes energy from a provider other than Xcel Energy (i.e. you receive natural gas from a transport provider such as BP or Tiger), you must manually enter that energy data in Portfolio Manager. Steps on how to create fuel meters and enter the energy data for the calendar year into Portfolio Manager are listed below in: **How to Manually Collect and Enter your Data**.

Step 4. Run the Data Quality Checker

Once all energy data for the entire calendar years has been entered into Portfolio Manager, owners must run the Data Quality Checker.

The Data Quality Checker is a built-in tool in Portfolio Manager that runs a set of basic data checks to identify potential data entry errors. Common alerts include temporary values, default values, less than 12 months of data, etc.

1. On the property's **Summary** sub-tab, under **Check for Possible Data Errors**, select "Check for Possible Errors."

2. Select "Dec 31" and select the year you are rating then click "Run Checker."
3. Review the list of alerts (if any) and Portfolio Manager's suggestions to address the issue(s).

- - Common alerts include temporary or estimated values or less than 12 full calendar months of energy bills.
  - **You can ignore waste or water meter alerts!**
4. Following the links in the explanations, make corrections or updates to your property details to address as many alerts as possible.
   - *Submittals to the city will be subject to a quality control review and will be rejected if data input errors are found. In that case, building owners will have thirty days to correct the errors and resubmit the data through Portfolio Manager.*
5. Once you have made all applicable changes, re-run the checker to ensure that the alerts have been addressed.

Step 5. Submit your Data to the City of Boulder

To comply with the Building Performance Ordinance you must manually submit your energy report to the city through Portfolio Manager every year.

1. Click the required reporting link on the main webpage by selecting "Submit Data to City" in the Boulder Building Performance Resources.

2. This link takes you to a new webpage. Note – you may be required to sign into Portfolio Manager.
3. Once signed in, the link will launch a page titled **Respond to Data Request**.
4. At the bottom of the page, you will need to choose the properties to report using the drop-down menu and click "Generate Response Preview."
5. Upon generating the response you will be taken to the Reporting tab.
   - You will see the response at the top of the table, highlighted.

6. When you are ready to submit to the city, in the **Action** column, select from the dropdown "Send Response."

7. On the page that appears, you must electronically sign your report by entering your Portfolio Manager login information and clicking "E-Sign Response."
   You have signed successfully when you see a green alert with a checkmark.

8. Click "Send Data" and confirm submission by clicking "Continue." Your report has now been submitted to the city!

9. You will receive a confirmation email from the EPA informing you that your data has been submitted to the City of Boulder.

10. You will receive an official compliance notification email from the City of Boulder after the city has reviewed the submission. Your building is not in compliance until you receive that email!

You have now completed the required rating and reporting for this year

– thank you!

Errors or Updates? If, after submitting your data to the city, you discover that any reported rating information is inaccurate or must be updated, you must make the appropriate changes to the property in Portfolio Manager, generate an updated response, and re-submit it to the City within 30 days of discovering the inaccuracy. See Updating or Correcting the Portfolio Manager Report for instructions on updating your data.

Additional Guidance? For guidance on reporting whole-building energy use through Portfolio Manager, ENERGY STAR has a variety of resources including the Quick Start Guide and Help Desk.
You can also contact the **City of Boulder Building Performance Help Desk** at: (844) 536-4528 or BPOHelpdesk@bouldercolorado.gov.

Updating or Correcting the Portfolio Manager Report

If, after submitting your data to the city, you discover that any reported rating information is inaccurate, you must make the appropriate changes to the building's Portfolio Manager Profile and generate an updated response and re-submit it to the City within 30 days of discovering the inaccuracy. Follow these instructions to re-report updated or corrected information to the City.

1. First, update or correct data by selecting the property in the Properties box in the **MyPortfolio** tab and selecting from the **Action** dropdown "Update Use Details" (If a change occurred in the building you want record of, such as additional square footage was added during a remodel) or "Correct Mistakes" (if you want to replace information reported previously that was incorrect).
2. After you save the changes, you must generate an updated report.
3. Under the **Reporting** tab, find the Boulder Reporting Template and from the **Action** dropdown, select "Generate an updated response".
    a. If Portfolio Manager generates an alert that some energy metrics could not be calculated, review and resolve any issue before submitting your response. If you make any changes you will need to generate an updated response.
4. Once generated, select "Send Response" in the **Action** drop down menu for the Boulder Reporting Template under **Template & Reports**.
5. On the page that appears, you must electronically sign your report by entering your Portfolio Manager login information and clicking "E-Sign Response".
6. Once your information is confirmed by a green **Signed** alert with a checkmark, click "Send Data" and confirm submission by clicking "Continue." Your updated report has now been submitted to the City and will automatically replace the data previously sent.
7. You will receive a confirmation email from the EPA informing you that your data has been submitted to the City of Boulder.
    a. Save this email as proof of submission.

How to Manually Collect and Enter your Data

If you are unable to use Xcel Energy's energy benchmarking automatic upload service, the process for manually collecting the energy data for the building depends on who is responsible for the energy bills of the building.

- <u>If the owner pays the utility bills for the whole building</u>, you can collect this consumption data through your service provider or from past bills.

- <u>If your tenants are responsible for paying their utility bills</u>, you must work with them to collect the consumption data from bills or individual utility accounts. This would require tenant consent. (See Data Privacy Rules in the box below). Or, you can try to request whole building consumption data from the service provider of that fuel by connecting with an account representative. This would often be provided in a spreadsheet format.
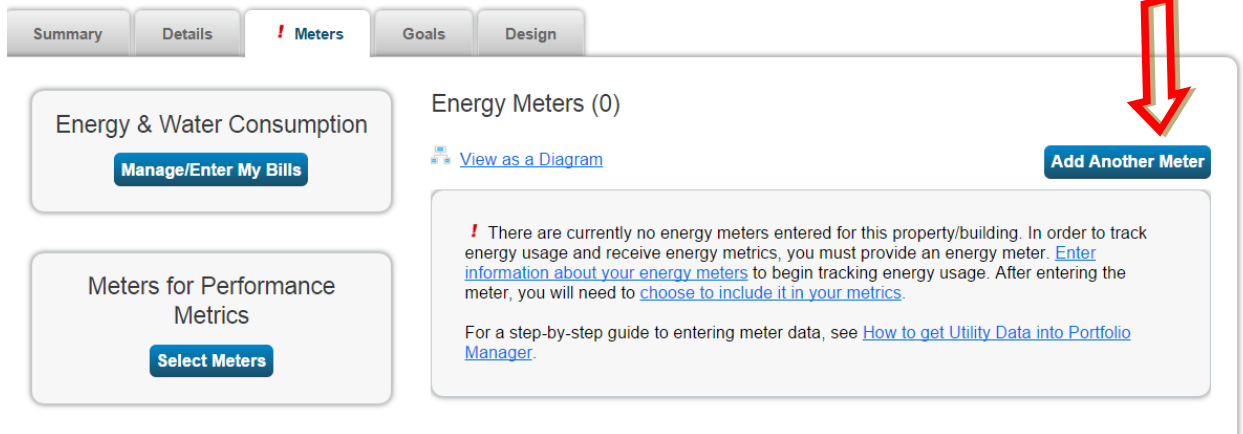

Data Privacy Rules: Due to lobbying efforts by the City of Boulder and other concerned municipalities, The Public Utility Commission (PUC) has made it easier for building owners to access whole building energy use data required for rating and reporting by implementing a new data aggregation standard. If there are 4 or more meters in the building, and no one tenant consumes more than 50% of the total energy use, the building owner, or their designee, can receive whole building energy use data from Xcel Energy, even if the tenants are sub-metered. In the case this rule is not met, tenants must sign consent forms to allow Xcel Energy to release the data to the building owner. For other regulated utilities, the consent form is available from the PUC or that utility.

Estimated Energy Use. A building owner should be able to obtain whole building data from their tenants and/or their utility. If a tenant is not cooperating with this process, please inform them that they must respond to a data request within 30 days or they will be in violation of the city ordinance (Ordinance No. 807, Section 10-7.7-6(b)). If a tenant still fails to comply, contact the Program Administrator.
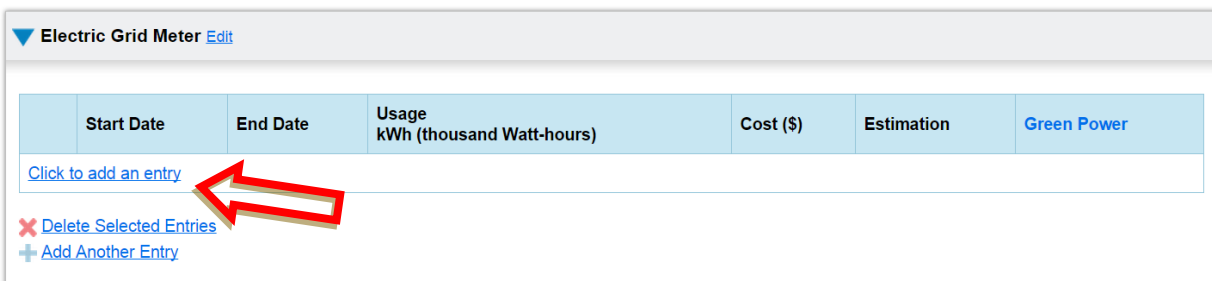
If whole-building data is not available from your utility and you have been unable to receive data from your tenants, or any other suitable channel, the city may instruct you to estimate energy use. Contact the Program Administrator in this case.

Once you have collected the energy data for the building for the reporting year, you must create the meters and manually enter that data into Portfolio Manager.

1. In your property in Portfolio Manager, select the Meters sub-tab and click "Add Another Meter."

2. Check the applicable fuel type boxes for all meters, provide any additional requested information (such as whether the electricity is purchased from the grid or generated onsite and the number of meters), and then click "Get Started."
   a. If you are collecting aggregated whole-building data from your fuel provider, you can enter just one meter for each fuel you collected whole-building data for.
3. Click anywhere in the first meter to enter the meter information.
   a. **Date Meter became Active** will be the date of the first meter bill for the building.
   b. Carefully check the units of the data you are providing and select the correct unit from the drop down.
4. Select "Create Meters." Now you can enter the calendar year consumption data (*Note: Entering costs is not required*).
5. To enter data, select "Click to add an entry."
   a. Keep in mind your end date for one billing cycle should not overlap with the start date for the next cycle. (i.e. If your January entry ends on 1/31/2015, your February entry should begin on 2/1/2015).

Once you have entered or uploaded the property's complete usage data for the year (Jan 1-Dec 31), you will be asked which meters should be included in the property's total consumption.

6. Check the boxes for each meter for the property and select the option "these meters account for the total energy/water consumption for this property."
7. Then click "Apply Selections." You will now see your property dashboard has updated with the usage data.

Frequently Asked Questions

1. Which property uses should I select to represent my building?

Portfolio Manager has approximately 80 different property use categories. You should accurately represent all uses that are found within your building. A list of definitions is available at: www.energystar.gov/buildings/sites/default/uploads/tools/PropertyUseDetailsandDefinition.pdf

2. How do I report standalone parking garages?

If you are reporting a standalone parking garage, EPA recommends that you select the "Other" building type when creating the building. Do not check off "My building's energy use includes parking areas." Instead, just enter the total area of the garage (i.e., including parking) as the area of the building. This will prevent any error messages from coming up as you continue.

The ENERGY STAR score provides an assessment of the building, not its parking area. If it is not possible to sub-meter your parking area, then Portfolio Manager will estimate the amount of energy parking uses and subtract that out before calculating your metrics. Learn more in the technical reference for parking.

3. How is exterior site lighting reported (not parking)?

If site lighting (landscape, signage, safety lighting, etc) is on a different meter, the energy use from these areas should be included. Although you do not include these outdoor areas when calculating the Gross Floor Area (GFA) of a building in Portfolio Manager, you should include the energy use associated with these areas. The Portfolio Manager algorithms assume buildings of your type are expected to have outdoor usage, too. The GFA refers specifically to interior space. But the energy use evaluated in our algorithms should be all energy required to operate your building, which includes the energy used both inside and out.

3a. If it's not separately metered, is there a way for folks to input how much 24/7 site lighting they have, and normalize for operation hours? No. Specific hours of operation for the site lighting aren't an available input in Portfolio Manager.

4. I do not purchase my natural gas from Xcel Energy. How do I get my natural gas consumption?

You will need to collect your natural gas bills and manually enter them into Portfolio Manager. Or, contact your natural gas supplier to determine the best method for collecting your monthly consumption for the calendar year.

5. What if I can't obtain whole building data from my utility?

A building owner should be able to obtain whole building data from their tenants and/or their utility. If a tenant is not cooperating with this process, please inform them that they must respond to a data request within 30 days or they will be in violation of the city ordinance (*Ordinance No. 8071, Section 10-7.7-6(b)*). If a tenant still fails to comply, contact the Program Administrator.

If whole-building data is not available from your utility and you have been unable to receive data from your tenants, or any other suitable channel, the city may instruct you to estimate energy use. Contact the Program Administrator in this case.

6. How do I determine the gross floor area for a building or for a property use within the building?
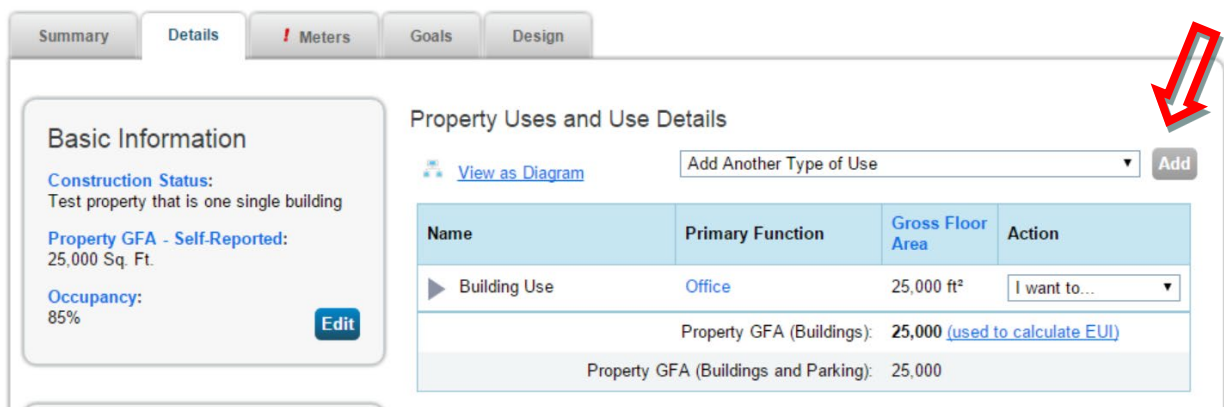
Many building owners will have information on gross floor area from leasing, sale, or other transactional documents. Other buildings will have plans that can provide dimensions for the building and/or individual property uses. Boulder County's tax assessor records may also have records of square footage in its permit database, however those records are often organized by parcel or building section, while rating and reporting happens at the building level. In conjunction, the gross floor area of common spaces and commercial condos can be estimated from building plans or measured; the City may also offer additional guidance, as needed, on measuring or estimating floor space.

The calculation of gross floor area is a one-time step, necessary only in the first year of reporting. Any estimation of floor area must be noted in "Property Notes." If the building square footage changes due to a physical change in the building such as a remodel, in Portfolio Manager go to the **Details** sub-tab for the property and under **Property Uses and Use Details**, select from the **Action** dropdown "Update with New Information." Then adjust the square footage and update the **Current As Of** date with the date the change took effect.

7. What if my building isn't fully occupied?

Report the percentage of the building that is occupied when you first create the building within Portfolio Manager. For office buildings with 10% or higher vacancy over 12 months, the vacant space must be input into Portfolio Manager separately from the occupied space as another use type with zero operating hours, computers, and workers. Follow these steps to add a vacant space to your property.

1. Select your property in Portfolio Manager and open the **Details** sub tab.
2. Under Property Uses and Use Details, from the dropdown select the type of use that the vacant area would be if occupied and click "Add."

3. On the page that opens, provide details of this space.
    a. Under name, identify the space as vacant.
    b. Enter the vacant square footage.
    c. Enter 0 for the operating hours, workers, and numbers of computers.
    d. Select the percent heated and cooled for the conditioning occurring in the vacant space.

4. Click "Save Use."
5. Under Property Uses and Use Details, you should now have more than one space use and the applicable square footage for each use.
   a. In some cases, the gross floor area for these uses may now sum to more than the building square footage. There will be an alert "!" next to the Property GFA if this is the case.

   b. In this case, you must select the original property use in the list that currently represents the whole building square footage, and update the square footage to be less than the vacant space.
      i. From the **Action** drop down for the original use, select "Correct Mistakes."
      ii. In the new window, under **Gross Floor Area**, in the column **Value**, update the square footage.
      iii. Click "Save Corrections."
      iv. The property GFA should now match.

8. What if my whole building is rented by a single tenant?

If your building has a single tenant who has assumed management of the entire building, you and your tenant can agree to delegate reporting duties to the tenant. This delegation must be noted in the "Property Notes" section of Portfolio Manager. You must also make sure that this tenant is assigned as the point of contact for this building with the city by **Claiming your Building** on the program website.

9. Are there any energy uses that are not part of my building's energy use?

Cell phone towers, radio masts, and any external billboards used for leased advertising space are not part of building energy use, and may be excluded if submetered. If you are not using whole-building data, and are submetering your parking areas, you may exclude parking area energy use since parking doesn't count towards your gross floor area.

10. What if there is split ownership of the building?

The primary owner listed in the Boulder County Tax Assessor records is responsible for compliance with all aspects of the ordinance. Please refer to the **Affected Building List** on the program website to see the primary owner assigned to each building.

11. What is Source EUI? What is an ENERGY STAR score? How are they calculated?

Energy use intensity (EUI) is the building's energy use per square foot. Source energy accounts for all the energy used in delivering energy to a building, including power generation and transmission and distribution losses. Site energy is the amount of energy consumed by a building as reflected in utility bills. Portfolio Manager typically shows a building's Source EUI, which is a complete assessment of the fuel required for operating the building. When you see Weather Normalized Source EUI, this is an estimate of what the Source EUI would have been in a year with "normal" weather conditions. For example, in a very hot year, Portfolio Manager might estimate your Weather Normalized Source EUI to be lower than your actual Source EUI. This allows an owner to more accurately compare a building's efficiency from year to year.

The ENERGY STAR score is a percentile score, on a scale of 1-100, comparing your building's energy performance with that of similar buildings in the U.S. The score normalizes for climate, weather, building size, number of employees, and other operational factors. A score close to 100 indicates the most energy efficient building. A score of 75 or above qualifies a building for ENERGY STAR Certification.

12. What if my building doesn't receive an ENERGY STAR score?

Only some building types will receive an ENERGY STAR score, due to limitations in the national comparative dataset. Thus, many buildings will submit their energy reports to the City without an ENERGY STAR score. The following building types are eligible for a score:

- Bank branch
- Barracks
- Courthouse
- Data center
- Distribution center
- Financial office
- Hospital (general medical & surgical)
- Hotel
- K-12 school
- Medical office
- Multifamily housing

- Non-refrigerated warehouse
- Office
- Refrigerated warehouse
- Residence hall/ dormitory
- Retail store
- Senior care community
- Supermarket/grocery store
- Wastewater treatment plant
- Wholesale club/supercenter
- Worship facility

If your building type is on the list and you still didn't receive a score, there may be an error in your data or submission. Contact a local PACE Business Sustainability Advisor for free assistance by calling 303-786-7223 or emailing info@PACEpartners.com.

13. How are data centers scored in ENERYG STAR Portfolio Manager?

Portfolio Manager defines a data center as a space "specifically designed and equipped to meet the needs of high density computing equipment such as server racks." You can add a data center as a property use type. To receive an ENERGY STAR score for a data center, IT energy use must be measured at the output of the uninterruptible power supply.

14. Can I use data from an energy or building management system?

Yes, if the system provides accurate whole-building data. Many such systems can upload energy data directly into Portfolio Manager. You must note in "Property Notes" if you do not use utility-provided data, and an explanation of any difference.

15. What if I generate electricity through on-site solar panels?

Onsite green power is not subject to traditional generation, transmission, and distribution losses. As long as you retain the Renewable Energy Credits (RECs), this benefit is reflected in the ENERGY STAR score and Source EUI by assigning onsite electricity a source conversion factor of 1.0 rather than the 3.34 value that is used for grid-sourced electricity. As such, a property with onsite solar or wind power is likely to receive a higher score. The electricity use from onsite solar and wind must be reported and included in your total energy consumption and ENERGY STAR score calculation. The use of onsite renewable electricity is part of your overall site energy consumption (i.e. the energy requirement of your property).

You can enter this into Portfolio Manager when setting up your meters. Obtain data from your installer on the energy used, any energy exported out to the grid, and about any renewable energy certificates

generated. If you report your renewable energy generation and use accurately, it will be reflected in your building's greenhouse gas emissions. For additional details on green power, see this document.

16. I have a cell tower that is responsible for some of the energy use at my building. How do I report it?

If the cell tower is sub-metered, you can exclude it from your property's energy use in Portfolio Manager. Simply exclude that meter if you are entering data manually. If you are using Xcel's benchmarking portal to automatically upload whole-building energy consumption, work with Xcel during the set-up to ensure the cell tower sub-meter is excluded from the whole-building data upload.

17. What if the building is under construction or newly built?

A newly constructed building, if it meets the threshold for being affected by this ordinance, is required to report its energy use for the first full calendar year after receiving a Certificate of Occupancy.

18. What if I purchased the building in the past year?

Buildings that have transferred ownership are not exempt from reporting requirements. The reporting regulations require the seller to transfer to the new owner any information that has been collected for completing the energy report.

19. What can I do to make my building more efficient?

ENERGY STAR offers a wealth of resources to improve building efficiency including financial calculators to evaluate energy efficiency measures, the Guidelines for Strategic Energy Management, and the Building Upgrade Manual.

Partners for a Clean Environment (PACE) provides free expert advisor services, financial incentives and a certification program to help businesses measure and gain recognition for their energy, waste, water, and transportation achievements. For free assistance, contact a PACE Business Sustainability Advisor* at 303-786-7223 or info@PACEpartners.com.

Provided by Boulder County and the City of Boulder Climate Action Plan (CAP) tax dollars supporting businesses and building owners in achieving their energy efficiency goals.

Not finding your question? Visit ENERGY STAR FAQs here or contact the Boulder Building Performance Help Desk at (844) 536-4528 or BPOHelpdesk@bouldercolorado.gov. Questions on Xcel Energy's Benchmarking Portal? Email benchmarking@xcelenergy.com.