OVERVIEW
BUILDING PERFORMANCE ORDINANCE
WHAT DO WE HOPE TO ACCOMPLISH?

Objectives

- **Reduce** GHG Emissions
- **Improve** quality of the commercial building stock
- **Realize** cost effective efficiency
- **Increase** awareness of building energy performance metrics
- **Drive** market transformation
- **Inform** design of future programs and services

Who Benefits

- Community Members
- Business Tenants
- Building Owners
- Policymakers
NATIONAL CONTEXT

U.S. Building Benchmarking and Transparency Policies

- Public, commercial, and multifamily building benchmarking policy adopted
- Public and commercial building benchmarking policy adopted
- Public buildings benchmarked

U.S. City Policies: Building Benchmarking, Transparency, and Beyond

- Beyond benchmarking (e.g., retrocommissioning or audit) policy adopted
- Public, commercial, and multifamily policy adopted
- Public and commercial building benchmarking policy adopted
- Public buildings benchmarked
ORDINANCE SCOPE

- **Adopted** Oct. 2015
- Commercial and Industrial (C&I) Buildings
  - Existing ≥ 20,000 sf
  - New* ≥ 10,000 sf
  - City-owned ≥ 5,000 sf
  - Large Industrial Campuses**

*Any building permitted since the Jan. 2014 energy code update.

**Three or more buildings at least partially used for manufacturing served by a central plant or single utility meter.
1. **Rate and report** energy use annually
   - Publicly disclosed after 2-year grace period
2. **Energy assessments** every 10 years
3. **Retrocommissioning (RCx)** every 10 years
   - Implement cost-effective measures within 2 years
4. **One-time lighting upgrades**

*Large Industrial Campuses have custom requirements.*
RATING AND REPORTING

- Annually report Jan 1 - Dec 31 whole-building energy data
  - All electricity and natural gas (even if tenants pay own bills)
- ENERGY STAR® Portfolio Manager (ESPM)
- Xcel Energy offers automatic data upload
  - Manually upload third party natural gas

Following a 2-year grace period, building specific total energy use and associated ratings will be displayed via a public website.
EFFICIENCY REQUIREMENTS

- Energy Assessments
- Retrocommissioning (RCx)
  - Measure Implementation
- Lighting Upgrades

BOULDER BUILDING PERFORMANCE EFFICIENCY REQUIREMENTS

The Building Performance Ordinance requires each affected commercial and industrial building owner to implement efficiency actions over a phased timeline. These actions are:

1. Perform Energy Assessments Every 10 Years;
2. Implement One-time Lighting Upgrades;
3. Perform Retrocommissioning (RCx) Every 10 Years;
4. Implement Cost Effective RCx Measures.

Timeline

https://bouldercolorado.gov/sustainability/boulder-building-performance-efficiency-requirements
- Must be conducted within 3 years of your first R&R deadline, and every 10 years after
- ASHRAE*-equivalent energy assessments
  - Buildings < 50,000 sf: ASHRAE Level I
  - Buildings ≥ 50,000 sf: ASHRAE Level II
- Owners must use a Qualified Service Provider

* American Society of Heating, Refrigerating, and Air-Conditioning Engineers
RETROCOMMISSIONING (RCX)

- Must be conducted within 5 years of your first R&R deadline and every 10 years after
  - Required scope is outlined in the City Manager Rules and How-to Guide
  - Owners must use a Qualified Service Provider
- Must implement measures with a payback period of ≤ 2 years within two years of study
LIGHTING UPGRADES

- One-time lighting upgrades within 5 years of your first R&R deadline
- Must meet current IECC*
  - Codes are updated every 3 years
  - Current code is 2018
- Only specific sections are required:
  - Interior/exterior lighting power
  - Interior/exterior timer switch/on-off controls
  - Occupancy sensors

*International Energy Conservation Code
SERVICE PROVIDERS

- Energy Assessments and Retrocommissioning
  - Must use a qualified service provider
  - Qualified providers are listed on the program website
    - Lighting contractors do not have to be on the list

- Service Providers
  - Must complete the online training
  - Must meet minimum qualifications
COMPLIANCE SCHEDULE

Start Year

2016
- Buildings $\geq 50,000$ sf
- New Buildings $\geq 10,000$ sf
- City Buildings $\geq 5,000$ sf
- Large Industrial Campuses

2018
- Buildings $\geq 30,000$ sf

2020
- Buildings $\geq 20,000$ sf

Rating and Reporting
- 3 yrs

Energy Assessments
- 2 yrs

Lighting and RCx
- 2 yrs

Implement cost effective RCx Measures
**DEADLINES***

<table>
<thead>
<tr>
<th>Ordinance Requirement</th>
<th>City Buildings ≥ 5,000 sf</th>
<th>Existing Buildings ≥ 50,000 sf New Buildings ≥ 10,000 sf</th>
<th>Existing Buildings ≥ 30,000 sf</th>
<th>Existing Buildings ≥ 20,000 sf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating &amp; Reporting</td>
<td>2016</td>
<td>2016</td>
<td>2018</td>
<td>2020</td>
</tr>
<tr>
<td>Public Disclosure</td>
<td>2019</td>
<td>2019</td>
<td>2021</td>
<td>2023</td>
</tr>
<tr>
<td>Energy Assessments</td>
<td>2019</td>
<td>2019</td>
<td>2021</td>
<td>2023</td>
</tr>
<tr>
<td>Lighting Upgrades</td>
<td>2021</td>
<td>2021</td>
<td>2023</td>
<td>2025</td>
</tr>
<tr>
<td>Retrocommissioning</td>
<td>2021</td>
<td>2021</td>
<td>2023</td>
<td>2025</td>
</tr>
<tr>
<td>Implement Cost Effective RCx Measures</td>
<td>2023</td>
<td>2023</td>
<td>2025</td>
<td>2027</td>
</tr>
</tbody>
</table>

*All deadlines June 1st
EXEMPTIONS

All Requirements

Unconditioned and unlit buildings
Financial hardship

Rating and Reporting

Less than one year of energy use data

Public Disclosure

Building information includes trade secrets, privileged or confidential commercial information

Energy Assessment

Building received equivalent energy assessment within 10 years of first requirement AND implemented cost-effective actions (payback ≤ 5 years)
EXEMPTIONS CONT.

Efficiency Requirements

1. **ENERGY STAR certified**
2. LEED Existing Buildings: Operation & Maintenance (EBOM) Certified
3. Building has demonstrated pattern of significant and consistent improvements and can provide all of the following:
   - Records for past 3 years of energy use or emissions
   - Narrative covering how reductions have been achieved and proof of implementation
   - Proof of high efficiency compared to other similar buildings or to your baseline EUI
ENFORCEMENT

- **For owners**
  - Fines of $0.0025 per square foot per day (up to $1,000 per day) of non-compliance.

- **For tenants**
  - Required to respond to building owner request for information within 30 days of a request.
  - Failure to do so will result in similar fines.
RESOURCES

- Webpage
  www.BoulderBuildingPerformance.com
  • Rules, requirements, deadlines
  • List of current affected buildings
  • Service provider resources
  • Rebates and trainings
  • Compliance map
  • Tools and guidance

- How-to Guides
  • Step-by-step guidance
  • Examples and definitions
  • Templates

- BPO Help Desk
  • BPOHelpdesk@bouldercolorado.gov
  • (844) 811-8785
HOW TO RATE & REPORT
USING ENERGY STAR PORTFOLIO MANAGER
WHAT IS ENERGY STAR PORTFOLIO MANAGER?

- EPA created ENERGY STAR Portfolio Manager®, a free online tool you can use to measure and track energy and water consumption, as well as greenhouse gas emissions.

- It is used to benchmark the performance of one building or a whole portfolio of buildings, compared to a national dataset and to itself year over year.
### ENERGY STAR SCORE

#### Property Types Eligible to Receive a 1-100 Energy Star Score

<table>
<thead>
<tr>
<th>Property Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Branch</td>
</tr>
<tr>
<td>Barracks</td>
</tr>
<tr>
<td>Courthouse</td>
</tr>
<tr>
<td>Data Center</td>
</tr>
<tr>
<td>Distribution Center</td>
</tr>
<tr>
<td>Financial Office</td>
</tr>
<tr>
<td>Hospital</td>
</tr>
<tr>
<td>Hotel</td>
</tr>
<tr>
<td>K-12 School</td>
</tr>
<tr>
<td>Medical Office</td>
</tr>
<tr>
<td>Multifamily Housing</td>
</tr>
<tr>
<td>Non-Refrigerated Warehouse</td>
</tr>
<tr>
<td>Office</td>
</tr>
<tr>
<td>Refrigerated Warehouse</td>
</tr>
<tr>
<td>Residence Hall/Dormitory</td>
</tr>
<tr>
<td>Retail Store</td>
</tr>
<tr>
<td>Senior Care Community</td>
</tr>
<tr>
<td>Supermarket/Grocery Store</td>
</tr>
<tr>
<td>Wastewater Treatment Plant</td>
</tr>
<tr>
<td>Wholesale Club/Supercenter</td>
</tr>
<tr>
<td>Worship Facility</td>
</tr>
</tbody>
</table>

#### Property Types Not Eligible for an Energy Star Score

<table>
<thead>
<tr>
<th>Property Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Use Properties</td>
</tr>
<tr>
<td>Restaurants</td>
</tr>
<tr>
<td>Industrial/Manufacturing</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Entertainment/Public Assembly</td>
</tr>
<tr>
<td>Technology/Science</td>
</tr>
<tr>
<td>Etc.</td>
</tr>
</tbody>
</table>
GETTING STARTED - RESOURCES

- R&R Checklist
- How-To Guide
- Training Slides
- Help Desk

Resources

Help Desk - The city has hired Overlay Consulting to provide Help Desk services to building owners rating and reporting their building energy data for compliance with the Building Performance Ordinance. Help Desk services include assistance using Portfolio Manager, connecting with Xcel Energy’s automatic data upload, and applying for exemptions or deadline extensions. Contact the Help Desk 8am-5pm MDT at BPOHelpdesk@bouldercolorado.gov or (844) 811-8785.

- Compliance Checklist - A list of the Rating & Reporting compliance steps.
- How-to Guide - Provides detailed instructions for Rating & Reporting energy data through ENERGY STAR Portfolio Manager.
- Training Slides - The city hosted trainings on how to use ENERGY STAR Portfolio Manager to complete Rating & Reporting and the slides are available for reference.
- ENERGY STAR Portfolio Manager - EPA’s free online tool for Rating & Reporting whole-building energy use. The ENERGY STAR webpage features guidance and trainings on using the tool.
- ENERGY STAR Energy Tracking Tool - Manufacturing buildings may choose to comply with Rating & Reporting using this tool. Contact the Program Administrator for more information.
- Using the Energy Tracking Tool - Instructions for manufacturing buildings to use the Energy Tracking Tool for Rating & Reporting compliance.
- Xcel Energy Benchmarking Portal - Automatically uploads whole-building energy data directly into ENERGY STAR Portfolio Manager (for energy supplied by Xcel Energy).
- Deadline Extension Request - Deadline extensions may be available. Submit the request online for review.
- Exemption Request - Rating and Reporting exemptions may be available if a building is unconditioned and unfit; has operated less than a year based on the Certificate of Occupancy; or has proof of financial hardship.
Step 1:
Create an Account in Energy Star Portfolio Manager
GETTING STARTED

Step 1:
Create an Account in Energy Star Portfolio Manager

- Create password
- Fill in some basic information about yourself, company, or business
ADD YOUR PROPERTY

Step 2:
Add Your Property

- Activate your Portfolio Manager account and log in
- From the home screen, select “Add a Property”
ADD YOUR PROPERTY

Step 2:

Add Your Property

- Select your Property Type
- Number of Buildings
- Construction Status
Step 3: Setting Up Your Property

- Address
- Year Built
- Gross Floor Area
- Occupancy
### Setting Up Your Property - Gross Floor Area

<table>
<thead>
<tr>
<th>Include in GFA</th>
<th>Don’t Include in GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lobbies</td>
<td>• Exterior Spaces</td>
</tr>
<tr>
<td>• Tenant Areas</td>
<td>• Balconies</td>
</tr>
<tr>
<td>• Storage Rooms</td>
<td>• Patios</td>
</tr>
<tr>
<td>• Common Areas</td>
<td>• Exterior Loading Docks</td>
</tr>
<tr>
<td>• Laundry Rooms</td>
<td>• Driveways</td>
</tr>
<tr>
<td>• Meeting Rooms</td>
<td>• Crawl Spaces</td>
</tr>
<tr>
<td>• Elevator Shafts</td>
<td>• Covered Walkways</td>
</tr>
<tr>
<td>• Stairwells</td>
<td>• Parking</td>
</tr>
<tr>
<td>• Restrooms</td>
<td>• Outdoor Courts (Tennis, Basketball, etc.)</td>
</tr>
<tr>
<td>• Mechanical Equipment Areas</td>
<td>• Interstitial Plenum Space Between Floors</td>
</tr>
<tr>
<td>• Basements</td>
<td></td>
</tr>
<tr>
<td>• Atriums (only count the base level)</td>
<td></td>
</tr>
</tbody>
</table>
Step 3:
How to Account for Parking

- The ENERGY STAR tool is intended to assess the efficiency of the building, not its parking lot.
- If its sub-metered, then parking may be excluded.
- If its not sub-metered, the parking square footage should be included as a separate use type.
Step 4:

Adding Property Use Details

- You will be asked specific questions regarding gross floor area, weekly operating hours, number of workers on the main shift, etc.
- Data collection worksheets for tenants
Congratulations! You have successfully created your property.

Next, you can:
- Add energy use information, so that you can see your energy performance metrics.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Not Available (Energy Baseline)</th>
<th>Not Available (Energy Current)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY STAR Score (1-100)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
<tr>
<td>Source EUI (kBtu/ft²)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
<tr>
<td>Site EUI (kBtu/ft²)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
<tr>
<td>Energy Cost ($)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
<tr>
<td>Total GHG Emissions Intensity</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Use (All Water Sources)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Waste (Compost and Diverted)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Step 5:
Adding Your Building’s Reporting ID

- Within the “Details” tab, go to the “Unique Identifiers (IDs)” box and select “Edit”.
- Under “Standard IDs” select “Boulder Energy Reporting ID”, enter your five digit ID and click “Save”.
Step 6 (Case Specific): Adding Additional Use Types

- In the “Details” tab you can add additional use types or edit your existing use type details.
Step 7:

Creating Energy Meters

- In the “Energy” tab you will need to create the building’s energy meters.
CREATING METERS & ENTERING WHOLE BUILDING ENERGY DATA

Sources of Your Property's Energy
What kind of energy do you want to track? Please select all that apply:
- Electric
- Natural Gas
- Propane
- Fuel Oil (No. 2)
- Diesel
- District Steam
- District Hot Water
- District Chilled Water
- Fuel Oil (No. 4)
- Fuel Oil (No. 5 and No. 6)
- Coal (anthracite)
- Coal (bituminous)
- Coke
- Wood
- Kerosene
- Fuel Oil (No. 1)
- Other:

About Your Meters for
Enter the information below about your new meters. The meter's Units and Date Meter became Active are required. You can also change the meter's name.

2 Energy Meters for Overlay (click table to edit)

<table>
<thead>
<tr>
<th>Meter Name</th>
<th>Type</th>
<th>Other Type</th>
<th>Units</th>
<th>Date Meter became Active</th>
<th>In Use?</th>
<th>Date Meter became Inactive</th>
<th>Enter as Delivery?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>Natural Gas</td>
<td></td>
<td>Therm</td>
<td>1/1/2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Grid Meter</td>
<td>Electric Grid</td>
<td></td>
<td>kWh (Thousand kWh)</td>
<td>1/1/2017</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Delete Selected Entries
Add Another Entry

Follow Us [Social Media Icons]
Step 8:

Adding Energy Data

Three ways to enter energy data for your property or portfolio:

1. Manually
2. Portfolio Manager Excel Spread Sheet Templates
3. Xcel Energy Auto Upload
CREATING METERS & ENTERING WHOLE BUILDING ENERGY DATA

Step 8:

Adding Energy Data

Three ways to enter energy data for your property or portfolio:

1. Manually
2. Portfolio Manager Excel Spread Sheet Templates
3. Xcel Energy Auto Upload
WHAT IF YOU DON’T SEE AN ENERGY STAR SCORE OR EUI

Your property does not have a score for the current year, therefore the weather normalized source EUI is the best way to evaluate your energy performance, both against the national median and by comparing your current and baseline patents.

Reason for no score:
1) Insufficient data for Baseline or Current Date
   Problem: You do not have 12 full months of data from which to establish a current or baseline period. There are 5 possible reasons why:
   - You have gaps
   - You have interventions
   - Your “Date Meter became Active” is AFTER some of your bills, so those bills are ignored
   - Your “Date Meter became Inactive” is BEFORE some of your bills, so those bills are ignored
   - You haven’t entered 12 full calendar months of data

   Here is a list of all of your meters (those DO NOT all necessarily have errors):
   - Natural Gas
     Active from 01/01/2017 to present
     No Motor EUI was Have Been Entered
   - Electric Grid Meter
Step 9:
Run the Data Quality Checker

- This 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.
Step 9:
Run the Data Quality Checker

- Set the “Year Ending” to “December 31, 2017” and click “Run Checker”
- This will pull up alerts for data that is incomplete or missing as well as how to correct the issue
Step 10: Submit your Energy Report

- To comply with the Building Performance Ordinance, you must manually submit your energy report to the city through Portfolio Manager every year.
Step 10: Submit your Energy Report

- After generating a response preview, you will need to send the response.
- You will then be asked to 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.
- Click “Send Data”
HELP DESK INFORMATION

- Hours of Operation: Monday – Friday 8am-5pm
- Phone Number: 844-811-8785
- Email: BPOHelpdesk@bouldercoloardo.gov
- Website: boulderbuildingperformance.com
THANK YOU!

QUESTIONS?

www.BoulderBuildingPerformance.com
BPOHelpdesk@bouldercoloardo.gov
844-811-8785
REFERENCE SLIDES
REQUIREMENTS: LARGE INDUSTRIAL CAMPUSES

- **Annually**
  - Report aggregate energy data
    - Publicly disclosed after 2 years

- **One Time**
  - Lighting Upgrades

- **Every 10 years**
  - Level II Energy Assessments
    - Implement measures with payback < 1 year
EXEMPTION EXAMPLES

My 60,000 sf building received an Xcel energy assessment in 2015. Can that replace my energy assessment requirement?

- No. This building is required to conduct an ASHRAE Level II-equivalent energy assessment because of its size (50,000 sf and up). Xcel’s assessment does not meet this equivalency.

- However, after you complete your 2016 rating and reporting, if you can show that implementing the measures Xcel found in its energy assessment can achieve a 15% reduction in your energy-use intensity by the 2019 energy assessment deadline, you could be exempt.
My building recently underwent a renovation/lighting upgrade – do I still need to comply?

- You are still required to rate and report.
- However, you may be exempt from the other requirements. After completing your rating and reporting:
  - Are you eligible for ENERGY STAR Certification? That would exempt you from all efficiency requirements
  - Is your EUI in the top 25% of similar buildings? That could exempt you from all efficiency requirements
  - Does the current lighting in the building comply with IECC 2015 requirements? If so, you can submit proof of this to satisfy the lighting requirement. However, you would still be subject to all other requirements.
I am eligible for ENERGY STAR certification from my recent rating and reporting submission. Now what?

- You are required to continue rating and reporting. However, if you complete the certification process you can submit an exemption request from all efficiency requirements.

- You must maintain the certification to maintain the exemption. If your score falls below the certified range (below 75) at your next R&R submission, you must get a (free) Level I energy assessment from PACE and have that year to bring the score back up. If your score has not achieved the certified range at the next R&R submission, the exemption will no longer be valid and you must comply with all future efficiency requirements.
Energy Benchmarking Services

Q2 2018
How it’s worked in the past:

1. Collect billing data from historic utility bills
2. Manually enter or upload data into Portfolio Manager
3. Repeat each month

- Inconsistent availability of tenant data
- Error-prone
- Time, resource intensive
Xcel Energy Solution Overview

- **Free, easy access** tool for **whole-building** energy consumption data

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Usage kWh (thousand Watt-hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/1/2015</td>
<td>5/31/2015</td>
<td>856,876.35</td>
</tr>
<tr>
<td>6/1/2015</td>
<td>6/30/2015</td>
<td>956,597.6</td>
</tr>
<tr>
<td>7/1/2015</td>
<td>7/31/2015</td>
<td>857,553.29</td>
</tr>
<tr>
<td>8/1/2015</td>
<td>8/31/2015</td>
<td>918,058.89</td>
</tr>
</tbody>
</table>

- Initial Upload = **36 months** of history
- Ongoing Upload = every month thereafter
New Process Walkthrough
Steps 1 – 3 are in Energy Star Portfolio Manager

https://portfoliomanager.energystar.gov/pm/

• Step 1:
  – Create an account in Portfolio Manager
• Step 2:
  – Create a property in Portfolio Manager
• Step 3:
  – Create Meters in Portfolio Manager
Energy Benchmarking Services

Download the user guide

Energy Benchmarking

Energy benchmarking is a key energy management best practice that enables you to identify the energy performance of your buildings, invest strategically in energy efficiency upgrades and monitor effectiveness of energy improvements. Benchmarking is the process of comparing measurements against a standard, average or best practice with the purpose of improving current practice and moving toward the use of best practices.

What’s included?

We are providing a direct feed of whole-building energy usage data from our metered data repository into ENERGY STAR Portfolio Manager. After you complete the initial connection steps, we will update your data on a monthly basis so you can focus on the important part—saving energy.

Get Started

Download the User Guide

www.xcelenergy.com/energybenchmarking
Create an Account in the Xcel Energy Portal

Reportedly into ENERGY STAR Portfolio Manager™. After you complete the Initial Connection steps, we will update your data on a monthly basis so you can focus on the important part – saving energy.

Get Started

1. Set up an account with ENERGY STAR Portfolio Manager™ along with the properties that you’d like to benchmark.

2. Once you have that set up, log in to the Xcel Energy Benchmarking Portal to establish the energy data connection.

3. Log back into ENERGY STAR Portfolio Manager™ and connect your account with Xcel Energy.

What next?

With your benchmarking data, you can identify energy efficiency opportunities. Here are a few resources to help make targeted improvements.
Create an Account in the Xcel Energy Portal

Connecting to our Energy Benchmarking service

Step 4 Set up an account in the Xcel Energy Benchmarking portal

1. Click on Sign Up.

2. Enter your information.

3. Click on the e-mail link you received from Xcel Energy and log in to the portal.
Connect your Portfolio Manager Account with Xcel Energy’s

Step 5: Back in Portfolio Manager, connect your account with Xcel Energy

1. In Portfolio Manager, click on Contacts.

2. Click on Add Contact.

3. Under contact username, type: XCELENERGYWEBSERVICES and click on Search.

4. When the contact shows up, click on Connect.
Connect your Portfolio Manager Account with Xcel Energy’s

5. Type in your log-in email you set up for the Xcel Energy Benchmarking portal. (You must use the same email address used to create your account in Step 4, on page 6 of this user guide.) Then agree to Terms of Use by checking the box.

6. Click on Send Connection Request.

7. Xcel Energy will notify you via email when your account connection request has been received and connected. Allow 30 minutes.

8. When the email arrives, log back in to your Portfolio Manager account.
Connect your Portfolio Manager Account with Xcel Energy’s

From: No Reply Benchmarking <noreplybenchmarking@xcelenergy.com>
Date: January 18, 2017 at 10:00:02 AM CST
To: "drew@ewb-nu.org" <drew@ewb-nu.org>
Subject: Account connected!

Congratulations! You’ve successfully connected with Xcel Energy’s Web Services Account in Portfolio Manager®, which means you’re one step closer to receiving an automated feed of whole-building energy data for all of your properties.

What’s next?
1) If you’re not already logged in to your Portfolio Manager account, go ahead and log back in: http://portfoliomanager.energystar.gov/
2) In Portfolio Manager®, share the properties and associated electricity and/or natural gas meters with us
3) Wait for notification from us to complete your initial setup

You can also see details of your progress throughout the initial connection phase in Xcel Energy’s Benchmarking Portal at this link: https://xcelenergy.force.com/benchmarking/0010B00001oQuiE

Stuck? Shoot us an email at benchmarking@xcelenergy.com
Share your properties and meters with Xcel Energy

**Step 6**

8. Give full access to property information as well as all Xcel Energy delivered fuel meters**.
   If you do not share with full access, Xcel Energy will not be able to update your property.

9. Make a selection regarding “Share forward.”
   (This gives Xcel Energy permission to share the property with others.) If you’re participating in an Xcel Energy program or plan to at some point in the future, this may be beneficial, but is not required.

10. Click on Apply Selections and Authorize Exchange.

11. Scroll down, and click on Share Property(ies).

12. Verify Sharing Requests have been sent.
   Your sharing notifications will automatically appear in the Sharing Notifications section of the Sharing Tab under your Portfolio Manager account.

13. Xcel Energy retrieves connection requests.
   When Xcel Energy has retrieved the share requests, they will be automatically accepted and an email will be sent to you. **Allow 30 minutes.** If your requests were declined for any reason, go back to Step 6 and ensure that the appropriate permission levels have been set for both the Property and Meters.
Xcel Energy Verifies your Relationship with the Property Owner

Step 7: Back in Portfolio Manager, connect your account with Xcel Energy

We require that if anyone other than the building owner is requesting data on the building owner’s behalf, that requester needs to obtain authorization from the building owner before proceeding. If you are the building owner, this step will not require any action from you. If you are not, this authorization can be completed using the customer energy usage data release forms found at the following link: xcelenergy.com/DataConsent

Use the following instructions when completing the consent form:

1) Specify your (the third party’s) contact information, including identifying a contact person who the customer may contact with questions related to the data release request.

2) Describe the purpose(s) of the proposed use of customer energy usage data. Be sure to include Energy Benchmarking in your description of the purpose.

3) Provide the consent form to the customer of record and have the customer enter their account number, service address and name in the customer section of the consent form, and sign and date the form.

4) Submit the completed release request consent form to Xcel Energy, by sending an email to datarequest@xcelenergy.com and copying benchmarking@xcelenergy.com. Invalid or incomplete forms will be returned, and their request for information release will not be honored.
Xcel Energy identifies the tenants in your building and maps them to the meters you created in Portfolio Manager.

**Step 8** Xcel Energy will compile your tenant list.

This may take up to five business days, depending on the complexity of the building. We will send you an e-mail if we get stuck. No action is required of you at this stage.
Step 9 Tenant to meter matching

We will make an initial attempt to match tenants to the meters you shared in Step 3. If we have any questions, we’ll reach out to you.

The system will analyze the configuration to see if individual customer consent forms are required. At this point, you will receive an email from us indicating one of the following:

a. Individual tenant consent is required (Step 10)
b. Consumption data was successfully published to your Portfolio Manager account (Step 11)

If you need to adjust the tenant list for any reason, create a task for Xcel Energy within the Benchmarking Portal.

a. Scroll down to open activities and click on New Task
b. Fill out the form, click on Send.

We will contact you if we have any additional questions.
Step 10: Work through consent process

Note that if you chose option 1 when setting up your meters, this step may not apply to you. Depending on the number of tenants in your building, you may require consent from individual tenants.

1. Receive notification from Xcel Energy telling you that consent forms are required from one or more tenants.
   1. Click on the link embedded in the notification email to download a copy of the customer consent form.
   2. Complete the consent form with the required tenants according to the directions in Step 7.
   3. Email consent form to benchmarking@xcelenergy.com

2. Xcel Energy will validate the consent form and notify you if more information is needed.
Xcel Energy applies its data privacy rules to the specific tenant combinations in your building.
### Initial Data Transfer

<table>
<thead>
<tr>
<th>Date</th>
<th>To Date</th>
<th>Amount</th>
<th>Edit Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/1/2014</td>
<td>3/31/2014</td>
<td>228,139.11</td>
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<td></td>
</tr>
<tr>
<td>4/1/2014</td>
<td>4/30/2014</td>
<td>201,326.34</td>
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<td>6/1/2014</td>
<td>6/30/2014</td>
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<td>7/1/2014</td>
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<td>198,687.09</td>
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<td>8/1/2014</td>
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<tr>
<td>9/1/2014</td>
<td>9/30/2014</td>
<td>197,722.54</td>
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<tr>
<td>10/1/2014</td>
<td>10/31/2014</td>
<td>207,740.41</td>
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<td></td>
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<td>11/1/2014</td>
<td>11/30/2014</td>
<td>204,968.72</td>
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<td></td>
</tr>
</tbody>
</table>

**Your Property is:** Edit
- A Single Building
- A Campus of Multiple Buildings

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Energy Type</th>
<th>End Date</th>
<th>Auto-Upload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Grid Meter Common</td>
<td>Electric - Grid</td>
<td>11/30/2016</td>
<td>Yes</td>
</tr>
<tr>
<td>Electric Grid Meter Residential</td>
<td>Electric - Grid</td>
<td>11/30/2016</td>
<td>Yes</td>
</tr>
<tr>
<td>Natural Gas Common</td>
<td>Natural Gas</td>
<td>11/30/2016</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Ongoing Data Transfer

From: No Reply Benchmarking <noreplybenchmarking@xcelenergy.com>
Date: June 7, 2016 at 2:24:36 AM CDT
To: "quirk.drew@gmail.com" <quirk.drew@gmail.com>
Subject: We’ve added new data for Buckley Housing in Portfolio Manager®!

We just finished adding new energy data for Buckley Housing. Log in to Portfolio Manager® to see your updated metrics.

If you’re ready to take the next step in saving energy and money, take a look at the programs available to you through Xcel Energy. Follow this link or contact your Account Manager or call a representative from the Business Solutions Center at 1-800-481-4700.

As always, you’re able to check in on the status of your connection and property setup in Xcel Energy’s Benchmarking Portal at this link: https://xcelenergy.force.com/benchmarking/a52U00000000Zb8

Other questions? Shoot us an email at benchmarking@xcelenergy.com

Thanks,

Xcel Energy
Setup Process Recap

Budget 1 hr

- Account Setup: 5-10 min
- Account Connection: 0-30 min
- Connect Properties: 0-30 min
- Building Owner Verification: 2-3 days
- Tenant Identification: 3-5 days
- Data Privacy Consent forms if needed: 0-? days
- Auto-Upload: 2x per day
- Ongoing Upload 45 days out: monthly

Expect 5-10 days
Current System Limitations

• Xcel Energy delivered fuels only (although Portfolio Manager can be used for others)
• Only energy data (kWh, therms) at this time
• Only actual consumption (not solar production) at this time

• Have you changed natural gas providers?
  • From a Transport provider to Xcel Energy: Have monthly natural gas data automatically uploaded to your account from Xcel Energy (Recommended). xcelenergy.com/energybenchmarking
  • From Xcel Energy to a Transport provider: You must now manually add your natural gas data to your Portfolio Manager account. Xcel Energy’s auto-upload feature will no longer work for your natural gas data.
On-Site Energy Audit through Xcel Energy

- **Energy Analysis on-site energy audit** – Xcel Energy sends an energy advisor to your facility to conduct a comprehensive on-site energy audit, which is a comprehensive audit of your facility’s lighting, heating, cooling, and motors and drives equipment.
- You receive a detailed report including energy conservation opportunities and the associated cost, savings, payback and available rebates.
- Available to electric and gas customers in Colorado.
- Select your building size below.
  - $125 – building size <50,000 square feet
  - $250 – building size 50,000–150,000 square feet
  - $500 – building size >150,000 square feet
How to sign up

1. Call your Account Manager or Business Solutions Center Representative
2. 855.839.8862 or email: energyefficiency@xcelenergy.com
3. Fill out an application (available online)
4. An Energy Advisor will call to schedule a walk-through
FAQs

Getting started

Are you able to aggregate / sum up all the electricity data for the building?
Yes, we can aggregate all of the tenant meters for you into one “whole-building” meter in Portfolio Manager. Refer to Step 3 in our Energy Benchmarking User Guide for more information.

How do I get started?
Visit our website as well as the steps outlined in the Energy Benchmarking User Guide. If you have any questions along the way, email us at benchmarking@xcelenergy.com.

What are the data privacy rules to access data?
First, we need to verify that you have a relationship with the building owner. If you are not the building owner, we will need to get you authorized on the building owner’s Xcel Energy account at the property. This can be done by completing a consent form with the building owner as the customer of record. Alternatively, the building owner can contact Xcel Energy at 1-800-481-4700 and have them request to add you as an authorized contact on their account.

Once this step is complete, we also have protections on the energy usage data. If you are requesting whole building energy data for a property with multiple Xcel Energy customers, as long as there are more than three tenants and as long as no individual tenant uses more than 50% of the building’s energy in a given month, no further consent forms are needed. If either of these conditions is not met, or if you are looking specifically for individual tenant data, you will need to have consent forms signed by those tenants.

Consent forms and instructions for filling them out can be found at the following link: https://www.xcelenergy.com/billing_and_payment/customer_data&_privacy/customer_energy_usage_data_release_forms
FAQs

Account Connection Stage

How do I connect to the service?
Take a look our website as well as the steps outlined in the Energy Benchmarking User Guide. After you complete those, we’ll be able to automatically transfer the data you need into your ENERGY STAR account.

How do I connect my Portfolio Manager Account with Xcel Energy’s?
Take a look at Step 5 in the Energy Benchmarking User Guide. This guide should be a helpful resource for you as you go step-by-step through the connection process.

Account connection was declined
Review Steps 1-5 in the Energy Benchmarking User Guide and try again. Be sure that you have created an account in the Xcel Energy Benchmarking Portal before attempting to connect with us in ENERGY STAR Portfolio Manager.

What is the Xcel Energy Portal Username?
The Xcel Energy Portal Username is the email address that you used to sign up for the Xcel Energy Benchmarking Portal. Review steps 1-5 in the Energy Benchmarking User Guide for more information.

I set up an account in Xcel Energy’s portal, but I didn’t receive the password reset email
Go the login page again and click the “forgot your password” link and follow the steps there to see if it gets you back on the right track. We can sort this out for you on the back end if that doesn’t work.
FAQs

Consent Forms

I am not the building owner – what do I need to do?
Complete a consent form with the building owner to become authorized on their accounts. Use the consent forms at the following link:

https://www.xcelenergy.com/billing_and_payment/customer_data&_privacy/customer_energy_usage_data_release_forms

Where can I find consent forms?
Consent forms and instructions for filling them out can be found at the following link:
https://www.xcelenergy.com/billing_and_payment/customer_data&_privacy/customer_energy_usage_data_release_forms

Why is consent required?
We take customer privacy and confidentiality interests seriously. If you are requesting whole building energy data for a property with multiple Xcel Energy customers, as long as there are more than three tenants and as long as no individual tenant uses more than 50% of the building’s energy in a given month, no consent forms are needed. If either of these conditions is not met, or if you are looking specifically for individual tenant data, you will need to have consent forms signed by those tenants.

Consent forms and instructions for filling them out can be found at the following link:
https://www.xcelenergy.com/billing_and_payment/customer_data&_privacy/customer_energy_usage_data_release_forms

How do I fill out a consent form?
Please reach out to the team at datarequest@xcelenergy.com for help with your consent form.

[Alternatively, reach out to the data request team at datarequest@xcelenergy.com to help the customer out. If you have experience with the consent form process and can answer the customer’s question, do that as well.]
FAQs

Consumption Data

Gas Transportation Customers
If you receive your natural gas from a third-party provider, we are not currently able to transfer this data to Portfolio Manager for you. Please work directly with your third-party provider in order to access this information.

District Steam and Chilled Water Customers
If you receive district steam and chilled water, we are not currently able to transfer this data to Portfolio Manager for you. Please work directly with your district steam and chilled water provider to access this information.

*for Xcel Energy district steam and chilled water customers, configure your meters in Portfolio Manager as follows:

<table>
<thead>
<tr>
<th>District Service</th>
<th>Meter Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steam</td>
<td>District Steam</td>
<td>kLbs. (thousand pounds)</td>
</tr>
<tr>
<td>Chilled Water</td>
<td>District Chilled Water from an electric-driven chiller</td>
<td>ton hours</td>
</tr>
</tbody>
</table>
## District Steam Bill

### OTHER RECURRING CHARGES DETAILS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CHARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steam Billing Period</td>
<td>02/01/17 - 02/28/17</td>
</tr>
<tr>
<td>Meter 2031</td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>1440</td>
</tr>
<tr>
<td>Peak Day Mlb</td>
<td>120</td>
</tr>
<tr>
<td>Service &amp; Facility Chrg</td>
<td>$200.00</td>
</tr>
<tr>
<td>Steam Capacity Charge</td>
<td>120 Mlb x $40.000000</td>
</tr>
<tr>
<td>Steam Consumption Charge</td>
<td>1440 Mlb x $6.602000</td>
</tr>
<tr>
<td>Steam Cost Adj</td>
<td>1440 Mlb x $8.679000</td>
</tr>
<tr>
<td>GRSA</td>
<td>$4,616.09</td>
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<tr>
<td>Franchise Fee</td>
<td>3.00%</td>
</tr>
<tr>
<td>Sales Tax</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$33,758.13</strong></td>
</tr>
</tbody>
</table>
FAQs

Onsite Solar or Wind Generation Customers

For customers with a solar photovoltaic (PV) system or wind turbine, Xcel Energy currently is not able to transfer the electricity generation data to Portfolio Manager for you. Please refer to your Xcel Energy billing statements to access this information. Note that Xcel Energy will transfer the gross electricity provided to the site from the grid under the Electric Grid Meter in Portfolio Manager. You will need to create an additional Electric Solar Meter or Electric Wind Meter for the onsite generation system and enter the production data for that system with that meter. More information can be found at https://www.energystar.gov/buildings/tools-and-resources/portfolio-manager-technical-reference-green-power

What energy units do meters need to be set to?

Units for electricity are kWh and units for gas are Therms.
FAQs

• I’ve received energy data in my Portfolio Manager account. Why don’t the start and end dates line up with my energy bills?
  – We allocate energy usage from each tenant’s individual readings across the months spanned in that reading. This allows us to add up multiple tenants’ usage and avoid double-counting any energy.

• My energy data doesn’t go up until the last month. Why is that?
  – To account for meter reading schedules, we only post energy consumption data for months that are at least 45 days in the past. On average, you will see data up to two months into the past.

• I have energy data for all my Xcel Energy meters. How do I get data for fuels not served by Xcel Energy?