City of Boulder
Building Performance Ordinance (BPO): Energy Assessments

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Boulder Building Performance Ordinance

All attendees will be on mute for the duration of the presentation.

Please feel free to enter questions in the chat box or to raise your hand and ask at the allotted time at end of presentation.

This entire session will be recorded.

A video link and pdf of the presentation will be emailed to all participants.

Boulder Building Performance Ordinance

In support of community energy and climate goals, the Boulder City Council adopted the Boulder Building Performance Ordinance (Ordinance No. 8071) on Oct. 20, 2015.

Energy consumption from the Commercial &Industrial sector accounts for over 50 percent of the City of Boulder's greenhouse gas (GHG) emissions footprint.

The ordinance is a key initiative toward achieving the City of Boulder's Climate Commitment goal of an 80 percent reduction in community GHG emissions by 2050, which was adopted by City Council in Dec. 2016.

Boulder Building Performance Ordinance

1) Annually rate and report (R&R) building energy consumption using ENERGY STAR Portfolio Manager (or approved alternative);

2) Perform energy assessments within three years of first energy use reporting deadline and every ten years thereafter;

3) Perform retro-commissioning (RCx) within three years of first reporting deadline and every ten years thereafter with cost effective RCx measures implemented within two years of the study; and

4) Implement one-time lighting upgrades to meet specific sections of the current International Energy Conservation Code (IECC) requirements.

Boulder Building Performance Ordinance

Buildings **50,000** sf and larger begin annual reporting **2016**

Buildings **30,000** sf and larger begin annual reporting **2018**

Buildings **20,000** sf and larger begin annual reporting **2020**

Boulder Building Performance Ordinance

Efficiency Requirement Compliance Deadlines				
Affected Buildings	Energy Assessment	Retro-commissioning	RCx Measure Implementation	Lighting Upgrade
City buildings > 10,000 sf*	May 1, 2019	May 1, 2021	May 1, 2023	May 1, 2021
Existing buildings > 50,000 sf New buildings*** > 10,000 sf**	June 1, 2019	June 1, 2021	June 1, 2023	June 1, 2021
Existing buildings > 30,000 and < 50,000 sf	June 1, 2021	June 1, 2023	June 1, 2025	June 1, 2023
Existing buildings > 20,000 and < 30,000 sf	June 1, 2023	June 1, 2025	June 1, 2027	June 1, 2025

*City buildings >5,000 sf must complete lighting upgrades but are not subject to energy assessments or retrocommissioning.

**Existing buildings that meet the definition of a Large Industrial Campus (three or more buildings, at least partially used for manufacturing, served by a central plant or single utility meter) have custom requirements and deadlines due to their unique nature.

***Any commercial or industrial building for which an initial building permit was issued on or after January 31, 2014.

Boulder Building Performance Ordinance

Ordinance Benefits

➢ IMPROVE the quality of Boulder's commercial building stock

➢ SAVE MONEY through cost-effective efficiency measures

➢ HELP building owners understand and manage their buildings' energy use

➢ EDUCATE tenants and real estate professionals about building energy performance

➢ INFORM future energy programs and services

➢ MARKET buildings in compliance as efficient and high performing

Energy Assessments – Overview

Affected building owners are required to complete energy assessments beginning 3 years following their first Rating &Reporting deadline and every 10 years after.

The energy assessment must meet or exceed the ASHRAE requirements as listed in Standard 211 published by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) in 2018.

Building owners MUST use a Qualified Service Provider. City of Boulder has qualified service provider list AND Xcel Energy has list of approved vendors.

Energy Assessments – Overview

Affected Building Size	Level of Assessment
Buildings < 50,000 sf	ASHRAE Level I Energy Assessment Can be met through participation in Xcel Energy's Onsite Energy Audit Program
Buildings > 50,000 sf	ASHRAE Level II Energy Assessment

Energy Assessments – Overview

Level I Energy Assessment Report

The Level I energy assessment report must include everything required by ASHRAE guidelines, as well as a summary of available rebates and incentives, ***a recommendation on RCx benefits, and a statement of whether the building's lighting systems and controls meet each lighting requirement in the Building Performance Ordinance***. See the Level I energy assessment report template on the [website](#) under "Energy Assessments" for guidance.

If the energy assessment is conducted through a local energy utility program, such as [Xcel Energy's Business Energy Assessment Program](#), the report produced for that program will satisfy the requirements of the ordinance.

Xcel's Energy Analysis Program audits MUST BE SCHEDULED BY DECEMBER 31, 2020!!

Energy Assessments – Key Report Findings

Executive Summary – must include Retro-commissioning and Lighting Compliance Evaluation/Recommendation!

Introduction – Assessment Scope, Key Dates and Contact Information

Facility Description - square footage, existing systems, envelope, major equipment types and how used

Historical Utility Data – monthly energy data for at least 12 months, Energy benchmarking, Target EUI an Savings Estimate

Energy Savings Opportunities – Recommended Low/No Cost Efficiency Measures, Potential Rebates, Savings Summary, Measures Considered but Not Evaluated

Special Conditions – timing, construction plans, pre-requisites for Energy Efficiency Measures

Appendix A: Utility Data for Evaluation Period
Appendix B: EEM Savings Calculations

Energy Assessments – Compliance Overview

1. Determine whether or not your building is on the [Affected Buildings List](#) for Energy Assessments.

2. Decide whether you will [use Xcel Energy's Energy Analysis Program](#) or contract your own outside vendor.

3. If you choose Xcel's program, call and schedule your audit – 855-839-8862. If you schedule before December 31, 2020, your audit will be performed for free. Option for On-site or remote audit.

4. If you choose to work with your own vendor, you must choose a vendor from City of Boulder's [Qualified Service Provider list](#). Consider using the [Level I Assessment Report Template](#).

5. Work with your contractor to complete your audit.

6. Submit your audit to the City of Boulder via our [online Submission Form](#)!

Energy Assessments – Resources

1. Efficiency Requirements How-to Guide

2. Xcel Energy's Business Energy Assessment Program – Audit provided for FREE.

3. City of Boulder's Qualified Service Provider List

4. Level I Energy Assessment Report Template

5. BPO Help Desk – BPOHelpDesk@bouldercolorado.gov or 844-811-8785

6. Exemption Request and Exemption Guide

7. Deadline Extension Request

8. Rebates and Incentives/Trainings

Energy Assessments – Frequently Asked Questions

1. Can a building owner split the costs of energy assessments with their tenants?

2. What do I do if a tenant denies access to a space or I don't have clearance to visit a space because of security concerns during the assessment?

3. How do I know if I'm exempt from performing an Energy Assessment?

4. What do I do if I don't think I'll be able to submit my Energy Assessment to the city on time?

5. What if my building has not been occupied for a while? Do I still have to do an audit?

6. Can we perform our own audit on our building? With our facility manager or other personnel?

7. What if tenant spaces have their own HVAC equipment? Do we need to perform the audit on each space?

8. What do I do if my building has a mix of commercial and residential spaces? (ie assisted living or mixed-use properties)
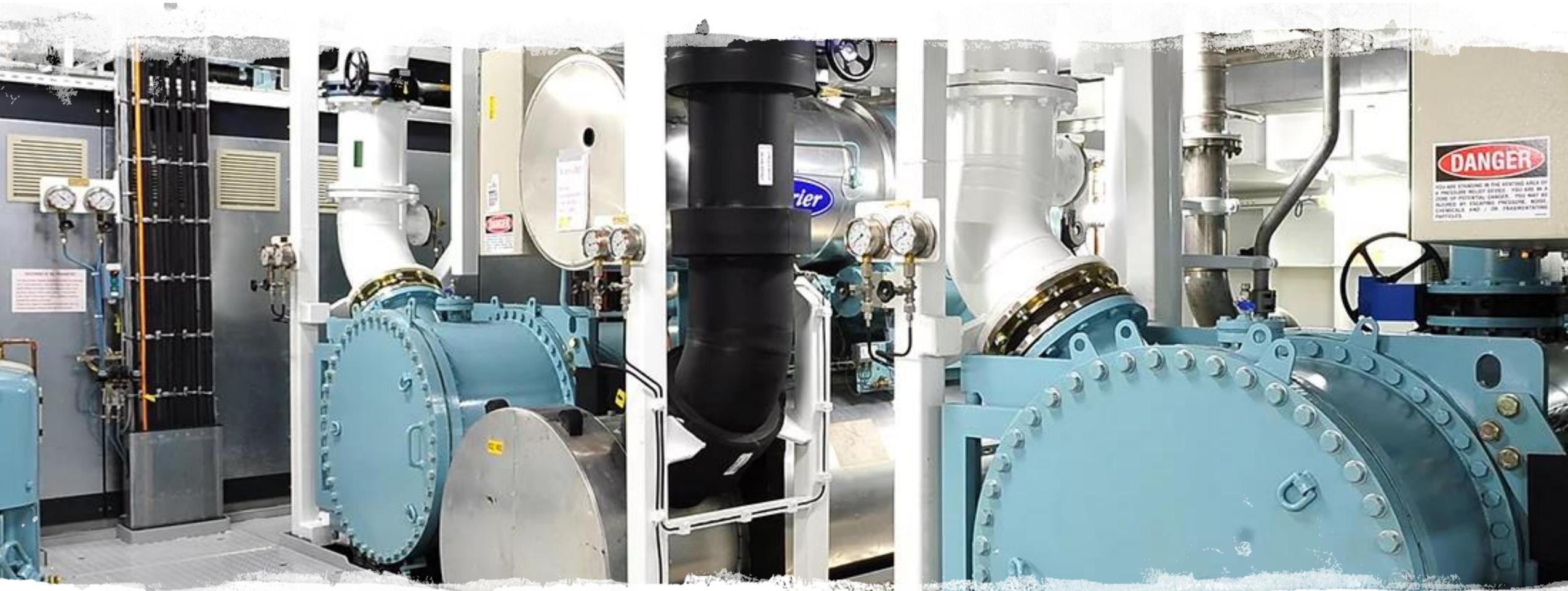
Questions?

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