

# Draft Phase 2 BEUDO Regulations

Overview Webinar  
June 16, 2025



# Meeting Goal

- Provide an overview of the key topics in the draft Phase 2 regulations for BEUDO and answer any questions about the draft language
- Provide information on how to submit comment during the 30-day comment period
- Share next steps
- Additional or property-specific questions can always be submitted to [beudo@cambridgema.gov](mailto:beudo@cambridgema.gov)

# Agenda

## BEUDO Overview and Timeline

### Draft Regulations: Phase 2

- Property Configuration
- Multi-Use Properties
- Baselines: Alternative Baselines, Renovated Properties
- Ownership Definition, Sale of a Covered Property
- Third Party Verification
- *Update* to Onsite Renewables definition
- *Update* to grid Emission Factors - annual calculations

### Next Steps

# Overview of the BEUDO Requirements

The **Building Energy Use Disclosure Ordinance (BEUDO)** was enacted in 2014 as a benchmarking requirement for all buildings in Cambridge. This was a key initial measure of the **Net Zero Action Plan**, allowing Cambridge to gain a clear understanding of our building stock.

In June 2023 amendments to BEUDO were adopted which **require nonresidential buildings to reduce their greenhouse gas (GHG) emissions**

Regulations have been in development to finalize the details of this **building performance standard**.

# Which BEUDO regulations have been finalized?

## Phase 1 - December 2024

- **Emission factors** to calculate a property's emissions, including methods for cogeneration plants
- How to account for **onsite renewable electricity**
- How to account for **offsite renewable electricity**
  - Types of contracts that meet the definition
  - Tracking and retiring Renewable Energy Credits

# 2025 BEUDO regulations development

## **Phase 2: in draft, posted online at [www.cambridgema.gov/BEUDO](http://www.cambridgema.gov/BEUDO)**

- Provides optional flexibility mechanisms for multi-building and mixed-use properties, alternative baselines, and ownership designation
- Expands definition of onsite solar
- Allows for annual grid emission factor
- Specifies third party verification and renovation definitions

**June 3 – July 2, 2025: 30-day Comment Period for Phase 2 regulations**

# 2025 BEUDO regulations development

## **Fall 2025: Draft of Phase 3 and comment period**

Anticipated topics include:

- Campus compliance procedures
- Review Board
- Hardship and deferral plans

# Agenda

BEUDO Overview and Timeline

## **Draft Regulations: Phase 2**

- **Property Configuration**
- **Multi-Use Properties**
- **Baselines: Alternative Baselines, Renovated Properties**
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- **Third Party Verification**
- ***Update* to Onsite Renewables definition**
- ***Update* to grid Emission Factors - annual calculations**

Next Steps

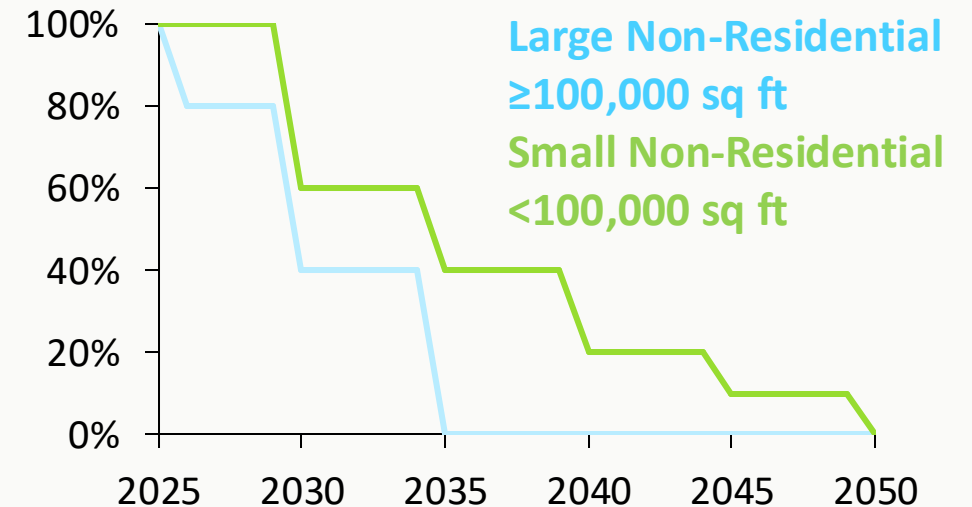


# Importance of Property Definition

**Covered Properties** are the Compliance Entity of BEUDO.

The amended Ordinance set a Property's requirements and timelines based on both the **size** and the **use** of that Property.

- **Non-Residential** Properties must reduce emissions on trajectories that correspond to their size
- **Residential** Properties have only benchmarking requirements



# Property Definitions

The Ordinance defines a **Covered Property** at the level of the parcel, or lot of land. This is also known as a “tax lot” or “map lot”.

Many parcels contain more than one building.

Owners may wish to report, benchmark and reduce emissions at the levels of **one or more buildings** rather than all of them on the parcel.



# Configuration of a Property

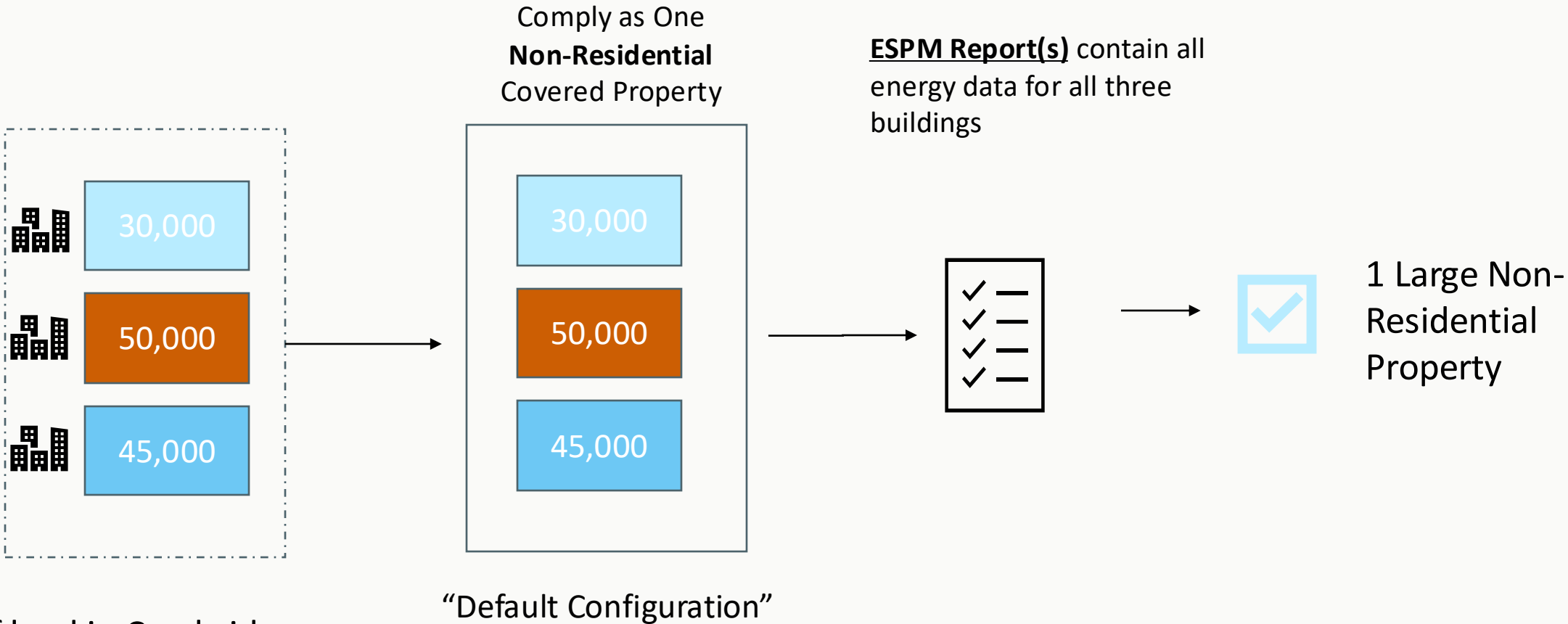
In response to stakeholder input, City staff developed draft regulatory language which allows for properties to be defined at either the Default *Parcel* Configuration or in an **“Alternative” Configuration**.

Owners may apply for **Alternative Configuration** if the following conditions are met:

- ✓ The Alternative Configuration must be comprised of **complete buildings**, as defined in the GIS database
- ✓ Each Covered Property configuration must include a **minimum** of 25,000 covered square feet (10,000 for municipal)
- ✓ **All energy used by the buildings must be reported** in designated Energy Star Portfolio Manager (ESPM) accounts
- ✓ Energy data reported for a Covered Property **may not be assumed or estimated**
- ✓ The owner must be able to provide **baseline year data** for the Alternative Configuration

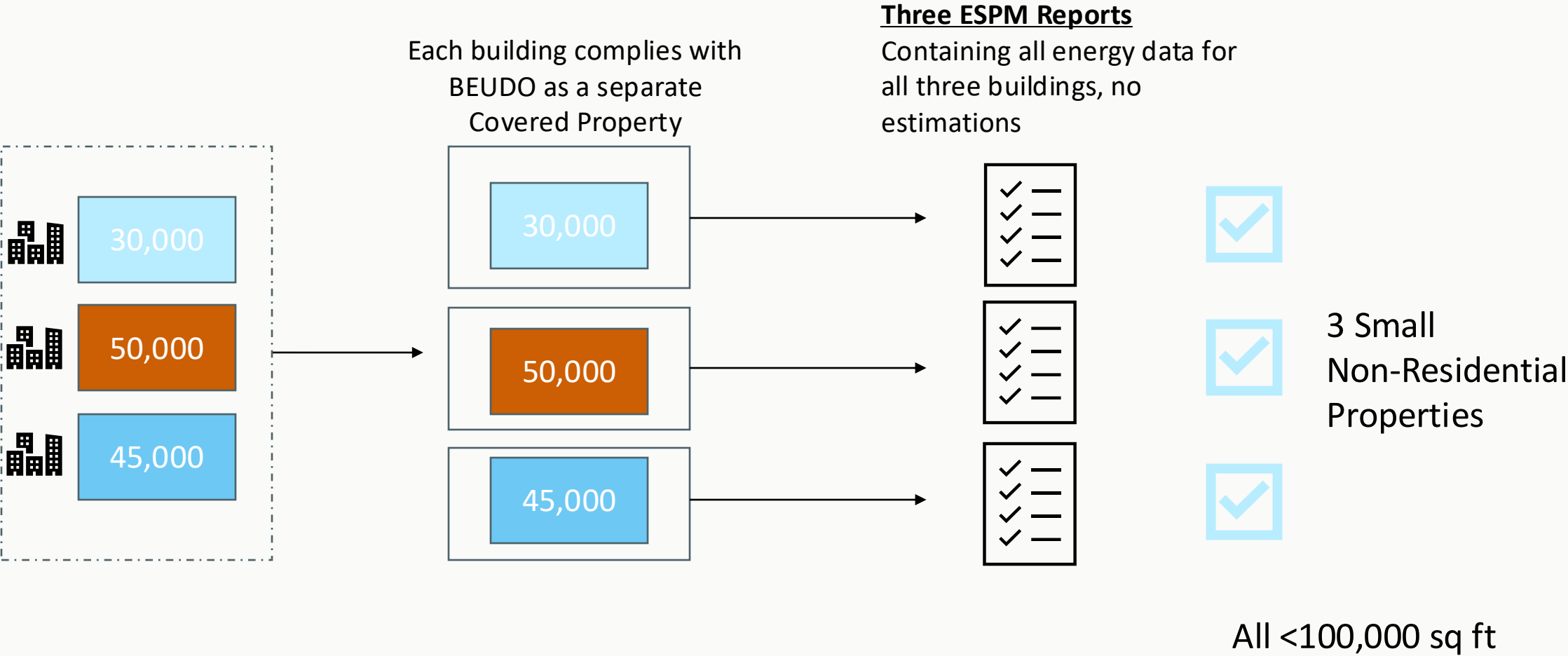


# Default Configuration

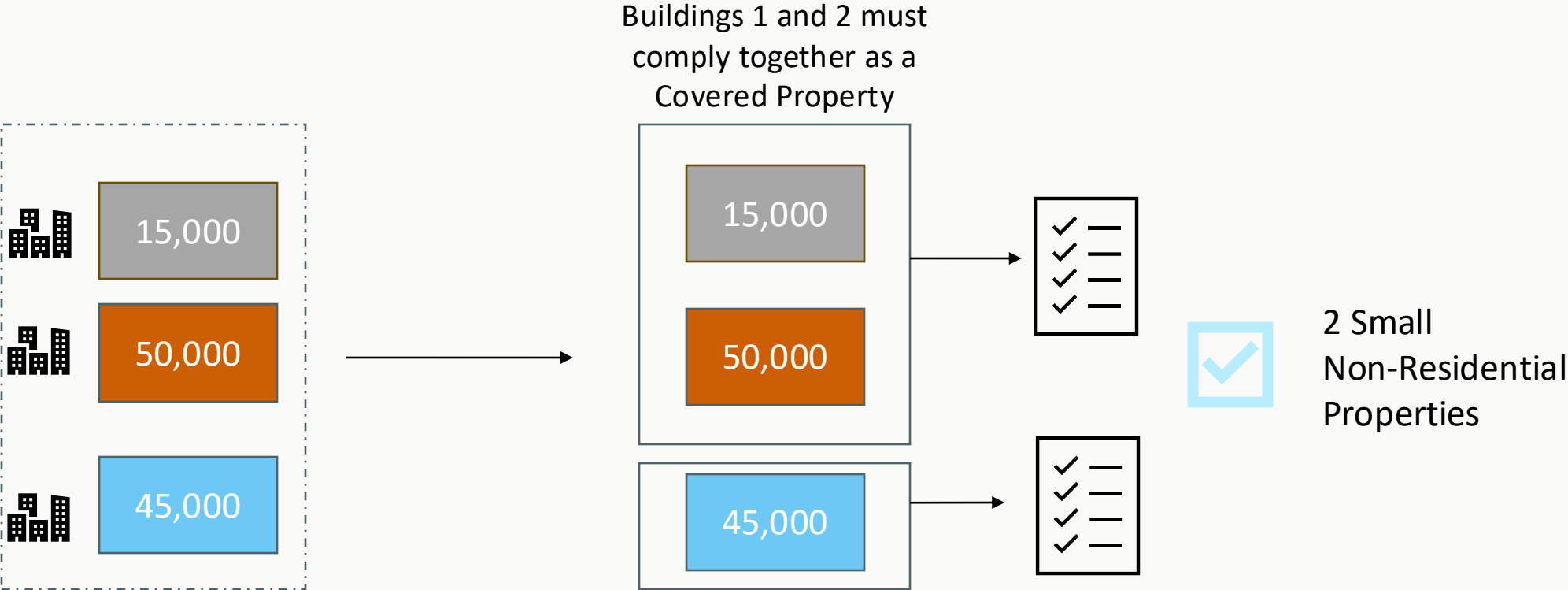


One parcel of land in Cambridge contains 3 Non-Residential buildings totaling 125,000 Covered Square Feet.

# Alternative Configuration: Example 1



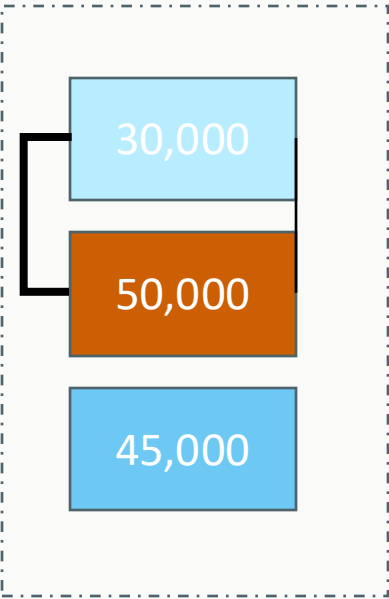
# Alternative Configuration: Example 2



One parcel of land in Cambridge contains 3 total buildings.  
Building 1 is less than 25,000 Covered Square Feet

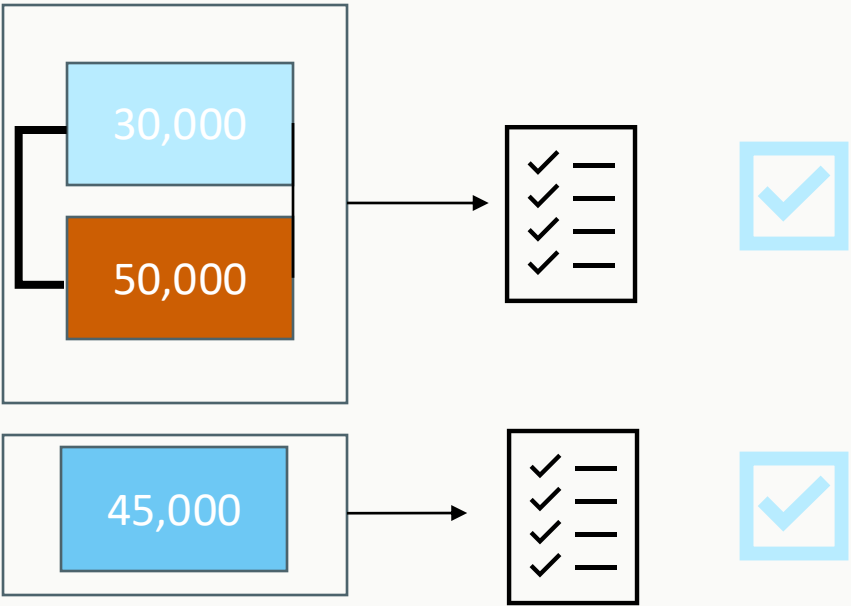
# Alternative Configuration: Example 3

1 Large  
Non-Residential  
Property



One parcel of land in Cambridge contains  
3 total buildings.  
Buildings 1 and 2 share a gas meter with  
no submetering

Buildings 1 and 2 must  
comply together as a  
Covered Property



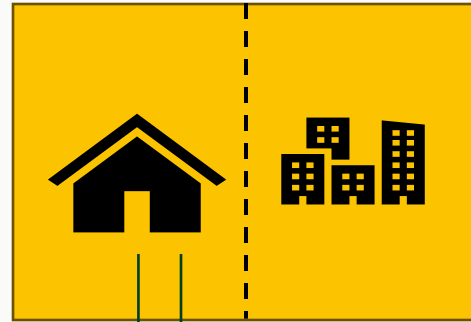
2 Small  
Properties

# Multi-Use Properties

- Parcels may contain buildings that are used for **both** Residential purposes and Non-Residential purposes.
- The ordinance defines Residential Properties as 75% or more residential, but additional consideration was needed for mixed-use buildings below this threshold
- The draft regulations propose a definition for **Multi-Use Properties**: once Alternative Configurations are approved, Covered Properties may apply for consideration as Multi-Use if they meet the following criteria:
  - At least one residential **dwelling unit**
  - The Covered Square Feet (living area) used for residential purposes is **75% or less**
  - Residential and Non-Residential areas have **separate energy metering**



# Approved Multi-Use Properties



The approved **Multi-Use Covered Property** will reduce emissions according to the timelines in the Ordinance based on its total covered square feet, excluding the energy used in the Residential areas (for both baseline and emissions reductions).

**Buildings with < 50 total units**

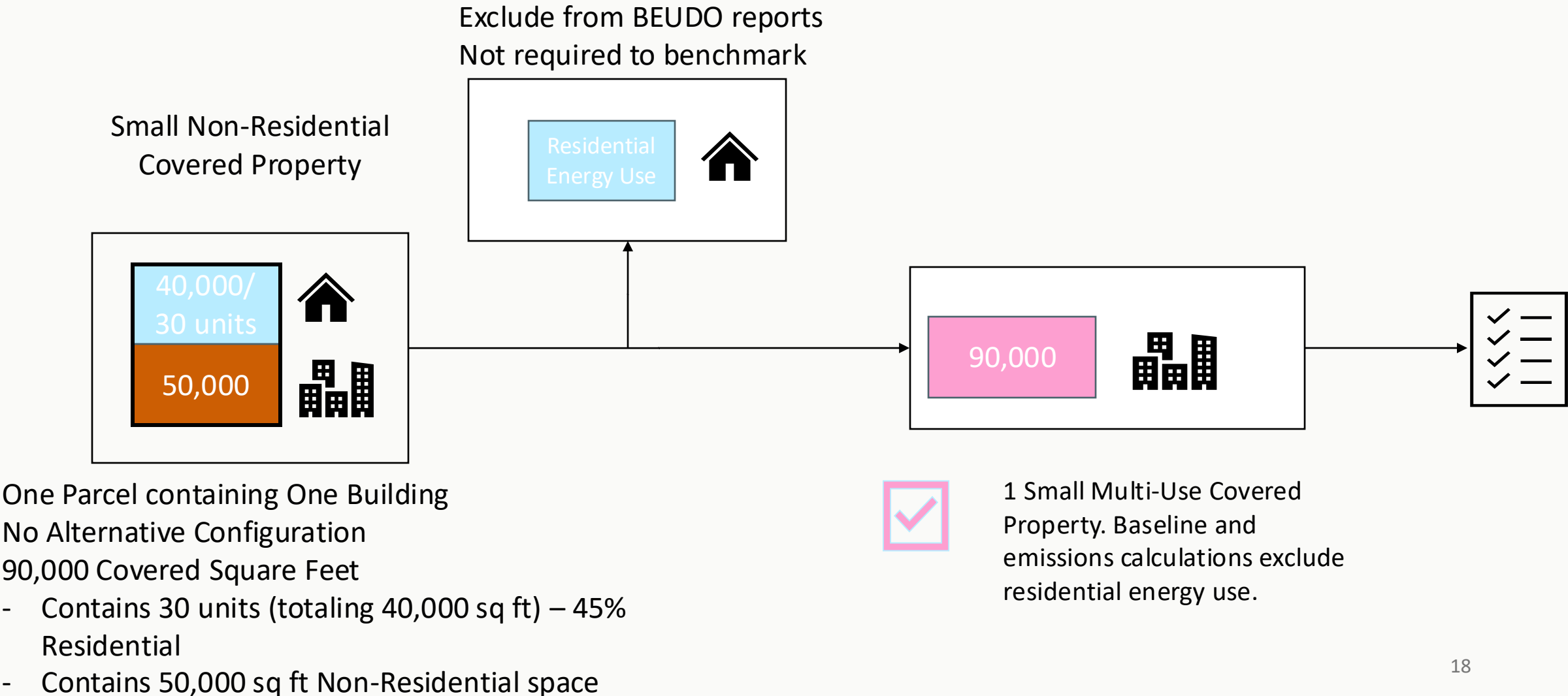
Residential energy use and square footage **will not** be included in benchmarking reports

**Buildings with  $\geq 50$  total units**

Residential energy use and square footage **will** be submitted in separate benchmarking reports



# Multi-Use Example



# Takeaway

- Covered Property compliance is at the **parcel level by default**
- **Alternative Configurations** allow an owner to separate parcels into groupings of buildings, as long as criteria are met
- A building with Residential and Non-Residential space may apply to be **Multi-Use**, which will eliminate the need to reduce emissions for Residential areas and not require benchmarking for <50 units

# Baselines

- The baseline of a Covered Property is the **average of two years of GHG emissions**, from which that Property reduces emissions.
- Existing Covered Properties' **default baseline is years 2018-2019**.
- Covered Properties may request an Alternative Baseline
  - Alternative Baselines may be any two **verifiable** consecutive years between **2010-2018**.
  - Per the ordinance, a Covered Property with an Alternative Baseline must make additional reductions of 2.5% for each year prior to 2018
  - Alternative Baseline requests are **due by December 31, 2025**. This means you must choose the years to use, but the data verification is not due until May 1, 2027. Inability to provide verified data for an Alternative Baseline will make it ineligible.
  - Any alternative configuration (per earlier slides) must be finalized before an alternative baseline.

# New & Renovated Properties

BEUDO defines a **New Covered Property** as

- Having been **built after 2018**
- Having completed a **significant rehabilitation**

The Regulations further **define significant rehabilitation** to correspond to the **Fossil Fuel Free Ordinance** major renovation definition:

- Renovation of 50% of the building floor area, or of more than 20,000 square feet
- Addition of 20,000 square feet or doubling the existing building
- Change of use of 20,000 square feet or the whole building



# Defining an Owner

The Owner of a Covered Property is defined in the Ordinance, and is liable for complying with all aspects of the ordinance. This includes:

- Benchmarking
- Emissions Reductions
- Third Party Verification
- Transfer of Property data to new Owner



# Defining an Owner

The default Owner for a Covered Property is **the entity listed for that address at the Massachusetts Registry of Deeds**. This entity is also listed in the Cambridge City Assessing Database.

The default owner is responsible for compliance with all aspects of BEUDO as they apply to Covered Propert(ies).

## Property Database

### 70 Rindge Ave

Property Information

|                     |                    |
|---------------------|--------------------|
| Property Class      | Improved Local Edu |
| State Class Code    | 934                |
| Zoning (Unofficial) | B                  |
| Map/Lot             | 197-4              |
| Land Area (sq. ft)  | 163,410            |

### Photos

(Click on a photo to view it at full size)

### Owner Information

|          |   |
|----------|---|
| Owner(s) | CAMBRIDGE CITY OF<br>SCHOOL DEPT<br>159 THORNDIKE ST<br>CAMBRIDGE, MA 02141 |
|----------|---|

masslandrecords.com

Southern Middlesex Recorded/Registered Land

Street #:

\* Street Name:

Town:

70

rindge

Search All Towns

Search

Reset

Advanced

Recorded Land Property Search (Dates Available: 01/01/1900-Current) Street #: 70 Street Name: rindge Town: Search All Towns F

Select All | Invert Selection | Deselect All | Print Search Result | View: 20/Page 50/Page 100/Page

| Street Name                        | Rec. Date | Book/Page | Type Desc. | Street # | Town      |
|------------------------------------|-----------|-----------|------------|----------|-----------|
| <input type="checkbox"/> RINDGE AV | 3/12/1999 | 29906/568 | DECISION   |          | CAMBRIDGE |
| <input type="checkbox"/> RINDGE AV | 7/26/1993 | 23461/296 | DECISION   |          | CAMBRIDGE |

View Details | View Images

| Doc. # | Rec Date   | Rec Time     | Type Desc. |
|--------|------------|--------------|------------|
| 437    | 03/12/1999 | 10:11:00.000 | DECISION   |

| Street # | Street Name |
|----------|-------------|
| 70       | RINDGE AV   |

Grantor/Grantee-3

|                               |    |
|-------------------------------|----|
| CAMBRIDGE CITY OF             | 23 |
| CONRY JAMES                   |    |
| CAMBRIDGE CITY OF SCHOOL DEPT |    |

# Designating an Alternate Owners for Specific Purposes

If desired, the default owner may apply to designate another entity to act as the owner for aspects of reporting and compliance. These include:

- Submitting data or verification of data
- Submitting proof of RECs, VCCs
- Purchasing ACPs

The default owner must annually attest to the designation of an alternate. If approved, the City will correspond with the alternate owner during the BEUDO compliance cycle. **Any official notices of violations or resulting enforcement will be sent to the default owner.**



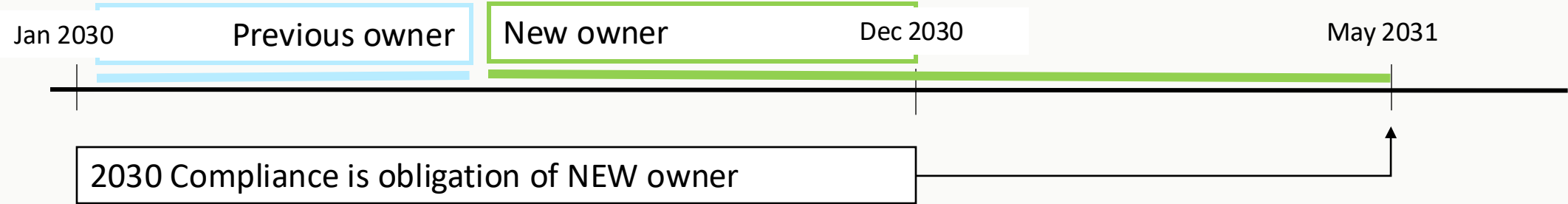


# Sale of a Covered Property

If a Covered Property is sold, **the previous Owner must provide the new Owner all information** necessary to report complete Benchmarking Information within 30 days of request.

The purchaser of the Covered Property is obligated to demonstrate compliance for the year in which the sale occurred, and going forward.

## Example:



# Sale of a Covered Property

A Covered Property which is sold to a new Owner has 60 days to apply for changes in the following:

- Covered Property Configuration
- Alternative Baseline

Approved requests to change will go into effect for **the compliance year after the sale.**

# Third Party Verification

Covered Properties must submit proof that their energy data has been verified by an **Approved Verification Body** at specific timepoints.

**Non-residential Properties** must submit proof of verification for all energy data for:

- ✓ The 2 years of data which comprise the baseline of that property
- ✓ The first year of each compliance period

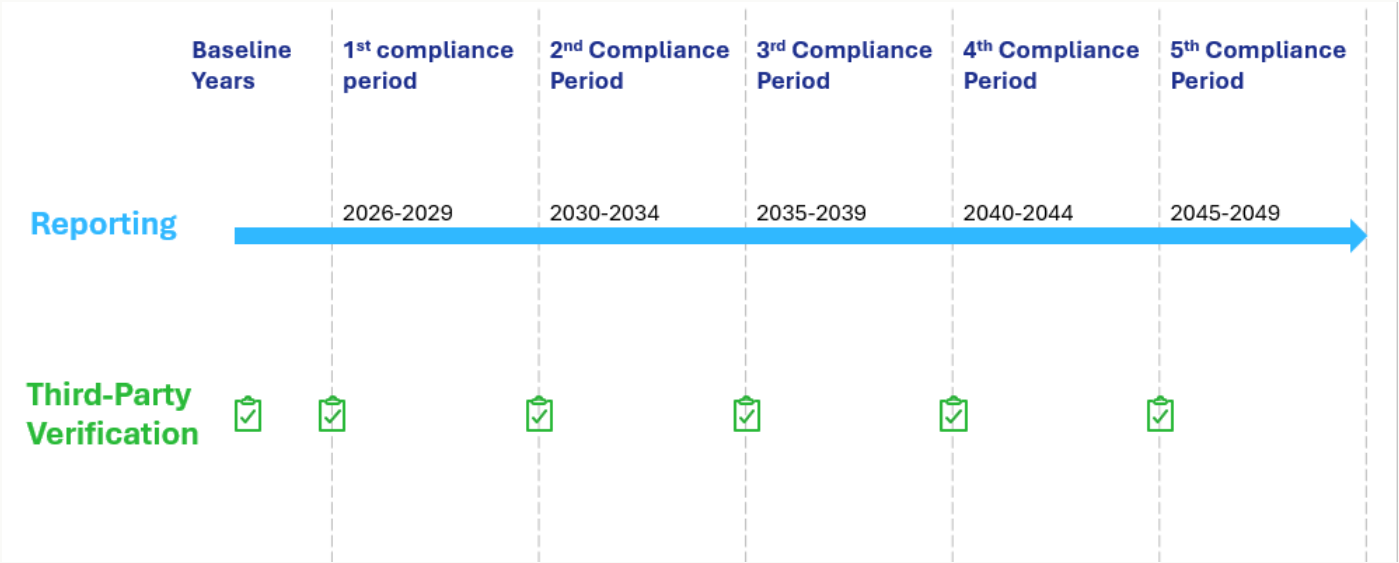
**Residential Properties are NOT required to submit verification of benchmarking data.**





# Third Party Verification

Third party verification of the baseline and first compliance year (2026) is due with benchmarking for the first compliance year.



\*New Covered Properties (those built after 2018) reduce in 3 or 5 year compliance periods depending on the size of the property.



# Third Party Verification

A list of organizations that can act as a **BEUDO Approved Verification Body**, along with credential types, is included in BEUDO Procedures.

The City will ask Covered Property Owners to submit attestation of the verification of their data, along with identifying information regarding the individual holding the accreditation.

**BEUDO Approved Verification Bodies**

Individuals from the following organizations are accredited to serve as an Approved Verification Body when completing Third Party Verification of a Covered Property’s energy data.

| Organization   | Profession                 | Credential   |
|--|----------------------------|--|
| AABC Commissioning Group (ACG)   | Commissioning Professional | Certified Commissioning Authority (CxA)                            |
| American Institute of Architects (AIA)   | Architect                  | Registered Architect (RA)  |
| American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) | Commissioning Professional | Commissioning Process Management Professional Certification (CPMP) |
| American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) | Energy Auditor             | Building Energy Assessment Professional (BEAP)                     |
| American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) | Energy Auditor             | Building Energy Modeling Professional (BEMP)                       |
| American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) | Energy Manager             | Operations and Performance Management Professional (OPMP)          |
| American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) | Commissioning Professional | Certified Building Commissioning Professionals (BCxP)              |
| Association of Energy Engineers (AEE)  | Commissioning Professional | Existing Building Commissioning Professional (EBCP)                |
| Association of Energy Engineers (AEE)  | Energy Auditor             | Certified Energy Auditor (CEA)                                     |
| Association of Energy Engineers (AEE)  | Energy Auditor             | Certified Measurement and Verification Professional (CMVP)         |
| Association of Energy Engineers (AEE)  | Energy Auditor             | SEP Performance Verifier   |
| Association of Energy Engineers (AEE)  | Energy Manager             | 50001 Certified Practitioner in Energy Management Systems          |
| Association of Energy Engineers (AEE)  | Energy Manager             | Certified Energy Manager (CEM)                                     |
| Association of Energy Engineers (AEE)  | Commissioning Professional | Certified Building Commissioning Professional (CBCP)               |
| BREEAM USA   | Building Operator          | BREEAM USA In-Use Assessor   |
| Building Commissioning Association (BCA)   | Commissioning Professional | Certified Commissioning Professional (CCP)                         |
| Building Commissioning Association (BCA)   | Commissioning Professional | Associate Commissioning Professional (ACP)                         |
| Energy Management Association (EMA)  | Energy Manager             | Energy Management Professional (EMP)                               |
| National Council of Architectural Registration Boards (NCARB)                      | Architect                  | Licensed Architect   |
| National Society of Professional Engineers (NSPE)                                  | Engineer                   | Professional Engineer (PE)   |
| Northwest Energy Efficiency Council<br>Midwest Energy Efficiency Alliance          | Building Operator          | Building Operator Certification (BOC)<br>[Level 2 for Boston]      |
| Passive House Institute US (PHIUS)   | Commissioning              | Phiplus Certified Verifier   |

# Update: Onsite renewables definition

The Regulations have been updated to include a definition of **on-site energy** when referring to BEUDO compliance:

“To qualify as on-site energy (8.67.010 (25)), the electricity generation source must be located either on the same Covered Property which will use the resulting RECs

or

on another property in Cambridge which is owned by the same Owner that will use the resulting RECs for compliance.”



# Update: Annual Grid Emission Factor

The Phase 1 regulations published grid electricity emission factors through the first compliance period.

The Regulations have been updated to include language which allows the City of Cambridge to publish an **Annual Emission Factor** for grid electricity.

The lower of the two numbers for each energy source will be used to calculate emissions for BEUDO Covered Properties, unless the Owner elects to use the higher number.

These numbers will be made available by April 1 annually.

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### Next Steps



# Next Steps

**The 30-day comment period for Phase 2 regulations closes on July 2.**

The form to submit comments is at **[www.cambridgema.gov/BEUDO](http://www.cambridgema.gov/BEUDO)**

City staff will take comments into consideration and publish final Phase 2 Regulations in July.

# Compliance Assistance

In 2025 Cambridge will launch a Building Owner Portal within our data management system, BEAM.

This Portal will enable property owners and their colleagues to:

- View their portfolio
- Submit configurations and baselines
- Submit third party verifications
- Confirm calculated property emissions
- And more!

# Questions?

[BEUDOregs@cambridgema.gov](mailto:BEUDOregs@cambridgema.gov)

Draft regulations and comment form at [www.cambridgema.gov/BEUDO](http://www.cambridgema.gov/BEUDO)

Sign up for updates at [camb.ma/BEUDOUdates](http://camb.ma/BEUDOUdates)