Property Configuration and Baseline Selection

Overview Webinar

December 11, 2025

CITY OF CAMBRIDGE

Sustainable Cambridge

Agenda

Meeting Goal: to provide an additional review of the Property Configuration and Alternative Baseline for owners wishing to use these flexibility mechanisms, due Dec. 31.

- **BEUDO Overview and Regulations Development**
- Property Definitions and Configuration
- Baseline Options and Selection
- Questions

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 large nonresidential buildings to reduce their greenhouse gas (GHG) emissions**.

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

BEUDO Regulations Development

Phase 1: (Adopted Dec 2024)

- **Emission factors** to calculate a property's emissions
- How to account for **renewable electricity**

Phase 2: (Adopted August 2025)

- Provide optional **flexibility mechanisms for multi-building and mixed-use properties,** alternative baselines, and ownership designation
- Allow for **annual** grid emission factor
- Specify **third party verification** and renovation definitions

Phase 3:
December 2025: Draft release and comment period

- Campus Compliance
- Review Board
- Hardship and Deferral plans
- Updates to topics in Phase 1& 2

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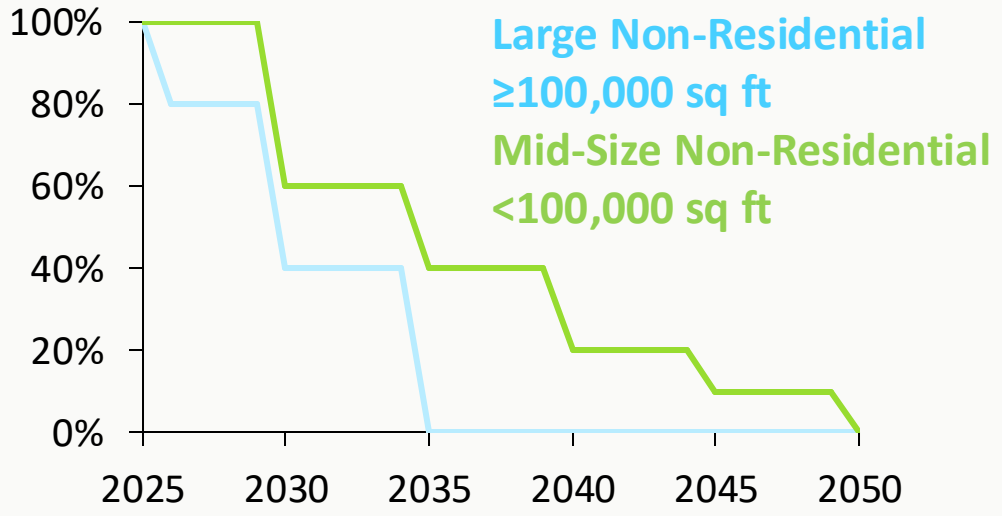
Importance of Property Definition

Covered Properties are the Compliance Entity in BEUDO.

The amended Ordinance set a Property's requirements and timelines based on both the **size** (living area) 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



Non-Residential vs Residential

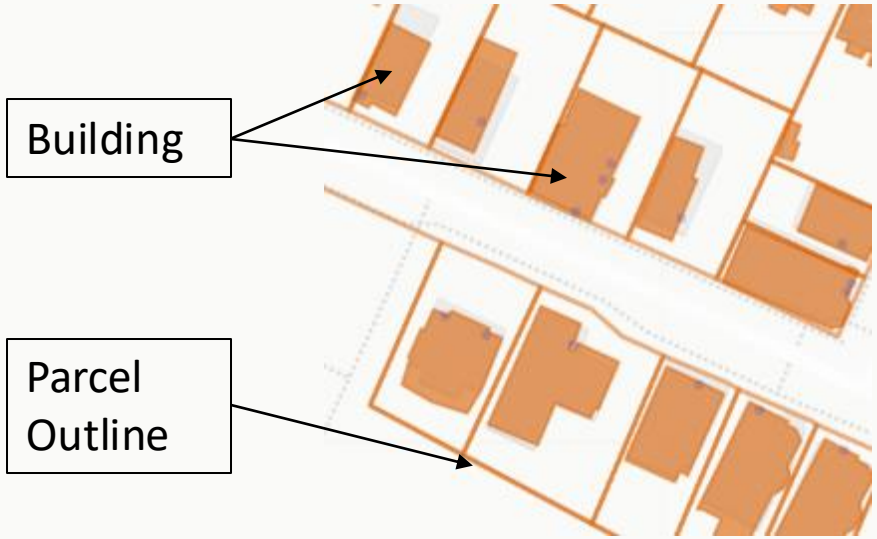
The Ordinance defines a Covered Property as Residential if it contains **one or more Dwelling Units**, and **greater than 75%** of the Covered Square feet is used for Residential purposes.

Dwelling Unit is defined by the Cambridge Zoning Ordinance as a “single residential unit, consisting of one or more habitable rooms, occupied or arranged to be occupied as a residential unit separate from all other residential units within a building, and used primarily for residential purposes and not primarily for professional or commercial purposes.”

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”.

- For a parcel containing one building, this is a straightforward approach to defining a Covered Property.
- **However, some parcels in Cambridge contain more than one individual building.**
- Owners may wish to report, benchmark and reduce emissions as **individual buildings or a subset of buildings,** rather than all together.



https://cityofcambridge.shinyapps.io/BEUDO_Covered_Properties_Tool/

Configuration of a Property

City staff has developed regulatory language to allow for properties to be defined at either the **Default Configuration** or in **an "Alternative" Configuration, if desired**. The creation of an Alternative Configuration does not exempt any building on the parcel from complying with the Ordinance.

Default – any individual buildings on a parcel are expected to comply as an aggregate Covered Property.

Alternative – if certain requirements are met, the buildings on a parcel may be considered as separate Covered Properties.

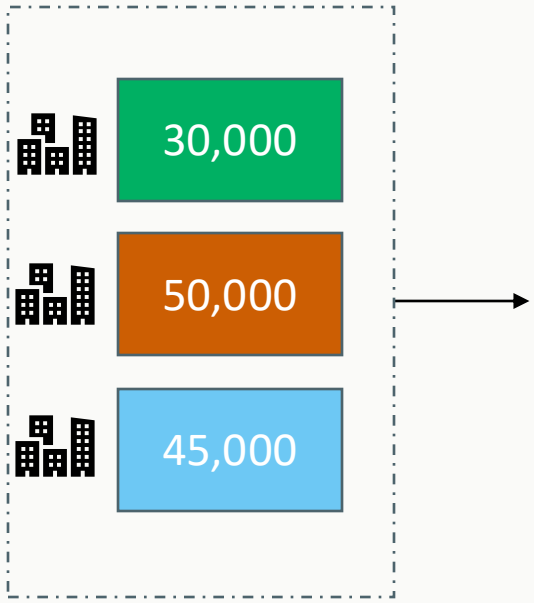
Criteria for Alternative Configuration

Owners may elect to use an **Alternative Configuration** if the following conditions are met:

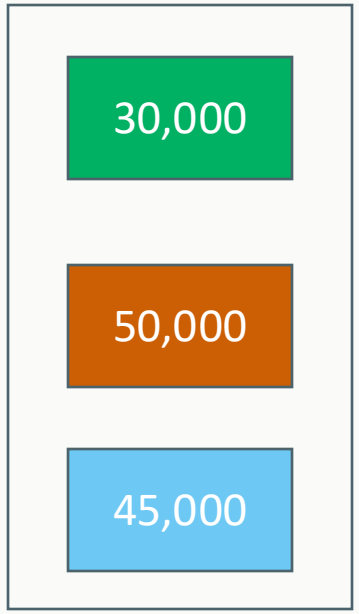
- ✓ The Alternative Covered Property must be comprised of **complete existing buildings,** as defined in the GIS database
- ✓ Each Alternative Covered Property must contain a **minimum** of 25,000 **covered square feet** (minimum 10,000 csf for municipal)
- ✓ **All energy used by the buildings must be reported** in designated Energy Star Portfolio Manager (ESPM) accounts
- ✓ The owner must be able to provide **baseline year data** for the Alternative Covered Property

Default Configuration

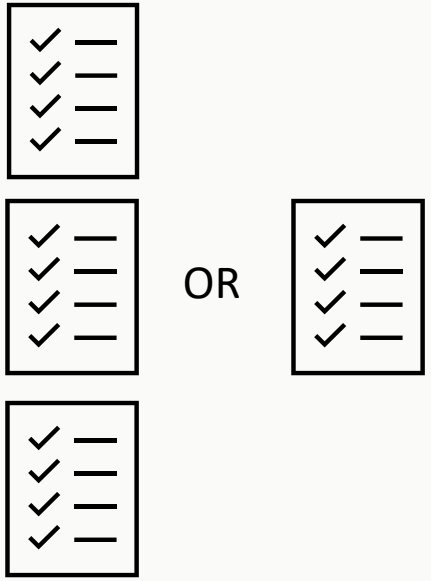
Three Non-Residential Buildings on one Parcel



All buildings comply as one Covered Property



ESPM Reports
Containing all energy data for all three buildings

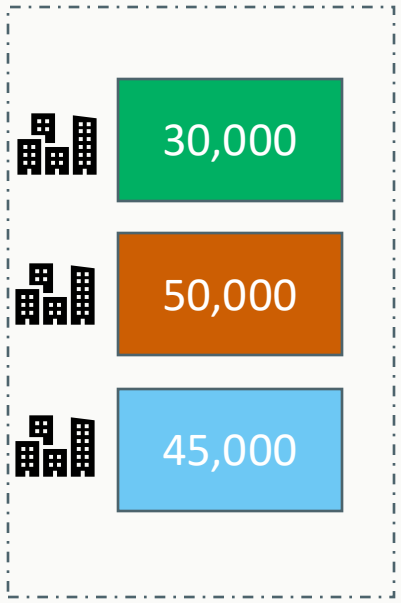


OR

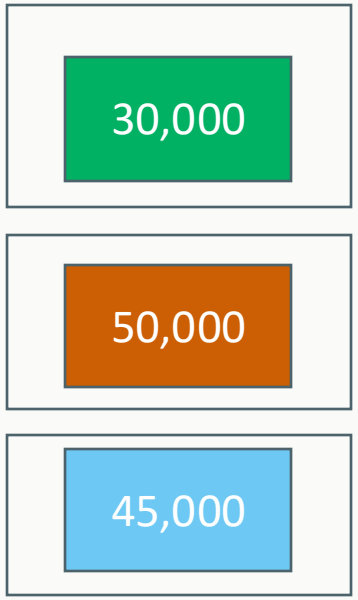
1 Large Non-Residential Property

Alternative Configuration: Example 1

Three Non-Residential Buildings on one Parcel



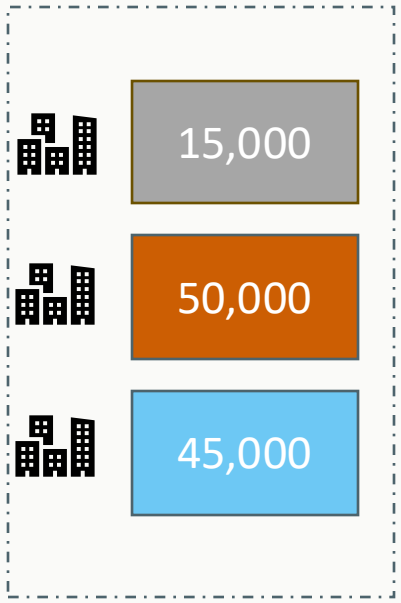
Each building complies with BEUDO as a separate Covered Property



3 Mid-Size Non-Residential Properties

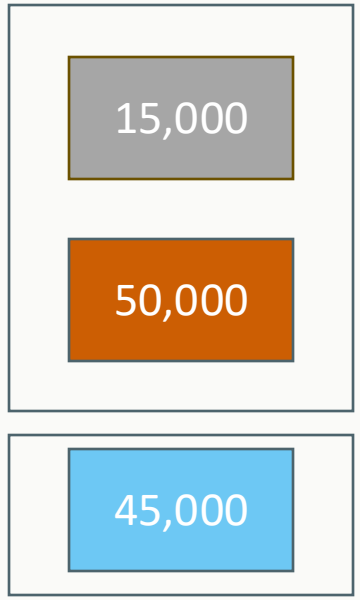
Alternative Configuration: Example 2

Three Non-Residential buildings on one Parcel



Building 1 is less than 25,000 Covered Square Feet

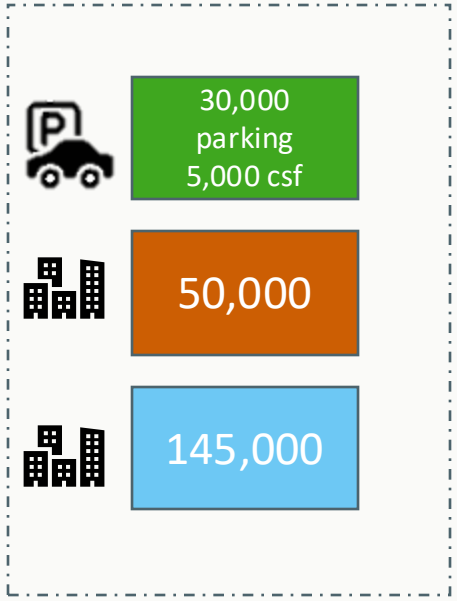
Building 1 must comply with another building as a Covered Property



2 Mid-Sized Non-Residential Properties

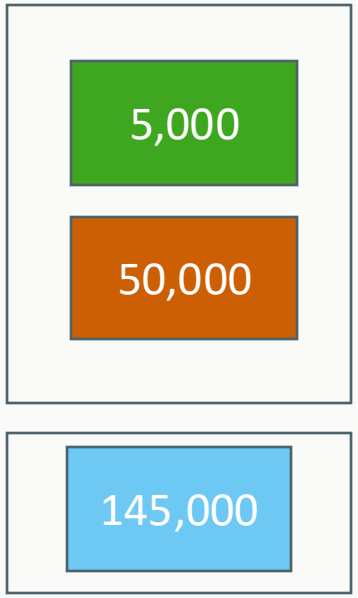
Alternative Configuration: Example 3

Three Non-Residential Buildings on one Parcel



Building 1 is a Parking Garage with only 5,000 Covered Square Feet

Buildings 1 and 2 must comply together as a Covered Property



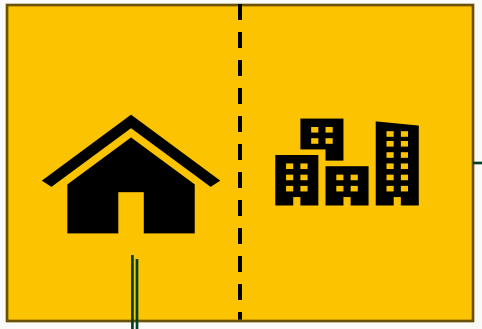
- 1 Mid-Sized Covered Property
- 1 Large Covered Property

Multi-Use Properties

- Parcels may contain buildings that are used for **both** Residential purposes and Non-Residential purposes. Multi-Use designation allows for Owners to separate the varying use types within a Covered Property.

- 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 **less than 75%**
  - Residential and Non-Residential areas have **separate energy metering**

Multi-Use Properties



The approved **Multi-Use Covered Property** will reduce emissions as a Non-Residential Covered Property, excluding the energy used in the Residential areas.

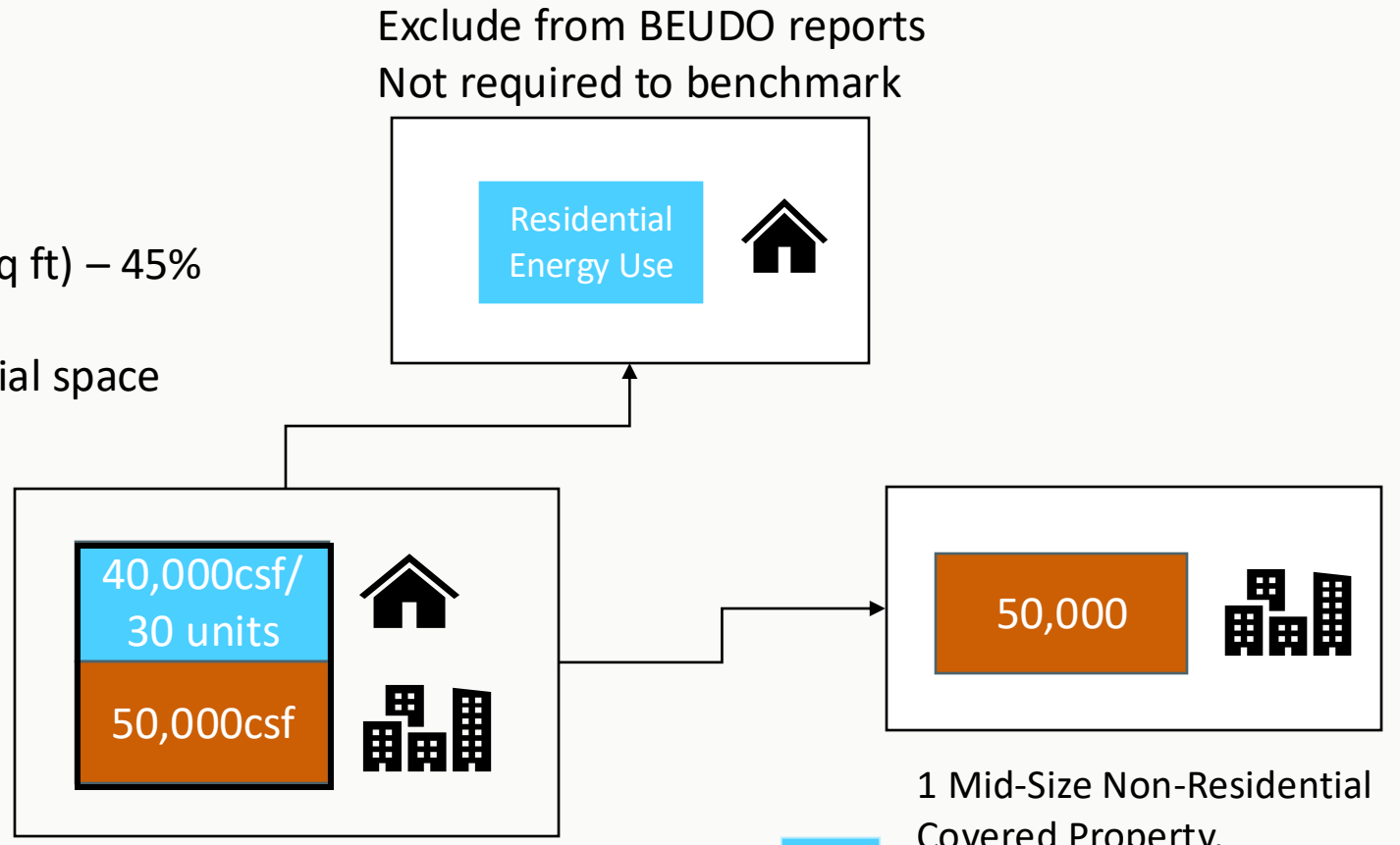
<u>Buildings with < 50 total units</u>
Residential energy use and square footage can be **excluded and not reported on**

<u>Buildings with ≥ 50 total units</u>
Residential energy use and square footage **can be excluded from emission reductions, but must be benchmarked**

Multi-Use Example

One Parcel containing One Building
No Alternative Configuration
90,000 Covered Square Feet

- Contains 30 units (totaling 40,000 sq ft) – 45% Residential
- Contains 50,000 sq ft Non-Residential space



Steps to Understand your Property

1. **Residential vs Non Residential** – *Are there dwelling units on your Property?*
    - For Parcels with only one building, this will be the main criteria to identify compliance obligations.
    - For multi-building parcels, first compute the covered square footage used for Residential purposes to understand if the entire Default property is Residential

2. **Alternative Configuration** – *Does this property have more than one building?*
    - Parcels with 2 or more buildings may group these buildings into Alternative Configurations, provided that they meet certain criteria
    - Re-evaluate if the Covered Properties that have been created now qualify as Residential

3. **Multi-Use** – *Does one building have both Residential and Non-Residential spaces?*
    - Apply for Multi-Use designation if the Covered Property qualifies as Non-Residential
    - Residential areas will be excluded from Emission Reduction requirements

Technical Guide: Property Configuration

The Office of Sustainability has published a **Technical Guide** regarding the options for configuring a BEUDO Covered Property (available at cambridgema.gov/BEUDO)

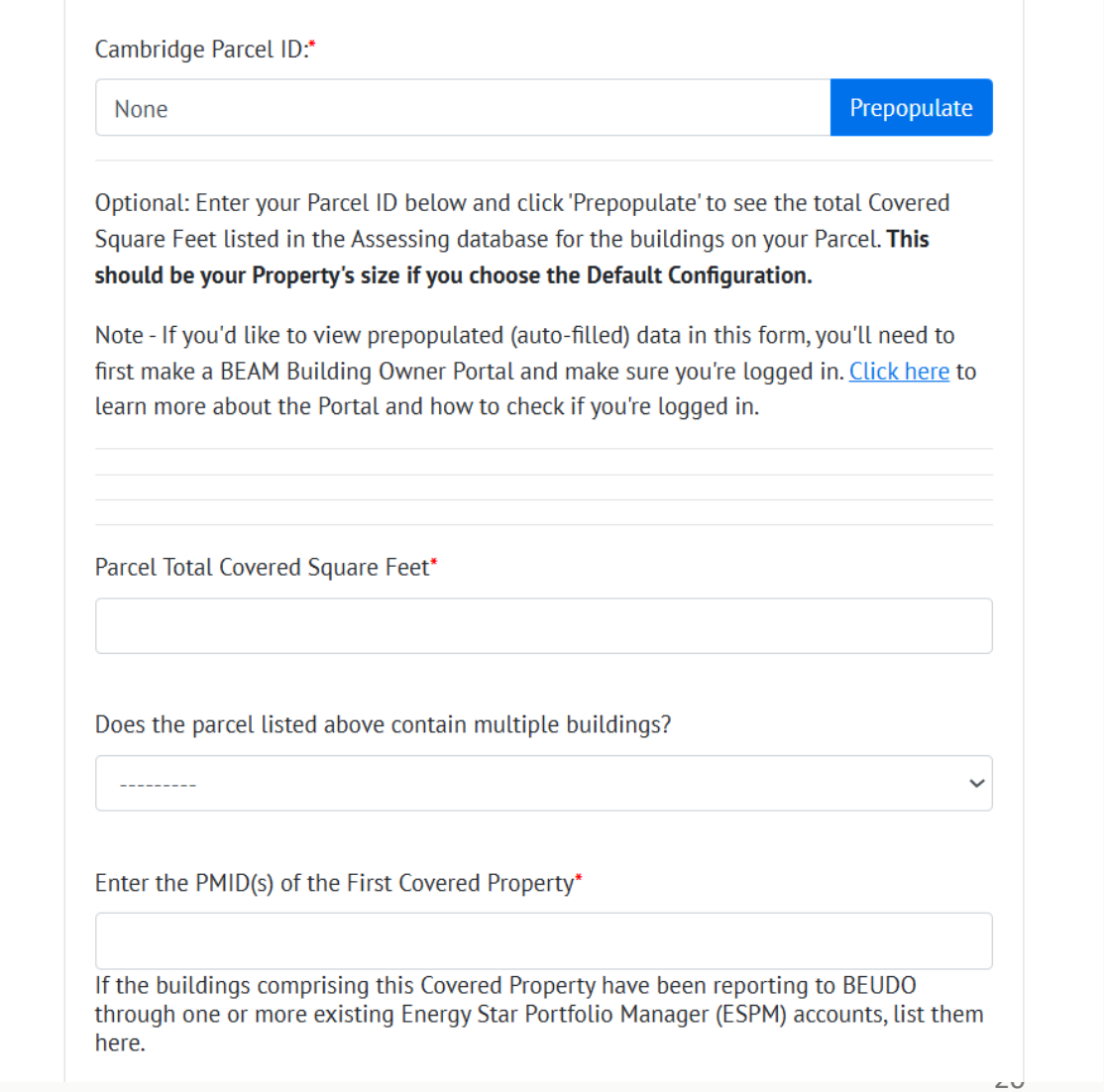
This guide is helpful in making final decisions for a majority of Owners, although some with complicated parcels may require additional input from city staff.

Owners are welcome to sign up for Office Hours for 1:1 support with complex questions that are not easily answered by the Guidance.

Property Configuration Form

- Used to confirm the Owner's elected configuration of the Property
- This **form** expects the user to **have their ESPM accounts** ready to refer to.
- One form should be filled out for **each Parcel***
- Parcels looking to split into 5+ Covered Properties should use the upload template

*Upload template available for large portfolios



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- Questions

Baselines

- The baseline of a Covered Property is the **average of two years of GHG emissions**, from which that Property reduces its annual emissions.
- Existing Covered Properties' **Default Baseline are years 2018-2019.**
- Covered Properties may request an **Alternative Baseline**
  - Using an Alternative Baseline can help Owners account for earlier work done to reduce emissions on a Covered Property
- For **New Buildings**, the baseline is the first two calendar years after the Certificate of Occupancy was received.

Choosing 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** for each year prior to 2018
- **Inability to provide verified data for an Alternative Baseline will require an Owner to use a Default Baseline.**
- Any Alternative Configuration (per earlier slides) must be finalized before an Alternative Baseline is chosen

Baseline Energy Data

BEAM has access to **all data which is in shared accounts in Energy Star Portfolio Manager (ESPM) –** if an Owner would like to import years prior to the start of the Ordinance, they must first enter the data into the existing ESPM accounts shared with the City.

An Owner may need to acquire energy data for Baseline years (Default or Alternative) for a Covered Property **which they did not own during those years.**

Obtaining Historical Energy Data

Eversource's Energy Disclosure Portal is typically used for Residential properties looking to obtain aggregate data for many units.

This Portal can also be used to be data for any BEUDO Covered property back to 2013.

The City has developed a resource to walk Owners through the process of requesting energy data for historical years.

BEUDO Compliance & Reporting

CITY OF CAMBRIDGE

Requesting Data for Baseline Years

The Building Energy Use Disclosure Ordinance (BEUDO) requires Covered Property owners to select a baseline. This baseline will act as the starting point to measure improvements over time. See the Technical Guide: Establishing Your Baseline for guidance on your baseline options.

This guide covers the process of requesting historical data for your chosen baseline years. To request your historical data from Eversource, you must first create an Eversource Energy Reporting & Disclosure Portal (EREDP) account, request recent data from the portal, and then get the approvals and "Building ID(s)" necessary to request the historical data that you need.

For instructional screenshots of the process laid out in this checklist, follow along with the Eversource Energy Reporting & Disclosure Portal Step-by-Step Walkthrough.

If you plan to use an Alternative Baseline, complete the Baseline Selection Form in the BEAM Owner Portal. Navigate to the side menu → Help Desk → New Ticket → Baseline Selection Form.

☐ 1. Create your Eversource Energy Reporting & Disclosure Portal account

Eversource's Energy Reporting & Disclosure Portal (EREDP) is a tool that facilitates requests for historical energy data for BEUDO compliance, including data for Alternative Baseline years.

Skip this step if you already have an account(s) for your Covered Property.

Follow this guide to create your account (steps 1-4 of the EREDP Step-by-Step Walkthrough). *Be sure to review the "FAQ" section on the portal, found on the log-in page or if you are signed in, on the top of the webpage in the blue menu bar.*

A) Have an energy bill handy for any properties for which you would like to request data. After registering, you will need the account number and meter number for any building locations for a later building owner (or designee) verification step.
B) Click the "Login" button on the Portal homepage.

Technical Guide: Baselines

The Office of Sustainability has published a **Technical Guide** regarding the options selecting a baseline (available at cambridgema.gov/BEUDO).

This guide is helpful in making final decisions for a majority of Owners, although some with complicated parcels may require additional input from city staff.

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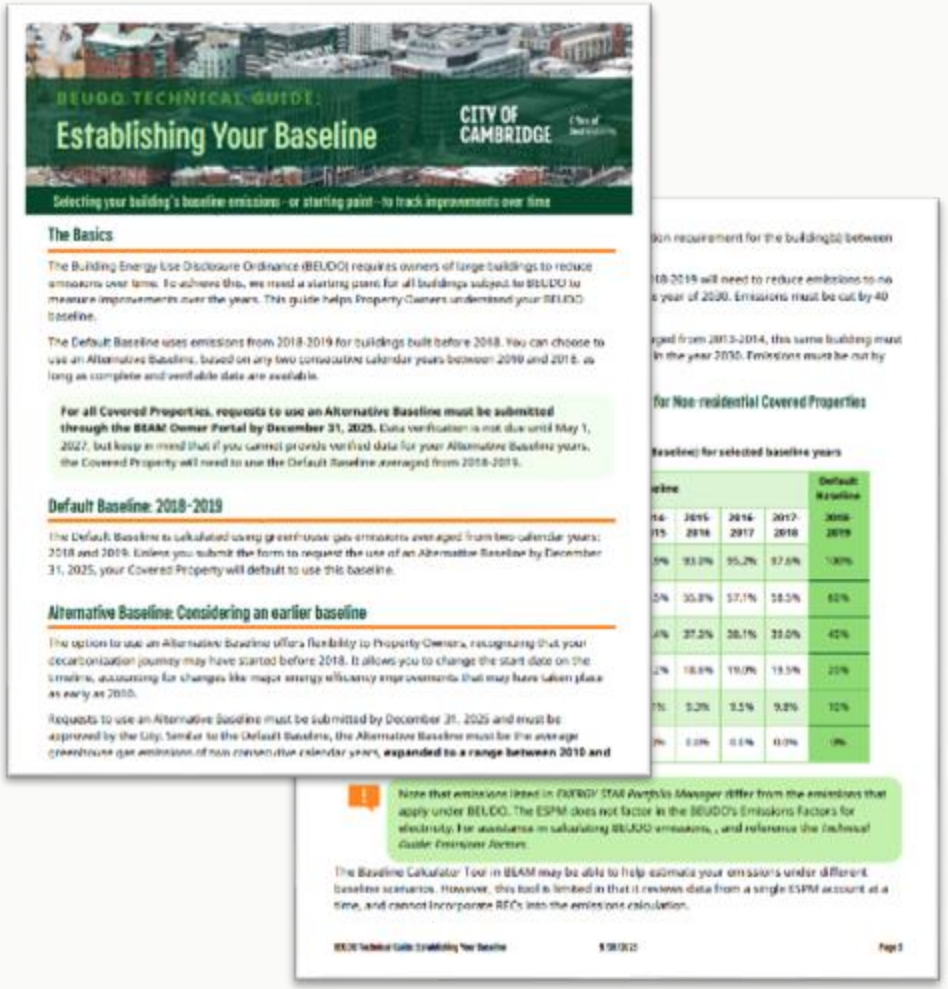
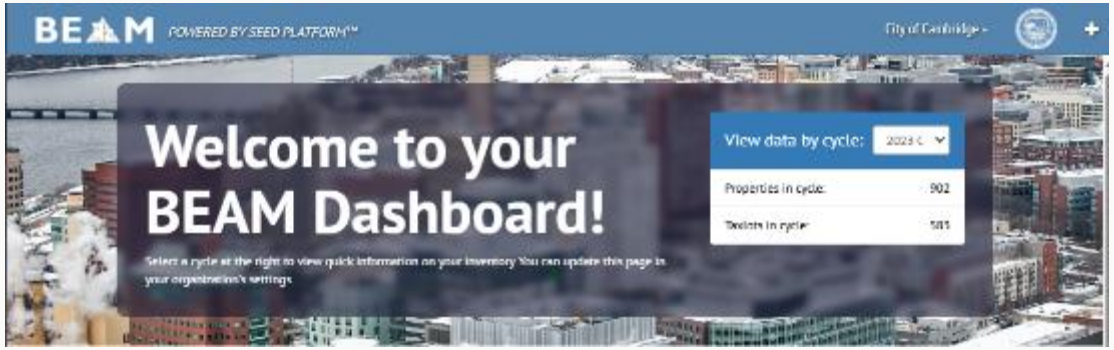


Baselines Tool

The **Baseline Calculator Tool** can help Owners take the historical data which is already associated with their Covered Property IDs in ESPM (then transferred to BEAM) and estimate the emission trajectories when selecting alternative baseline years.

- BEAM applies the **correct emission factors** for each year, and incorporates the additional reduction in calculating goals for Alternative Baseline options.
- All data has pulled over from ESPM – different owners/operators may have entered older data for a building, and **no data is verified**
- Covered Properties which report their energy use in 2+ ESPM accounts **cannot** use the tool

BEAM Building Owner Portal



New platform to give BEUDO Covered Property Owners insight into their compliance

- Intake for key information (Configuration, Baseline Selection, REC/VCC application, etc)
- Imports energy data from ESPM, and applies BEUDO factors to energy use to show the correct emissions for compliance
- Will soon incorporate visuals and planning tools to track trajectories and goals

Create a login and add members to share your Covered Properties

Thank you!

- The BEUDO Helpdesk can answer many questions related to configuring your Covered Property or choosing your Baseline.
  Email BEUDO@cambridgema.gov

- Office Hours are now available for 1:1 support with City Staff to understand complex questions not addressed by Technical Guides (all on the BEUDO website).

- Questions?