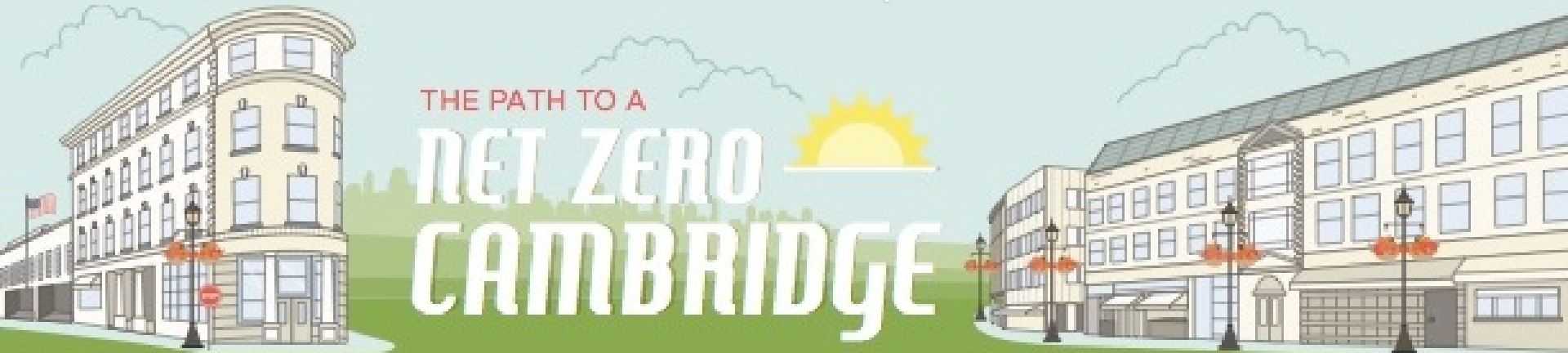


City of Cambridge

Getting to Net Zero Action Plan

Building Energy Use Disclosure Ordinance (BEUDO) Amendment Proposal

Community Forum
September 15, 2022
6:30 – 8:30 pm



Instructions for the public



You will join the meeting with video and microphone off



During the Q&A period we will answer written questions and use the Raise Hand feature to take verbal questions

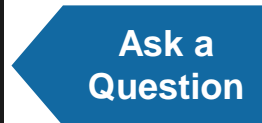
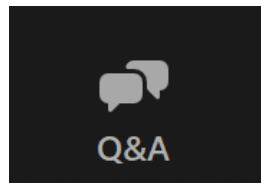


You can type written questions or comments in the Zoom Q&A Panel



We are recording and will post the slides and recording to the BEUDO project webpage

**Bottom Panel
of Zoom
Screen**



Agenda

- **Background**
- Overview of the amendment process
- Review of key components of the amendments
- Resources to support BEUDO buildings
- Next Steps
- Q&A



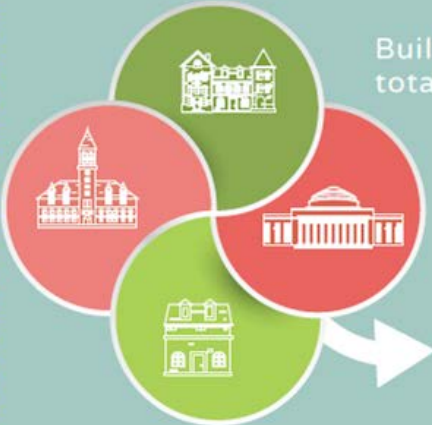
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THE CLIMATE IMPERATIVE

Climate change poses a growing set of risks and challenges to cities.



Combating climate change needs to **start locally**



Buildings generate over 80% of Cambridge's total greenhouse gas emissions.

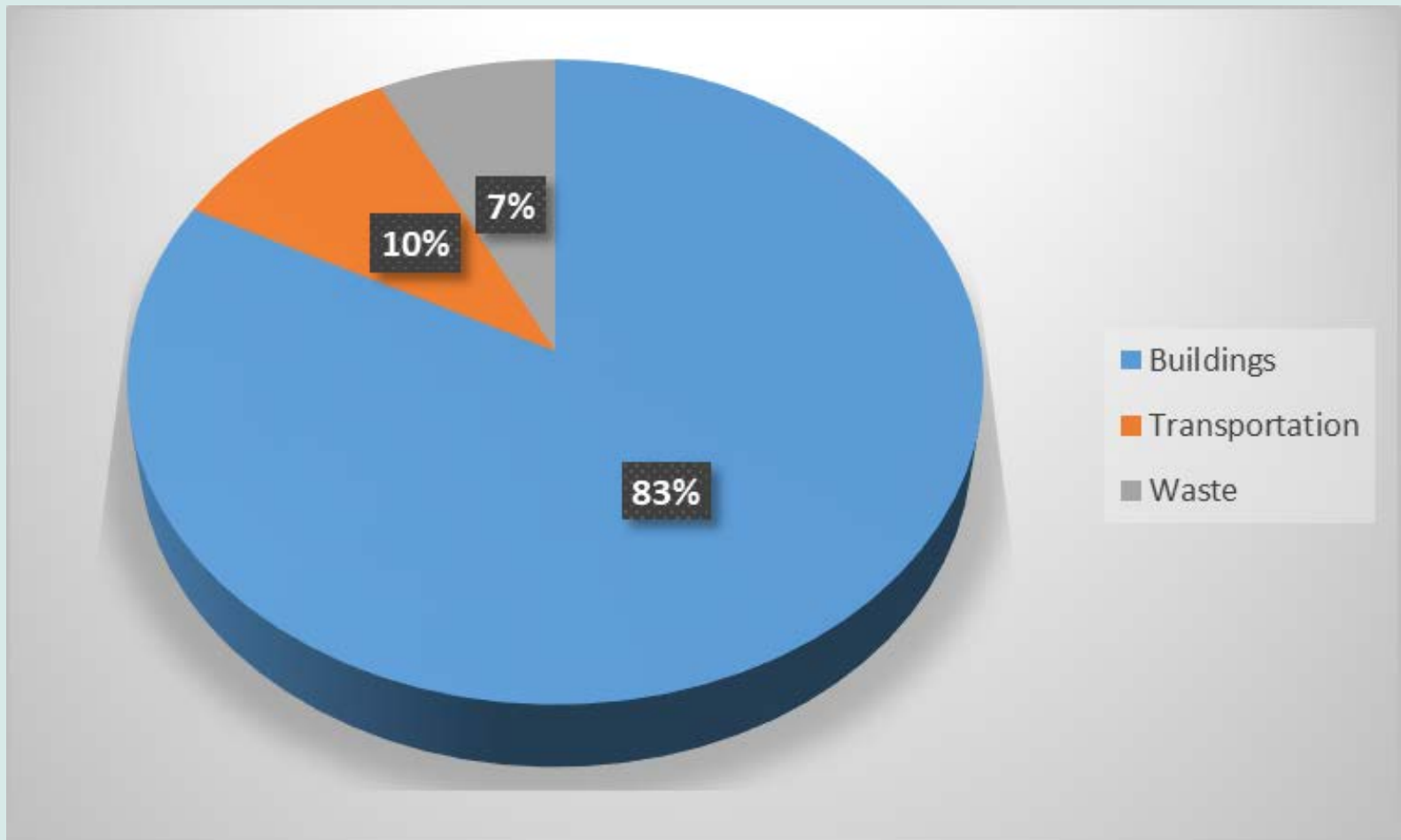
That is why it is Cambridge's aim to achieve

NET ZERO EMISSIONS

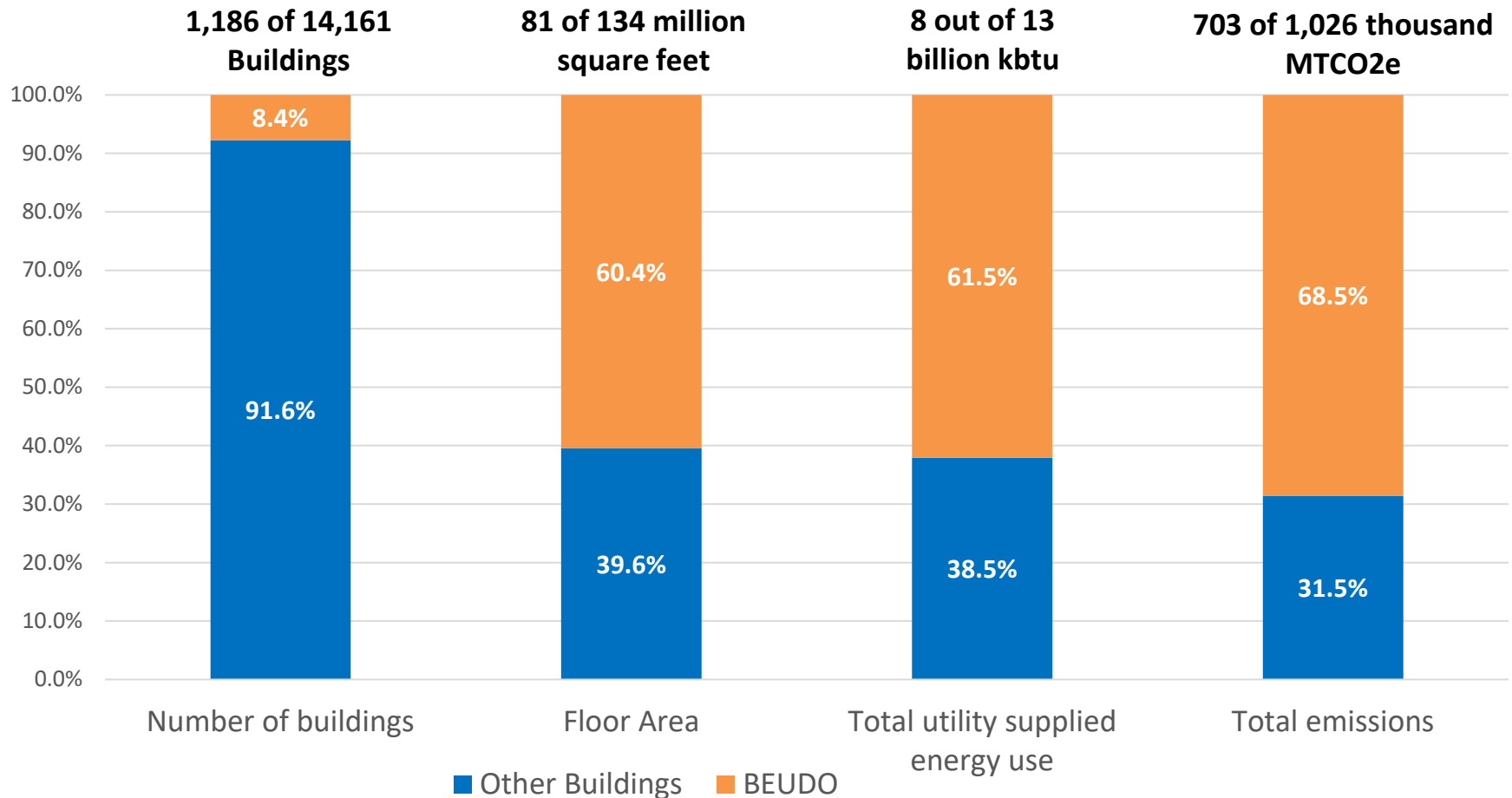
from buildings.

Residents, universities, businesses and the City are collaborating to address the immediacy of the climate imperative.

Cambridge Community GHG Inventory

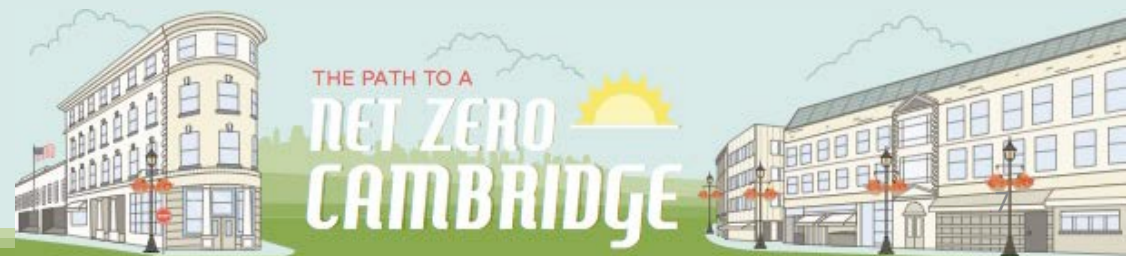


BEUDO buildings are responsible for majority of building GHG emissions



2014 Building Energy Use Disclosure Ordinance

To encourage efficient use of energy and to reduce the emission of greenhouse gases, this Ordinance requires owners to annually measure and disclose energy usage. This Ordinance will authorize the City to collect energy usage data to enable more effective energy and climate protection planning by the City and others and to provide information to the real estate marketplace to enable its members to make decisions that foster better energy performance.



2014 Building Energy Use Disclosure Ordinance

BEUDO Applicability

- *Municipal*: parcels with 10,000 square feet or greater (beginning 2014)
- *Residential*: parcels with 50 or more dwelling units (beginning 2015)
- *Large Non-Residential*: parcels with 50,000 square feet or greater (beginning 2015)
- *Small Non-Residential*: parcels with 25,000-49,999 square feet (beginning 2016)

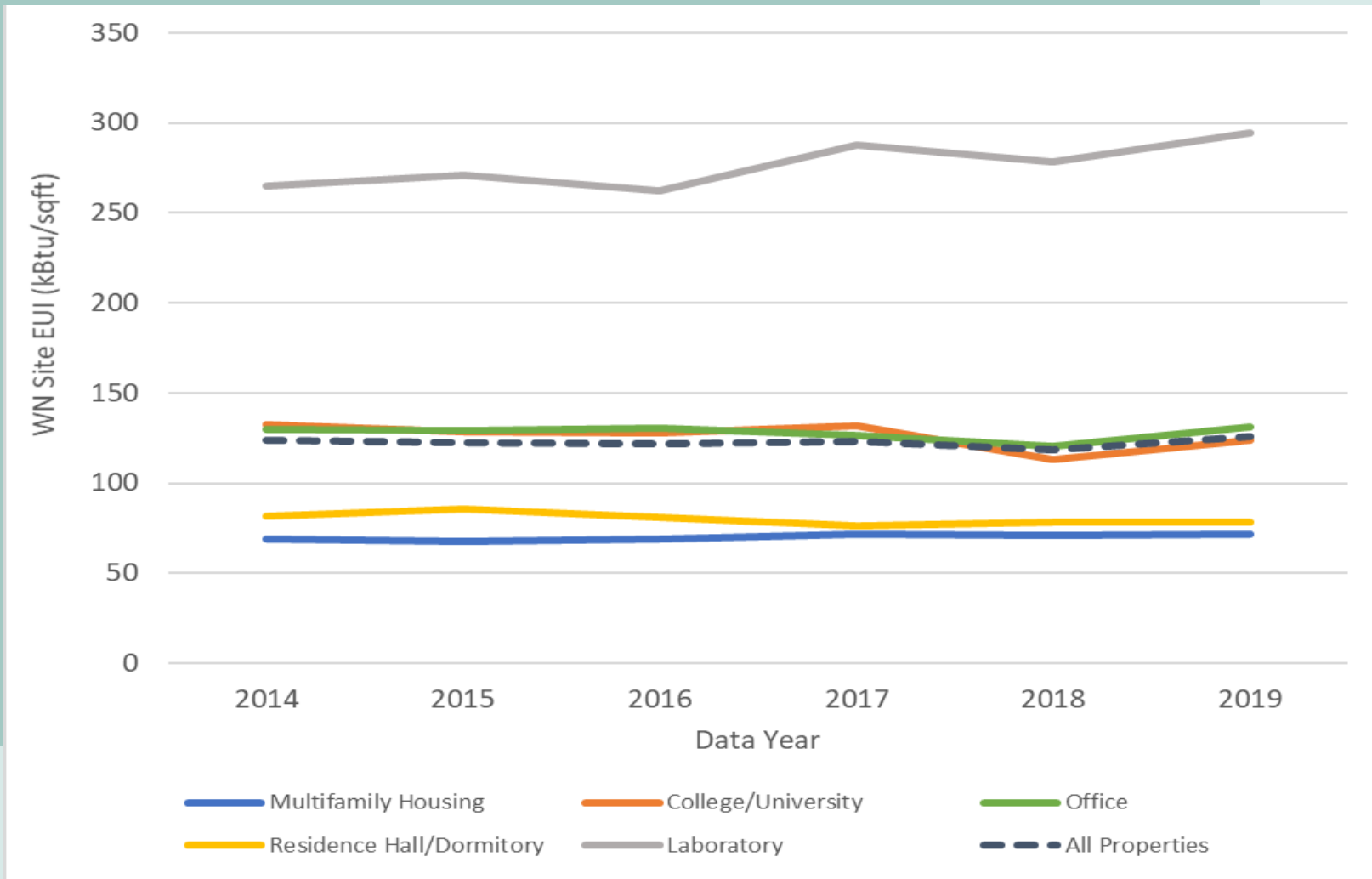


2014 Building Energy Use Disclosure Ordinance

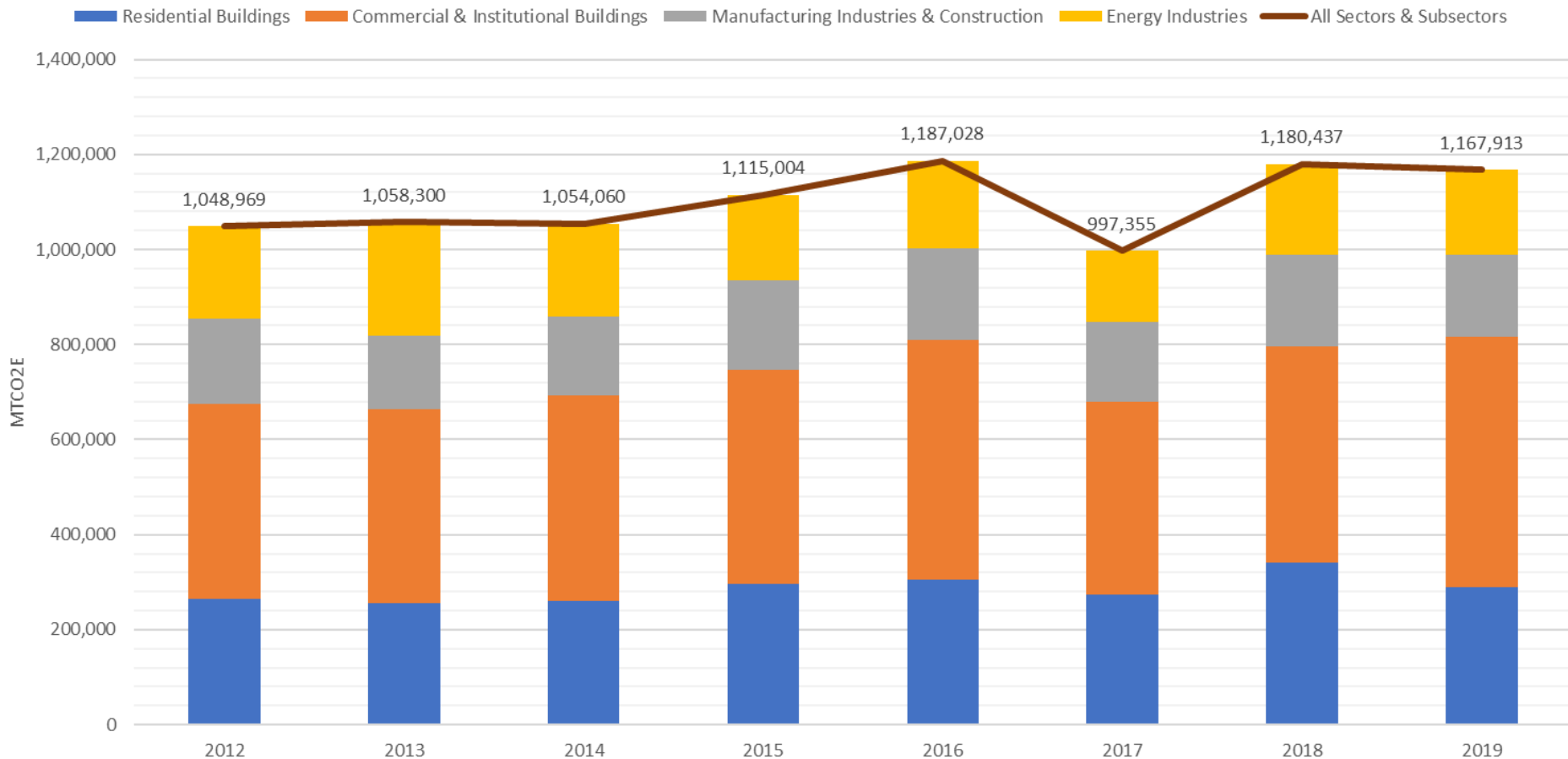
*By December 31, 2018, the Department shall review the effect of this Ordinance on improving energy performance for Covered Buildings. **If energy performance for Covered Buildings has not improved significantly, the Department shall make recommendations to the City Manager as to whether amendments to this Ordinance or other measures are necessary to improve building energy performance for Covered Buildings.***



Energy performance has not improved significantly over time



GHG emissions have increased from 2012-2019



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Process Overview

- 2017: Background policy research and analysis
- 2018: Straw proposal development with BEUDO property owner consultation
- 2019-2020: Proposal refinement
- **2021: CDD submitted proposed amendments to City Council on November 8th**



Process Overview (cont.)

- 2022: City Council process to consider BEUDO amendments
 - Multiple hearings held by Health & Environment and Ordinance Committees
 - **Committee vote to shift net zero deadline from 2050 to 2035 (based on 2017 policy order)**
 - *Addition of flexibility mechanisms and alternative schedule for residential buildings*
 - Ongoing small group meetings with BEUDO property owners and associations

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Key Components of Nov. 2021 CDD Proposal

- Performance requirement of reducing GHGs relative to individual baseline, in 5-year increments beginning in 2025, reaching net zero by 2050
- Default baseline is 2018-2019 average, but option to pick an early baseline with adjusted reduction requirements
- Buildings can pick from onsite reductions (energy efficiency, solar, electrification); new offsite renewable energy; or Alternative Compliance Credits
- Specific pathway options for affordable housing, labs, and campuses
- Exemptions for net zero buildings and financial distress
- Periodic policy review and adjustment



Key Changes to CDD Proposal in Council Discussion

- Performance requirement of reducing GHGs relative to individual baseline, ~~in 5-year increments~~ beginning in 2025, reaching net zero by 2050 for residential buildings and 2035 for non-residential buildings
- Default baseline is 2018-2019 average, ~~but option to pick an early baseline with adjusted reduction requirements,~~ new construction baseline of 0 starting in 2025
- Buildings can pick from onsite reductions (energy efficiency, solar, electrification); new offsite renewable energy; or Alternative Compliance Credits (ACCs); ~~also traded and deferred ACCs,~~ local and global carbon credits
- Specific pathway options for ~~affordable housing, labs, and~~ campuses, ~~delayed compliance schedule and~~ 2050 net zero target for residential
- Exemptions for ~~net zero buildings and~~ financial distress, ~~and utility failure~~
- Periodic policy review and adjustment



CAMBRIDGE



Key Flexibility Mechanisms in Council Discussion

Alternative Compliance Credits shall be equivalent to one ton of GHG emissions, and used by the City for City programs and projects to support GHG reduction

- ACCs start at \$234/ton, based on analysis of average cost of reducing emissions from BEUDO buildings, and adjusted over time based on actual costs
- Potential to take credit for GHG reductions paid for in other buildings beyond requirements
- Potential deferral of ACCs up to 10 years to execute capital improvement projects, assuming that cumulative GHG reductions are equivalent



Key Flexibility Mechanisms in Council Discussion

Carbon Credits are off-site measures to offset only the emissions from direct fossil fuel use of the building

- Carbon credits would be distinguished between local and global sources
- Use of carbon credits will be phased down over time, with global credits ending in 2035 and local credits ending in 2045
- CDD would issue regulations to certify eligible carbon credits
- The cost of carbon credits would be subtracted from the cost of ACCs needed to comply in a given year



Key Flexibility Mechanisms in Council Discussion

Off-site **Renewable Electricity** can offset only the electricity use of the building

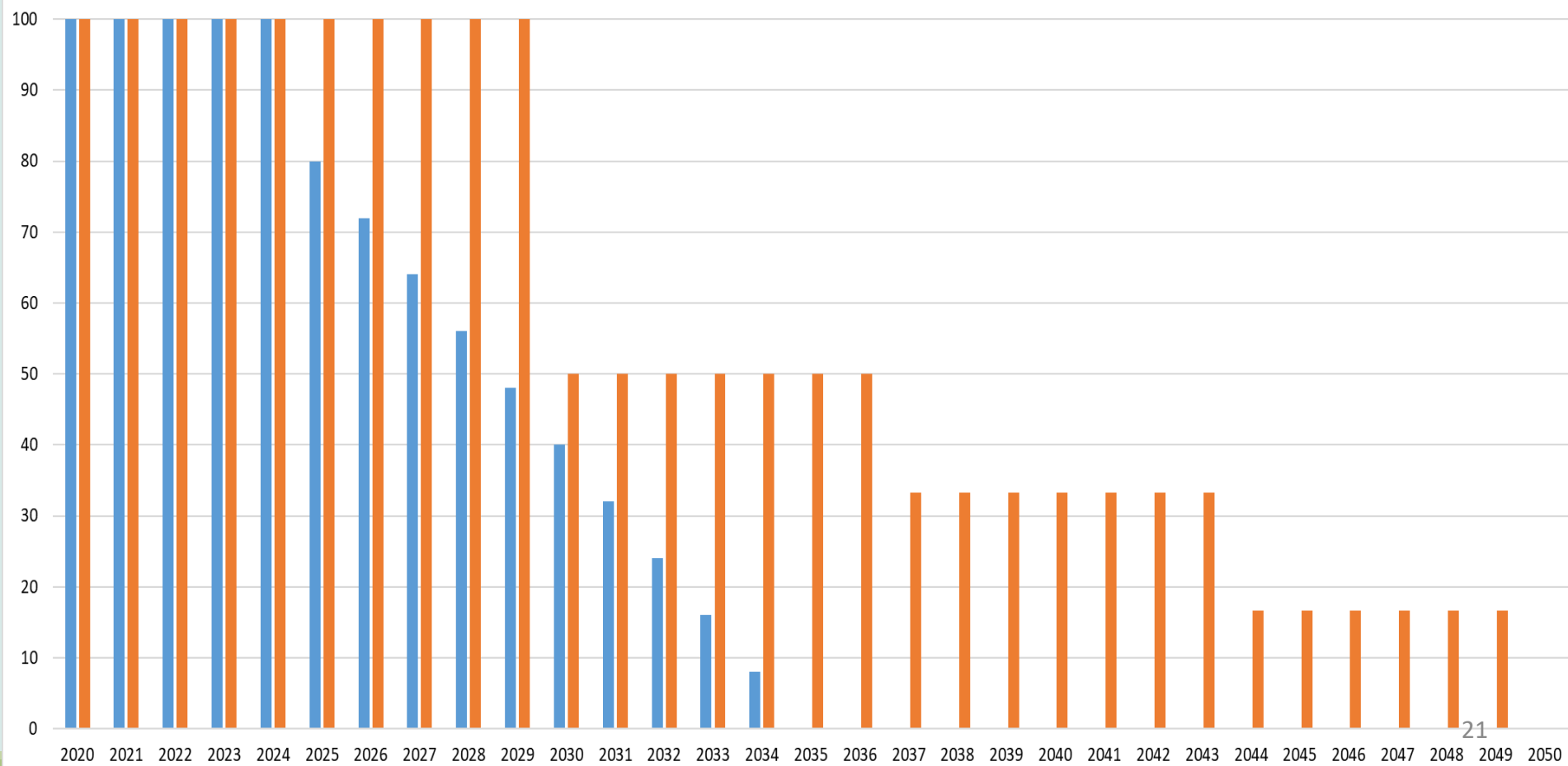
- Renewable electricity must come from **new sources** (purchaser-caused)
- Renewable electricity may come from anywhere in the country
- As the state electricity grid gets greener, buildings automatically get credit thanks to **emission factors** which are set by regulation
- The **Cambridge Community Electricity** aggregation program will also deliver increasing amounts of BEUDO-compliant renewable electricity



Key Flexibility Mechanisms in Council Discussion

Delayed compliance for **affordable housing and market rate residential buildings**

Non-Residential Buildings (blue) vs. Residential Buildings (orange)



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Retrofit Resources



Cambridge Building Energy Retrofit Program

Community Development

The One-Stop Shop for Cambridge Buildings Over 25,000 Square Feet or 50 Units

Connect with energy efficiency services and technical support including:

- › Comprehensive planning services and support specific to your building
- › Expert guidance, including a dedicated Eversource Energy Efficiency team, vendor referrals, and specialized building technologies
- › Energy Efficiency offerings and incentives tailored to your building type and size
- › Building Operator Certification training classes for facilities staff

Contact the Cambridge Building Energy Retrofit Consultant:
(781) 441-3502 or CambridgeEnergyConsultant@eversource.com

Resource Hub

- › [Energy Efficiency Incentives for Commercial Buildings \[PDF\]](#)
- › [Building Energy Use Disclosure Ordinance](#)
- › [Retrofit Program Development Process - Full Report \[PDF\]](#)



Retrofit Resources

- Mass Save: www.masssave.com
- Cambridge Community Electricity:
www.masspowerchoice.com/cambridge
- Cambridge Multifamily Retrofit Advisor and Cambridge Clean Heat: www.cambridgeenergyalliance.org
- Forthcoming state and federal resources



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Next Steps

Continued City Council consideration of potential amendments

- Ordinance Committee Hearing: ~October
- Full Council consideration and voting: ~late 2022/early 2023

Stay informed at www.cambridgema.gov/BEUDO



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Questions + Feedback

- Questions can be asked using the Q+A function

Bottom Panel
of Zoom
Screen



- Spoken questions/comments can be made by using the raise hand feature
 - If calling in, dial *9 to raise your hand / *6 to unmute
- In order to allow everyone to speak, please try to be brief
- The meeting is scheduled to end at 8:30 p.m.



www.cambridgema.gov/BEUDO

Thank You!

www.cambridgema.gov/beudo

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