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# CITY OF CAMBRIDGE

## Community Development Department

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**To:** Yi-An Huang, City Manager

**From:** Iram Farooq, Assistant City Manager for Community Development

**Date:** June 22, 2023

**Re:** Building Energy Use Disclosure Ordinance – Proposed Clarifications to  
Amendments discussed at the June 12, 2023 Council Meeting

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Please find attached proposed clarifications to the amendments to the Building Energy Use Disclosure Ordinance (BEUDO) discussed at the June 12, 2023 Council meeting. The clarifications are based on input received from owners of Covered Properties and staff and reflect the changes to the amendments shown below. Additions are shown as underlined and deletions as strikeouts.

- 8.67.010 DEFINITIONS:
  - Numbering:
    - This section's numbering was corrected to 8.67.010 from 8.67.10.
  - Approved Verification Body (3):
    - *Amended text:* ““Approved Verification Body” shall mean an organization ~~firm~~ accredited by the American National Standards Institute to conduct greenhouse gas inventory verification services.”
    - *Explanation:* Changed to reflect that ANSI accredits “organizations” that provide 3<sup>rd</sup> party verification, not firms.
  - Emissions Factor (15):
    - *Amended text:* ““Emission Factors” shall mean the multipliers used to determine the ~~annual~~ Greenhouse Gas Emissions produced by the production or consumption of Energy. The Assistant City Manager for Community Development shall promulgate regulations pursuant to 8.67.130 no later than the year prior to each Compliance Period to establish the ~~annual~~ Emission Factors for that Compliance Period, and no later than one year prior to the first Compliance Period to establish the ~~annual~~ Emission Factors for 2010-2025.

- (a) For the combustion of fuels, such as oil and gas, the Emission Factors will be based on standard scientific values published by federal agencies.
  - (b) For the use of all electricity purchased from the grid other than Renewable Electricity, the ~~annual~~ Emission Factors will generally reflect the emissions intensity of electricity consumed in Massachusetts.
  - (c) For the generation of steam, hot water, and chilled water, and the generation of electricity other than Renewable Electricity, the Emission Factors for each output from the generation facility will be calculated using the Greenhouse Gas Protocol methodology jointly developed by the World Resources Institute and World Business Council for Sustainable Development, or similar methodology, using data provided by the generation facility owner.”
- *Explanation:* The period for the emission factors will be determined through regulation.
- Energy (16):
  - *Amended text:* ““Energy” shall mean purchased electricity, natural gas, steam, hot or chilled water, heating oil, or other product or electricity generated on site, for use in a building for purposes of providing heating, cooling, lighting, water heating, or for powering or fueling other end-uses in the building and related facilities, excluding any verified amount of electricity used for charging electric vehicles and excluding any Energy exported for consumption outside the Covered Property.”
  - *Explanation:* Changed to clarify that energy exported (such as steam sent to another property) is not part of a building’s own energy use and should not be reported as such.
- Hardship Compliance Plans (20):
  - *Amended text:* ““Hardship Compliance Plan” shall mean a detailed compliance plan to reduce Greenhouse Gas Emissions, based on an energy audit or similar assessment, that a Covered Property Owner may propose for approval by the Review Board to address hardship at a Covered Property. Such hardship may

include, but not be limited to, financial distress, ownership structure consisting of individual non-residential Condominiums, limitations in securing sufficient grid electrical service when it is needed, and limitations due to historic designation or other regulatory designation of the Covered Property that hinders it from compliance with 8.67.100. The Assistant City Manager for Community Development shall promulgate regulations pursuant to 8.67.130 that establish the documentation required for application, the minimum requirements for the emissions reductions achieved by Hardship Compliance Plans, and the length of time for which they may be approved."

- *Explanation:* Changed to reference that regulations will establish the documentation required for applying for a Hardship Compliance Plan.

- Verified Carbon Credits (31):

- *Amended Text:* "Pursuant to these regulations, the Review Board shall approve ~~determine~~ the types and geographic limits of emissions reduction projects from which a Covered Property Owner may obtain new Verified Carbon Credits, such that the Verified Carbon Credits be local when possible."
- *Explanation:* Language clarified to indicate that regulations will specify the criteria for carbon credits as well as propose types and geographic limits of projects that could meet such criteria to be approved by the Review Board.

- 8.67.100 EMISSION REDUCTION REQUIREMENTS

- Use of Renewable Electricity (7)

- *Amended text:* "Any Renewable Electricity must be obtained in the year in which it is applied, and documentation thereof must be submitted to the Department by the subsequent May 1 reporting deadline. In calculating Greenhouse Gas Emissions ~~for a Covered Property, and Owner that, a Covered Property that~~ consumes electricity from a generating facility in Cambridge that uses combustible fuels to generate electricity for direct use by the Covered Property may subtract Renewable Electricity

from said generated electricity only as long as the Emission Factor for the generated electricity is less than or equal to the Emission Factor for electricity purchased from the grid. The Assistant City Manager for Community Development shall promulgate regulations pursuant to 8.67.130 to establish a methodology for evaluating the Emission Factor for generated electricity compared to grid electricity.”

- *Explanation:* Language clarifies that this section applies to all properties that receive electricity from co-generation, whether they are owned by the same owner as the co-generation facility or not.

- Campus (10)

- *Amended text:* “A Campus may choose to comply with the requirements of Section 8.67.100 at the level of each Covered Property or at the level of the aggregate Campus Greenhouse Gas Emissions, and the Owner shall determine the method by which they intend to comply, and once determined, this method shall be used for all Compliance Periods. The annual performance requirement for a Campus complying at the aggregate level shall be the total of Greenhouse Gas Emissions allowed for each of the individual Covered Properties in that year, as determined by the performance requirements in 8.67.100(2)-(4). A New Covered Property may be included in an existing Campus if the Owner determines prior to the end of the New Covered Property’s Baseline period that this is the method by which it will comply. The use of Verified Carbon Credits by such a Campus shall similarly be limited to the total Verified Carbon Credits allowed for the individual Covered Properties, as determined by 8.67.100(5). The Greenhouse Gas Emissions of such a Campus shall be the total Greenhouse Gas Emissions of the individual Covered Properties. An Owner may only define one Campus from their Covered Properties. An Owner may include in a Campus one or more properties under 25,000 Covered Square Feet or with less than 50 Dwelling Units; such properties shall be subject to the requirements for Covered Properties of 25,000 to 99,999 Covered Square Feet.”

- *Explanation:* The first amendment clarifies that a campus can include new properties. The last sentence adds that a campus owner can voluntarily include properties below the BEUDO threshold, but they must comply with all of the requirements for buildings under 100,000 square feet.
- 8.67.110 MAINTENANCE OF RECORDS AND DATA VERIFICATION
  - *Amended text:* “For the first year of each compliance period, Owners shall provide a third-party verification of their reporting data, submitted by the benchmarking deadline for that year per 8.67.050(1). Covered Properties reporting as a Campus will have until July 1 of the deadline year to submit verification of their data. Verifications must be performed by an Approved Verification Body.”
  - *Explanation:* Campuses will report by May 1 of each year but be given until July 1 to submit verified data.

#### **Amendment to Definition of New Property**

An amendment has been proposed to change the definition of “New Covered Property” to a property that receives a Certificate of Occupancy (COO) in 2025 and onwards and requiring that such properties not exceed net zero Greenhouse Gas Emissions by 2030 and onwards. This would require new buildings that chose to install fossil fuel energy systems on site to remove such systems within a period of 5 years or less. This amendment has not been incorporated into the proposed changes to the ordinance language discussed above.

Municipalities generally are not allowed to adopt regulations that determine materials and methods of construction as these are regulated under the state building code. However, newly adopted state regulations known as the Fossil Fuel Demonstration, will allow the City of Cambridge to require fossil fuel free construction of all buildings sizes and types, with the exception of “research laboratories for scientific or medical research, hospitals and medical offices regulated by the department of public health as a health care facility.” Laboratories and health care facilities were excluded from the demonstration, based on the state’s assessment of the feasibility of constructing such facilities without using fossil fuels. Creating a requirement as part of the BEUDO ordinance to require such buildings to be net zero in five years or less, may be considered a pre-emption of the state building code.

Also, changing the definition of a New Covered Property to buildings receiving a Certificate of Occupancy in 2025 and onwards would leave out buildings receiving a COO between 2018 and 2024 as the Ordinance language is currently structured.

### **Background**

The Building Energy Use Disclosure Ordinance (BEUDO) was adopted in 2014 and requires energy and water reporting from commercial properties over 25,000 square feet and residential properties over 50 units. This regulates approximately 1,100 buildings in Cambridge which are responsible for approximately 75% of the building sector greenhouse gas (GHG) emissions.

The ordinance has successfully increased transparency and awareness of energy and water consumption by the regulated buildings. BEUDO includes a provision requiring that the Community Development Department review the impact of the ordinance on energy performance of covered properties, and recommend amendments to improve building energy performance if it has not improved significantly. Analysis performed in 2018 concluded that energy performance of covered properties had not improved significantly.

The proposed amendments to BEUDO ordinance represent an essential step in Cambridge's commitment to achieve carbon neutrality. The Net Zero Action Plan identifies BEUDO performance requirements as an integral part of a comprehensive suite of actions which together will phase out GHG emissions from new buildings, many existing buildings, and much of the energy supply system in Cambridge. This Plan was created (2015) and updated (2021) by a Net Zero Task Force and is being overseen by the Cambridge Climate Committee. Both these groups, and the Climate Crisis Working Group, have urged the prompt advancement of strong BEUDO performance requirements.