

## **CAMBRIDGE BUILDING ENERGY USE DISCLOSURE ORDINANCE**

### **Reasons for the Ordinance**

Energy use in commercial and institutions buildings is the largest contributor of carbon pollution in Cambridge, approximately two-thirds of the total. To significantly reduce the city's carbon footprint, it is essential that owners and tenants work to make their buildings as energy efficient as possible and substitute non-fossil fuel energy sources. A major impediment to addressing building energy use is that building energy performance is not easy to ascertain. Whereas energy performance information is available for vehicles and appliances, similar information is not generally available for buildings.

Energy use disclosure ordinances are a recent policy development that has begun to be adopted around the U.S. to improve transparency in the building energy performance sphere. Ordinances are in effect in Washington, DC, New York City, San Francisco, Seattle, Minneapolis, Philadelphia, and Boston. Disclosure to the City was also included in recent zoning amendments in Cambridge and is included as part of the proposed zoning changes resulting from the recently completed the Kendall and Central Square planning studies.

For building owners and managers, energy use data enables annual benchmarking and allows the establishment of energy performance baselines, monitoring over time, informing upgrade decisions, and verification of savings from investments in improvements. Public disclosure of energy performance data will provide essential information to the marketplace to allow investors, owners, and tenants to make informed decisions about which buildings to select. Disclosure also enables better energy planning by communities and allows energy service providers to respond to the market more effectively.

### **City of Cambridge Approach**

The Community Development Department has been consulting with other cities as well as the Institute for Market Transformation and Natural Resources Defense Council to determine best practices in developing and implementing building energy use disclosure ordinances. The ordinance framework the City is considering parallels the ordinances that have been adopted to date. The key elements are:

Applicability: The ordinance would apply to large commercial, institutional, and multi-family buildings. The size thresholds the City is considering are commercial and institutional buildings that are 25,000 square feet or larger and multi-family buildings with 50 or more units. We believe based on preliminary analysis that these thresholds will capture most of the energy use in the commercial, institutional, multi-family sectors. Municipal buildings would be included. The City is evaluating the option of synchronizing the thresholds with those in the City of Boston ordinance.

Phasing: The ordinance would go into effect in 2014, assuming it is enacted by the spring. Municipal buildings would benchmark and disclose their energy use first in approximately October 2014. Then commercial and institutional buildings 50,000 square feet or larger and multi-family buildings with 50 or more units would disclose in May 2015. Commercial and institutional buildings 25,000 square feet or larger would benchmark and disclose in May of 2016.

Benchmarking: The ordinance would require building owners to annually benchmark and report energy use, water use, and building information to the City. All energy sources would be covered including

electricity, natural gas, steam, hot or chilled water, heating oil, and renewable energy. Owners would be required to input data and information into the US EPA's Energy Star Portfolio Manager (ESPM). The ESPM platform requires inputs into fields including the building address, primary use type, gross floor area, energy use, and water use. ESPM calculates the energy use intensity, greenhouse gas emissions, and a benchmarking score for applicable building types. The City is also considering asking developers of large buildings to input results from the EPA Target Finder tool upon receiving a permit for new construction.

Disclosure: With benchmarking data submitted through Energy Star Portfolio Manager, the City would annually disclose the results through the City website. A building's energy benchmarking data would not be disclosed in the first year of compliance other than to note that the property has complied or not with the ordinance. The City will develop an effective platform to host the data to make it as useful as possible to the marketplace. In addition, the City would analyze the data and report summary statistics each year.

Follow up Requirements: The City is considering options to require energy performance improvement actions of buildings that do not meet a minimum level of performance. For example, a building that scores below a score of 75 on the Energy Star scale might be required to conduct an energy assessment or retro-commissioning project at defined intervals (e.g., every five years).

Enforcement: Penalties would be established for properties that do not comply with the ordinance. The City would work with property owners to avoid penalties, which would be designed to achieve compliance without being punitive.

Utility Data: The City recognizes there is an issue for owners in obtaining tenant utility information. The City hopes to engage NSTAR and other energy suppliers to provide whole building data, as has been done in other cities. In the event that whole building data is not made available, the ordinance will include provisions to estimate energy use in tenant spaces.

Implementation: The City will engage a consultant to prepare an implementation plan that will cover identification of subject properties, notification of properties, training and technical assistance to owners and property managers, and design of the disclosure platform.