



Executive Department
Jon P. Jennings, City Manager

To: Councilor Thibodeau and members of the Sustainability and Transportation Committee
From: Troy Moon, Sustainability Coordinator
RE: Recommended amendments to the Energy Benchmarking Ordinance
Date: September 14, 2018

Background:

In November, 2016 the City Council adopted an energy benchmarking and disclosure ordinance that requires all commercial properties with a footprint greater than 20,000 square feet to calculate their annual energy and water consumption and to report it to the Sustainability Office using the US Environmental Protection Agency's energy reporting platform, Portfolio Manager. The ordinance also requires the Sustainability Office to disclose the reported information on the City website. Over 800 buildings in the city are subject to the reporting requirements.

The ordinance established a hard deadline for businesses to report their data to the Sustainability Office but a softer deadline for the Sustainability Office to disclose this data on the City website.

- Reporting deadline for affected properties: December, 2018. (Two years after the effective date of the ordinance)
- Disclosure deadline: Two years after the effective date of the ordinance **or** one year after the Sustainability Office determines that the utility has made energy data available in a convenient electronic format, **whichever is later**.

The softer deadline for disclosure was the result of stakeholder input that gathering the data necessary to report would be cumbersome and that whole building data for properties with multiple tenants would be challenging to acquire.

Discussion:

This summer the City had the benefit of a Sustainability Fellow from the University of New Hampshire Sustainability Institute. This allowed us to “test drive” the benchmarking process. Her project was to gather the data necessary to benchmark City buildings and to develop resources that would guide property owners through the process of benchmarking their affected properties. During the course of the fellowship we encountered a number of obstacles that supported stakeholder input

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about the difficulties associated with collecting the energy data for commercial buildings. We believe these obstacles will make it difficult for Portland property owners to comply with the ordinance by the December deadline:

1. Data about electrical consumption is not readily available to property owners in an easy to use electronic format.

Central Maine Power offers a section on their website called “Energy Manager” but our effort to use it proved frustrating. The interface is not intuitive and users with multiple accounts find it difficult to load data from specific accounts. If a user is successful in selecting the account he or she wishes to examine the website will not download a report in a useable format. The CMP website indicates that reports are available in PDF or Excel formats but clicking the link associated with these formats does not generate a file that can be opened by those programs.

We also learned that commercial property owners may not be presented with the same Energy Manager interface for all of their properties. During a working session with a representative from the Portland 2030 District we logged into the website using account information from several accounts belonging to a single property owner. For some buildings we were offered an interface similar to what the owner of a small residential property owner might see but for other properties we were offered a more complicated interface. This makes it difficult to describe the process for collecting data to the affected property owners. The more complicated interface offers a “Green Button” that, theoretically, allows the account owner to download energy data in an easy to use electronic format. (This option doesn’t appear on the residential interface that some commercial buildings are offered.) However, the data that downloads is raw 15 minute interval data from the smart meter. Over the course of a month, this creates a very large file of data that is not useful unless the user has access to specialized software for analyzing such data and the skills to use it. Large and sophisticated property managers use such tools or hire a consultant who does but most property owners do not.

2. Owners of buildings with tenants do not have access to whole building energy data.

A significant portion of the buildings subject to the benchmarking ordinance have multiple tenants. Many have dozens of individual units. In most cases, each tenant has an electric meter and pays their own electric bill. Regulations established by the Public Utilities Commission prohibit the utility from disclosing such information to a third party without their written consent. This means a building owner needs to gather monthly energy data from each tenant in a building and compile it into a report showing the whole building data. The alternative would be for the property owner to obtain account information from each tenant along with a release that could be provided to the utility in order to access each tenants energy data. In either case, the property owner would be required to compile the data into a whole building profile before they could report energy consumption in the building. This process presents considerable administrative burden on the property owner and makes compliance difficult.

During the summer we learned that Efficiency Maine had partnered with the Portland 2030 District in an attempt to access whole building data. (By statute, Efficiency Maine can access utility data that is otherwise protected by PUC rules but must still protect confidentiality.) As a pilot, 2030 District members provided Efficiency Maine with the addresses of several buildings and asked them to request that Central Maine Power provide the electrical usage from all accounts associated with those

properties. In response, Efficiency Maine received a huge volume of raw 15 minute interval data from each of the meters associated with the properties. Unfortunately, they lack the ability to process and interpret that volume of data. Our staff discussed this process with Efficiency Maine who remains willing to support efforts to obtain whole building data but, at present, we haven't figured out how to make this work efficiently. Both the City and Efficiency Maine lack the resources to facilitate a cumbersome process at this time.

In other cities with successful benchmarking ordinances the local utilities provide a streamlined way to provide whole building data to property owners. A regional example is Eversource, which serves the Boston metro region. They have established an easy to use web portal that allows building owners to provide any necessary documentation to verify ownership and to request data that is then supplied in whole building formats. This streamlined process resulted from the close collaboration between the local governments, the utility, regulators, and affected property owners. Our experience working with these entities in Maine indicates that all are willing to work to make energy data available in a streamlined fashion but more needs to be done to make this a reality.

Recommendation:

As things currently stand, building owners and property managers face significant obstacles that will make it difficult if not impossible to comply with the December reporting deadline to disclose energy and water usage to the City. Staff recommends that the benchmarking ordinance be amended to align the reporting deadline with the deadline for disclosure. This will allow staff to continue working with all parties to provide a usable way to acquire energy data, including whole building energy data.



When the Council passed the ordinance it is clear that they recognized that data was not available to stakeholders because the deadline for disclosing building energy use was undefined. We also suggest that the City continue to work with Efficiency Maine, the Portland 2030 District, energy utilities, and the PUC to revise rules and procedures that make whole building data available to property owners while taking necessary steps to protect the privacy of tenants.