



CITY OF PORTLAND
Executive Department
Jon P. Jennings, City Manager

To: Councilor Thibodeau and the members of the Sustainability and Transportation Committee
From: Troy Moon, Sustainability Coordinator
Re: Setting a reporting deadline for single occupant buildings to report energy data
Date: April 12, 2019

In November 2016, the Portland City Council adopted the Energy Benchmarking and Disclosure Ordinance that required all buildings in the City of Portland with a floor space of 20,000 square feet or more to calculate their annual energy and water consumption and to report it to the Sustainability Office. The first reporting deadline was set for December 2018. In advance of this deadline, City staff collaborated with local property owners associated with the Portland 2030 District, Efficiency Maine, Central Maine Power, and others in order to test-drive the reporting process so we could better assist other business owners with the reporting process. During our work, we determined that Central Maine Power could not make aggregated whole building energy data available to their customers in a convenient, electronic format. Staff recommended that the City Council adopt an amendment to the ordinance postponing the reporting deadline until the Sustainability Office is able to determine that CMP is able to provide whole building data available to their customers. Council adopted this amendment in December, 2018.

As staff continues to work with Central Maine Power on data access issues we have determined that the owners of buildings with 20,000 square feet or more of floor space that have a single primary tenant currently have access to their energy consumption data in a convenient, electronic format. Recent upgrades to CMP's Energy Manager have made it more visually appealing and easier to use than it was in the past. Customers are able to create a profile and can generate reports about the usage associated with the accounts they control. As an example, the summary below shows the monthly electricity usage of the Trough Ice Arena.

Data Summary

Period Ending ↑	Usage (kWh) ↓	Min Demand (kW) ↓	Max Demand (kW) ↓	Avg Demand (kW) ↓
2/1/2018	80,285.790	78.400	144.800	107.911
3/1/2018	73,006.410	0.600	147.600	108.640
4/1/2018	81,946.780	81.440	143.720	110.292
5/1/2018	78,915.890	82.800	157.120	109.605
6/1/2018	81,624.260	42.560	189.040	109.710
7/1/2018	90,535.280	82.600	215.960	125.743
8/1/2018	104,003.160	91.280	212.400	139.789
9/1/2018	105,445.500	0.000	225.440	141.728
10/1/2018	90,465.750	39.840	207.800	125.647
11/1/2018	83,203.880	47.600	180.560	111.833
12/1/2018	74,581.040	46.920	138.280	103.460
1/1/2019	73,066.200	76.520	144.200	98.207
Total	1,017,079.940	670.560	2,106.920	1,392.567

The data is also available in a graph so customers can recognize trends in energy usage.



Energy Manager also shows customers their demand – the amount of electricity they use at any given time. The benchmarking ordinance does not require property owners to report this but they should track it and make efforts to reduce their demand because it plays a large role in determining their energy costs.

Excluding buildings owned by the City of Portland, we have identified 197 buildings subject to the ordinance that appear to have a single primary tenant. These include hotels, warehouses, retail stores, university or private school buildings, buildings owned by other government agencies, and medical buildings. In total, they represent 14,800,000 square feet of building space. Beginning the benchmarking program with this subset of buildings will provide a meaningful amount of data that will help the Sustainability Office understand how commercial buildings use energy. It will also help us to identify buildings that use more energy than similar properties and direct their owners toward resources that can help them make energy efficiency upgrades. This would reduce their costs and their greenhouse gas emissions. We have provided a list of the buildings we believe would be subject to reporting if the Council adopts the amendment.

The proposed amendment sets a reporting deadline for these buildings on May 1, 2020. During the time between adoption of the ordinance and this deadline, the Sustainability Office will notify the affected property owners of the reporting requirement and assist them with technical information about benchmarking and reporting. We have identified partners including the Northeast Energy Efficiency Partnership, EPA Region 1, and the Maine DEP who can assist with the education process by providing the City and property owners with information Portfolio Manager (the reporting platform) and guidance about gathering and analyzing the necessary information. The City webpage already contains extensive information about the benchmarking ordinance and the reporting process:

<http://www.portlandmaine.gov/2389/Energy-Benchmarking>

We will also continue to work with Central Maine Power in an effort to establish to set an aggregation threshold for buildings with multiple occupants and to create a data portal similar the one established by Eversource to support the Cities of Boston and Cambridge. As reported to the Committee last month, CMP has issued an RFP to upgrade their customer service platform and has indicated that the update will allow them to provide aggregate whole building data to their customers.

Attachment: List of affected buildings