Energy Reporting Requirement for Large Commercial and Multi-residential Buildings

Date: February 14th, 2014 To: Chair of the Parks & Environment Committee

Dear Chair Mammoliti,

Energy reporting – often referred to as energy disclosure or benchmarking – is a powerful, proven tool for reducing energy and water use in large buildings, creating local green jobs, mitigating greenhouse gas emissions, and improving buildings' energy productivity and value. Leading US cities have introduced annual energy reporting bylaws including New York City, Philadelphia, Boston, Chicago, San Francisco, Seattle, and Austin. A recent United Nations Environment Program Finance Initiative report identifies energy measurement as one of six key strategies for unlocking billions of dollars of energy efficiency potential in commercial and institutional buildings. A 2002 EU directive requires display of energy certificates in all public buildings and building owners to provide prospective buyers and tenants with building energy performance certificates at time of construction, sale or rental.

The City of Toronto has taken significant leadership to ensure that new buildings are energy efficient with base requirements in the Toronto Green Standard above the Ontario code, and significant incentives for leading edge efficiency. With about 60 percent of Toronto's greenhouse gas (GHG) emissions associated with existing buildings and significant constraints on energy and water supply, it is also important to reduce energy and water demand of Toronto's current building stock.

Annual energy reporting is generally focused on large commercial, multi-unit residential and institutional buildings. Reporting is via an on-line platform including one-time data about a building's age, size, type, and use patterns, and annual data on energy (gas, electricity) and water use. Aggregation and analysis of data should allow comparison of performance, tracking of improvements, and targeting of conservation programs.

We believe that a well-designed energy reporting program can have numerous benefits including:

- Help Toronto property owners and managers save money on their utility bills and make Toronto a more affordable place to live and operate a business;
- Protect consumers and investors by providing access to energy performance information that can inform real-estate buying or leasing decisions;
- Reduce capital costs for utility companies as they continue to grow and maintain their infrastructure to meet growing demands associated with current development patterns;
- Create opportunities for additional economic activity within the City, both directly by encouraging investments in conservation, and indirectly by redirecting avoided utility costs into more productive and labour-intensive activities;
- Provide valuable data about city- building energy and water use that will inform decisions around planning, infrastructure investment, targeted programs and effective policies; and
- Reduce air pollution and greenhouse gas emissions and help achieve Council-approved emission reduction and energy conservation targets as established in the Climate Change Action Plan and Sustainable Energy Strategy.

Such results are already occurring. For example, 24,071 buildings in NYC representing over two billion square feet of real estate have been benchmarked and the median EnergyStar score improved by 3 percent in just one year. Results are similar in other cities, yielding millions of dollars in avoided utility costs and providing local employment opportunities.

Emergence of voluntary energy reporting initiatives such as ASHRAE bEQ, EnergyStar, LEED-Existing Buildings, CivicAction's Race to Reduce, Tower Renewal STEP and REALPac's 20-by-15 Energy Benchmarking Program demonstrates the building sector's interest, although participation tends to be by best-in-class performers and the information collected is not always easily comparable. As of 2014, Ontario's *Green Energy & Economy Act* requires public sector buildings to report energy use annually, although it is not clear how that information will be used.

On-the-ground evidence shows the power of information to drive down energy intensity in large buildings. As part of Toronto's *Power to Live Green Sustainable Energy Strategy*, Toronto City Council directed the Deputy City Manager, Cluster B, to "*undertake the actions necessary in 2010 for the City to evaluate and implement a building energy benchmarking and energy use labelling program, initially for institutional buildings and subsequently for commercial/multi-unit and residential buildings". As the accountants say -- you don't manage what you don't measure – so let's explore and advance this opportunity for Toronto.*

Recommendation

- The Chief Corporate Officer, in collaboration with relevant City Divisions, Agencies and Corporations including the Toronto Atmospheric Fund and in consultation with key external stakeholders, be directed to report to City Council by March 2015 with a proposed bylaw and implementation plan for establishing a mandatory 'Annual Energy & Water Utilization Reporting Requirement' for large buildings, including for promulgation, support for delivery and compliance, and access to and use of the information.
- 2. The Chief Corporate Officer be directed to provide the Parks & Environment Committee at its meeting in August, 2014 with an interim status report regarding the development of a mandatory Energy Reporting Requirement for large buildings, and such report include information on the following elements which must guide the formulation of any requirement:
 - a. Engagement and collaboration with the Toronto Atmospheric Fund, Toronto Water, Legal Services, City Planning, Toronto Building, Tower Renewal office and any other relevant City Divisions, Agencies and Corporations;
 - b. Consultations with building owners, property managers, building science experts, energy management professionals, other orders of government, tenants, sponsors and participants in existing voluntary programs, and other relevant stakeholders;
 - c. Evaluation of the appropriate regulatory authorities of the City;
 - d. Engagement and collaboration with key utilities and provincial and federal government agencies and ministries, in particular Toronto Hydro, Enbridge Gas Distribution Ltd., the Ontario Power Authority, and Natural Resources Canada;
 - e. Initial assessment of the financial, economic, environmental and social implications of the proposed program;
 - f. A preliminary assessment of a probable schedule for implementation, including potential for phased application;
 - g. Identification of potential criteria for determining which buildings will be included in this program, such as size and type of building;
 - h. An assessment of data platforms that would make data collection simple and costeffective for property owners, generate relevant information for the key stakeholders, and ensure data is publicly accessible while appropriately protecting privacy

i. Discussion of preliminary staffing and budgetary implications associated with a mandatory energy & water utilization reporting requirement.

Thank you for your consideration,

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