



BOMA
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INDUSTRY ADVISORY

Carbon management critical to sustaining your building and your business

By *Francisca Quinn*

This first in a three part series is brought to the BOMA Membership by the Energy and Environment Committee.

Climate change, caused by the increased concentration of heat-trapping gases in our atmosphere, is driving governments around the world to regulate “greenhouse gas” (GHG) emissions. While the property sector is not yet subject to Canada-wide GHG regulations, managing carbon now is not only good for the planet, it also makes good business sense. Carbon management creates asset value through cost savings, risk reduction and reputational benefits.

Emissions from buildings constitute almost 40% of Canada’s national GHG emissions. The most common greenhouse gas is carbon dioxide, primarily created from the combustion of fossil fuels.

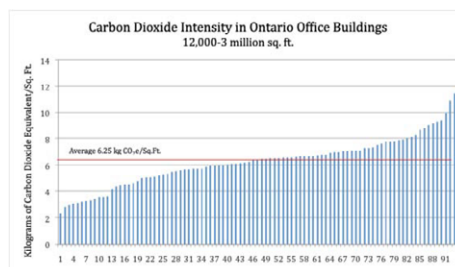
Sources of carbon emissions in buildings include:

- Consumption of natural gas for space and water heating
- Electricity use for HVAC, lighting and plug load
- Diesel and propane fuels fuelling backup generators
- Leakage of HFC and CFC refrigerants in chillers

If you manage a building, it is critical that you measure and track your building’s energy use and the corresponding carbon emissions (aka its “carbon footprint”). Here’s why:

Since energy prices always increase when carbon becomes regulated, knowing your energy consumption now will enable you to forecast and plan for the impact of higher energy prices.

Understanding your carbon footprint will give you the knowledge necessary to determine if



Portfolio emissions intensity

you are covered by any regulatory measures. It will also help you determine the cost of carbon neutrality or the potential upside of energy efficiency or renewable energy projects.

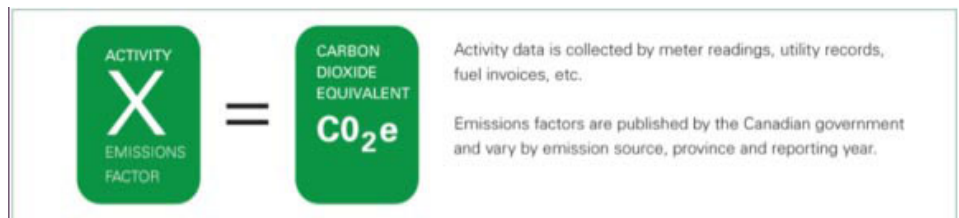
As well, tenants – your customers – are increasingly tracking their own operational carbon emissions (from facilities, vehicles, business travel, supply chain, etc). To comply with their own reporting and management requirements, tenants will regularly require carbon data from you. They may also ask that you track carbon savings from “greening initiatives” so that they can report these to their stakeholders.

Customers are also increasingly stipulating energy/carbon performance as a leasing crite-

ron. In the U.K., where the public sector leases around 18% of all office real estate, this important customer segment is moving towards procuring space only in buildings performing in the top quartile of the British building stock.

Additionally, examining energy and carbon-intensity metrics (e.g. kWh/sqft or CO2/sq.ft.) will help you benchmark your building against other similar buildings and predict how you will perform when building labels become mandatory. In the U.K., for example, the EU Energy Performance in Buildings Directive requires almost all commercial buildings to carry energy and carbon labels. These labels have become a critical part of any lease or sale, and many buildings are required to display lobby certificates attesting to the label.

The bottom line: If your customers are not already asking for carbon data, the expectation is that they will be in the near future – as will governments at all levels. Knowing these carbon management basics will prepare you to make sound business decisions and demonstrate leadership in the discussions that soon will arise with your property owners, tenants, staff and the communities in which you operate.



Quantifying carbon emissions

This is the first article in a series of three discussing carbon management in buildings. Look out for our next articles:

- “Integrating carbon management into your Business processes: measurement and reporting”
- “Using carbon information in property management: benchmarking, investing and marketing”

Francisca Quinn, is the Sustainability Practice Leader at Loop Initiatives. Francisca has worked with leading British and Canadian companies since 2003 to build carbon management practices. She is very familiar with international carbon reporting standards and has spoken on carbon-related topics to business and investor audiences. Loop Initiatives is a sister company to Halsall a multi-disciplinary building engineering firm with a strong focus on sustainability and an active BOMA Ottawa member.