

# Landlords and tenants become allies to save energy

October 05, 2009

Tyler Hamilton

Mississauga civil engineer Michael Laurie may be on to something.

The founder and president of PLANiT Measuring got his start drawing up floor plans for real-estate agents and homeowners. Back then he used a tape measure and drawing board.

Over time he began to seriously tinker with new technologies. He started to use sophisticated laser measurement devices. He drew up plans using computer-aided design (CAD) software. He collected his measurements on a tablet PC, and later even added voice recognition so he could talk to his computer from across a room.

These days, Laurie is taking this package of technology and using it to fill an important and growing market demand: energy auditing for large buildings. He takes measurements of every aspect of a building - room size, floor plans, windows, doors, the type of insulation in the walls, the layout of lighting, energy use, the types of toilets used ... the list goes on.

The end result is a detailed digital model of the building. Using that model as the baseline, Laurie can observe - on a computer screen - the direct impact of energy-efficiency retrofitting before the physical work takes place.

"The model can be calibrated to reflect the current energy use and utility bills of the existing building, for example, and then the owner can perform any number of creative and informative exercises to find out how those numbers are affected by various changes to the building," says Laurie.

What happens when low-flow toilets are added, or an automated lighting system? How much will monthly energy bills fall when a more efficient boiler is installed, or compact fluorescent light bulbs are added to every light fixture? These questions can be answered before the hard work, and upfront expense, are committed.

And more building owners are expected to make that commitment over the coming years. Ontario's energy strategy is about more than simply adding more wind farms and solar panels to the grid; it's also about using less energy.

That's why more than a hundred of the GTA's biggest landlords and tenants got together last week to figure out ways to make the area's office and retail space more energy efficient through building retrofits.

The group included Brookfield, Cadillac Fairview, GWL Realty Advisors, Oxford Properties - a who's who of building managers and owners - as well as influential tenants such as Rogers, Telus, Wal-Mart and Canada's Big Five banks. They call themselves the Commercial Retrofit Initiative and Leadership Council, and they were brought together as part of a Toronto City Summit Alliance initiative called Greening Greater Toronto.

Julia Deans, chief executive of the alliance, says there has historically been a wide disconnect between the wants of tenants and landlords around the issue of energy efficiency. If a tenant is responsible for paying the monthly power and heating bill, then what incentive is there for the landlord to pay more for energy-efficient equipment or design?

But the dynamics are changing. The economic downturn has squeezed landlords in the GTA. Toronto's office vacancy rate is above about 9 per cent compared to 6.6 per cent a year ago, with five new office towers totalling 3.9 million square feet set to flood the market. According to the alliance, "the pressure to attract and retain tenants is high, and market forces are working in favour of the tenant."

There's also the reality that many new office towers are getting Leadership in Energy and Environmental Design (LEED) certification, suggesting a trend that favours "green buildings." Studies repeatedly show that these more efficient buildings tend to have higher occupancy rates, despite rent premiums. And believe it or not, data suggests that green buildings make for healthier and happier occupants.

With tenants, who pay the utility bill, in a position to have more say about the design and efficiency of the buildings they occupy, it's the perfect time to bring them together with landlords so that, as a group, they can figure out next steps.

Linda Mantia, senior vice-president of corporate real estate at RBC Financial Group and council co-chair, said after the council's inaugural meeting that there's good reason to focus attention on the GTA's biggest buildings.

"Office buildings are the largest consumers of energy in commercial and industrial sectors in Ontario. They are also the largest producers of greenhouse gases in this sector," she said. "With 80 per cent of that office space located in the GTA, most of this energy consumption and resulting greenhouse gas is in our backyard."

It's also in PLANiT Measuring's back yard. That suits Mike Laurie just fine. After all, you can't improve what you can't measure. And given the number of large buildings in the GTA that need retrofiting, there'll be a lot of measuring.