January 2016 Article from BLOOM Centre

Integrated Sub-metering

"My very first meeting with a processor for OMAFRA was with a general manager upset with his lack of cost control after spending thousands on a water conservation project. Three years after the project plant used more water and had more cost than prior to their project. When asked about his management system, the answer I got was "It's just me" (the general manager). This was 24 years ago. I, too, had been a plant manager and experienced the same problem – a lack of performance data. Your utility champion will have the same challenge and will need the right tools. Effective utility management is based on performance measurement. This cannot be guesswork, it must use integrated sub-metering systems. They can be bolted onto your electricity service panels in a half hour. Twenty-five years ago, the system installed in a frozen food plant where I managed cost us $250,000. Today, a better system starts at $1,500.

Why sub-metering? Behaviour adds 6 to 20 percent to your overall bill – forgetting to turn the lights off, letting a machine run … it all adds up. Integrated sub-metering allows you to identify the "oops" and identify responsible behaviour. The system accurately tracks costs for multiple systems: lighting, air compressors, coolers and packaging. You get accurate variable costs for product costing models in a complex business that can include; a vineyard, winery, retail store and event venue. The data can be calculated down to cost, kilowatts and carbon per case. Additional meters for water, sewer and natural gas are easily added. The system can link to your desktop and cell phone. Two Ontario-based makers of integrated metering systems are:

- Z3 Controls: www.z3controls.com
- Intellimeter Canada Inc.: www.intellimeter.on.ca

You can get program support for installing sub-metering systems from both:

- SaveOnEnergy: www.saveonenergy.ca/Business.aspx
- Growing Forward 2: www.omafra.gov.on.ca/english/about/growingforward/gf2-processor.htm"

Next Month: Predicting the Cost of Utility Efficiency Projects