



It's a fact. Prices for electrical energy consumption will be rising in Ontario. No matter where you live in the province, you'll feel the pinch. In addition to price increases, all electric usage meters will be replaced with smart meters, also known as time-of-use rates meters, to monitor when consumers are using their energy. During peak hours, determined by the government, prices will be higher. So Ontarians not only need to know *how* to conserve, but also *when* to conserve electricity.

It's going take education to reach both home owners and small businesspeople. The Ontario Convenience Stores Association (OCSA) has taken a proactive approach on this issue, working closely with stakeholder groups to develop a strategy specifically for c-retailers. The aim is to give store owners and managers the information and tools they need to achieve energy savings and reduce costs before the program is fully implemented.

As a first step, OCSA is spearheading an energy audit with the help of Ontario Power Authority (OPA), Triacta Power Technologies, and the Clean Air Foundation's Cool Shops Program. Using sample stores, the association is conducting audits to help c-retailers understand where peak consumption in their business sector is coming from and find ways to reduce energy use. The intent is to educate and help c-store owners learn how to save money on their electricity costs *before* the new smart meter program and higher energy costs kick in.

Peter Love, chief energy conservation officer at the Ontario Power Authority, says the OPA is working closely with businesses, schools, hospitals, and other sectors to make energy consumption reduction a priority for everyone.

Love likens the energy reduction initiative to the Blue Box program implemented in the province some 30 years ago. The Blue Box initiative took time and education to get people on board, but now has become second nature.

Saving energy

In terms of energy savings, the education is two-pronged. The first one is pretty straightforward and won't cost you a cent. It's changes to habits, sometimes referred to as good housekeeping tips. Examples include closing the front door when you have the air conditioner running, turning off the lights at night, or turning off the computer and any electrical appliances that don't need to be running. It's these seemingly inconsequential items that can add dollars to your energy bill.

The second category is making investments in better technology, including using more environmentally friendly lighting, putting insulation seals on doors and windows, maintaining equipment so it runs at peak performance, or replacing equipment that's draining your energy and costing money. Over time, the up-front investment will pay off by putting the money you would have spent on electrical energy back in your pocket.

What's costing you?

But how do you find out what's draining your energy or how you can save money on your electricity bill?

The first thing is to understand your electric bill, says Jennifer Hassani, director of marketing for Triacta Power Technologies. Triacta makes high density metering systems used as monitoring tools for electric utilities. Triacta will be donating their equipment, which will be installed to monitor electric usage at the c-stores chosen for the energy audit.

Hassani has a few tips to help store owners lower their electric bills. "You need to understand the market structure," she explains. "It sounds really simplistic, but until you understand how you're billed, you really can't get the rest of it (energy savings) right." For example, commercial businesses pay different charges depending on their classification, which is determined by their utility company. Businesses are also classified differently from residential users. It pays to find out what your classification is and how you're billed.

Another question: Do you pay straight kilowatt hour consumption charges, or are you being levied a "demand charge"? A demand charge is levied on the greatest amount of consumption within any 15-minute window period in the month. For example, if you turn on all of your freezers, lights and other equipment at the same time each month, you'll be levied a charge based on that amount. This peak usage is considered your demand charge.

So how do you lower your demand charge? Hassani uses McDonald's as an example, a company Triacta worked with to reduce their electricity costs. In this case the store was opening at 6 a.m. Employees turned on the grills and just about everything else requiring electricity at the same time. As well, their parking lot lights were also on. The result? McDonald's was paying several hundreds in demand charges. By turning on a

couple grills at a time, staggered over 15-minute intervals, and using a timer for the exterior parking lot lights, the company reduced the demand charge by \$400.

C-stores and energy

Though c-retailers have not yet been audited, Hassani says there are probably some pretty consistent charges the entire industry is incurring. One is equipment-related. For example, if you operate a supplier's ice cream freezer display, are you responsible for ensuring it's in full working order? If it isn't working at 100% efficiency, chances are it will increase your electricity bill. Hassani advises you check to see who's in charge of maintaining that equipment and conduct regular maintenance.

Cara Sweeny, program manager for the Cool Shops Program at the Clean Air Foundation, will also be involved with the c-retail audits. The Clean Air Foundation is a national environmental not-for-profit organization launched in 2000 under the Summerhill Group, which manages the operations of four not-for-profit organizations -- Clean Air Foundation, Canadian Energy Efficiency Alliance, EnerQuality and Healthy Indoors Partnership. Cool Shops helps Ontario retailers identify and implement in-store energy management measures to reduce energy use and save on utility costs.

As part of the OCSA audit, Cool Shops will be providing a free site-specific energy audit for the selected c-stores and collecting data to make recommendations for changes. They'll also play a lead role in bringing together all the partners to help organize the OCSA audits.

Sweeny says Cool Shops has done over 3,000 audits in the Ontario small commercial market during the summer of 2005, and some of the recommendations from this group would apply to the c-channel. She agrees that maintenance of refrigeration cooling units is very important. If you can't afford to replace your unit, be sure you clean and maintain the units regularly to ensure your energy consumption remains low.

Lighting is also important. Switching off lights that aren't needed and changing your light bulbs to more energy-efficient options such as compact fluorescent bulbs and new T8 fluorescent tubes will definitely pay off. Obviously, freezers and units for dairy products have to run 24/7, but if you can turn off or even turn down any of your coolers at night, that's money in your pocket.

Retailers whose business is located in any of the cities serviced by Cool Shops are eligible for a free energy assessment. Currently, The Cool Shops Program runs in Toronto, London, Markham, Peterborough, Ottawa and Milton, with plans to expand to Kitchener and possibly other areas in 2006. But all Ontario retailers can access the Cool Shops website at www.coolshops.ca for energy-saving resources and information.

Over the coming months c-store owners will have the opportunity to learn more about energy saving initiatives. We will follow the c-retail energy audits and report back on some of the findings. As well, retailers are invited to attend The Convenience U

CARWACS Show on March 1 and 2, 2006, where representatives from the audit partners will be available to answer your questions and give you additional information. Stay tuned and prepare to get energized!