

EVERY KILOWATT COUNTS

Taking Action on Electricity Conservation



by Peter Love

To ensure a reliable and sustainable electricity system, Ontario has set a conservation target of 6,300 megawatts (MW) of peak demand reduction by 2025—one of the most aggressive targets in North America. Putting this target into context, it means that conservation would eliminate 75 percent of the expected growth in demand by 2025. This is significantly more than 50 percent of expected demand growth that the U.S. National Action Plan for Energy Efficiency recently estimated the efficiency resource may be able to meet.

The 2025 and interim targets are essential to Integrated Power System Plan (IPSP) of the Ontario Power Authority (OPA), which is now under review by the Ontario Energy Board. Meeting these targets will require all sectors to take leadership roles, but this is particularly challenging because electricity use and conservation are largely invisible.

Many people and organizations have already conserved and will continue to conserve electricity. I expect that Ontarians will have achieved the initial target of 1,350 MW of peak demand reduction in 2007. But more can and must be done by those who have already taken action, as well as by the minority who may have not begun.

Besides being essential to a reliable and sustainable electricity system, conservation has three important benefits—the “3 Es”—employment, economy and environment.

- First, conservation is labour intensive; Ontario companies hire Ontarians to design, manufacture, wholesale, retail and install conservation products and deliver conservation services.
- Second, conservation saves money in homes, schools, hospitals, office buildings, stores, factories and resource industries; this enables further investments that lead to hiring more Ontarians and acquiring more conservation products and services.
- Third, conservation helps the environment; since 82 percent of Canada’s man-made greenhouse gas emissions come

from energy production and use, conservation is a first step in reducing our impact on the climate.

The IPSP identifies enough energy savings potential for the next 20 years to enable five homes to be powered by the electricity used by four homes today. However, to achieve this, everyone will need to THINK about electricity, BELIEVE they can make a difference and, most importantly, ACT to use less.

To ensure that these targets are met in a reliable, affordable and dependable way, the OPA’s long-term, strategic approach to conservation involves 1) building capability, 2) acquiring resources, and 3) transforming the market. Progress is being made on all three fronts:

1. Building capability—Much activity has focused initially on supporting partners to design and deliver conservation programs. The OPA has launched 18 such programs; several are delivered by local distribution companies (LDCs), while others are delivered by industry associations or stakeholder groups (such as the Building Owners and Managers Association of Toronto and the Social Housing Services Corporation).
2. Acquiring resources—The OPA’s 18 operating programs offer rebates or payments for energy-efficient products or projects. Since 2005, Ontario’s LDCs have invested \$160 million in conservation programs in their service territories. The OPA has spent about \$115 million on conservation between 2005 and September 2007, and has budgeted \$1.2 billion over the next three years. The IPSP calls for an investment of \$10 billion on conservation or about \$500 million per year for 20 years.
3. Transforming the market—This will have occurred when a desired conservation practice or product dominates the market. This may result from economic forces and/or changes to codes and standards. Programs that provide incentives for switching to energy-efficient alternatives, combined with

leadership by manufacturers and marketers that lowers costs and improves quality, are essential precursors to higher minimum standards.

An indication of the important role played by codes and standards in Ontario since 1989 is found in *Taking Action*, the 2007 Annual Report of the Chief Energy Conservation Officer, which shows that about two-thirds of conservation achieved to date results from enhanced codes and standards.

Experts estimate that, over the long term, as much as 75 percent of electricity savings will come from a combination of regulated standards and pricing. An integrated approach to conservation, which includes standards, pricing and incentives offered through programs, will help ensure that targets are met and sustained.

In the future, Ontarians can expect to see more OPA conservation programs delivered by a range of partners: 28 will be offered by the end of 2008. These programs are funded by you, electricity ratepayers. While there’s no obligation to participate, there’s a direct incentive to do so as your neighbours and competitors almost certainly will. Why not participate and reduce your electricity costs as well? Check out what programs are available at www.everykilowattcounts.ca.

Our ultimate goal is to achieve a culture of conservation in Ontario—this will not only make our electricity system more reliable and sustainable but will also benefit employment, the economy and the environment. To achieve this, Ontario needs leaders in every organization. I am calling on every office, company, school, hospital—even every household—to step up to this conservation challenge. Because once again, we need everyone to think about conservation, believe they can make a difference and then act to conserve. **CK**

Peter Love is Ontario’s first Chief Energy Conservation Officer