

The **Greenest** Streetlighting

Town of Cobourg is First off the Blocks to Make Conversion to High Efficiency Induction

Earlier this spring, the Town of Cobourg announced its partnership with Cobourg Networks Inc. (an affiliate of Lakefront Utilities Inc.) and energy efficient lighting manufacturer, Luxlite Inc., to undertake the complete conversion of the town's streetlighting system. The existing system is being replaced by induction lighting, a new highly efficient technology.

The 100,000 hour life expectancy of the new lamp replaces the 24,000 hour expectancy of the current high pressure sodium lamps. Maintenance costs associated with the new system are expected to be virtually eliminated for twenty years and of course, there will be significant energy cost benefits.

Lighting system in conjunction with Luxlite Inc.," said Cobourg Mayor Peter Delanty. "This will make Cobourg the first community in North America to convert entirely to this new energy efficient induction street lighting technology. The new street lights use half the energy of the town's existing high pressure sodium lighting system".

Although the estimated cost of the induction lighting conversion will be approximately \$1.25 million, it is expected that the decision will translate into significant savings for the municipality with lower maintenance costs and savings on energy bills. The Town has estimated that over the 20-year life of the

new streetlighting system, taxpayers will save in excess of \$1.3 million. Just as importantly, the environmentally friendly lights will reduce carbon dioxide emissions by over 500 tonnes per year.

There are certain grants and incentives available to

municipalities from the Provincial Government through the Ministry of Natural Resources and Ontario Ministry of Energy Municipal Eco Challenge Fund (MECF). The application is for the showcase/demonstration of new technology.

Tests conducted by Lakefront Utility Services Inc. found that induction lights use half the energy of high pressure sodium streetlights and produce a brighter, safer and longer lasting lighting system for the community. High pressure sodium converts a third of its electrical energy into light with the balance lost to heat output, whereas induction lighting converts two-thirds of the electrical energy into light with only a third as waste heat.

The new street lights use half the energy . . .

"The new induction lights have a long life span because there are no contacts to wear out as the lights are energized by induction," said Bruce Craig, President of Lakefront Utility Services Inc.

Light depreciation is also less of a factor. The high pressure sodium system has a 53% depreciation of light output over a lamp life of 6 years, while induction lighting has only 15% depreciation over a lamp life of 20 years. This translates into brighter, safer and longer lasting lighting for the community.

The quality of light produced by these new fixtures is a superior white light over the orange high pressure sodium lamps. The existing high pressure sodium lighting system has a colour rendition index of 21, while

"Cobourg is about to take a giant step toward energy conservation leadership by changing the lighting in all 2,395 of the town's street lights from the energy eating high pressure sodium lights to a new energy saving Induction



Town in North America

Streetlighting System

induction lights have a colour rendition index of 84. This means that objects are more identifiable and produce an effect that is similar to daytime lighting conditions.

Mayor Delanty says, "This is the right time for this project, as it not only addresses the energy conservation issues that are critical to the Province's Energy Plan, but also speaks to the Federal Government's Green Initiatives for Canada," said Mayor Delanty. "I look forward to other municipalities joining us in celebrating our achievements

and taking a leadership role in Ontario and Canada to create a better and greener future for our children." ■

Town of Coburg Holdings Inc. is the parent company to the Lakefront Group of Companies consisting of: Lakefront Utility Services Inc., Lakefront Generation Inc., Coburg Networks Inc., and Lakefront Utilities Inc., the local distribution company serving over 9,000 customers in the Town of Coburg and former Village of Colborne.



KINGSTON HYDRO:

Helping Customers Connect Renewable Energy Generation to the Grid

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- The company was the first distributor in Ontario to develop an isolation scheme for micro-generators that does not require an external disconnect switch and is compliant with all relevant regulation, saving generators hundreds of dollars and reducing ongoing utility costs.
- The administration of a 'Connection Cost Rebate Program', returning half of connection costs up to \$1,000 to generators, ended this April and was part of Kingston Hydro's CDM funding approved by the Ontario Energy Board. The program incited interested parties to move forward with DG projects. Distributed

energy efforts include the execution of eight connection agreements for solar and wind power facilities ranging in size from 0.4 kW to 30kW. Kingston Hydro's connections include a net metered solar PV system, 6 Standard Offer Program solar PV systems, and one net metered wind power generator with battery backup.

- Kingston Hydro has also initiated the Solar Domestic Water Heater Rental program, partially funded as a pilot deployment program by Natural Resources Canada. The goal of the program is to install 250 units in homes by 2010, at no upfront cost to the customer and a \$50/month or less rental fee.

"We have been working hard to make the connection of distributed generators as simple as possible to encourage more renewable generation in our local supply mix," says Mr. Keech. Looking to the future, Hydro Kingston's goal is to continue to work with the City of Kingston and its community partners to position themselves as a leading centre for sustainable energy in the province. ■

Kingston Hydro provides distribution services to approximately 27,000 customers in the City of Kingston. Kingston Hydro and Utilities Kingston are wholly owned by the City of Kingston.