



By Don Horne

Municipalities are looking at their streets in a whole new light, thanks to the advancements in LED and optimal induction systems.

Streetlighting accounts for a considerable slice of the budget pie, generally in the range of at least 10 per cent. The high-pressure sodium lights used by many towns and cities across Canada can consume a lot of kilowatts. In Ontario alone, municipal electricity consumption creates at least 1.5 million tonnes of carbon dioxide emissions a year – the equivalent of 300,000 cars on the road annually.

Aside from the feel-good message of reducing the carbon footprint, there are many millions of dollars to be saved by switching to the new lighting systems.

In one municipality of roughly 15,000 people with an average of 1,500 streetlights, an existing lighting system would cost taxpayers almost \$6 million over the next two decades.

By switching to an optimal induction system, it would save \$3.6 million and halve the tonnage of carbon being released into the atmosphere.

The true definition of win-win.

In Ontario, the MECF (Municipal Eco Challenge Fund) provided municipalities with grants up to \$500,000 for showcase projects. Although the deadline for applications expired in October, the announcement for the disbursement of those monies is being made this December.

Streetlights are one of the first, best ways to push ahead the development of green resources.

Government subsidies of wind and solar generation technologies are far more substantial than those offered to switch to “greener” lighting, but the rewards of solar and wind are considerably smaller than those offered by better streetlighting.

It isn't often that a new “green” technology is pushed without taxpayers having to dig a little deeper into their pockets. In fact, the taxpayers come out substantially ahead in reduced operating costs within a few years.

A GREEN TECHNOLOGY THAT ACTUALLY PAYS FOR ITSELF



South of the border, the race is on among the big chain retailers like Wal-Mart and Safeway to cash in on the tax advantages of installing solar panels on the roofs of their stores before the December 31 deadline. Although fewer than 10 per cent of their stores have such solar panels installed, it is a chance for the big box stores to bolster their environmental credentials by reducing their dependency on electricity derived from burning coal.

For many consumers, buying green (whether it is the product or how it was made or distributed) is becoming as important as name brand, quality and price.

For many communities, the big retail stores are the largest consumers of electricity. If a store like a Wal-Mart, Canadian Tire or Zellers decides to use those rooftop acres for solar generation, that could save anywhere from 10 to 40 per cent of the demand for retail use.

To get a better idea of the numbers, consider this: if Wal-Mart covered every Sam's Club and Wal-Mart location with solar panels, the total acreage of available solar power would be equal in size of Manhattan, an island of 23 square miles.

If every large retailer decided to install solar panels on their rooftops, the total shaving of demand during peak periods (hot, sunny summer days) would be invaluable to local utility providers.

It will cost more. Solar power is considerably more expensive than coal or natural gas to produce – but then again consumers are showing a willingness to pay more for products that they have faith in.

Look no further than the hybrid cars being produced at a premium price. On balance, you are better off buying a diesel four-cylinder subcompact if you want to save money and the environment at the same time; but for those who are “buying green”, an extra 10 or 20,000 dollars to drive a hybrid is not out of the question.

The same goes for homeowners installing solar or wind turbines to complement their electricity needs. They admit that they probably won't live long enough to see a return on their investment – but it is the investment in the health of the planet that means more to them. These are purchases of the heart, for the soul – modern day religious indulgences purchased to ensure a place in environmentally correct heaven.

So it may seem almost sinful that a technology like induction lighting or LEDs can be both environmentally friendly and financially rewarding – two upsides that you seldom see side-by-side in the never-ending push to eliminate harmful carbon emissions entering our atmosphere.

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