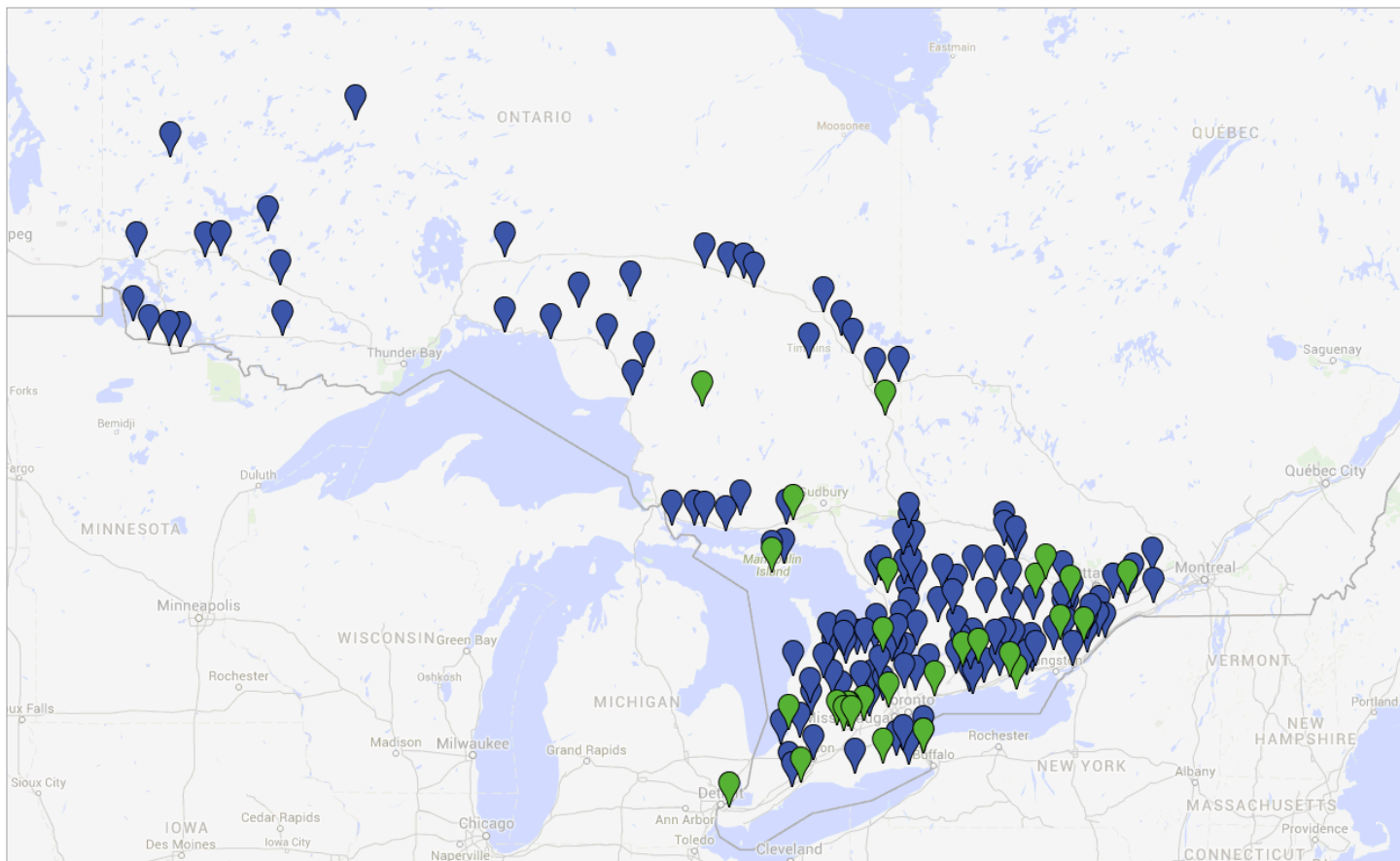


Province-wide LED Streetlight Conversion Program

ONTARIO, CANADA

Since its launch in March 2013, Ontario's Local Authority Services (LAS) Streetlight Program has become the leading LED Streetlight replacement program in Canada, due largely to its unique turnkey approach, one that brings together all of the services that municipalities require to reliably apply this new technology and to start reaping the benefits quickly.



OVERVIEW

- + Over 140 Ontario municipalities have chosen our turnkey program for their LED streetlight upgrades
- + Now one of the top ten LED street lighting Integrators in the World
- + Nearly 100,000 Cree streetlights installed by March 2016
- + Over 40 full and part time Municipal LED streetlight professionals and growing
- + State-of-the-art custom app and installation tools
- + Lux Mapping™ Surveying Technology
- + Smart City applications

We are the largest LED street lighting integrator in Canada,
with more lights installed or underway than any other company in Ontario.



BACKGROUND

LAS had been monitoring developments in streetlight technology since 2008. Its staff had the specialized knowledge in energy efficiency, LED markets and technology to perform the extensive research required to develop a unique and customized turnkey solution.

To ensure that its members were getting the best value and highest quality products, LAS launched RFP processes to select the suppliers. It conducted a competitive search for a firm that could offer a complete turnkey service that met or exceeded all of its requirements, concluding with the selection of RealTerm Energy (RTE) as its program partner.

RTE provided LAS an unrivaled service offering including asset management, design, and project management services not currently available elsewhere in the marketplace.

LAS also put out a Request for Proposal (RFP) for the Supply of Streetlight Luminaires. LAS was careful to ensure that the RFP met and surpassed most municipal procurement standards supporting a competitive search for suppliers offering quality products at an affordable price.

After a careful and thorough analysis of the submissions, the supply contract was awarded to Cree Canada, which represented the best value fixture for its members.

“Cree is committed to continuous innovation in high-quality LED lighting” said Shirley Coyle, President of Cree Canada. “Cree’s streetlights are helping municipalities reduce energy and maintenance costs, while providing their citizens with a better light experience.”

Benefits of an LED upgrade:

- + Typically achieving between 50%-70% savings in energy consumption
- + Up to 80% maintenance reduction
- + Improved visual acuity
- + Reduced light pollution
- + Reduced greenhouse gas emissions

“We are very pleased to offer a program that our members had requested and that is meeting the needs of so many municipalities.”

Gary McNamara
Chair, LAS

TURNKEY SOLUTION

When evaluating an LED streetlight upgrade, Municipalities may face different obstacles. They may not have the capacity to assess their existing grid, source a product that meets their quality, regulatory and budgetary needs, or to ensure proper installation and maintenance specifications are met. As well, the technology at the time is new and is constantly evolving. As a result, the marketplace for these products is changing and crowded with products of differing quality.

The specialized expertise and in-depth knowledge of both the technology and the current market usually falls outside the scope of most municipal staff. In addition, in a typical procurement, they would have had to identify and bring in a number of outside consultants with the expertise needed to handle each stage of the project – from system audit and design, to fixture procurement and finally installation and maintenance. This whole exercise is costly, time-consuming, and inefficient.

“Our turnkey solution brings together all of the services and products needed, as well as providing financing or financial assistance when required,” explains Sean Neely, RealTerm Energy’s President.

Municipalities can select from two approaches:

1. Design, Upgrade and Transfer

Our turnkey solution allows RealTerm Energy to Design, Upgrade and Transfer an effective and efficient LED lighting system that will conform to the Municipality’s lighting requirements and financial constraints, where the Municipality self-finances the Project and RealTerm Energy acts as project manager.

2. Energy Performance Contracting

RealTerm Energy acts as an ESCO to Design, Install and Maintain a new LED street lighting network specified by the Municipality, where RealTerm Energy underwrites 100% of the project costs, and shares the energy and maintenance savings with the Municipality over a 10-year period.

For further information about financing options in Canada [click here](#).



OUR SERVICES



GIS Data Collection



Investment Grade Audit



Photometric Design



Incentive Application & Paperwork



Installation & Project Management



Recycling



Oversees Billing Changes



Final Report & Binder

Benefits of our turnkey program:

- + Initial assessment of the existing streetlight network
- + Comprehensive Investment Grade Audit
- + Street-by-street photometric design for each unique street to optimize energy efficiency and minimize costs
- + Analysis of maintenance costs and potential savings
- + Creation and transfer of data and asset management tools and software
- + Expert project management including recycling of old fixtures
- + Transfer of all warranties upon commissioning
- + Financial assistance via energy savings contract including ongoing maintenance



BEFORE



AFTER

OUR PROJECTS

As of March 2016, we have successfully installed nearly 100,000 LED streetlights in over 100 communities across Ontario. In addition, we are currently installing thousands more over the next 3 months.

"We are very pleased to offer a program that our members had requested and that is meeting the needs of so many municipalities. From the beginning, we have concentrated on quality and value, which is why we focus on reducing the operating and capital costs of a project along with delivering quality light where it's needed. Our excellent working relationships with Cree and RealTerm Energy allow us to bring industry-leading innovation to market in areas such as asset management mapping, photometric design, lux mapping, product procurement to match individual street requirements, and much more," said Gary McNamara, Chair, LAS.

"Our turnkey solution brings together all of the services and products needed, as well as providing financing or financial assistance when required."

Sean Neely,
President of RealTerm Energy

Ontario Conservation Results by March 2016

(Approximately 100,000 streetlights installed)

- + 65,000,000 kWh annual energy consumption reduction
- + Over \$10,000,000 annual energy costs savings
- + Over \$3,250,000 annual maintenance savings
- + Approximately 7,000 metric tonnes of greenhouse gas eliminated per year
- + Approximately \$8,000,000 paid out to local installation contractors emissions



WHAT OUR CLIENTS ARE SAYING

"The LED Program provides industry expertise and analysis, which was something the City of Timmins did not have in-house."

Luc Duval, Director of Public Works and Engineering, City of Timmins

"I must commend LAS for the procurement process. A small municipality like ours does not have the staff to perform such a procurement exercise. The selection of Cree and Real Term Energy was excellent, and offered nothing but professionalism,"

Will Moore, CAO-Clerk, Township of Chatsworth

"The LED streetlight conversion project went very smoothly. We found their field crew to be extremely responsive to any issues or requests we made and everything was done in a very professional manner".

Barry Thompson, Manager of Energy Management, City of Barrie

Lux Mapping™

At the forefront of the street lighting industry, we also offer exclusive GPS Lux Mapping™ Surveying Technology: a vehicle-mounted system that allows lux levels to be measured and recorded at normal road speed limits, making it suitable for all types of applications.

- + GIS output
- + Fast surveying
- + No road closures
- + Accurate results
- + Quick identification of under lit and over lit areas

WHAT'S NEXT

Our partnership is redefining the municipal street lighting market with intelligent LED lighting systems and service offerings that deliver unmatched energy and maintenance savings. In addition to our turnkey solution for LED streetlights, our Smart Controls platform, delivered as-a-Service and operated by RealTerm Energy, offers unparalleled visibility and control of street lighting infrastructure.

This platform gives the Municipality both the opportunity for additional lighting energy cost savings, and a Smart City network control platform that enables the industry's leading Smart City application offerings. Examples include telecontrol, Wi-Fi, traffic and parking control, EV Charging Stations, air quality control, and much more. Even better, choosing a network as-a-Service allows the Municipality to select, à la carte, which Smart City services to implement, on a pay-as-you-go model.

"The LED streetlight conversion project went very smoothly. We found their field crew to be extremely responsive to any issues or requests we made and everything was done in a very professional manner".

Barry Thompson
Manager of Energy Management
City of Barrie



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Local Authority Services (LAS) is a preferred provider of competitively priced and sustainable co-operative business services for Ontario municipalities and the broader public sector. Part of the AMO family, LAS helps its customers "save money, make money, and build capacity."

RealTerm Energy Corp., a RealTerm Global company, is redefining the municipal street lighting market with intelligent LED lighting systems and services that deliver unmatched energy and maintenance savings. We create and foster long-term partnerships with forward-thinking private, public and government market leaders to deliver innovative and cost-effective lighting solutions.

Cree Canada Corp. provides interior and exterior LED lighting solutions for commercial, industrial, architectural, parking, and street lighting applications. Our products feature technologies that have become revolutionary approaches to lighting and have set the standard for LED illumination. Cree luminaires provide improved illumination performance, consume less energy, and require less maintenance than traditional lighting solutions. A market leader, Cree has thousands of successful LED installations worldwide including tens of thousands of streetlights in Ontario, Canada.