

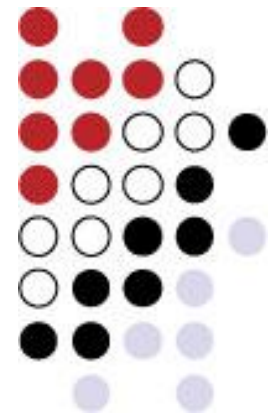
Are you ready for the 1 July, 2013 energy report deadline?



Sustainable Peterborough

Mar 13th, 2013

Wayne Hartwell



LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario

Agenda



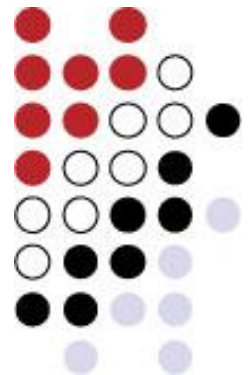
- Green Energy Act 2009 - Regulation 397/11
- EPT – Energy Planning Tool
- EESP – Energy Consulting Services
- Next Steps
- SOE – Save On Energy
- Street lighting Retrofit Program



Energy Planning Regulatory Requirement



- Energy Conservation and Demand Management Plans (Reg 397/11) Regulation under *Green Energy Act* requires:
 - The first REPORT due July 1, 2013: Energy Consumption and GHG Emission Template.
 - The second PLAN due on July 1, 2014 energy conservation and demand management plans.



Ministry of Energy Template



I'm writing to give you an update on [O. Reg. 397/11](#) Energy Conservation and Demand Management Plans which was developed under the *Green Energy Act, 2009* that came into force January 1, 2012. O. Reg. 397/11 requires broader public sector (BPS) organizations, including municipalities, to: (i) report on their annual energy consumption by July 1, 2013; and (ii) to develop a 5-year energy conservation and demand management plan by July 1, 2014. I have provided more information about this regulation on the second page of this letter. Also, additional information and resources will continue to be available on the Ministry of Energy website, at <http://www.energy.gov.on.ca/en/green-energy-act/conservation-for-public-agencies/>.

We have been working closely with staff in the Ministry of Municipal Affairs and Housing throughout the development and now the implementation of the regulation. We are currently completing development of a database and supporting tools and guides to help BPS organizations comply with the regulation as well as running a small pilot with select organizations, to make the database available in the spring of 2013. Prior to the launch of the database we will update our website with supporting tools and a guide to help BPS organizations comply with the regulation's reporting requirements. We also plan to host webinars in early 2013 to provide information on tools as well as demonstrate how to access and use the database.

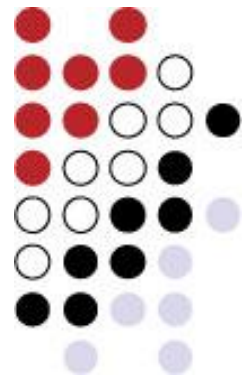
You have been identified by the Association of Municipalities of Ontario as your organization's primary contact for accessing the database and uploading your organization's energy consumption report. Can you please confirm that you are indeed the appropriate contact for your organization, or alternatively provide us with contact information for the responsible person? **Please email BPSSupport@ontario.ca with confirmation/new contact information (name, position, email and phone number) by January 31, 2013 otherwise the user profile will remain in your name.**

Before the database is launched, on behalf of your organization, you will be given access to the Ministry's online database and will be able to:

- Login to the Ministry of Energy's online database;
- Access a your sector reporting template;
- Input your organization's building and energy consumption information; and
- Upload the template to the database.

We appreciate your organization's continued support of the regulation and commitment to help implement the regulation.

Should you have any questions about the regulation please contact BPSSupport@ontario.ca.



Regulatory Requirement—GEA



- Phased reporting requirements to allow municipalities to develop capacity

Phase One

- Energy consumption and GHG emissions for the following municipally owned and operated facilities:
 - offices
 - libraries, arts and culture facilities;
 - emergency medical services, fire, police;
 - community centre, arena, indoor pool, multi-use recreation complex;
 - public works/transit garage; and
 - water pumping and water treatment

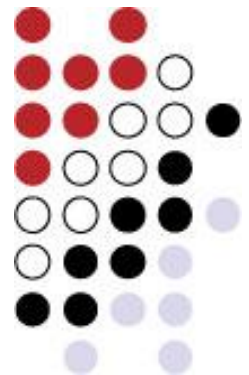


Regulatory Requirement—GEA



Phase One (continued)

- Applies to all facilities that are heated and cooled
- Municipalities could voluntarily add other facility types
- In addition to energy consumption municipalities would report on the size and use of their facilities (e.g., hours of use).
- Water/wastewater unique see Sec 5.3.8
- Report ***due July 1, 2013 using 2011 data***



Operation Name/ Type	Address	Total Floor Area ¹	Operation Hours of Use (e.g., 9-5, 24/7, ice hours for arenas)	School and Hospital Attributes ²	Energy Type	Energy Purchased in Natural units	Energy consumed kWh/yr or (ekWh/yr) ⁴	GHG Emissions (tonnes CO2e/yr) ⁵	GHG Intensity (tonnes CO2e per year/sqf) ⁶	Energy Intensity (ekWh per year/sqf) ⁷
					Electricity ³	kWh				
					Natural Gas	M3				
					Steam	mega pounds				
					Propane	litre				
					Fuel Oil	litre				
					Chilled water	Ton hours				
					Wood	metric tonne				
					Coal	metric tonne				
Total by Operation Type										
Overall Agency Totals										

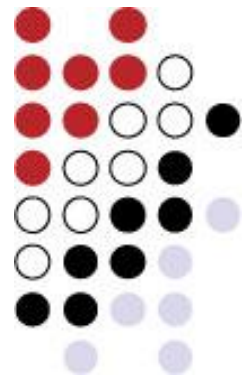
1. Total floor area of indoor space in which the operation is conducted. For water and sewage works would report water distributed and sewage treated annually in mega litres.
2. Schools should note the number of temporary accommodations, and if a pool is part of school. Hospitals should note if they are chronic or acute care facilities, or both
3. Electricity consumed should be in kWh not adjusted for line losses
4. Equivalent kWh will be automatically calculated in the template supplied by Ministry of Energy
5. GHG emission will be automatically calculated in the template factor to be supplied by Ministry of Energy
6. For water and sewage works GHG emissions intensity will be reported as tonnes CO2 equivalent per year/Mega Litre

Regulatory Requirement—GEA



Phase Two

- Energy conservation plans **posted** by **July 1, 2014**
 - Updated consumption information
 - CDM goals and objectives
 - Cost/savings estimates for proposed measures
 - Description of any renewable energy used
 - 5 Year Plans, to be approved by Council

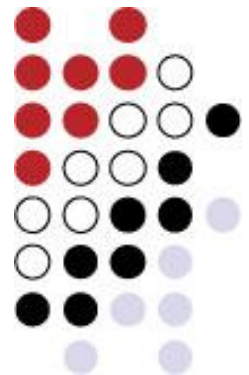


LAS

Save Money, Make Money, Build Capacity



- EPT
- Energy Consulting
- EMT
- Solar
- Electricity
- Natural Gas
- Group Benefits
- Insurance
- Risk Management
- One Investment
- Fuel



LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario

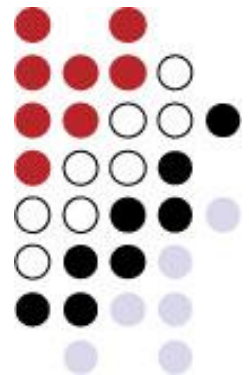
www.las.on.ca

EPT

The Energy Planning Tool



EPT – The Energy Planning Tool is a web-based application that allows Ontario municipalities to generate Regulation 397/11 compliant reports and plans.



LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario



Facilities

Facility List

Name	Description	Address	Building #	Focus	Actions [NEW]
55 Plus Centre	Older Adults	564 Road	56	NO	[VIEW] [EDIT] [DEL]
Grandview	Arena	123 Street	111	NO	[VIEW] [EDIT] [DEL]
Warsaw Roads Depot		1422 Cou			
Douro Roads Depot		435 Douro			
Douro-Dummer Town Hall		894 South			
White Lake Fire Hall #5		2153 Dummer			
Warsaw Fire Hall #4		910 Water			
Donwood Fire Hall #1		812 Daley			
Douro Fire Hall #2		435 Douro			
Fire Hall #3		1612 Douro			
Warsaw Community Centre		93 Ford S			
Douro Community Centre		2893 High			

Facility List & Details

Upload data for each of your facilities. **Key function to use for 2013 report.**

Name

Operations Centre Test Facility

Description

Works Yard

Address

123 Any St.

City

Mytown

Province

ON

Postal

H0H 0H0

Phone

416-123-1234

Building #

2

Year Built

2000

Operations Contact

Jeffrey Barten

Energy Team Contact

Anthony Marshall

Hous of Operation

M 8 T 8 W 8 T 8 F 8 S 4 S

Photo (JPG Only):

[Remove Image]

Asset Composition

10000 (m²)

Public Works

[DELETE]

Add Type

(m²)

Total Area (m²)

10000

Energy Types

(Check all that Apply)

Energy Type	Budget Cost/yr	Budget Usage/yr	Budget eKwh	Target Reduction	eKwh Saved/yr
<input type="checkbox"/> Steam	0	0	0.00	% over year(s)	0.00
<input type="checkbox"/> Diesel	0	0	0.00	% over year(s)	0.00
<input checked="" type="checkbox"/> Electric	200.00	10000.00	0.00	0.00 % over year(s)	0.00
<input checked="" type="checkbox"/> NG	500.00	0.00	0.00	0.00 % over year(s)	0.00
<input type="checkbox"/> Oil	0	0	0.00	% over year(s)	0.00
<input type="checkbox"/> Propane	0	0	0.00	% over year(s)	0.00

Energy Consumption [ENTER NEW] [EXPORT]

Start Date	End Date	Energy Type	Usage	Cost	Actions
2012-09-01	2012-09-30	Electric	10000	1000.00	[EDIT] [DEL]

Production [ENTER NEW]





Projects

Projects List										
Description	Asset	Contact	Start	End	Status [%]	Cost	Save(GJ)	Save(\$)	ROI	Actions [NEW]
Pump Retrofit		Stephen Dixon	2009-07-23	2009-06-30	Pen [10%]	15,000.00	200.00	5,000.00	3 yr	edit
Lights Off Campaign		Stephen Dixon	2009-07-10	2009-07-15	Act [50%]					
Heat Recovery Systems		Stephen Dixon	2009-08-01	2009-12-31	Pen [0%]					

Edit Project

Description

Asset

Category

Contact

Start Date (YYYY-MM-DD)

End Date (YYYY-MM-DD)

Photo (JPG Only):

Details

Estimated Cost

Est. Savings (GJ)

Est. Savings (\$\$)

ROI

Status

Percent Complete

Last Update (YYYY-MM-DD)

Pump Retrofit

Short Term

Stephen Dixon

2009-07-23

2009-06-30

Browse...

Retrofit all fixed speed circulation pumps in the rink to Variable Speed Drives.

15000.00

200

5000.00

3

YEARS

Active

10%

2010-03-24

☒ submit

Project Documents

Document Filename	Action
Energy Improvement Bill 150.doc	[VIEW] [DELETE FILE]



Home	Municipality	People	Facilities	Programs	Processes	Projects	Library	Reports
Programs List								
Description	Facility	Contact	Date	Status	Actions [NEW]			
Energy Committee Meeting		Stephen Dixon	2009-06-30	Completed	 edit 			
Energy Audit		Sam McKnight	2009-07-05	Active	 edit 			
Council Workshop		Stephen Dixon	2009-10-05	Pending	 edit 			
Education campaign		Sam McKnight						

Program List & Details

Create and track programs such as meetings, workshops and audits that further plan creation and implementation.

Each program assigned an asset, a staff lead, and length.

Description

Energy Audit

Facility

Category

Project

Contact

Sam McKnight

Program Date (YYYY-MM-DD)

2009-07-05

Photo (JPG Only):


Browse...

Details

Audit by recreation energy specialists. This audit will be comprehensive and look at all areas of energy consumption.

Status

Active



☒ submit

End Product: 2014 Strategic Plan

Fulfill requirement for the following in your energy plan:

- Data from energy report(s)
- CDM goals and objectives
- Proposed CDM measures
- Confirmation of Council Approval

Energy Management Plan

Township of Douro-Dummer

2011-09-22

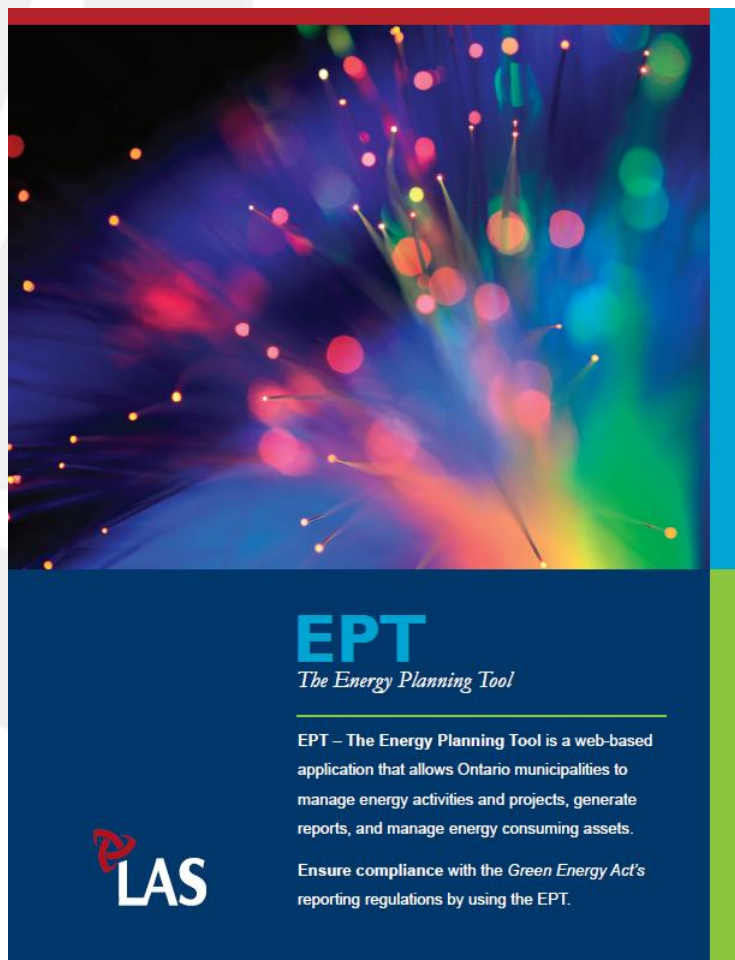
Commitment

- *Declaration of Commitment:* Test 123
See Reference Document: Resolution.doc
- *Vision :* We exercise stewardship in our use of finite energy resources in order to demonstrate leadership, optimize our delivery of services, and enhance the overall quality of life in our community.
- *Policy:* We will incorporate energy efficiency into all areas of our activity including our organizational and human resources management procedures, procurement practices, financial management and investment decisions, and facility operations and maintenance.
- *Goals:* To continuously improve the energy efficiency of our facilities by utilizing best practices (management/policy, technical, organizational), in order to reduce our operating costs, energy consumption and the reduction of greenhouse gas emissions. We will seek opportunities to reduce fossil fuel use by utilizing any renewable energy sources available.
- *Overall Target:* 1. Initial target for 2014, before end of council term (XX% reduction in consumption from baseline year, 2008) 2. Longer term target of 2018 to align with another council term
- *Objectives:*
- *Stakeholder Needs:* Internal stakeholders (Council, committees of council, CAO, staff) need to be able to clearly communicate the corporate commitment to energy efficiency, to maintain awareness of energy use and to develop the skills and knowledge required to implement energy management practices and measures.
See Reference Document: Corporate Energy Plan- notes.doc
- *Our Municipal Energy Needs :* We need reliable, low-cost, sustainable energy sources delivering energy to the most efficient facilities and energy-consuming technology feasible
See Reference Document: Current Consumption.xls

EPT Now Available



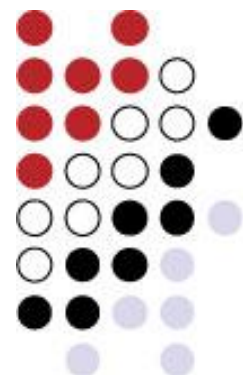
- Annual subscription fee per municipality \$200/ year!
- LAS staff can also load data and prepare report

A promotional graphic for the EPT. The top half features a vibrant, abstract image of fiber optic lights in red, blue, green, and yellow. The bottom half is a dark blue rectangle with white text. The text reads: 'EPT' in large blue letters, followed by 'The Energy Planning Tool' in a smaller, italicized font. Below this is a horizontal line, then a paragraph: 'EPT – The Energy Planning Tool is a web-based application that allows Ontario municipalities to manage energy activities and projects, generate reports, and manage energy consuming assets.' This is followed by another paragraph: 'Ensure compliance with the Green Energy Act's reporting regulations by using the EPT.' The LAS logo is in the bottom left corner of this section.

EPT
The Energy Planning Tool

EPT – The Energy Planning Tool is a web-based application that allows Ontario municipalities to manage energy activities and projects, generate reports, and manage energy consuming assets.

Ensure compliance with the *Green Energy Act's* reporting regulations by using the EPT.



LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario



Sharing Subscription

Sam McKnight
Energy Planning Tool
Logout

Home	Municipality	People	Facilities	Programs	Processes	Projects
------	--------------	--------	------------	----------	-----------	----------

Programs List				
Description	Facility	Contact	Date	Stat
Energy Committee Meeting		Stephen Dixon	2009-06-30	Complete

Edit Program

Description

Energy Audit

Facility

Category

Project

Contact

Sam McKnight

Program Date (YYYY-MM-DD)

2009-07-05

Photo (JPG Only):

Browse...

Projects List										
Description	Asset	Contact	Start	End	Status [%]	Cost	Save(GJ)	Save(\$)	ROI	Actions [NEW]
Pump Retrofit		Stephen Dixon	2009-07-23	2009-06-30	Pen [10%]	15,000.00	200.00	5,000.00	3 yr	edit
Lights Off Campaign		Stephen Dixon	2009-07-10	2009-07-15	Act [50%]	5,000.00	100.00	1,000.00	1 yr	edit
Heat Recovery Systems		Stephen Dixon	2009-08-01	2009-12-31	Pen [0%]	100,000.00	2,500.00	20,000.00	5 yr	edit

Share for plan – YES
Share for report - NO

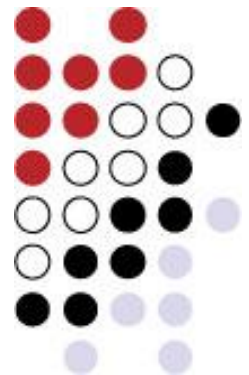
Energy Consumption and GHG Emission Template

Operation Name/ Type	Address	Total Floor Area ¹	Operation Hours of Use (e.g., 9-5, 24/7, ice hours for arenas)	School and Hospital Attributes ²	Energy Type	Energy Purchased in Natural units	Energy consumed kWh/yr or (ekWh/yr) ⁴	GHG Emissions (tonnes CO2e/yr) ⁵	GHG Intensity (tonnes CO2e per year/sqft) ⁶	Energy Intensity (ekWh per year/sqft) ⁷
					Electricity ³	kWh				
					Natural Gas	M3				

Energy Consulting Service (EESPs)



- Essentially roving energy managers to serve the municipal sector
- LAS has hired team of experienced energy professionals to help municipalities struggling with energy management
- This project was made possible through the financial support of the Ontario Power Authority.

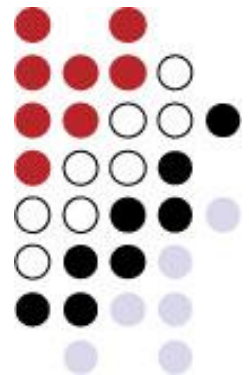


Energy Consulting Service (EESPs)



We can help with the following:

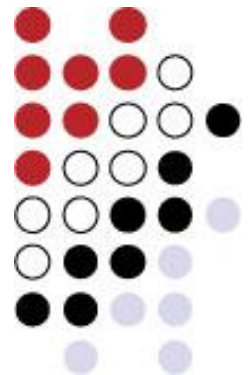
- Building audits;
- Identification, assessment, and recommendation of energy saving opportunities and funding sources;
- Creation of energy conservation and management plans;



Energy Consulting Service (EESPs)



- Applying for energy efficiency incentive programs;
- Collection, analysis, and reporting of energy bill data;
- Tracking, reporting and evaluating projects;
- Service provider & equipment procurement;
- Delivery of building occupant-, operator-, and or management-focused training.





Getting Started

1. Gather Your Information

- Facilities List
- Baseline Energy Data (from billing sources)

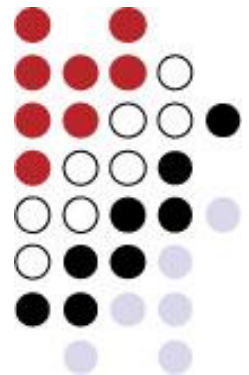
2. Build Your Team

- Create an Energy Team to lead/guide the process, provide feedback, and encourage buy-in and/or...

3. Consider Outside Supports

- LAS' EPT, Energy Consultants, EMT
- Ministry, Utilities, consultants

Energy Consulting Service (EESPs)



1. *Gather Your Information*

- Facilities List and details (Asset Management)
- Monthly Consumption Data (including read dates)
- Send to EESP
- Detail any capital projects

2. *EESP together with Municipality*

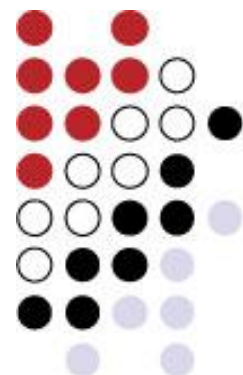
- Identify facilities warranting audit
- Arrange and complete audits



SAVE ON ENERGY



saveONenergy
AUDIT FUNDING



Incentives to Evaluate Your Building's Energy Performance

If you can't measure it, you can't manage it. Understand how your energy is being used.

The Audit Funding Program. Evaluate today's energy use – and identify tomorrow's opportunities.

Participate and save

A comprehensive evaluation of your building's energy performance will determine opportunities for improvement. These options for maximizing energy savings will form the basis of an action plan.

The **AUDIT FUNDING** incentive is intended to cover up to 50% of the cost of an energy audit, based on requirements that take into account the size and complexity of the buildings.

See how the [Town of Marathon](#) completed an **AUDIT FUNDING** project and received **\$12,766** in incentives from Hydro One.

SAVE ON ENERGY



saveONenergy™
DEMAND RESPONSE



LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario

SAVE ON ENERGY

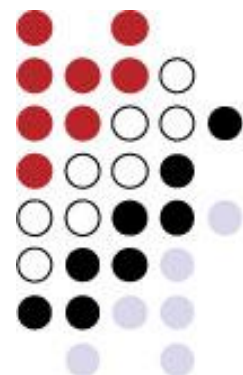


saveONenergy™
HIGH PERFORMANCE NEW CONSTRUCTION

Ensure Energy Efficiency is Built into your New Construction and Major Renovation Project from Day One

Targeting new construction and major renovations in the planning stages, the **HIGH PERFORMANCE NEW CONSTRUCTION** program provides design assistance and substantial financial incentives for building owners and architects who exceed the electricity efficiency standards specified in the Ontario Building Code.

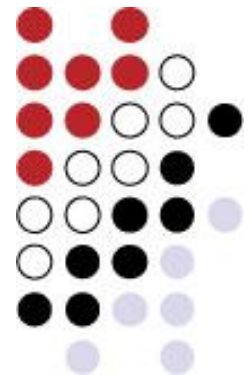
The **HIGH PERFORMANCE NEW CONSTRUCTION** program rewards builders and their project decision-makers with incentives for offsetting the cost of energy-efficiency measures, achieving lower long-term operating costs, greatly improved marketability and enhanced occupant comfort. By designing and building new buildings with more energy-efficient equipment for lighting, space cooling and ventilation, your building will cost less to operate, have lower environmental impacts and be a comfortable place in which to live, work or play.



SAVE ON ENERGY



saveONenergy™
SMALL BUSINESS LIGHTING

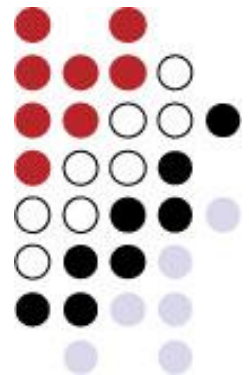


LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario

SAVE ON ENERGY



Social and Assisted Housing

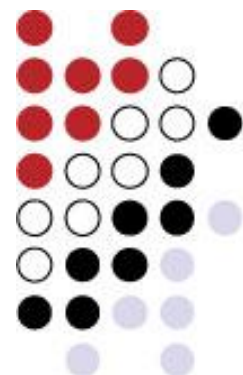


LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario

SAVE ON ENERGY



saveONenergySM RETROFIT PROGRAM



	Prescriptive	Engineered	Custom
Lighting	Per-unit incentives	The greater of either, \$400/kW of demand savings or \$0.05/kWh of first year electricity savings (to a maximum of 50% of project costs)	The greater of either, \$400/kW of demand savings or \$0.05/kWh of first year electricity savings (to a maximum of 50% of project costs)
Non-lighting including lighting controls	Per-unit incentives	The greater of either, \$800/kW or \$0.10/kWh of first year electricity savings (to a maximum of 50% of project costs)	The greater of either, \$800/kW or \$0.10/kWh of first year electricity savings (to a maximum of 50% of project costs)

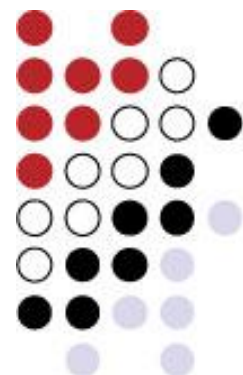


LAS is a wholly-owned subsidiary company
of the Association of Municipalities of Ontario

Street Light Program



Questions



For More Information



Wayne Hartwell

Energy Efficiency
Service Provider

Central Ontario East
289-684-9466

whartwell@amo.on.ca

Scott Vokey

Energy Services
Manager

416-971-9856
ext. 357

svokey@amo.on.ca

