

# LightSavers International Symposium

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Welcome to Toronto!

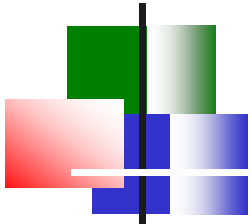


Brian K. Owen, greenTbiz

October 7<sup>th</sup>, 2008

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Turning on the 'Pilot Light'  
LightSavers Pilot Test  
Overview & Update



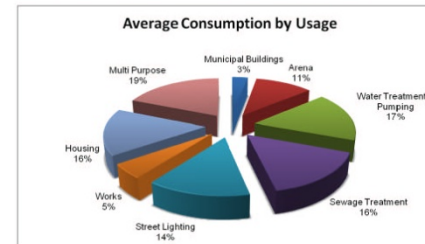
# The Energy Case for Public Space Lighting

## Municipalities Readiness Survey – “The Next Steps”

### EXECUTIVE SUMMARY

The Independent Electricity System Operator (IESO) recently contracted Power Application Group Inc. (PAGI) to develop an electricity profile of Ontario municipalities. The objectives of this process were to educate municipalities about the April 1, 2008 change from the Regulated Price Plan (RPP) to the hourly price, increase understanding and awareness of the electricity market and commodity purchase options, discuss and exchange best energy management practices, and develop a segment profile on electricity costs, consumption and conservation potential.

During a 20 week period, PAGI staff met with 142 Municipalities from across the entire Province and received completed surveys from an additional 3 sites. **These 145 Municipalities represent 72% of the population in the Province as defined by the Association of Municipalities of Ontario (AMO).** The results were then pro-rated on a regional basis to develop an overall electricity use profile of the Municipal segment. The following two charts provide a breakdown of consumption both by category and region.



“We’re building a new community culture focused on the responsible use of energy – in all facets of our daily lives. As a municipality, it’s incumbent on us to lead the way,” said Pickering Mayor Dave Ryan.

Pickering, and Durham Region as a whole, is positioning itself as the “Energy Capital of Ontario” – a place where energy is produced, but also as a leader that partners with government, business and academia to develop energy solutions.

#### Sustainable Decision Making

The City approaches energy issues from all angles – sustainable development, business attraction, environmental concerns and fiscal responsibility. This shift took hold a few years ago with the development of a local action plan to establish greenhouse gas emission reduction targets.

Leading the charge is the City’s Office of Sustainability. The Office works with City Council and the other departments to ensure that environmental, economic and social objectives are considered and integrated in all municipal actions and decisions.

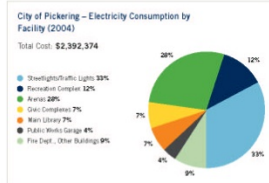
#### Leading by Example

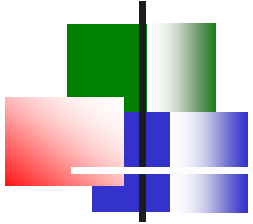
Already, it is successes. In life, the Pick Central Library obvious target lighting retro in energy sa

This project on load shift Both buildin certain func-scheduled h off non-esse spikes, incre And lighting to take adva it’s available

The City is a its chilling e facilities – in which house rooms and b have been e building sea how much c off-peak tim can generall and avoid th day. Even di they can lim By shifting s from the pet save betwee

“By focusing needs to be select those the most ba experience i Ron Taylor, C



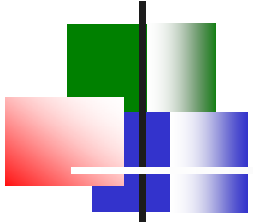


# LEDDiscovery

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- To launch the LightSavers project, TABIA's greenTbiz coordinated 'LEDDiscovery' an event held in March of 2008. At the event, 25 LED and adaptive lighting technology manufacturers presented their products to representatives from 25 different municipal, academic, social and health care sector organizations. During the event, attendees participated in an innovative speed-dating session called 'LEDate, where they spent a few minutes with selected manufacturers, learning about their products.



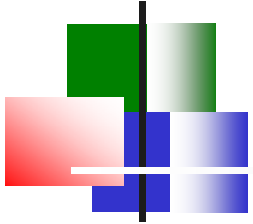


# LightSavers Pilot Submissions

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- In April 2008, MASH (Municipal, Academic, Social, Healthcare) sector partners were invited to submit letters of intent to participate in pilot projects. Nine pilot projects were identified and over the summer LightSavers will identify opportunities to match pilot locations with the appropriate LED / ALT technology.





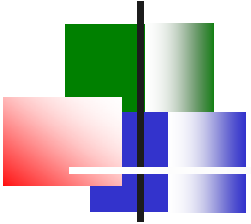
# LED and ALT Manufacturers REOI

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- To ensure the participation of the best and the 'brightest' manufacturers of LED and ALT, a Request for Expression of Interest was issued through the City of Toronto.
  - 21 submissions
  - 19 complete
  - 13 approved

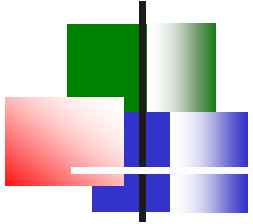


# The Potential for Outdoor Lighting



- A recent study for the Ontario Power Authority (OPA) estimated that stationary outdoor lighting in the residential, commercial, and industrial sectors used 3,400 GWh of electricity in 2005, or about 12 percent of the total lighting usage in the specific sectors that were surveyed. According to another study for Natural Resources Canada, one million roadway lamps across Ontario owned by municipal governments or local distribution companies (LDCs) consume approximately 960 GWh of electricity annually. Outdoor lighting represents an important strategic opportunity for energy savings. With potential emission reductions up to 70%, LEDs and ALT could be an important way for Ontario to lighten its environmental load.





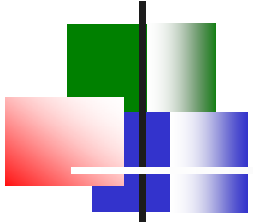
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# Pathway to Commercialization & Market Transformation



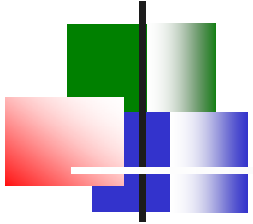
# Partnering without Prescription

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- Collaboration & Partnerships
- Common Goals
- Awareness & Education
- Information Sharing
- Lessons Learned
- Best Practices





# Protocol to Practice

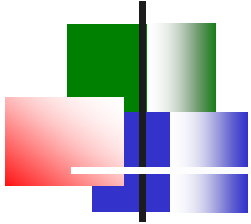
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- Acceptable, reliable and 'universal' testing process
- EM&V protocol
- Development of procurement best practices & process



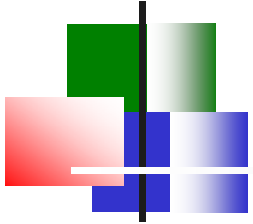
# 5As Questions

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- **Awareness**
  - What is the current level of the end-user awareness of the technology?
  - What is the current level of industry awareness of the technology?
  - What is the industry doing currently to promote awareness?
- **Availability**
  - What is the state of the technology?
  - Is the technology at a point of effective usage?
- **Accessibility**
  - What is the accessibility level of the technology from the industry?
- **Affordability**
  - Is their cost effectiveness & economic feasibility?
  - What is the payback and the ROI?
  - Does it currently make economic sense?
  - What is being done to overcome 1st costs?
- **Acceptance**
  - What do you think that the acceptance of the technology has been from the end-user?
  - What do you think that the acceptance of the technology has been from the industry?



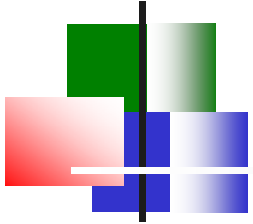


# Barriers & Breakthroughs

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- In your opinion, what is the biggest barrier preventing current widespread usage of the technology?
- What is the biggest breakthrough to date regarding the technology itself and / or usage?



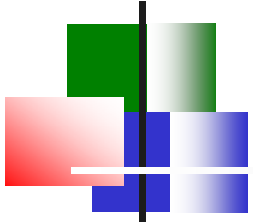


# Actions

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- What are you doing to aid in Market Transformation of the industry and the technology as well as usage of the technology in general?





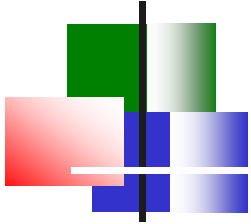
# Project Project'ion'

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## *'Project or Reject'*

- Stakeholder Engagement
- Involvement & Roles
- Challenges & Obstacles
- Trials & Tribulations
- Triumphs
- Outcomes & Results
- Lessons Learned
- Best Practices





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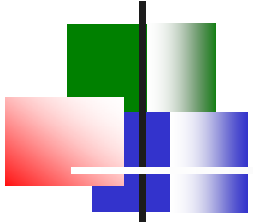
*Tomorrow is becoming today for LED.  
It is not a case of if, but simply a case of  
when and where practical.*

*You are all part of the LED City  
... a Community of Change*



*Thank you for your attendance and  
interest.*





# Thank You

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thinking green & saving green



[www.greenTbiz.org](http://www.greenTbiz.org)

