

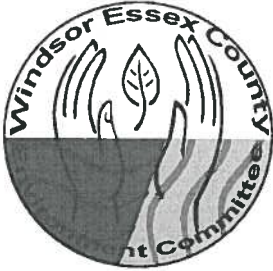


THE CITY OF WINDSOR

COUNCIL SERVICES DEPARTMENT

VALERIE CRITCHLEY
CITY CLERK

IN REPLY, PLEASE REFER
TO OUR FILE NO. _____



May 27, 2013

TO: ALL MEMBERS OF THE WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE

* The minutes of the Committee meeting held May 2, 2013 are attached.

The next meeting of the Windsor-Essex County Environment Committee is scheduled as follows:

**Thursday, June 6, 2013
5:30 o'clock p.m
Lou Romano Water Reclamation Plant
4155 Ojibway Parkway**

Please notify the undersigned at 519-255-6222, ext. 6430, if you are unable to attend.

Yours very truly,

Karen Kadour
Committee Coordinator

KK/
Windsor, Ontario May 2, 2013

A meeting of the **Windsor Essex County Environment Committee** is held this day commencing at 5:30 o'clock p.m. in the Board Room, Lou Romano Water Reclamation Plant, there being present the following members:

Councillor Alan Halberstadt, Co-Chair
Derek Coronado
Rick Coronado
Roger Dzugan
Karen Fallon
Evan Freeman-Gibb
Jesse Costa Gardner
Mike Nelson
Phil Roberts (alternate member)
Tamara Stomp

Regrets received from:

Councillor Hilary Payne
Charlie Wright, Co-Chair
Mark Bartlett
Dean Clevett
Paul Henshaw
Radwan Tamr

Delegations in attendance:

Bruce Melmer, regarding Item 4.1
Brian Watling regarding Item 4.1

Also present are the following resource personnel:

Averil Parent, Environment & Sustainability Coordinator
Karen Kadour, Committee Coordinator

1. CALL TO ORDER

Councillor Halberstadt, Co-Chair calls the meeting to order at 5:30 o'clock p.m. and the Committee considers the Agenda being Schedule "A" **attached** hereto, matters which are dealt with as follows:

2. **ADDITIONS TO THE AGENDA**

None.

3. **DECLARATIONS OF CONFLICT**

None disclosed.

4. **PRESENTATION**

4.1 **Pristine LED Lighting**

Bruce Melmer, President and Brian Watling, Marketing, Pristine LED Inc. are present to provide information relating to the benefits of LED lighting. An information package is distributed and ***attached*** as Appendix "A".

Mr. Melmer provides the following comparison between LED lighting and traditional lighting technologies:

- **Dramatically longer life** – *5 to 10 times longer life over traditional lighting*
- **Eliminates maintenance and the liability that comes with it** – *Breaks the cycle of a 2-3 year throw away bulb.*
- **A far superior light source for the human eye and well being** – *Eliminates all health related issues from lighting.*
- **Eliminates hazardous waste and the extra disposal costs**
- **Dramatically lowers heat creation and extremely durable** – *Lower air conditioning costs.*
- **Huge environmental impact, the carbon removal numbers are staggering.** There is no better way for a company to go green.
- **Reduces consumption averaging 40-60%.**

Councillor Halberstadt, Co-Chair thanks Mr. Melmer and Mr. Watling for their presentation.

5. **MINUTES**

Moved by T. Stomp, seconded by E. Freeman-Gibb,
That the minutes of the Windsor Essex County Environment Committee at its meeting held April 4, 2013 **BE ADOPTED** as presented
Carried.

A. Parent advises she contacted the Department of Environmental Quality to request a copy of the petcoke report. She notes at this time, the report has not been received.

6. BUSINESS ARISING FROM THE MINUTES

6.1 Letter submitted to the Environmental Registry in response to Coco's Big Box Development

D. Coronado indicates a decision from the Ministry of Natural Resources regarding the big box development is expected within 60 days.

6.2 Guest Speaker Series Update

A. Parent reports Dan Burden, Walkable and Livable Communities Institute has been retained as a Green Speaker to do a walking audit of the Walkerville and Wyandotte Business Improvement Areas (BIA) on June 7, 2013. She notes Mr. Burden's \$6,000 fee will be derived from the following sources:

WECEC	\$1,000
City of Windsor Environmental Master Plan	\$1,000
City of Windsor Planning Department	\$1,000
Wyandotte Street BIA	\$1,000
Wyandotte Street BIA	\$1,000
St. Clair Society of Architects	\$1,000

7. COORDINATOR'S REPORT

A. Parent reports the Renewable Energy Media Campaign with Generator Design has been launched successfully. A Press Conference was held on April 19, 2013 at St. Clair's Centre for Construction Innovation and Production and included a tour of the facility. Campaign advertisements were placed in the County newspapers and the Windsor Star online. WECEC and our partners participated in an Expert On Call session held April 7, 2013 with another session to be held on April 27, 2013.

A. Parent advises the tour of the Detroit Wildlife Reserve will be held on June 14, 2013. She notes environmental groups, City of Windsor staff, City and County Councillors and the media have been invited to tour the Reserve along with WECEC.

A. Parent indicates approximately 1,000 visitors attended the Earth Day event held April 28, 2013 at Malden Park.

A. Parent states WECEC partnered with the City of Windsor and the Downtown Windsor BIA to organize a successful kick-off event for the Rose City Clean Sweep Campaign held April 5, 2013.

8. SUBCOMMITTEE REPORTS

8.1 Air

The salient points of discussion relating to the Air Subcommittee report as provided by D. Coronado are as follows:

- The most recent provincial annual air quality report has been published in the “Air Quality In Ontario 2011 Report”. An excerpt from the report is as follows:
- “This annual report, summarizes the state of ambient air quality in Ontario during 2011 and examines 10 year trends. It reports on the measured levels of six common air pollutants: ground-level ozone, fine particulate matter, nitrogen dioxide carbon monoxide, sulphur dioxide and total reduced sulphur compounds.”
- Canada’s largest annual inventory of greenhouse gas emissions was released in March/April 2013. It showed an overall increase in emissions of 0.14% to about 702 million tons.
- The report identified Canada has the largest growth in emissions among G8 countries over the past two decades. It is also among the top sources of greenhouse gases in the world, representing approximately two percent of global emissions, and one of the highest sources of greenhouse gases per person.
- Smog alerts are primarily announced during the summer months. Smog is directly related to weather conditions and the amount of air pollution.
- There is a need to target efforts on transportation issues.
- The United States takes the lead on transportation emissions.

Councillor Halberstadt, Co-Chair suggests WECEC meet with representatives from the state and federal government regarding air pollution. He requests the Smog Action Plan be discussed at the June 6, 2013 WECEC meeting.

M. Nelson advises smog days are generally represented by hot, dry weather. He indicates the Essex Region Conservation Authority’s Smog Action Policy will be provided to A. Parent for dissemination to WECEC.

8.2 Transportation

A. Parent states the deadline to submit comments to the Canadian Environmental Agency regarding the environmental assessment of the Ambassador Bridge is May 13, 2013.

8.3 Provincially Significant Wetlands

No report.

8.4 Water Quality

Councillor Halberstadt, Co-Chair states a meeting of the Water Quality Subcommittee will be held at the end of May 2013.

8.5 Surplus Parks Strategy

J. Costa Gardner advises consideration is being given to the development of a surplus parks strategy.

M. Nelson states a review of the Parks Master Plan will be undertaken and, surplus parks will be looked at on an individual basis.

9. NEW BUSINESS

Confirm and Ratify Motion to approve \$1,000 for the Sponsorship of Dr David Suzuki

It is generally agreed that the following e-mail poll conducted and approved on April 18, 2013 **BE CONFIRMED AND RATIFIED:**

Moved by T. Stomp, seconded by K. Fallon,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$1,000 to be derived from the Green Speaker Series budget for the sponsorship of Dr. David Suzuki who will address students from Windsor-Essex County on climate change and protecting our environment to be held on April 25, 2013 at the WFCU Centre.

Carried.

9.2 Pat on the Back Awards

A. Parent advises "Pat on the Back Award" application packages will be sent to environmental groups and both Windsor Essex County school boards. She indicates the award winners will be honoured at a ceremony to be held on May 29, 2013 at the Ojibway Nature Centre.

Moved by R. Dzugan, seconded by T. Stomp,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$2,500 for costs associated with the Pat on the Back Awards.

Carried.

9.3 Eliquid Media Domain Renewal

Moved by T. Stomp, seconded by J. Costa Gardner,

That **APPROVAL BE GIVEN** to an expenditure in the upset amount of \$84.75 payable to eliquid MEDIA International Inc. for the annual Domain Renewal for wecec.org.

Carried.

9.4 Windsor Air Quality Index Comparison

Discussed under Item 8.1.

9.6 Possible Representation from Non-Smoking Group

Councillor Halberstadt, Co-Chair reports there is interest in banning smoking on sports fields. After discussion, WECEC decides not to pursue this as an environmental issue.

9.4 Strategic Plan Review

The “Strategic Plan Review 2012” is discussed to determine which items are relevant at this time.

The following comments are made relating to the Strategic Plan Review 2012:

- Suggestion to promote WECEC to municipal levels of government (City/County Councils) Presentation to City/County Councils prior to budget deliberations.
- Suggestion to provide an annual report to all municipalities in Windsor Essex County.
- Suggestion to hold two WECEC meetings a year at the Ojibway Nature Centre
- Suggestion for performance reviews.

10. COMMUNICATIONS

10.1 The Plugged in World Needs to Unplug – The Windsor Star article dated April 20, 2013 is received for information.

10.2 The Clean Sweep crew kicks litter’s butt – The Windsor Star article dated April 12, 2013 is received for information.

10.3 Mad about your hydro bill? Blame nuclear and gas plants – The Toronto Star article dated April 18, 2013 is received for information.

10.4 Spring and litter editorial – The Windsor Star article dated April 12, 2013 is received for information.

10.5 Planning Standing Committee Agenda Item – Development Applications is received for information.

11. **DATE OF NEXT MEETING**

The next meeting will be held on Thursday, June 6, 2013 at 5:30 o'clock p.m. at the Lou Romano Water Reclamation Plant.

12. **ADJOURNMENT**

There being no further business, the meeting is adjourned at 7:30 o'clock p.m.

Councillor Halberstadt, Co-Chair

Committee Coordinator



AGENDA
WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE
held on Thursday, May 2, 2013
Meeting at 5:30p.m. At LOU ROMANO WATER RECLAMATION PLANT

1. **CALL TO ORDER**

2. **ADDITIONS TO THE AGENDA**

3. **DECLARATION OF CONFLICT**

4. **PRESENTATION**

4.1 Prestige LED Lighting – Energy conservation possibilities through LED lights

5. **MINUTES**

Adoption of the minutes of the meeting held April 4th, 2013 – *emailed separately.*

6. **BUSINESS ARISING FROM THE MINUTES**

6.1 Letter submitted to the Environmental Registry in response to Coco's Big Box development application to the Ministry of Natural Resources - *attached.*

6.2 Green Speaker Series Update – Dan Burden

7. **COORDINATORS REPORT**

WECEC Coordinator Monthly Report – *attached.*

8. **SUBCOMMITTEE REPORTS**

8.1 Air – *attached.*

8.2 Transportation

8.3 Provincially Significant Wetlands

8.4 Water Quality

8.5 Surplus Parks Strategy

9. **NEW BUSINESS**

9.1 Notice of Motion regarding Dr. David Suzuki sponsorship for \$1,000 as part of the Green Speaker Series

9.2 Pat on the Back Awards

9.3 Eliquid Media Domain Renewal invoice for \$84.75 – *attached.*

9.4 Strategic Plan review – *attached.*

9.5 Windsor Air Quality Index comparison – *attached.*

9.5 Possible representation from non-smoking group

10. **COMMUNICATIONS**

10.1 The Plugged In World Needs to Unplug – The Windsor Star April 20th 2013 – *attached.*

10.2 Clean Sweep crew kicks litter's butt – The Windsor Star April 12th 2013 – *attached.*

10.3 Mad about your hydro bill? Blame nuclear and gas plants – The Toronto Star April 18th 2013 - *attached.*

10.4 Spring and litter editorial – The Windsor Star April 12th 2013 – *attached.*

10.5 Planning Standing Committee Agenda Item – Development Applications – *attached.*

11. **DATE OF NEXT MEETING**

The date of the next meeting will be June 6, 2013 at Lou Romano Water Reclamation Plant at 5:30 o'clock p.m.

12. **ADJOURNMENT**

About Pristine LED

Pristine LED Inc. is a Canadian company that manufactures and distributes state of the art LED lighting systems. Pristine LED focuses mainly on Industrial, Commercial and Institutional solutions but also have custom design capabilities.

Our primary engineering, manufacturing division has over twenty five years of award winning history to draw upon. You could say we have been manufacturing LED (light emitting diode) lighting or commonly known as SSL (solid state lighting), longer than most companies on the market today. We take pride in the fact our equipment is engineered from the ground up, utilizing sound (SSL) principals and quality materials. This allows us to provide our clients with the longest warranty in the industry ... a ten (10) year replacement warranty. Simply put, if it fails ... we replace it. Our fixtures are rated at 100,000 hours of useful life and 'planned obsolescence' is not a principal of business we embrace. The average life expectancy of a Pristine LED product is ten to twelve years.

One of the founding cornerstones of Pristine LED is the environmental impact we create. Our fixtures do not contain any hazardous materials and are completely recyclable. To make the waste management circle complete we buy our old fixtures back at the end of life to ensure there is nothing going to landfill.

Being one of the first companies to supply high quality LED solutions for not only fluorescent lighting but low/high bay (MH, HPS) applications has allowed us to do business with many multi-national companies and different levels of government. Clients include Labatt Breweries, Cargill, Bonduelle, Tim Horton's, Honda, Toyota, Boston Pizza, Morton Salt, Mucci Pac, Anchor Danly, Vista Print, Sabre Machine Tool, the City of Chatham-Kent, the County of Essex and the Province of Ontario.

Each Pristine fixture is built to the highest standards using only the best materials. UL, CSA listed and LM79 and LM80 certified. DLC listed.

The word is spreading quickly about Pristine LED's Superior Product Line and if you would like to have an Energy Audit performed to see how much money you can save from money that you are already spending on your inefficient lighting system, we will be happy to provide that for you.

Pristine LED also offers Capital Leasing options that allows for the savings from your upgraded lighting system to pay for the lease payment and in most cases provides actual profits from the savings that you will enjoy. Additionally, there are incentives that may apply to your upgrade that may reduce the cost.

The bottom-line, the longer you wait to learn about what we offer...the more money you are throwing away paying for the energy used by your inefficient and outdated existing lighting system, never mind the existing maintenance costs.



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APPENDIX "A"

Pristine LED History

Pristine LED was established with the goal of producing technologically advanced LED lighting systems for industrial, commercial and institutional use. Our fixtures are engineered to meet uncompromising standards, and draw on twenty-five years of award winning solid state electronics research and development in partnership with our electronics component manufacturer. With the tremendous demand in North America for LED lighting systems our Windsor plant is now manufacturing Canadian made fixtures for this market. We utilize Canadian component suppliers and are proud that our products have 90% Ontario content cutting carbon creation in transportation.

Our mission is to design and manufacture energy and cost efficient products to the highest standards of innovation, quality control and customer satisfaction. Pristine LED is the synthesis of lighting technology. Our products use up to 75% less energy than today's most economical industrial lighting. Unlike harsh fluorescent, metal halide and high pressure sodium lighting, our fixtures produce true light with 90% of the sun's visible spectrum, showing life at its finest. Since initial development in the 1960s, the LED – or Light Emitting Diode – has grown in brightness, spectrum and performance. Advancements now offer technology that casts brilliant light with unparalleled energy efficiency.

All Pristine LED products are fully guaranteed with a **10 year replacement warranty** the industry's best. Pristine LED is blazing the trail for LED technology that is becoming the standard for lighting. From factory/warehouse facilities, to office buildings and retail centres, LED fixtures are readily engineered to serve in applications once served by fluorescent, high pressure sodium, and metal halide in high bay/low bay light fixtures. Our fixtures contain no hazardous materials such as lead or mercury and boast a life of 100,000 hours and require no replacement or maintenance for the full life of the fixture. They readily accept motion sensor and ambient lighting capabilities. All of our products are CSA/UL, ROHS, US DOE , Canada Green Building Council certified and DLC listed

The founding owner of Pristine LED is Bruce Melmer, President/CEO. Bruce is an environmentally conscious entrepreneur. He has sought out new opportunities to bring innovative products to a wide client base, both individually and through a network of highly trained sales associates. Managing sales teams across Ontario and internationally for 30+ years, his cornerstone for success has been a steadfast focus on client satisfaction.



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Why Pristine LED compared to other manufacturers?

- **Warranty** – Ten (10) year replacement, industry best.
- **12 – 15 year life expectancy** most products are considerably less.
- **Cree diodes used.** The industry leader in diode manufacturing worldwide.
- **Superior thermo management** (heat sinking) important for long life.
- **Linear approach** combined with 12% curvature on diodes provides the best spread of light in the industry.
- **No hazardous materials** in production or product. No waste concerns.
- **Superior power supply** we are the leaders. Key component for long life. Diode rating does not mean long life.
- **Our engineering** division have been successfully manufacturing LED (SSL) for over 15 years
 - **Proven track record** with Canadian Industry and the province of Ontario
- **Works seamlessly** with all types of sensor technologies. There is no better way to save a kilowatt than not use it.
 - **Canadian owned and operated**



We have achieved a 98.8% utility audited reduction for a client.

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How does LED lighting measure up compared to traditional lighting technologies?

Direct Benefits

- **Dramatically longer life.** 5 to 10 times longer life over traditional lighting.
- **Eliminates maintenance and the liability that comes with it.** Breaks the cycle of a 2-3 year throw away bulb.
- **A far superior light source for the human eye and well being.** Eliminates all health related issues from lighting.
- **Dramatically increases productivity/quality control.** You can't fix it, if you can't see it. High definition lighting.
 - **Eliminates hazardous waste and the extra disposal costs.**
- **Dramatically lowers heat creation and extremely durable.** Lower air conditioning costs.
- **Huge environmental impact, the carbon removal numbers are staggering.** There is no better way for a company to go green.

Reduces consumption averaging 40 - 60%



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Power Supplies are a Critical Component

"Power supplies are often the weak link in LED lamps. This is especially true for industrial and infrastructure lighting applications where difficult operating conditions can quickly cause traditional power supplies to fail. This reduces the cost-effectiveness of solid-state lighting and conflicts with fixture lifetime expectations built on the basis of the longevity of LEDs alone. With high power conversion efficiency and no high-voltage aluminum electrolytic bulk capacitors, Pristine LED's power supply provides an architecture that avoids this problem and delivers on the long-lifetime promise."

**Bruce Melmer,
President
Pristine LED Inc.**



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LED Lighting Offers Major Health Benefits Compared to Conventional Counterparts

Research shows that LED lights exhibit characteristics that are better for overall health and safety than those of fluorescent, incandescent and halogen fixtures. **San Francisco, CA (Vocus) September 12, 2010**

It turns out that LED lighting is not only easier on your wallet and better for the planet; it's also healthier. When considering general lighting features that may affect health, like flicker, hum, burnout, heat and toxic materials, LEDs come out ahead of the competition every time.

Flicker:

LED Lights exhibit very little to no flickering. In contrast, incandescent and fluorescent lights both exhibit such flickering, which is difficult for the human eye to perceive, but causes problems nonetheless. Common ailments associated with flickering, according to the Occupational Safety and Health Administration (OSHA), include "headaches, eye strain and general eye discomfort." In fact, a study published by Lighting Research and Technology in 1989 found that exposing workers to lights without flickering "resulted in more than a 50 percent drop in complaints of eye strain and headaches." Furthermore, the stroboscopic effect flickering creates can pose a threat to those working around moving parts or large machinery. According to OSHA, "When objects move or rotate rapidly, [flickering light] makes them look as if they are moving more slowly than their actual speeds - they may even appear stationary if the object is moving at the same rate as the flicker frequency...This could [pose] a safety hazard if someone mistakenly thought that equipment was stationary or was moving slowly." LED lights, therefore, reduce the negative health effects and safety risks associated with flickering that incandescent and fluorescent lights pose.

Hum:

LEDs silently and safely offer full-spectrum light. Fluorescent lights are notorious for emitting an annoying and distracting droning sound. And in fact, researcher John Ott discovered that fluorescent lights and the noise pollution associated with them cause "irritability, hyperactivity, fatigue and attention deficits" (Ott, John N. (1973). Health and Light: The Effects of Natural and Artificial Light on Man and Other Living Things). LEDs produce no such hum.

Burnout:

Most LED lights last up to 50,000 hours plus, while most incandescent bulbs burn out in less than a year. LEDs' slower burnout rate allows for longer color consistency throughout the life of the fixture. Color matching across a group of lighting fixtures reduces eyestrain, and slower burnout rates means fixtures will retain color consistency for a longer period of time.

UV Emissions:

LEDs do not emit UV radiation, and are, thus, safe for desktop, close-proximity applications. Fluorescent bulbs emit UV radiation, which can cause premature aging and skin cancer, as well as eyestrain and headaches. A study published in the August, 2008 issue of Oxford University Press found, "the UV emissions from a significant percentage of the tested CFLs...may result in foreseeable overexposure of the skin when these lamps are used in desk or task lighting applications."

Mercury:

LEDs do not contain mercury, and so can be disposed of safely and easily. Mercury is an extremely dangerous and toxic substance that exists in most kinds of bulbs—incandescent and fluorescent—except for LEDs. The presence of mercury makes disposing of other bulbs dangerous and time consuming.



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Direct Conversion Table

A rule of thumb for replacement of fluorescent lighting is 10w LED per 4ft length

All assumptions below are based on a 24/7 annual burn and cost calculations are based on .14 per kwh
Wattage used is the input wattage of whole fixtures. These examples are per fixture, per year.

Fixture	Watts	KWH	Costs	LED Watts	KWH	Costs	% Reduced
T12 2 lamp	92*	803	\$112.52	26	227	\$31.80	71.74%
T12 4 lamp	184*	1607	\$225.04	53	463	\$64.82	71.20%
T12 2 lamp 8'	166*	1450	\$203.02	53	463	\$64.82	68.07%
T12 HO 2 lamp 8'	204*	1782	\$249.50	53	463	\$64.82	74.02%
Fixture	Watts	KWH	Costs	LED Watts	KWH	Costs	% Reduced
T8 2 lamp	72	629	\$88.06	26	227	\$31.80	63.89%
T8 3 lamp	106	926	\$129.64	26	227	\$31.80	75.47%
T8 4 lamp	138	1205	\$168.78	53	463	\$64.82	61.59%
T8 2 lamp 8'	128	1118	\$156.55	53	463	\$64.82	58.59%
Fixture	Watts	KWH	Costs	LED Watts	KWH	Costs	% Reduced
T5 2 lamp	102	891	\$124.75	26	227	\$31.80	74.51%
T5 4 lamp	205	1790	\$250.72	53	463	\$64.82	74.15%
T5 6 lamp	307	2682	\$375.47	74	646	\$90.50	75.90%
T5 HO 2 lamp	121	1057	\$149.99	53	463	\$64.82	56.20%
T5 HO 4 lamp	242	2114	\$295.98	74	646	\$90.50	69.42%
T5 HO 6 lamp	363	3136	\$439.07	159	1389	\$194.46	56.20%
Fixture	Watts	KWH	Costs	LED Watts	KWH	Costs	% Reduced
150w MH/HPS	175	1528	\$214.03	53	463	\$64.82	69.71%
250w MH/HPS	285	2489	\$348.57	74	646	\$90.50	74.04%
400w MH/HPS	460*	4018	\$562.60	159	1389	\$194.46	65.43%
1000w MH/HPS	1100*	9609	\$1345.34	315	2751	\$385.26	71.36%

* Denotes the availability of energy saver lamp



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LED / Fluorescent Lighting Systems Comparison Spectrometer Readings

Foot Candle / Lux Measure - 218 Bristol St., Guelph

August 27, 2012

Location	Fixture Type	No. Fixtures	Foot Candles	Lux	Environment
Board Room	LED 20W	5	45.5	487.8	Natural light intrusion
	T8 - 2 tube fluorescent		41.5	445	
Reception Area	LED 20W	6	61.1	664.5	Natural light intrusion
	T8 - 2 tube fluorescent		44.2	433	
Schieck office	LED 20W	3	45.6	478.5	Window blinds used
	T8 - 2 tube fluorescent		25.9	252	
Community Office	LED 20W	3	53.4	582.7	Window blinds used
	T8 - 2 tube fluorescent		26.4	272	
Hare Office	LED 20W	3	47.5	478.9	Window blinds used
	T8 - 2 tube fluorescent		29.8	296	
Newman Office	LED 20W	3	55.8	599.1	Window blinds used
	T8 - 2 tube fluorescent		23.3	242	
Aitken Office	LED 20W	3	48.9	527.9	Window blinds used
	T8 - 2 tube fluorescent		22.5	235	
Lunch Room	LED 20W	4	86.5	939	Natural light intrusion
	T8 - 2 tube fluorescent		80.8	787	
Gulati Office	LED 20W	3	79.1	844.5	Window blinds used
	T8 - 2 tube fluorescent		26.7	251	
Wyman Office	LED 20W	3	52.8	526	Window blinds used
	T8 - 2 tube fluorescent		24.1	249	
Hallway	LED 20W	4	35.5	383	No natural light intrusion
	T8 - 2 tube fluorescent		24.6	221	

This was a project completed for the office of the Attorney General Province of Ontario



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SABRE TOOL CASE STUDY SAVINGS QUICK REPORT

Billing	Date	Month	Year	Amount	Increase/Decrease	Average	
2009	9/22/2009	Aug-09	2009	\$5,856.88			
	10/21/2009	Sep-09	2009	\$4,065.41			
	11/17/2009	Oct-09	2009	\$3,637.90			
	12/21/2009	Nov-09	2009	\$5,253.32			
	2010	1/18/2010	Dec-09	2009	\$5,243.61		
		2/18/2010	Jan-10	2010	\$5,628.34		
		3/22/2010	Feb-10	2010	\$6,226.84		
		4/21/2010	Mar-10	2010	\$7,433.59		
		5/21/2010	Apr-10	2010	\$6,975.52		
		6/21/2010	May-10	2010	\$6,209.34		
		7/20/2010	Jun-10	2010	\$5,794.10		
		8/18/2010	Jul-10	2010	\$7,131.99		
9/20/2010		Aug-10	2010	\$6,432.27			
10/21/2010		Sep-10	2010	\$4,737.32			
11/17/2010		Oct-10	2010	\$4,578.18			
12/17/2010		Nov-10	2010	\$5,637.21			
Lights Installed Oct/Nov 2010	1/21/2011	Dec-10	2010	\$3,984.92			
	2/17/2011	Jan-11	2011	\$2,918.66			
	3/21/2011	Feb-11	2011	\$3,321.99			
	4/19/2011	Mar-11	2011	\$3,442.90			
	5/25/2011	Apr-11	2011	\$3,389.18			
	6/26/2011	May-11	2011	\$3,496.47			
	7/26/2011	Jun-11	2011	\$4,575.64			
	8/25/2011	Jul-11	2011	\$4,426.34			
						Monthly Increase over same month in previous year	\$75.39 671.91 940.28 381.89 -1258.69 -2709.68 -2904.85 -3990.69 -3576.34 -2712.87 -2705.65
						Monthly savings over same month in previous year	\$642.87 Av. Monthly Increase
						Recorded and Average Reduction Over Recorded Period From Previous Year. Sabre Tool now shows savings over the previous year of an average of \$2,634.65 per month on electricity cost	\$2,634.65 Av. Monthly Reduction

Below is the report showing hydro costs for Sabre Machine Tool before and after installation of Pristine LED lighting. The Pristine LED audit and analysis was based ONLY on reduction of wattage revealed a monthly cash savings of \$1,085. The ROI quoted by Pristine LED was approximately two (2) years. After Retrofit with Pristine LED actual savings were \$2,634 per month. The retrofit had an impact in reducing cost of air conditioning, plus a proportionate drop in demand charges, taxes and fees. This gave Sabre Tool an ROI that worked out to be approximately eight (8) months instead of two (2) years.

Recorded and Average Increases Over Recorded Period From Previous Year. Sabre Tool was showing increases over previous year of an average of \$642.87 per month on electricity cost.

Recorded and Average Reduction Over Recorded Period From Previous Year. Sabre Tool now shows savings over the previous year of an average of \$2,634.65 per month on electricity cost.

The dramatic reduction in heat created by the LED lighting has a profound effect on the cost of cooling your buildings. It takes 1.7 times the energy to remove heat as it does to create heat and this results in tremendous savings. Pristine LED Lights are solid state, meaning you can turn them on and off as many times as you want and as is needed. This creates even greater savings when you are able to put light where it is needed when it is needed.



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January 5, 2012

I am pleased to take this opportunity to comment on our experience with your state of the art LED lighting systems. As a frozen food processing company we are required to operate at the highest standards of quality and production as well as meeting our commitment to energy efficiency and environmental compliance and consideration.

In utilizing your LED systems in our facilities we have surpassed our targets by significantly reducing our energy consumption beyond our expectations. The ability to add motion sensors to the lights has compounded the anticipated savings. Also, with the significant reduction in heat generated from LED's it has dropped the demand on our freezer compressors to offset the heat generated from metal halides. The quality of your lights and its performance in an extreme cold temperature environment has been exceptional with no failures and your level of service to our varied requirements has been exceptional.

We look forward to working with you into the future and commend you for the excellent Canadian made LED lighting technology you have created for our industry.

A handwritten signature in black ink, appearing to read "Alex Coe".

Alex Coe – Project Engineer (Bonduelle Ontario Inc.)

Jan 5/2012

Date



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Corporation of the County of Essex
EMERGENCY MEDICAL SERVICES

Dean Wilkinson
Deputy Chief, Planning & Physical Resources
dwwilkinson@countyofessex.on.ca



March 1, 2012

Bruce Melmer
President
Pristine LED Inc.
100-3215 Jefferson Blvd.
Windsor, Ontario.
N8T 2W7

Dear Bruce:

RE: LED Lighting Installation – Jefferson Station

I am writing to you to state how pleased we are with the LED lighting installation in our Jefferson Station this past October. As we needed to replace the fluorescent lighting in this twenty year old facility, we decided to explore the feasibility of installing LED. By installing the LED lighting within the existing fluorescent fixtures, the cost of procurement and installation was approximately 60% of replacing the previous lighting with T5 & T8 fluorescents. LED allowed us to install fewer lights yet provide a brighter and more natural light within all work areas. As well, early cost savings indicate an expected reduction of electricity costs will conservatively range in the area of 20 to 25%. I would not hesitate to recommend your product to others contemplating upgrading current lighting or building a new facility.

Sincerely,

920 Mercer Street, Windsor, Ontario N9A 1A6 • Tel (519) 256-1315 Ext. 209 Fax (519) 256-2053

Cell (519) 791-9161

Website www.countyofessex.on.ca



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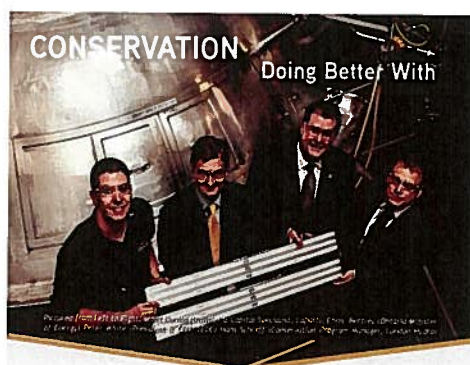
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Labatt Brewery Canada Installs Pristine LED Lighting And Achieves 75% Energy Consumption Reduction

Pristine LED has announced that their installation of an LED lighting system in the Labatt Brewery plant in London Ontario has produced a 75% reduction in lighting energy consumption, together with a significant lowering of maintenance costs.

FOR IMMEDIATE RELEASE



conservation

[PRLog \(Press Release\) - Aug 01, 2012 -](#)

[PRISTINE LED FORGES PARTNERSHIPS WITH CORPORATE AND GOVERNMENT AGENCIES LABATT BREWERY CANADA INSTALLS PRISTINE LED LIGHTING SYSTEMS IN CANADIAN BREWING FACILITIES TO REALIZE UP TO 75% ENERGY CONSUMPTION REDUCTION WITH ASSISTANCE OF LONDON HYDRO REBATE PROGRAM.](#)

[LONDON, ON, August 1, 2012 - Pristine Led, Inc. is pleased to announce that a partnership with Labatt Brewery, The City of London, London Hydro, Ontario Power Authority and the Government of Ontario – Ministry of Energy to install and verify Pristine's LED lighting systems in the Labatt London plant has produced excellent results. Labatt has realized a significant lighting energy consumption reduction of up to 75% along with a dramatic lowering of maintenance and replacement costs. The plant has been retrofitted from fluorescent and metal halide lighting to LED over the last several months and work has now started, on converting the Labatt Brewery Edmonton facility due to the excellent results in London. The Ontario Power Authority, City of London, London Hydro and the Ontario Minister of Energy strongly supported the program with the application of the SaveOnEnergy rebate program. This program is available through local utility companies to assist companies to convert to energy saving technologies by offering a rebate on the cost of product and installation for approved projects. By switching to LED lighting, Labatt was able to have a measurable impact on the amount of energy consumed and will greatly assist the City of London in reducing the demand on its electricity system. The saved energy can be diverted to growth areas without increasing demand on the system and will help to reduce incidents of "brown -outs" during peak demand periods.](#)

[Bruce Melmer, President, Pristine LED stated, "we are very pleased to have worked with Labatt and the City of London to produce such positive results on energy consumption reduction. It gives us great confidence in our technology when we see the kind of support we have received from companies and governments because of the many benefits that our LED lighting systems bring to our environment and the economic benefits to these organisations by switching to LED lights". He further indicated that, "we are working with numerous companies and governments across Canada and the US with continued demand and growth for our Windsor based manufacturing plant. It makes us proud to support the local economy through the creation of jobs and opportunities with our suppliers in our home community."](#)



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