

# Green Power Purchasing for Ontario Municipalities

May 26, 2010



Report to the Greater Toronto Area Clean  
Air Council



Prepared by the Clean Air Partnership



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## Green Power Purchasing for Ontario Municipalities

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### Preamble

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#### About the Clean Air Partnership

Clean Air Partnership (CAP) is a registered charity that works in partnership to promote and coordinate actions to improve local air quality and reduce greenhouse gases for healthy communities. Our applied research on municipal policies strives to broaden and improve access to public policy debate on air pollution and climate change issues. Our social marketing programs focus on energy conservation activities that motivate individuals, government, schools, utilities, businesses and communities to take action to clean the air.

Clean Air Partnership's mission is to transform cities into sustainable, vibrant, resilient communities, where the air is clean to breathe and greenhouse gas emissions are minimized.

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<http://www.cleanairpartnership.org>



### About the Greater Toronto Area Clean Air Council (GTA-CAC)

The Greater Toronto Area Clean Air Council promotes the reduction of air pollution and greenhouse gas emissions and increased awareness of regional air quality and climate change issues in the Greater Toronto Area through the collective efforts of all levels of government. The Council identifies and promotes the most effective initiatives to reduce the occurrence of air pollution and greenhouse gas emissions in the GTA, and their associated health risks. The goals of the Council are:

- To enable solutions to air quality and climate change challenges through a dynamic network that expands knowledge and enthusiasm, and encourages practical and successful policies and actions.
- To promote a better understanding of air quality and climate change problems and their implications for public health among policy makers and to improve their ability to address these problems in an economically effective way;
- To explore opportunities for joint initiatives to reduce air pollution and greenhouse gas emissions in the GTA; and
- To liaise with municipalities in the GTA and across Canada, organizations with compatible mandates, and communities within the region to share best practices for reducing air pollution and greenhouse gas emissions.



### INTRODUCTION

**On June 7, 2007, Greater Toronto Area Clean Air Council (GTA-CAC) member municipalities signed on to the *Toronto and Region Inter-Governmental Declaration on Clean Air*, committing them to take action on clean air and climate change. **Article 3.3** of the Declaration calls on the signatories to:**

***“Identify opportunities to purchase green power in order to increase the capacity for renewable energy development in Ontario.”***

On June 4, 2008, the GTA-CAC member municipalities signed on to the *Toronto and Region Inter-Governmental Declaration on Clean Air*, committing them to take action on clean air and climate change. **Article 3.4** of the Declaration calls on the signatories to:

***“Establishment of a Community of Practice to increase the implementation of renewable energy purchasing or production.”***

***Target: 15 members are producing or purchasing renewable power by 2010***

This scan was developed in response to these commitments, and is primarily intended to provide an overview of existing and potential green power purchasing options for municipalities in Ontario. The scan lists the services offered by green power vendors, and highlights green power purchasing arrangements that have been successfully employed in Ontario municipalities - describing each jurisdiction’s rationale and process. This Scan is complemented by the GTA-CAC Green Energy Production Scan available at [www.cleanairpartnership.org](http://www.cleanairpartnership.org).

When municipalities consider green power purchasing, it is essential to research and understand the available sources of renewable energy. EcoLogo<sup>M</sup> certification is a federal government established standard of environmental verification. Within EcoLogo<sup>M</sup> certification, green power is grouped into three types depending on the degree of environmental efficiency, modernity and integrity. EcoLogo<sup>M</sup> allows municipalities to verify the source and proportion of the electricity mix that they purchase ensuring that green power purchasing decisions stand up to environmental scrutiny.

EcoLogo<sup>TM</sup> Standards are developed in an open, public, and transparent process spanning approximately 12-18 months, and are designed so that only the top 20% of products available on the market can achieve certification. Consumers can trust that products bearing the EcoLogo certification mark truly represent environmental leadership and provide tangible human health and environmental benefits.

EcoLogo standards are especially stringent because they address multiple environmental attributes throughout the entire life cycle of the product or service. Perhaps even more



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encouraging is the fact that all EcoLogo certified products must also meet performance requirements to ensure they perform as well as their conventional alternative.

After a standard is finalized, any manufacturer that demonstrates compliance with the stringent requirements is eligible for EcoLogo certification. Following a successful third-party audit of the product against the standard's requirements, EcoLogo certification can be claimed, and the product can bear the EcoLogo Mark.

One option for municipalities who wish to purchase green power is through a bulk purchasing arrangement offered by the Association of Municipalities of Ontario's Local Authority Service's (LAS) Electricity Procurement Program. Forming municipal purchasing pools to achieve bulk rates, LAS has a relationship with Bullfrog Power that facilitates green power procurement for Ontario jurisdictions.

Information for this scan was gathered from the websites of various energy companies, municipal government websites, from policy documents, and through personal communication with green power retailers and municipal staff. The geographic scope of this study was limited to the province of Ontario. The vendor options highlighted below describe available companies, and are grouped in terms of their feasibility for municipalities who wish to pursue green power services.

### Green Power Retailers in Ontario

While there are a number of companies in Ontario which offer green power, three were found to currently have the capacity to sell directly to municipalities:

- Bullfrog Power
- Direct Energy
- Oakville Hydro Energy Services Incorporated



EXISTING GREEN POWER PURCHASING OPPORTUNITIES FOR ONTARIO MUNICIPALITIES

**BULLFROG POWER INC.**

<p><b>Description</b></p>	<ul style="list-style-type: none"> <li>▪ Founded in 2005, Bullfrog Power is a leading Canadian provider of 100% green EcoLogo<sup>M</sup> certified electricity, with service available to Ontario and Alberta residents and businesses.</li> <li>▪ They provide Canadians with a convenient way to support locally generated renewable power.</li> <li>▪ Green power purchases are audited annually by Deloitte Bullfrog is endorsed by WWF Canada, Pembina Institute, Pollution Probe, David Suzuki Foundation and approximately 50 other non-profit groups.</li> </ul>
<p><b>Municipal Customers</b></p>	<ul style="list-style-type: none"> <li>▪ City of Toronto</li> <li>▪ City of Mississauga</li> <li>▪ Regional Municipality of York</li> <li>▪ Town of Aurora</li> <li>▪ City of Cambridge</li> <li>▪ Township of Rideau Lakes</li> <li>▪ For testimonials from Municipal customers: <a href="http://www.bullfrogpower.com/municipalities/video.cfm">http://www.bullfrogpower.com/municipalities/video.cfm</a></li> </ul>
<p><b>Details</b></p>	<ul style="list-style-type: none"> <li>▪ Bullfrog matches a municipal building’s energy usage with EcoLogo<sup>M</sup> certified green power that it injects onto the provincial grid.</li> <li>▪ The municipality pays a premium to buy green power to match 100% of their facility’s annual electricity usage.</li> <li>▪ The arrangement does not affect a municipality’s existing energy bill or supplier, as no change is required to the current power supplier agreement.</li> <li>▪ The municipality’s local utility (LDC) is not impacted financially as the green power is a premium, and is billed separately.</li> </ul>
<p><b>Considerations</b></p>	<ul style="list-style-type: none"> <li>▪ Proven track record of developing new renewable generation facilities within the province of Ontario directly attributed to customer demand.</li> <li>▪ Bullfrog is the only green power retailer, and the only entity other than the OPA, to cause new renewable generation (EcoLogo<sup>M</sup> Type III) to be built in Ontario.</li> <li>▪ Provide a mix of 20% EcoLogo<sup>M</sup> Type III wind power and 80% EcoLogo<sup>M</sup> Type II low-impact water power.</li> </ul>



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BULLFROG POWER INC.	
<b>Considerations</b>	<ul style="list-style-type: none"><li>▪ The mix does not include any of the oldest forms of renewable energy (EcoLogo<sup>M</sup> Type I).</li><li>▪ Bullfrog offers initial launch and ongoing communications services, including media coverage, press releases, and on-site presentations to facilitate education of staff and residents, features within Bullfrog Newsletter (approx circulation 15,000).</li><li>▪ They provide permanent signs, visible logos, promotional material, website content, employee discount coupons,</li><li>▪ Bullfrog's communications group works collaboratively with municipal customers to help them position their environmental stewardship to internal and external stakeholders and raise environmental awareness among citizens in the community.</li></ul>



EXISTING GREEN POWER PURCHASING OPPORTUNITIES FOR ONTARIO MUNICIPALITIES

**DIRECT ENERGY**

<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Founded in 1985, Direct Energy is one of North America’s leading integrated energy companies and a member of the Centrica Plc.</li> <li>▪ Direct Energy has grown to become the largest energy retailer in North America and has over five million customers</li> </ul>
<b>Municipal Customers</b>	<ul style="list-style-type: none"> <li>▪ The Regional Municipality of Peel</li> <li>▪ City of Toronto (Toronto Police Training Facility and Exhibition Place)</li> <li>▪ The District Municipality of Muskoka</li> <li>▪ Town of Caledon</li> <li>▪ Corporation of the Township of Lake of Bays</li> <li>▪ Township of Muskoka Lakes</li> <li>▪ Township of Georgian Bay</li> <li>▪ TTC (Toronto Transit Control)</li> </ul>
<b>Details</b>	<ul style="list-style-type: none"> <li>▪ EcoLogo<sup>M</sup> certified</li> <li>▪ Options Include:                         <ul style="list-style-type: none"> <li>▪ Green power included as part of utility bill, or</li> <li>▪ Green power billed separately by Direct Energy.</li> </ul> </li> </ul>
<b>Considerations</b>	<ul style="list-style-type: none"> <li>▪ Purchase of Green Energy under long term Power Purchase Agreements and has a global investment in Wind Generation in excess of four billion dollars (cnd), with over 2,800 MW of wind generation capacity.</li> <li>▪ In addition, also have PPA’s (power purchase agreements) with an Alberta type three wind generator.</li> <li>▪ Wholesale Energy Group is already actively involved in trading both Carbon Offsets and Renewable Energy Credits.</li> <li>▪ Direct Energy Business provides EcoLogo certified power from a variety of Canadian sources in Alberta and Ontario.</li> </ul>
<b>Contact Information</b>	<p>Tom Marshall, Account Executive                      705 627 5497   Tom.marshall@directenergy.com  <a href="http://www.directenergybusiness.com">www.directenergybusiness.com</a></p>



EXISTING GREEN POWER PURCHASING OPPORTUNITIES FOR ONTARIO MUNICIPALITIES

**OAKVILLE HYDRO ENERGY SERVICES INC. (OHESI)**

<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Oakville Hydro Corporation provides residential and commercial electrical energy, data communication, and specialized construction services in the Oakville region.</li> <li>▪ OHESI is one of Oakville Hydro Corporation's 3 subsidiary companies.</li> <li>▪ OHESI offers products and services like their green power program to business and residential customers.</li> <li>▪ Along with the town of Oakville, OHESI green power program's commercial customers include ABREX Paint &amp; Chemical Ltd., Oakville Hydro Electricity Distribution Inc., Halton Partners for Clean Air, Omron Dualtec Automotive Electronics, and Green Rooms Inc.</li> <li>▪ In July of 2007, Oakville Hydro Energy Service's first "green power" production facility, a Landfill Gas to Energy project, went into full operation.</li> </ul>
<b>Municipal Customer</b>	Town of Oakville
<b>Details</b>	<ul style="list-style-type: none"> <li>▪ OHESI offers the Green Light Pact system which consists of an annual pact of 660 kw/H for \$60 (or half for \$30)</li> <li>▪ They provide EcoLogo<sup>M</sup> certified, OPG generated power.</li> <li>▪ The Pact pays for a green power premium which is then injected into the grid (the cost is not reflected on the customer's electricity bill).</li> </ul>
<b>Considerations</b>	<ul style="list-style-type: none"> <li>▪ Customers receive a certificate of purchase.</li> <li>▪ OHESI lists participating business partners on website.</li> </ul>
<b>Contact Information</b>	<p>Mary Craddock                  Manager of Retail Services - Green Power Program                  905.825.6370  <a href="mailto:mcraddock@oakvillehydro.com">mcraddock@oakvillehydro.com</a>                  Toll Free: 1-866-521-0192  <a href="mailto:green@oakvillehydroenergy.com">green@oakvillehydroenergy.com</a></p>



## Green Power Purchasing for Ontario Municipalities

Of the companies advertising green power supply and services, some are currently unable to service municipalities due to logistical constraints and/or limited selling arrangements. However, the companies below have expressed interest in providing municipal green power either as a service in the future or under particular circumstances.

POTENTIAL GREEN POWER PURCHASING OPPORTUNITIES FOR ONTARIO MUNICIPALITIES	
ONTARIO POWER GENERATION (OPG) – EVERGREEN	
<b>Description</b>	<ul style="list-style-type: none"> <li>▪ Ontario Power Generation (OPG) is an Ontario-based commercial company 100% owned by the province of Ontario.</li> <li>▪ OPG was created to operate the electricity generating assets of Ontario Hydro, which includes:               <ul style="list-style-type: none"> <li>▪ 3 nuclear stations, 5 fossil stations, 64 hydroelectric stations, and 3 Wind generating stations.</li> </ul> </li> </ul>
<b>Current Customers</b>	<ul style="list-style-type: none"> <li>▪ OPG’s Evergreen service is currently sold to retailers.</li> <li>▪ No Municipal customers.</li> </ul>
<b>Details</b>	<ul style="list-style-type: none"> <li>▪ OPG produces EcoLogo<sup>M</sup> certified energy.</li> <li>▪ OPG sells wholesale, on a large scale to retailers.</li> </ul>
<b>Municipal Considerations</b>	<ul style="list-style-type: none"> <li>▪ Currently unable to sell to individual municipalities because they primarily only sell to customers on a whole-sale, large-scale level, and to smaller retailers.</li> <li>▪ Selling to municipal could be possible if they were to make bulk purchases for wholesale prices (see LAS bulk purchasing in introduction).</li> </ul>



POTENTIAL GREEN POWER PURCHASING OPPORTUNITIES FOR ONTARIO MUNICIPALITIES

**ONTARIO ENERGY SAVINGS- GREEN ENERGY OPTION (OES GEO)**

<p><b>Description</b></p>	<ul style="list-style-type: none"> <li>▪ Ontario Energy Savings (OES) has been one of Ontario’s largest energy retailers since 1997.</li> <li>▪ They are part of the Energy Savings Group, a leading North American energy retailer and Canadian organization with approximately one million customer accounts.</li> <li>▪ OES provides natural gas and electricity through long term, fixed price, and price protection programs.</li> <li>▪ OES’s Green Energy Option is a renewable electricity option seeking to reduce harmful greenhouse emissions by ensuring electricity is generated through renewable sources (like water and wind) into the Ontario electricity grid.</li> </ul>
<p><b>Current Customers</b></p>	<ul style="list-style-type: none"> <li>▪ OES’s GEO is currently sold to residential customers.</li> <li>▪ No municipal customers.</li> </ul>
<p><b>Details</b></p>	<ul style="list-style-type: none"> <li>▪ OES sell units of green energy reflected on a monthly bill.</li> <li>▪ They inject the purchaser’s power equivalent into the Ontario grid as green energy.</li> </ul>
<p><b>Municipal Considerations</b></p>	<ul style="list-style-type: none"> <li>▪ The OES Green Energy Option is not currently available to municipalities, as it is only residential.</li> <li>▪ However, OES is considering the possibility of selling to municipalities in the future.</li> </ul>



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### Municipal Purchasers

This section outlines Ontario municipalities who currently purchase green power for one or more of their facilities. Details are provided with respect to their purchasing process and motivating factors for purchasing green power.

The following municipalities currently purchase green power on an ongoing basis:

- Town of Aurora
- Town of Caledon
- City of Cambridge
- City of Mississauga
- Town of Oakville
- City of Toronto
- Regional Municipality of Peel
- Regional Municipality of York



MUNICIPALITIES:	
<b>Town of AURORA</b>	
<b>Green Energy Provider:</b>	Bullfrog Power
<b>What's Being Powered:</b>	Town Hall
<b>Details:</b>	<ul style="list-style-type: none"> <li>Aurora Town Hall powered by Bullfrog - a 2 year pilot project begun in April 2008 in partnership with York Region.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>Council's commitment to supporting the generation of clean, renewable power and making choices that are environmentally friendly.</li> <li>Town is taking action to reduce their electricity-related emissions footprint and raise awareness among area businesses, residents and other municipalities across Ontario about the environmental benefits of green power.</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>Environmental Advisory Committee (report NO. PW06 – 018, April 10, 2006) provided recommendation that the Council:                             <ul style="list-style-type: none"> <li>Adopt the concept of Green Power; and</li> <li>Adopt in principle the purchase of Green Power from Bullfrog Power Inc. in sufficient quantities to operate Town Hall for one year.</li> </ul> </li> <li>The Town released a joint RFP with the Region of York for procurement of "green energy" for the Town Hall and the Region of York Head Offices on Yonge Street (January 31, 2008).</li> </ul>
<b>Challenges/ Barriers:</b>	n/a
<b>Contact Information</b>	Christina Nagy-Oh, Manager of Environmental Initiatives, Public Works 905.727.3123 x 4382 <a href="mailto:cnagy-oh@e-aurora.ca">cnagy-oh@e-aurora.ca</a>



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MUNICIPALITIES:	
<b>Town of CALEDON</b>	
<b>Green Energy Provider:</b>	Direct Energy
<b>What's Being Powered:</b>	Caledon East Campus' (Fire Hall, OPP Station, Town Hall and Caledon Community Complex)
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ Caledon began purchasing green power in May 2006. First Ontario municipality to be green powered.</li> <li>▪ In 2008, switched to Direct Energy's Green Electricity offer.</li> <li>▪ Electricity purchases are the equivalent of removing 2,103,302 lbs of CO<sub>2</sub>.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>▪ A desire to lessen dependence on fossil fuels and improve air quality.</li> <li>▪ A desire to promote renewable energy as an environmental action.</li> <li>▪ Fits with the town's existing environmental values (and Greenest Town in Ontario Award).</li> <li>▪ Also fits with strategic environmental commitments (member of Canada's Green Building Council &amp; the Federation of Canadian Municipalities' Partners for Climate Protection).</li> <li>▪ Green power helps meet municipal CO<sub>2</sub> reduction targets and energy efficiency commitment.</li> <li>▪ Caledon's purchase generates goodwill, education and awareness.</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>▪ Council passed resolution W-59-2003 in 2003 which called for the Town to join the Federation of Canadian Municipality's Partners for Climate Protection (PCP) program, and establish greenhouse gas emission reduction targets.</li> <li>▪ The Environment Committee helped implement sustainable practices to reduce energy spending and waste.</li> <li>▪ The Town's Environmental Progress Action Plan supports greenhouse gas reduction targets and green purchasing.</li> </ul>
<b>Challenges/ Barriers:</b>	n/a
<b>Contact Information</b>	Jeremy Schembri Energy and Environment Coordinator, Office of Environmental progress 1-905-584-2272 ex. 4269 <a href="mailto:jeremy.schembri@caledon.ca">jeremy.schembri@caledon.ca</a>



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MUNICIPALITIES:	
<b>City of CAMBRIDGE</b>	
<b>Green Energy Provider:</b>	Bullfrog Power
<b>What's Being Powered:</b>	City Hall
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ The City of Cambridge was awarded the prestigious LEED Gold certification by the Canada Green Building Council for its new City Hall, the first City Hall in Canada to receive Gold certification. Officially opened in June 2008 and occupied by staff in February the same year, the Cambridge City Hall project began in 2005.</li> <li>▪ The new building employs features of sustainable design and represents the wave of the future in the field of architecture.</li> <li>▪ The design focuses on energy conservation with anticipated annual cost savings of about 42 percent.</li> <li>▪ It has numerous cutting-edge environmental features affecting lighting, heating, energy, air and water recycling.</li> <li>▪ The most visible feature of the building is the four-storey high “living wall”.</li> <li>▪ This eight-metre wall of vines and plants will act as a natural air purifier, cleaning and re-circulating air throughout the building.</li> <li>▪ They are purchasing green power from Bullfrog for 100% of their electricity usage for a minimum of two years entitles them to earn two LEED points.</li> </ul>
<b>Rationale/ Motivations:</b>	n/a
<b>Decision Making Process:</b>	n/a
<b>Challenges/ Barriers:</b>	n/a
<b>Contact Information</b>	Bob Paul Supervisor of Building Services 519.623.1340 x 4626 <a href="mailto:paulb@city.cambridge.on.ca">paulb@city.cambridge.on.ca</a>



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MUNICIPALITIES:	
<b>City of MISSISSAUGA</b>	
<b>Green Energy Provider:</b>	Bullfrog Power
<b>What's Being Powered:</b>	Civic Centre Purchase volume in excess of 5,000 MWh annually.
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ The Civic Centre became Bullfrog powered in April 2008 for a one year pilot project, and has been renewed annually since.</li> <li>▪ Feedback from the community has been very positive.</li> <li>▪ The City is considering the possibility of purchasing green power for other municipal buildings in the future.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>▪ To demonstrate leadership</li> <li>▪ Promote green power</li> <li>▪ Reduce emissions</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>▪ Municipal staff motivated the project, which was then supported by council.</li> </ul>
<b>Challenges/ Barriers:</b>	<ul style="list-style-type: none"> <li>▪ The amount of research required, which involved:               <ul style="list-style-type: none"> <li>▪ Ensuring the support and purchase of the best available green power option (one that promoted new facilities)</li> <li>▪ An assurance of credible green power sources.</li> <li>▪ Considerations of carbon credits, standards, regulations etc.</li> </ul> </li> </ul>
<b>Contact Information</b>	Rajan Balchandani Manager, Energy Management 905.615.3200 x 5771 <a href="mailto:rajan.balchandani@mississauga.ca">rajan.balchandani@mississauga.ca</a>



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MUNICIPALITIES:	
<b>Town of OAKVILLE</b>	
<b>Green Energy Provider:</b>	OHESI- Green Light Pact
<b>What's Being Powered:</b>	Town Hall
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ Oakville has been purchasing green power since 2005.</li> <li>▪ They annually purchase enough to offset 5% of town hall's annual energy consumption.</li> <li>▪ The energy usage is calculated annually and green power is purchased accordingly.</li> <li>▪ In 2007, Oakville reduced 37 tonnes of emissions.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>▪ The desire to demonstrate leadership.</li> <li>▪ Citizen education and awareness.</li> <li>▪ A willingness and enthusiasm to expand renewable energy consumption.</li> <li>▪ The Town of Oakville is awarded a certificate detailing yearly purchase.</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>▪ Oakville adopted the Environmental Strategic Plan supporting green energy production.</li> <li>▪ Council endorsed this Plan's green power recommendation in 2005 (This led to purchase and budgeting for renewable energy).</li> </ul>
<b>Challenges/ Barriers:</b>	<ul style="list-style-type: none"> <li>▪ Current budget restrictions limit the town's green power purchase (The 5% purchase amount is defined by their budget).</li> <li>▪ Requests to increase green power consumption which, assessed annually are often infeasible due to competing requests.</li> </ul>
<b>Contact Information</b>	Trisha Leszczynski Environmental Policy Coordinator 905.845.6601 x 3948 <a href="mailto:TLeszczynski@oakville.ca">TLeszczynski@oakville.ca</a>



MUNICIPALITIES:	
<b>Regional Municipality of PEEL</b>	
<b>Green Energy Provider:</b>	Direct Energy Business
<b>What's Being Powered:</b>	<ul style="list-style-type: none"> <li>▪ Region of Peel Headquarters - 10 Peel Centre Drive, Brampton</li> <li>▪ 16 John St., Brampton</li> <li>▪ 1001 Peter Robinson Blvd., Brampton</li> <li>▪ 7075 Rexwood Rd., Brampton</li> <li>▪ 80 Allan Rd., Brampton</li> </ul>
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ Direct Energy Business provides the Region of Peel with EcoLogo certified Green Power. When a customer purchases EcoLogo certified green power from Direct Energy, they are supporting the EcoLogo certified infrastructure (Current &amp; Future) and the production of green power.</li> <li>▪ The Region of Peel began purchasing Green Power Jan. 1, 2009.</li> <li>▪ 6 sites currently purchase Green Power.</li> <li>▪ Over 10,000 MWH Green Power Purchased in 2009.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>▪ To demonstrate leadership and promote Green Energy.</li> <li>▪ To increase citizen education and awareness.</li> <li>▪ To reduce carbon emissions and lessen dependence on fossil fuels.</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>▪ The Region of Peel put out a RFP for the supply of electricity, natural gas and administrative services.</li> </ul>
<b>Challenges/ Barriers:</b>	n/a
<b>Contact Information</b>	<p>Jillian Gorbold                      Manager Energy Services Real Property Asset Management                      905.791.7800 x 4823  <a href="mailto:Jillian.gorbold@peelregion.ca">Jillian.gorbold@peelregion.ca</a></p>



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MUNICIPALITIES:	
<b>City of TORONTO</b>	
<b>Green Energy Provider:</b>	Bullfrog Power
<b>What's Being Powered:</b>	<ul style="list-style-type: none"> <li>▪ City Hall</li> <li>▪ Nathan Phillips Square</li> <li>▪ Hybrid-electric ice-resurfacers</li> <li>▪ Plug-in hybrid-electric vehicles</li> </ul>
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ Purchase volume in excess of 16,000 MWh annually.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>▪ City reduces its emissions footprint by over 4,000 tonnes of CO<sub>2</sub>.</li> <li>▪ The City is showcasing City Hall as a sustainable building to reduce its environmental footprint.</li> <li>▪ This green power purchase also reduces emissions of sulphur dioxide (SO<sub>2</sub>) by 12,000 kg and nitrogen oxide (NO) by 5,000 kg.</li> <li>▪ The City's green power purchase also supports its ambitious goal of achieving an 80% reduction in greenhouse gas emissions by 2050.</li> <li>▪ To demonstrate the City's effort and commitment to renewable energy and greenhouse gas reduction goals.</li> <li>▪ To stimulate the production of additional renewable energy and further development of green power generation.</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>▪ The City of Toronto put out a RFP for the supply of green electricity.</li> </ul>
<b>Challenges/ Barriers:</b>	<ul style="list-style-type: none"> <li>▪ Funding</li> </ul>
<b>Contact Information</b>	Hao Yuen Supervisor, Energy & Waste Management 416.392.8332 <a href="mailto:hyuen@toronto.ca">hyuen@toronto.ca</a>

MUNICIPALITIES:	
<b>Regional Municipality of YORK</b>	
<b>Green Energy Provider:</b>	Bullfrog Power
<b>What's Being Powered:</b>	<ul style="list-style-type: none"> <li>▪ Administrative Centre</li> <li>▪ East Gwillimbury Household Hazardous Waste Depot</li> <li>▪ Stouffville Pumping Station</li> <li>▪ York Region Transit (YRT)/VIVA Terminals VIVA Stations</li> </ul>
<b>Details:</b>	<ul style="list-style-type: none"> <li>▪ York issued an RFP in January 2008 for the provision of EcoLogo<sup>M</sup> certified green power from qualified companies.</li> <li>▪ Together the Town of Aurora and The Regional Municipality of York reached a purchase agreement with Bullfrog.</li> <li>▪ They reached an initial one year contract, and have subsequently renewed for a third year.</li> </ul>
<b>Rationale/ Motivations:</b>	<ul style="list-style-type: none"> <li>▪ To demonstrate leadership</li> <li>▪ To exhibit stewardship in Ontario</li> <li>▪ To benefit the environment and residents of the region</li> </ul>
<b>Decision Making Process:</b>	<ul style="list-style-type: none"> <li>▪ In 2002 Regional Council adopted the “Governments Incorporating Procurement Practices which are Environmentally Responsible” (GIPPER) Statement of Principle, committing to green procurement and waste reduction through the Vision 2026 Statement and Corporate Clean Air Committee initiative.</li> <li>▪ A major consideration was to be assured that the energy being supported was composed of 80% hydro, 20% wind</li> <li>▪ Sought marketing assistance and outreach for green power launch and implementation.</li> <li>▪ Sought reinvestment into expansion of wind energy in Ontario.</li> <li>▪ Sought assurance that all green power is produced in Ontario promoting local air quality.</li> </ul>
<b>Challenges/ Barriers:</b>	<ul style="list-style-type: none"> <li>▪ The amount of research involved.</li> <li>▪ Understanding the market and where green power is sourced.</li> <li>▪ The evaluation of all criteria for green power options (i.e. reinvestment into further initiatives, supporting local power generators) to determine the best choice.</li> </ul>



## Green Power Purchasing for Ontario Municipalities

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## Conclusion – Consideration for Municipalities

### WHAT PROSPECTIVE MUNICIPALITIES SHOULD CONSIDER:

Committing to purchase Green Power might make a great deal of sense for all the right reasons but there are a number of factors to consider when choosing a supplier and the particulars of the renewable energy options. At a minimum those factors should include; Financial Strength, Verification, Product Choice, Price and Social Responsibility.

**Local sourcing** – By requiring local sourcing, you are ensuring that you are purchasing green power in the first place, and displacing the same amount of power produced by fossil fuels. For example advancement of renewable electricity generation industry – ensure that a portion of the premium collected is directed towards the development of new power generation facilities in the province, thereby stimulating a greater reliance on renewables.

### FINANCIAL STRENGTH

A supplier with a strong financial background is a necessity because municipalities need their supplier to honour the entire term of the contract. This in turn requires that the supplier honour their commitment with any generating counterparty. In light of the global credit difficulties, more than ever before suppliers should be expected to substantiate claims of financial stability. Financial strength can be ascertained through audited annual reports, web sites and/or bond ratings.

### PRODUCT VERIFICATION

In Canada EcoLogo is the de facto standard in substantiating vendor claims of the authenticity of renewable supply. Approved suppliers of green power can be found on the EcoLogo website.

[www.ecologo.org/en/certifiedgreenproducts/details.asp?product\\_type\\_id=13](http://www.ecologo.org/en/certifiedgreenproducts/details.asp?product_type_id=13)

### PRODUCT CHOICE

While there are a variety of sources of renewable power with varying degrees of environmental benefit; solar, “run of river” hydro and wind all produce zero greenhouse gas emissions.

Of equal importance to the type of generation is the choice in product options available to the municipality. The broad definition of “product” includes such attributes as billing,



## Green Power Purchasing for Ontario Municipalities

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percentage green and choice in assignment. To clarify the latter, a purchase of 1000MWHs has the same benefit whether it is assigned to a specific building or spread across the portfolio of municipal buildings. If submitting for LEEDs certification it is worthwhile to ensure that 100% of the building be powered with EcoLogo certified power. However, assigning increments across all departments may be advantageous depending on the goals of the departments within the municipality. Billing options typically include a choice to be billed directly by the retailer or to have the charges rolled up inside the electric utility bill.

### **PRICE**

Ultimately buying renewable power is similar to purchasing other goods and services and price must be considered. Make certain that you get apples to apples comparison so that price can be fairly included in the assessment. Avoid stipulating unnecessarily stringent requirements that may preclude a fair and competitive process.

### **SOCIAL RESPONSIBILITY**

Social responsibility is difficult to assess but for the purposes of sustainability should include the record of the supplier in Ontario and all other jurisdictions where they operate. For example some of the assessment could include: to what extent does this company support community development, equitable employment, charitable activities and other pertinent social factors?