

A woman who stands out

JoAnne Butler knows all about standing out in a crowd.

After all, she was so good in Grade 10 math that she was the only one in her class who didn't have to write the final exam. And in 1978, as one of just a handful of female civil engineering graduates from Queen's University, she became a rare woman in the Alberta oil patch.

Excelling in a male-dominated industry, Ms. Butler was soon the first female engineer to work for American oil giant Amoco Corp. in the Middle East. She went on to become the first woman president of the Canadian Chamber of Commerce in Mexico while there as president of TransAlta Mexico supporting the construction and operations of two gas-fired electrical generation plants – and becoming fluent in Spanish in her forties.

Now, as the OPA's Vice-President of Electricity Resources, or the person who oversees virtually every contracted megawatt of electricity generation in Ontario, she is being singled out again.



JoAnne Butler

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This is the second issue of the OPA's relaunched newsletter, *Arc*. Six times a year, it will bring to your inbox a mix of news, features and information about the OPA's initiatives and the staff behind them. We hope you enjoy it.



Joe Green, ENBALA Power Networks, tracks electricity use with Michael McRitchie, Sunnybrook Health Sciences Centre.

CONSERVATION: grant pays big dividends

A decision by the OPA to support an innovative Ontario business at a critical time is continuing to pay benefits to the province.

ENBALA Power Networks received a grant from the OPA's Conservation Fund in 2011 to help it test an idea for balancing demand on Ontario's electricity grid.

In the past two years, ENBALA (the name is a shortened form of "energy balance") has used that grant to develop technology that connects large electricity users to the grid and helps them respond to real-time fluctuations in demand and keep the grid in balance.

Sunnybrook Health Sciences Centre is the latest operation to connect to the ENBALA technology. Five chillers at the hospital have been linked to the Independent Electricity System Operator (IESO), which manages the reliability of the provincial power grid.

Here's how it works: the IESO sends continuous signals to the ENBALA system, which monitors Sunnybrook's power needs. If the hospital determines it can spare the electricity, it shifts it to the grid (and receives payment for it). The shift is often for a very short period of time but it can save the IESO from having to buy expensive power from outside Ontario.

"This initiative provides a new opportunity for Sunnybrook to contribute to the overall reliability of Ontario's power system and generate new revenue to help sustain our services – all without impacting the comfort of our patients or our employees," Michael Young, the hospital's chief administrative officer, said at an October 31 launch event.

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For more information on the Conservation Fund,
<http://www.powerauthority.on.ca/cfund>

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The hospital joins other big power users in the aggregate Grid Balance initiative, including McMaster University, Confederation Freezers, Wal-Mart, Atlantic Packaging and Collingwood Public Utilities. ENBALA has been contracted by the OPA to provide up to four megawatts (MW) of demand response power.

The growth of the ENBALA network reinforces the decision by the OPA to offer a \$300,000 grant from its Conservation Fund.

"We see a lot of promise in this technology," said the fund's manager, Jenni Myllynen. "We expect it to help not only make Ontario's electricity grid smart but also to engage the demand-side, large industrial users because it offers them a financial incentive to participate in a program that responds to the needs of the grid."

Ron Dizey, president and CEO of ENBALA, said the investment by the Conservation Fund is providing value back to the provincial power system. "With the fund's support, we have engaged leading Ontario organizations such as Sunnybrook Health Sciences Centre, McMaster University and Confederation Freezers in a province-wide grid initiative that is supporting the real-time balance of electricity supply and demand," he said.

TWO NEW MEMBERS HAVE BEEN APPOINTED TO THE OPA BOARD OF DIRECTORS

Susanna Youn Sun Han of Toronto and Deborah Whale of Alma, Ont., were appointed to two-year terms by Energy Minister Bob Chiarelli.

Ms. Han is the chief financial officer of Urbancorp, a residential home builder. A Chartered Accountant, she is a graduate of the Richard Ivey School of Business at the University of Western Ontario.

She has spent more than a decade bidding on public sector projects and advising some public sector authorities on their procurements and is a recognized leader in Canadian public infrastructure procurement.

Ms. Whale, a graduate of Queen's University, has been active for decades in the Ontario and Canadian agriculture sector. She is currently vice-president and owner/operator of Clovermead Farms Inc., a dairy and beef operation in Wellington County.

She is also vice-chair of the Ontario Farm Products Marketing Commission, which is responsible for the conduct of the province's regulated agricultural marketing boards and agencies.

CONSERVATION

Communities honoured for leadership

Three Ontario municipalities received top honours at this year's Community Conservation Awards, which celebrate the work municipalities are doing to support province-wide conservation goals.

Burlington, Sault Ste. Marie and South-West Oxford received their awards at a Local Authority Services Symposium on Dec. 6, which was organized by the Association of Municipalities of Ontario (AMO).

In congratulating the winners, AMO president Russ Powers said municipalities are at the forefront of reducing energy costs and fighting climate change.

"Conservation is not just the cheapest energy option," he said. "As these municipalities have shown, it delivers substantial economic, social and environmental benefits to the whole community."

The Community Conservation Awards are given to communities that demonstrate strong achievement in conservation leadership, innovation and market transformation, and corporate/internal and community engagement.

Now in its second year, the initiative is a collaborative effort led by the OPA with AMO and the Electricity Distributors Association (EDA).

"We are pleased to recognize these communities for their achievements in energy conservation and commitment towards ensuring long-term energy sustainability," said Andrew Pride, OPA's Vice-President, Conservation.

"Burlington, Sault Ste. Marie and South-West Oxford have taken the initiative to promote conservation in their local communities and demonstrate their leadership province-wide."

"We commend these municipalities for working hard to engage with their communities and to build broad and informed support for conservation," said EDA chair Rene Gatten. "These municipalities are leading examples for all communities in Ontario working to get the most from our energy resources, often in partnership with local electrical utilities."

Energy Minister Bob Chiarelli also congratulated the winners for their commitment to energy conservation.

"The recently announced Long-Term Energy Plan confirmed conservation will be the first resource considered to meet emerging energy needs, where cost-effective," he said. "The leadership of these communities will help implement this goal."

Eight finalists were selected by a panel comprising OPA conservation specialists as well as five external judges who are experts in the municipal conservation field. The winners represent population categories up to 50,000, 50,000 to 150,000, and over 150,000.

The awards are open to all municipalities in Ontario. Participating municipalities were required to provide a written submission that outlines their conservation efforts as well as a recent case study highlighting a specific conservation initiative.

More information about the Community Conservation Awards can be found at powerauthority.on.ca/ccs.

More information about Ontario's saveONenergy energy conservation programs can be found at www.saveonenergy.ca.

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The native of Perth in the Ottawa Valley has been named one of Canada's 100 Most Powerful Women for 2013. Ms. Butler was honoured by the Women's Executive Network from among hundreds of nominees at a gala in Toronto on December 4.

She is listed as a leader in the public sector, one of nine categories, and joins a diverse group of more than 650 women recognized over the past decade, including Bonnie Brooks of Hudson's Bay Co., author Margaret Atwood, Senator Marjory LeBreton and Olympic hockey champion Cassie Campbell.

"If I can influence even one person, inspire them to know there's no limit to what they can do, that's great," says Ms. Butler, a mother of three teenage daughters, who is also a board member of the Ontario Shores Centre for Mental Health Sciences in Whitby and the Technical Standards and Safety Authority of Ontario. She's also a 10K runner and an enthusiastic golfer.

"If you are good, work smart and get results, people will respect you and you will succeed, whether you're a man or a woman." 

PLANNING

OPA implementing energy project siting recommendations

The OPA is working with the Ministry of Energy and the Independent Electricity System Operator (IESO) helping to implement the recommendations of a report, *Engaging Local Communities in Ontario's Electricity Planning Continuum*, on the regional planning and siting of large energy infrastructure projects in Ontario.

The Ontario government has accepted all 18 recommendations in the report, which was released this past August by the OPA and the IESO.

The recommendations will help ensure that large energy infrastructure projects are properly located, improve municipal and public engagement and ensure greater predictability for the energy sector.

"The recommendations offer the potential for more insightful and effective electricity planning at the regional and municipal levels," said Amir Shalaby, Vice-President, Power System Planning, at the OPA.

"This will allow us to better understand how municipalities plan and to better explain what drives electricity planning for municipalities."

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The three core recommendations call for early and frequent community outreach, local voice and local responsibility, and more inter-ministerial coordination. The recommendations are designed to bring communities to the table, link local and provincial planning, reinforce the planning/siting continuum, and enhance electricity awareness and improve access to information.

The OPA has already started incorporating the recommendations that are within its mandate. For example, it has been engaging with local communities, municipal governments, First Nation and Métis communities and others in developing new regional plans. Eight of these plans are now under way across Ontario.

The OPA has also launched [new interactive web pages](#) for its regional planning initiatives. These pages will provide up-to-date information on the initiatives taking place in Ontario's 21 electricity regions.

The OPA has been working to enhance electricity awareness by improving access to information through its website. It has also been increasing access to its data by making it available to consumers, industry, municipal planners and academic researchers. In a related initiative, the government recently launched [emPOWERme](#), a new, interactive website to help energy consumers take charge of the power they use by better understanding the province's electricity system. It also launched an ["Open Government" initiative](#) to provide easier access to and sharing of public information.

Consistent with the report's recommendations on enhancing support for community energy planning, the OPA worked with Quality Urban Energy Systems of Tomorrow (QUEST) over the past year to develop a primer to assist communities as they develop their community energy plans. [The primer](#), published in November this year, provides context for energy planning in Ontario, including an overview of opportunities for collaboration across municipal energy planning and provincial/regional electricity planning.

Some recommendations will require coordination with other ministries. For example, the Ministry of Energy, the OPA and the IESO have been working with the Ministry of Municipal Affairs and Housing to identify ways to ensure that electricity infrastructure is an important element of the [Provincial Policy Statement](#).

Earlier this year, the government asked the OPA and the IESO to work together to develop recommendations for a new integrated regional energy planning process that would focus on improving how large energy infrastructure projects are sited in Ontario. Work was completed over the summer and the agencies submitted a report to the Minister of Energy on August 1.

The OPA and IESO engaged key stakeholders and associations that represented a broad range of interests, including First Nation and Métis groups, municipalities, local distribution companies, community leaders and the public. From within these groups, the OPA and IESO invited Ontario chiefs, Métis leaders, mayors, planners, developers, consumer groups, chambers of commerce and boards of trade, business improvement associations, residential and ratepayer associations, and community groups to provide feedback. 

CONSERVATION

Telling a story with graphics

The OPA is producing a series of infographics to present complex information quickly and clearly.

The first graphic, dealing with the saveONenergy FRIDGE & FREEZER PICKUP, commemorates a successful program that recycled more than 365,000 fridges and freezers since 2006. Local distribution companies are encouraged to use this infographic to promote the program in their newsletters or through social media.



To learn more and to participate in this program, visit saveonenergy.ca

[@saveONenergyONT](https://twitter.com/saveONenergyONT)



Five additional infographics will be forthcoming, including one called Investing in Our Future that notes progress in the Ontario electricity system since 2003. Other infographics will deal with saveONenergy programs, regional planning and conservation.

"We think these infographics are a great way to convey a lot of information on very complicated topics in a way that is easy to use for customers and stakeholders," said Megan Paul, corporate marketing manager for the OPA.

PROCUREMENT

New hydro project adds to Ontario supply



A new hydroelectric generating unit opening on the Mattagami River in northern Ontario will add clean electricity to Ontario's grid.

The addition of a generating unit at the existing two-unit Little Long Generating Station will add 67 megawatts (MW) to the existing capacity of 203.5 MW while an upgrade to an existing turbine will add another 7.5 MW. The power is expected to be flowing this winter.

Ultimately, the Lower Mattagami River hydroelectric project will be adding about 450 MW. The project consists of expansion at three existing stations and redevelopment of a new three-unit facility.

The work at the other two facilities is scheduled to be completed in 2014 and 2015. The newly developed facilities will be on line before the end of 2015.

The four-facility complex, which is located about 70 kilometres north of Kapuskasing, has been in service since 1963. It is operated remotely by Ontario Power Generation from a facility near Timmins under a Hydroelectric Energy Supply Agreement (HESA) with the OPA. Last summer, Energy Minister Bob Chiarelli announced that Moose Cree First Nation has partnered with Ontario Power Generation to build the expansion of this project, taking a stake of up to 25 percent.

The expansion at five hydroelectric generating projects was the subject of a directive by the Minister of Energy in 2007, which set a goal of adding more than 500 MW to the province's energy supply. This Lower Mattagami River project is the last project to come into service and is progressing on schedule.

"I am delighted to see this northern hydroelectric project coming on line," said JoAnne Butler, Vice President, Electricity Resources, at the OPA.

"This is the largest hydroelectric construction project in 40 years and it has reaffirmed the province's commitment to renewable energy while creating hundreds of jobs in the community. It is another successful project with First Nations' participation and contribution."

ENGAGEMENT

OPA's advisory committee gets down to business

The OPA has established a committee to advise its Board of Directors and executive on policy issues related to the OPA's mandate. An ambitious schedule of meetings in 2014 has been set.

The Stakeholder Advisory Committee is composed of 15 people with significant expertise in Ontario's electricity sector. Brian Bentz, CEO of PowerStream, was earlier appointed as the committee chair.

In providing a forum to receive advice and recommendations from a diverse range of interests, the committee will build on existing OPA outreach activities, including the Advisory Council on Conservation and the First Nation and Métis Advisory Group.

The OPA's Board of Directors appointed the members of the committee. Joining Mr. Bentz are:

- Steve Baker (president, Union Gas Limited)*
- John Beaucauge (principal, Counsel Public Affairs)*
- Bryce Conrad (president and CEO, Hydro Ottawa)*
- Laura Cooke (vice-president, Corporate Relations, Hydro One Networks Inc.)*
- Jared Donald (president, Coenergy Canada)*
- Julie Girvan (independent consultant/consumer advocate)*
- Valerie Helbrunner (partner, Torsy LLP)*
- Tim Gray (executive director, Environmental Defence)*
- Kristin Jenkins (vice-president, Communications, OPA)*
- Geoff Lupton (director, energy, fleet and traffic, City of Hamilton)*
- Brenda Marshall (vice-president, marketing, TransAlta)*
- Rob Mace (president and CEO, Thunder Bay Hydro Electricity Distribution Inc.)*
- Ian Rowlands (professor, environment and resource studies, and associate director, Waterloo Institute for Sustainable Energy, University of Waterloo)*
- James Scongack (vice-president, corporate affairs, Bruce Power)*
- David Timm (vice-president, strategic affairs, GDF SUEZ Canada Ltd.)*
- Adam White (president, AMPCO)*

OPA Chair Jim Hinds said that there will be more time to do more stakeholder outreach up front as Ontario moves into a period of adequate supply. "If the OPA and SAC work well together, we will design better initiatives, achieve greater consensus around them and have better support for their implementation," he said.

Mr. Hinds added that the committee members bring "an extremely broad range of expertise and experience" to the table. "I believe they will provide tremendous value to the OPA as we continue to fulfill our mandate to the ratepayers of Ontario," he said.

The committee has six meetings planned for 2014: January 7, March 11, May 13, June 24, September 8 and November 25.

More information is available here: <http://powerauthority.on.ca/stakeholder-engagement/stakeholder-advisory-committee>

CONSERVATION

Latest results released

2012
Conservation Results
December 2013



ONTARIO
POWER AUTHORITY

Conservation programs in Ontario achieved 671 kilowatt-hours (kWh) of verified annual energy savings and reduced 643 megawatts (MW) of demand across the province in 2012, according to the latest annual results report.

Since the launch of saveONenergy programs in January 2011, local distribution companies have generated 379 MW of demand reduction and saved 3,906 gigawatt-hours (GWh) of energy cumulatively.

"Ontario is also continuously piloting new technologies and programs that are cost effective to help customers better manage their energy consumption," said Andrew Pride, the OPA's Vice President of Conservation. He noted that every dollar invested in energy-efficiency programs has saved \$2 in avoided energy costs.

The 2012 Conservation Results report is available here:

<http://www.powerauthority.on.ca/news/2012-conservation-results-report>



EMPLOYERS

OPA wins award for employers

The OPA has been honoured as one of Greater Toronto's top employers for the fourth consecutive time.

The inclusion of the OPA on Greater Toronto's Top Employers for 2014 was announced in a special supplement in the Globe and Mail on Nov. 27 and on line at the job-search engine Eluta.ca.

The Top Employers award, now in its ninth year, is an annual competition to recognize companies and organizations that lead in offering exceptional places to work.

"We can take great pride in this recognition as a highly regarded employer," said OPA CEO Colin Andersen. "The award will also help us continue to attract the best and brightest people to address the challenges of our mandate."

The cited reason for recognizing the OPA, include its parental leave benefits, in-house environmental initiatives and community engagement activities.

CONSERVATION

OPA wins environmental reporting award



OPA CEO Colin Andersen accepts award from WWF-Canada CEO David Miller

The Ontario Power Authority (OPA) has been recognized for its initiatives to reduce the environmental footprint of its internal operations.

The OPA has won this year's HP Change the Equation sustainability reporting contest for its 2012-2013 internal environmental report. The report covers the OPA's efforts to reduce waste, paper use and electricity consumption as well as efforts to procure more environmentally responsible office supplies and increase employee engagement. The OPA's performance results for 2012-13 are included, as are its objectives for 2013-2014.

The contest is part of WWF-Canada's Living Planet @ Work program, championed by HP, designed to empower and engage employees so they can drive sustainable practices at work. In fact it was the OPA's Conservation Fund that enabled WWF to first develop and pilot the Living Planet @ Work program in 2009.

The OPA was also one of the pilot participants and continues to be an active member of the program.

OPA CEO Colin Andersen said the Living Planet @ Work program has provided valuable support to the OPA's internal environmental efforts – including resources, tools and guidance. "Awards such as this help engage our employees and provide further impetus for our efforts," he said.

"I would like to thank the OPA for its valuable contribution to the Living Planet @ Work program and for the leadership and commitment the organization, especially their internal environmental committee, has demonstrated by writing their first sustainability report and winning this award," said Hadley Archer, VP, Strategic Partnerships and Development, at WWF-Canada.

The OPA received assistance in preparing the report from fourth-year students in the University of Waterloo's Environment and Business program. The reports were judged by Dr. Dirk Matten, professor at the Schulich School of Business at York University and the HP Chair in Corporate Social Responsibility.

The OPA has also received other recognition for its efforts, winning Pollution Probe's Clean Air Commute for its size category for the past three years and WWF-Canada's Green Team of the year in 2012. In 2011, the OPA was selected as one of Canada's Greenest Employers. 

For more information:

Living Planet @ Work: <http://atwork.wwf.ca/>

HP's Change the Equation Sustainability Reporting Contest:

<http://atwork.wwf.ca/EN/resources/ChangeTheEquationContestBrochure.cfm>

CONSERVATION

First Nation communities picked for project

Twelve communities have been chosen to participate in the first year of the saveONenergy Aboriginal Conservation Program (ACP), the first program of its kind in the province.

The announcement was made on August 29 by the OPA and Aboriginal Affairs Minister David Zimmer.

The ACP provides customized conservation services to help First Nation communities, including remote and northern communities, reduce their electricity consumption and improve home comfort. In addition to the direct work with First Nation communities, there was also outreach to Métis and urban Aboriginal people to ensure that they are aware and can take advantage of province-wide conservation programs available through their local distribution companies.

More than 30 First Nation communities applied to participate. Those selected to participate are: Keewayin, Wunnimin Lake, Moose Cree, Pic River, Michipicoten, Munsee-Delaware, Beausoleil, Walpole Island, Saugeen, Nawash, Thessalon and Nipissing.

Chief Roger Thomas of Munsee-Delaware said residents of his community are happy to be chosen for the program.

"We will be learning about conservation of energy with our citizens and hopefully saving dollars on the Nation's energy bills by switching lighting in our community assets," he told Anishinabek News.

OPA CEO Colin Andersen praised the ACP as "an example of successful collaboration between his organization and First Nations" and noted that First Nation communities were also engaged in the review of Ontario's Long Term Energy Plan, which was released last week. Mr. Zimmer said that ACP will help communities manage their electricity costs.

"I hope to see many more communities take part in the next year of the program," he said.

Participating communities will have the opportunity to work with a certified energy auditor, who will recommend energy-saving measures based on an assessment of their homes. Eligible businesses and facilities can receive assessments for their lighting and water-heating systems as part of the program. 

PROCUREMENT

FIT Program applications window closing



awarding up to
123.5
megawatts
worth of contracts

The OPA began accepting another round of applications for renewable energy projects under the FIT Program on November 4.

Projects must have a proposed capacity of more than 10 kilowatts (kW) and up to 500 kW. The application period for FIT 3 will close on December 13, 2013 at one second before midnight EST. The OPA will award up to 123.5 megawatts (MW) worth of contracts based on the applications received during this period.

The OPA is also accepting applications during the same time frame for the Unconstructed Rooftop Solar Pilot project. The pilot, which has a separate procurement target of up to 15 MW, resulted from a direction from the Minister of Energy to the OPA to design a pilot stream within the FIT Program for Rooftop Solar Projects on Unconstructed Buildings.

The FIT rules and contract have specific provisions for the changes in relevant sections of the program documents and process to ensure that these projects are developed and evaluated appropriately.

Shawn Cronkwright, OPA's director of renewables procurement, said: "With the launch of the revised microFIT 3 Program earlier this year and the FIT 3 Program in early November the OPA continues to build on the success of these programs with changes that will continue to encourage more clean energy and greater community, Aboriginal community and public sector participation, while providing better value to electricity consumers."

For more information on the program and the pilot, please visit the [FIT website](#).

A procurement process for renewable energy projects larger than 500 kW is currently under development. More details will be provided on the OPA website when they are available.

PLANNING

Revised Long-Term Energy Plan released

After months of hard work – and significant input by the OPA – the revised Long-Term Energy Plan (LTEP) has been released by the Ministry of Energy.

The new LTEP, titled *Achieving Balance*, was made public on December 2. It updates a 2010 document and provides a blueprint to ensure the reliable supply of clean and affordable electricity for the next 20 years.

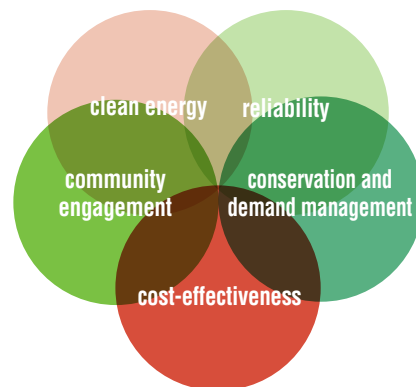
The updated LTEP sets targets for various sources of generation in Ontario, including renewable, nuclear and natural gas. It emphasizes that coal-fired generation will play no role in the future.

"This plan reflects what we heard from thousands of people and dozens of organizations right across the province," said Energy Minister Bob Chiarelli. "Our vision for Ontario is to create a clean, affordable and reliable energy system that focuses on conservation and addresses regional needs."

Chuck Farmer, the OPA's director of conservation integration, who led a team of OPA planners working on this project, said the update reflects changes that have occurred in the electricity system since the LTEP was released in 2010. Future procurements can be expected to be timed to meet system needs, he added.

Mr. Farmer said the LTEP is reflective of the extensive consultation and engagement undertaken during its development and demonstrates the value of outreach.

"The OPA can be proud of the role we played, providing extensive advice before and during the plan development," he said.



The Ministry of Energy said LTEP balances five principles that will guide future decisions: cost-effectiveness, reliability, clean energy, community engagement and an emphasis on conservation and demand management before building new generation.

Compared to the 2010 LTEP, *Achieving Balance* is expected to reduce projected

cost increases in the cumulative cost of electricity service by \$16 billion in the near term (2013-2017) and \$70 billion over the life of the plan to 2030. It said these cost reductions will be realized even as Ontario phases out coal-fired generation by the end of 2014.