

Electricity

Solutions for Southwestern GTA



ETOBICOKE • MISSISSAUGA • OAKVILLE

Working together to build a stronger tomorrow

Ontario's plan to strengthen the electricity system for the southwestern GTA is a key element of the province's overall energy objectives, which include fighting climate change through conservation as well as eliminating coal in favour of cleaner, greener forms of energy.

As the province's energy planners, the Ontario Power Authority (OPA) is working to ensure your region gets the reliable energy supply it needs for years to come. And you can help that plan take shape.

Mississauga is one of Canada's fastest-growing urban centres and home to more than 18,000 businesses, including 50 of Canada's Fortune 500 offices. Nearby, in Oakville, there are more than 260 corporate headquarters, ranging from technology to tourism.

The region's robust growth is reflected in its peak electricity load, which has grown more than twice as quickly as the provincial average. This has put an increased strain on the electrical infrastructure that serves your community. The southwestern Greater Toronto Area has become a major load centre, requiring over 3,500 megawatts to meet peak electricity demand.

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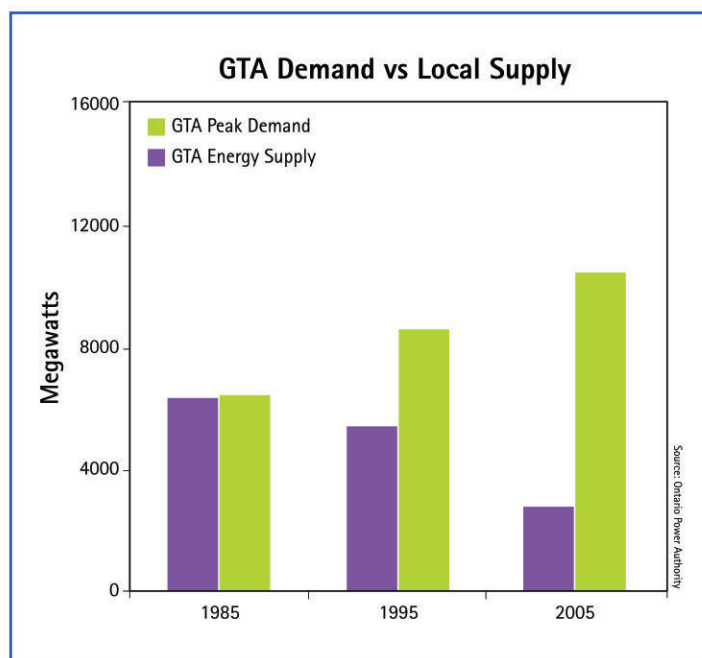
The OPA is taking steps to ensure your region has reliable supply. It supports Ontario's commitment to fight climate change by getting off dirty coal-fired generation by 2014. It is Canada's single biggest climate change initiative.

Power generation in the GTA declined when the Lakeview Generating Station was closed in 2005 as part of the government's commitment to eliminate coal. It

removed 1,140 megawatts of local power; enough energy for more than 280,000 homes.

For your community to continue to grow and prosper, families and businesses need to count on a reliable source of electricity today and in the future.

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Have your say on October 28

On October 28, join George Smitherman, Deputy Premier and Minister of Energy and Infrastructure, to discuss Ontario's long-term energy needs and how the southwestern Greater Toronto Area factors into it, including the pursuit of reliable, cleaner sources of electricity and the plan to build a new natural gas power plant in Oakville, Mississauga or Etobicoke. The town hall meeting is to take place from 7 p.m. to 9:30 p.m. at the Living Arts Centre, 4141 Living Arts Drive, Mississauga. An open house will precede the meeting, beginning at 5 p.m. at the same location.

Don't miss out on incentives to conserve



Several conservation programs are currently offered by the Ontario Power Authority together with your local electric utility. Take advantage of them now!

Why would someone want to pay you to install an energy-efficient air conditioner or programmable thermostat? Or give you \$25 to put in a device to turn up the temperature in your house on hot days so slightly you won't even notice it? Or offer to take away your old basement fridge for free? Because all of these activities result in electricity conservation. Ontario needs to reduce electricity use, and the Ontario Power Authority (OPA) and your local electric utility are offering generous incentives to convince you to use less electricity.

"Conservation has an important role to play in meeting our power needs," says Paul Shervill, OPA vice-president of conservation and sector development. "We are encouraging consumers to use electricity wisely. To do that, we have introduced a range of conservation programs to provide them with the tools to help them use less electricity. The goal in the southwestern Greater Toronto Area is to

achieve a regional reduction of some 500 megawatts by 2014 through conservation."

Conservation helps reduce the strain on Ontario's electricity system, ensuring a more reliable supply of power for all users. It also reduces the need for investment in generation and transmission resources, and for expensive imports of electricity from neighbouring jurisdictions. It has a lower cost than other alternatives for supply.

Conservation products and services contribute to local and regional employment as well as create jobs and new businesses. They can reduce electricity bills, which represents a valuable opportunity for every homeowner, business, industry and institution to save money. Our environment also benefits from conservation, by reducing greenhouse gases and other emissions that can cause air pollution, acid rain and smog. The OPA has developed programs for every sector of the economy – residential, commercial, industrial and institutional.

Some of the residential programs available include:



The Great Refrigerator Roundup

That old, inefficient second fridge of yours is wasting between \$120 - \$150 per year in electricity. Book an appointment today at www.everykilowattcounts.com and we will come pick it up for FREE – even haul it out of your basement for you. More than 95 percent of all the materials from refrigerators picked up are recycled and go to build projects such as bridges in Ontario.

Cool Savings Rebate

You can save up to \$550 on ENERGY STAR® qualified heating and cooling systems installed by a participating contractor. If you're looking to replace your air conditioning system with one that is ENERGY STAR® qualified or higher, then we have attractive rebates to help you do just that. There also rebates to install a programmable thermostat or upgrade to a mid- or high-efficiency furnace with an electronically commutated motor. And then you will keep on saving up to \$250 every year on your electricity bill.



peaksaver®

Sign up and receive a cool \$25 for having a control device installed on your thermostat. On hot summer days, your utility will be able to turn up the temperature in your house by just a few degrees for a short period of time – and you likely won't even notice it. You can help reduce the demand for electricity in your community, and you'll feel great knowing you're doing something good for the environment.

The Every Kilowatt Counts Power Savings Event

From Oct. 1 to Nov. 16, access money-saving coupons at participating retailers or download them from www.everykilowattcounts.com toward the purchase of simple, energy-saving household items such as ENERGY STAR® light bulbs and fixtures, heavy-duty outdoor timers and power bars with automatic shut-off or built-in timers. Save money and kilowatts, and watch your savings add up.



For more information on these programs please visit: www.everykilowattcounts.com

Appliance Recycling Centre in Oakville

The OPA contracts with ARCA, a company that provides full-service appliance recycling programs to utility companies throughout North America, to run the Great Refrigerator Roundup program.



ARCA Canada opened a state-of-the-art recycling facility on South Service Road West in Oakville to decommission and recycle appliances picked up through the OPA program. Almost every fridge, freezer and air conditioner collected through the Great Refrigerator Roundup ends up at this facility.

ARCA recycles appliances using a multi-step process that removes harmful substances, such as CFCs and oil, in an environmentally safe manner and recycles as much of the plastic, copper, aluminum and steel as possible, leaving only very little material, less than five percent, to go to a landfill.

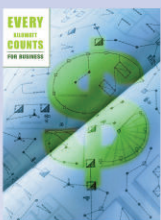
This program has also resulted in about 100 new jobs in Ontario, many at this Oakville facility.

Did you know?

- For every 10 – 12 old fridges permanently removed and decommissioned, one typical Ontario home is effectively removed from the electricity grid.
- Refrigerator, freezer and window air conditioning technologies have dramatically improved over the past 20 years. A typical fridge built in the late 1980s uses 1,500 kilowatt-hours of electricity annually, costing about \$180 per year, while a new ENERGY STAR® rated fridge will use only 25 to 30 percent as much.

Companies can ring up savings

Businesses and institutions across the province are doing their part, too. There are several programs to help with their electricity conservation efforts:



Electricity Retrofit Incentive Program

Are you thinking about retrofitting your business? If you include energy-efficient upgrades, you could be eligible for incentives under this program.

Power Saving Blitz

Specifically designed for small businesses, this program offers a free electricity assessment, material and labour for turn-key lighting and water heating retrofits at no cost, up to \$1,000.



High Performance New Construction

Constructing a new commercial building? This program offers design assistance and attractive financial incentives to encourage builders and developers to incorporate sustainable building practices and energy-efficient features in their new construction and major renovation projects.

Demand Response – If your business can curtail its demand at certain times of the day consider participating in one of the OPA's demand response programs – this could even potentially be a new source of revenue for your business.

For more information on these programs please visit: www.everykilowattcounts.com/business

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"With our strong foundation of nuclear and hydropower, we can focus on increasing energy efficiency and adding new supplies of cleaner, greener sources of energy, such as wind, solar and biomass," says George Smitherman, Deputy Premier and Minister of Energy and Infrastructure. "At the same time, we are also investing in carefully considered, clean, natural gas plants, which provide power where it is needed and make Ontario's grid more efficient and reliable."

Energy conservation is the cornerstone of Ontario's energy plan. That's because the most important megawatt of electricity is the one we don't use. As part of a broader 1,100-megawatt GTA-wide initiative, the OPA is looking to find 500 megawatts of conservation in the southwestern GTA by 2014.

"Conservation is always our first choice when we think of electricity supply," says Amir Shalaby, the OPA's vice-president of power system planning. "Using less electricity – conservation – and using it at off-peak times, when it's more available at cheaper prices – demand management – are the best resources we have at our disposal. They're fast to implement, cheaper than building new generating stations, create no harmful emissions, and they are something almost everybody in Ontario can help with."

The next step is increasing our energy supply from renewable sources like wind, solar and biomass. Since 2003, more than 530 megawatts of new renewable energy has come online. There are another 2,100 megawatts of signed renewables contracts in place today, and by year end it is expected there will be contracts for an additional 500 megawatts.

Ontario is also investing in cleaner sources of electricity, like natural gas, which reduce our carbon footprint by producing less than half

the greenhouse gases, less than one-third of the nitrogen oxides and about one percent of the sulphur dioxide of an average coal-fired plant.

Gas-fired generation also accommodates more renewable energy in the province's supply mix because of its ability to respond quickly to help meet peak demand when more variable sources like wind or solar power aren't available.

Across the GTA, natural gas plants will provide new sources of local power to meet community needs. The Portlands Energy Centre, in the heart of Toronto, began operating earlier this year. The Goreway Generating Station in Brampton and the Halton Hills Generating Station are at various stages of completion. The Greenfield South Project in Mississauga has received approval to also go ahead.

In addition to all of these measures, the OPA has identified a gap of approximately 850 megawatts of additional generation in the southwestern GTA. In August, the OPA began a competitive bid process to find a developer to build that generation – as a combined-cycle natural gas electricity plant.

For the plant to effectively contribute to the reliability of Ontario's electricity system, it must be built in southeast Oakville, southern Mississauga or southwest Etobicoke. By selecting one of these locations, it reduces the need for long transmission lines through the region. The plant's exact location will be determined through the competitive bid process.

The plant will meet or surpass Ontario standards for safety, emissions, noise, other environment and health-related matters, as well as municipal planning, zoning, water use and waste management requirements. It will have an in-service date of no later than Dec. 31, 2013.



Stay informed

Electricity Solutions for the Southwestern GTA is published by the Ontario Power Authority to describe plans to address the specific electricity system needs of local communities, including portions of Mississauga, Oakville, Etobicoke, Halton Hills, Vaughan and Toronto. For more information, visit our project website at www.powerauthority.on.ca/swgta.

If you have any questions or comments for the OPA, please contact us at info@powerauthority.on.ca (please put Southwestern GTA in the subject field) or call us toll-free at 1-800-797-9604.

The OPA is dedicated to long-term planning of an electricity system that is sustainable and reliable for the benefit of Ontario customers. We coordinate conservation programs and procure supply from diverse resources.