



YEAR END
2014

OPG PERFORMANCE REPORT



2014 OVERVIEW

Financial Highlights

(millions of dollars except where noted)	2014	2013
REVENUE		
Revenue	4,963	4,863
Fuel expense	641	708
Gross margin	4,322	4,155
EXPENSES		
Operations, maintenance and administration	2,615	2,747
Depreciation and amortization	754	963
Accretion on fixed asset removal and nuclear waste management liabilities	797	756
Earnings on nuclear fixed asset removal and nuclear waste funds	(714)	(628)
Property Taxes	32	53
Restructuring	18	50
Other	36	(35)
	3,538	3,906
Income before other income, interest, income taxes, and extraordinary item	784	249
Other income	(3)	(3)
Net interest expense	80	86
Income tax expense	139	31
Income before extraordinary item	568	135
Extraordinary item	243	-
Net Income	811	135
ELECTRICITY PRODUCTION (TWh)	82.2	80.8
CASH FLOW		
Cash flow provided by operating activities	1,433	1,174



Electricity Terms

- **One megawatt (MW)** is one million watts. Megawatts are a measure of electricity supply capacity at a point in time.
- **One kilowatt (kW)** is 1,000 watts; one gigawatt (GW) is one billion watts; and one terawatt (TW) is one trillion watts.
- **One kilowatt hour (kWh)** is a measure of electricity demand or supply per hour. One kilowatt hour is the energy expended by fifty 20-watt compact fluorescent lights burning for one hour. The typical residential customer uses approximately 800 kWh per month.
- **One megawatt hour (MWh)** is 1,000 kWh; one gigawatt hour (GWh) is one million kWh; and one terawatt hour (TWh) is one billion kWh.

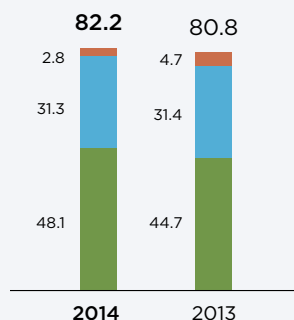
Revenue & Operating Highlights

Legend

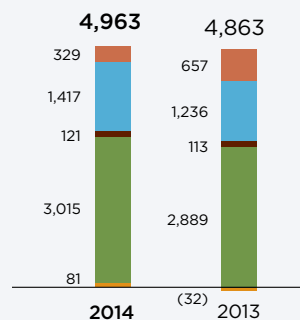
- Contracted Generation Portfolio*
- Regulated Hydroelectric
- Regulated Nuclear Waste Management
- Regulated Nuclear Generation
- Other

* Includes OPG's thermal and hydroelectric generating stations that are under contracts, wind turbines, and OPG's share of the Portlands Energy Centre and Brighton Beach Generating Station.

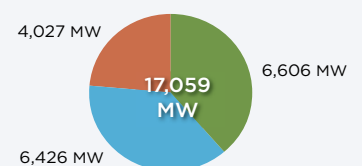
Electricity Generation (TWh)



Revenue (millions of dollars)



In-Service Generating Capacity (MW) Dec. 31, 2014



CORPORATE PROFILE





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Lower Mattagami, Kipling GS construction

OPG IS ONTARIO'S LARGEST CLEAN ELECTRICITY GENERATOR.

At Dec. 31, 2014, Ontario Power Generation's generating portfolio had an in-service capacity of 17,059 megawatts (MW). OPG operates:

<p>2 </p> <p>Nuclear generating stations</p>	<p>3 </p> <p>Thermal generating stations</p>
<p>65 </p> <p>Hydroelectric generating stations</p>	<p>2 </p> <p>Wind Power turbines</p>

OPG's focus is on the efficient and reliable generation and sale of electricity from its generating assets, while operating in a safe, open and environmentally-responsible manner. OPG was established under the *Business Corporations Act* (Ontario) and is wholly owned by the Province of Ontario.

The company's diversified generating portfolio consists of two nuclear generating stations, 65 hydroelectric generating stations, and three operating thermal generating stations, one of which is the largest capacity 100 per cent biomass-fuelled plant in North America.

OPG also owns two other nuclear generating stations, which are leased on a long-term basis to Bruce Power L.P. In addition, the company co-owns both the Brighton Beach gas-fired generating station with ATCO Power Canada Ltd., and the gas-fired Portlands Energy Centre with TransCanada Energy Ltd.

A MESSAGE FROM THE BOARD CHAIR AND PRESIDENT

Ontario Power Generation (OPG) produces more than half of the electricity Ontarians rely on each day. Our operations touch all corners of the province and many places in between. We power the province – 24 hours a day, seven days a week – and we do so with a clean, efficient and reliable generating fleet, all at a significantly lower price than the average of all other generators.



Bernard Lord
Board Chair



Tom Mitchell
President and CEO

In 2014, OPG successfully completed its phase-out of coal-fired generation. This is considered to be North America's single largest climate change initiative. With the closure of these units, the electricity we produce is now 99.7 per cent free of greenhouse gas and smog-causing emissions.

Operating Highlights

Operationally, 2014 was a strong year for OPG. Net income was \$811 million, an increase of \$676 million, compared to 2013. We continued to gain traction with our business transformation, realizing additional savings through business efficiencies, streamlined operations and a further reduction in staff numbers. These efforts have saved over \$500 million since 2011.

OPG's total generation also saw an increase over the previous year as a result of our continued strong generation asset reliability.

Project Management Advancements

By the close of 2014, we successfully completed the \$2.6 billion Lower Mattagami hydroelectric project, more than six months ahead of schedule.

This unique commercial partnership with the Moose Cree First Nation has added 438 megawatts (MW) of clean, renewable electricity to the province. It also created jobs and local economic benefits through employment and the involvement of local businesses. At the peak of construction about 1,600 people were employed, including about 250 First Nation and Métis people.

OPG was honoured to receive the Ontario Waterpower Association's Stewardship Award for its work on the Lower Mattagami project including efforts relating to sustainable development, environmental preservation, and community capacity development.

We're extremely proud of this one-of-a-kind success story. The Lower Mattagami redevelopment illustrates the power of partnership, a shared vision, and solid project management.



We also successfully converted the Atikokan Generating Station (GS) to biomass fuel. This conversion project is the first of its kind in Ontario and has placed OPG at the forefront of this innovative technology.

With over 200 MW of generating capacity, Atikokan GS is the largest 100 per cent biomass-fuelled power plant in North America, generating renewable, dispatchable, peak-capacity power. The expertise and project

management insights we have acquired through this initiative will be used on other development projects and shared globally.

These development projects have not only provided more clean power to the province, they also have created new economic opportunities and sustainable jobs for Northern Ontario in the green energy and forestry industries.

Improving Efficiency and Reducing Costs

Three years ago, OPG launched a company-wide business transformation to drive efficiencies and reduce operating costs. The aim is to increase business efficiencies to ensure the company continues to moderate electricity pricing for the people of Ontario while remaining a safe, reliable, generator.





To date, we've implemented a new organization model with fewer staff, streamlined our service delivery and improved our internal processes. Since 2011, efforts have enabled us to reduce our headcount by approximately 2,200 or 20 per cent - largely through attrition - for a savings of over \$500 million. By the end of 2016, we expect to have saved over \$1 billion.

By achieving these reductions in a careful, measured way, we've ensured our focus on safety and performance remains strong.

Focus on Refurbishment

Looking ahead, the Darlington refurbishment is OPG's most significant undertaking.

In 2014, we continued to make progress on preparations for the refurbishment with the opening of the Darlington Energy Complex. Energy Minister Bob Chiarelli joined OPG staff to officially open this state-of-the-art training facility in Durham Region. This project was completed ahead of schedule and is part of our extensive planning and preparation to ensure everyone working on the refurbishment will be trained and ready to complete their tasks safely, precisely and efficiently.

Darlington's refurbishment is a milestone project for OPG. It reinforces our role in the province by providing an additional 30 years of clean, affordable electricity, while at the same time producing over 100,000 person

years of employment on the project. These positive economic benefits will be shared across the province.

Nuclear Operational Excellence

During 2014, OPG's nuclear facilities demonstrated strong performance and continuous improvement against industry benchmarks. In April, Darlington Nuclear received its second consecutive excellent safety and performance peer evaluation.

The station also received the highest possible safety and control rating - its fifth consecutive excellent performance evaluation - from the Canadian Nuclear Safety Commission (CNSC).



Pickering Nuclear also received positive safety and control ratings from CNSC staff, with improved performance recognized in the areas of radiation protection and security.

These achievements demonstrate OPG's strong focus on safety and operational excellence. We continue to make investments and improve the performance of the Pickering Nuclear facility, which will provide a reliable electricity supply for Ontario while Darlington undergoes its refurbishment.

Safety Excellence

OPG's employee safety performance for 2014 continued to show strong results – achieving the best workplace safety record in our company's history. And, for the third straight year, the Canadian Electricity Association recognized OPG's strong commitment to safety with a President's Award of Excellence for Employee Safety.

Sustaining Success

The solid results we were able to achieve in 2014 are a direct result of the tireless efforts of the women and men who work for OPG. Our employees are dedicated, highly skilled, and committed to providing the province the power it needs, when it's needed.

We thank our employees for their continued contributions.

Looking to the future, OPG will continue to focus on providing maximum value to our shareholder and to the people of Ontario.

This means ensuring our energy production is reliable, safe and environmentally sustainable for Ontarians today and in the future.

BERNARD LORD
Board Chair

TOM MITCHELL
President and CEO

ACHIEVEMENT HIGHLIGHTS OF 2014



Coal Closure

In April 2014, OPG burned the last piece of coal at its Thunder Bay GS which, as of January 2015, provides dispatchable electricity from advanced biomass fuel. The phase-out of coal in Ontario is considered to be the single largest climate change initiative in North America and is a key milestone in the Ontario government's strategy to move to cleaner electricity. Former coal-burning units at Lambton and Nanticoke are currently being preserved for possible conversion to alternate fuels, if required. OPG's generation is now 99.7 per cent free of greenhouse gas and smog-producing emissions.



Atikokan's Conversion to Biomass

In July 2014, Atikokan GS completed its transition from coal to biomass. The converted station provides renewable electricity generation from a sustainable fuel recognized as beneficial to climate change mitigation. Atikokan is the first of its kind in Ontario and is North America's largest 100 per cent biomass-fuelled power plant. The two-year conversion project is another example of OPG's commitment to clean energy.



Lower Mattagami River Project Completion

The Lower Mattagami hydroelectric project was completed in 2014, six months ahead of schedule and on budget. OPG and the Moose Cree First Nation began working together on the \$2.6 billion, 438 MW project in 2010. Generating units were added to existing stations at Little Long, Harmon and Kipling, and a new three-unit Smoky Falls/Kâpâškilehtek generating station replaced the 83-year-old station. Over the course of the project about \$1 billion in contracts was awarded to Ontario businesses, including over \$350 million in Northern Ontario.



Business Transformation Savings

Significant savings were achieved through OPG's business transformation in 2014. Since the project began in 2011, the number of OPG employees has decreased by approximately 2,200 with cumulative savings of over \$500 million. The aim is to save approximately \$1 billion by the end of 2016. OPG has created a new centre-led organizational structure and introduced over 100 change initiatives to improve processes and drive efficiencies. Business Transformation wrapped up at the end of 2014, but process and efficiency improvement is a continuous goal for OPG.



CEA President's Award for Safety Excellence

In November 2014, the Canadian Electricity Association (CEA) presented OPG with a President's Award for Safety Excellence. The CEA presents awards to member organizations ranked at the top of the electricity industry for employee safety. This was the third consecutive year OPG received a CEA award for safety performance. In addition, two employee emergency responders from Pickering Nuclear received the CEA Lifesaving Award.



Pickering Nuclear Continued Operations

The Canadian Nuclear Safety Commission (CNSC) approved OPG's request for continued operations at its Pickering nuclear station and authorized the company to operate the station to 2020. OPG completed extensive studies to meet the necessary requirements and demonstrate that Pickering Nuclear can safely operate until that period. Pickering is now well-positioned to support the Darlington refurbishment when the Darlington units will be offline.



Darlington Energy Complex Opening

The Darlington Energy Complex opened ahead of schedule in 2014. Featuring a life-sized training model of a nuclear reactor face, the complex is part of OPG's intensive planning and preparation to ensure everyone working on refurbishing Darlington's reactors is equipped to complete their tasks safely, precisely and efficiently. Energy Minister Bob Chiarelli officially opened the complex with OPG Board Chair Bernard Lord and President Tom Mitchell. Following the opening, over 3,500 visitors attended community open house events at the complex.



OPG and Gull Bay First Nation Celebrate New Relationship

OPG and Kiashke Zaaging Anishinaabek (KZA), also known as Gull Bay First Nation, celebrated a new relationship with the signing of a Final Settlement Agreement and a formal apology by OPG. The settlement and apology were for past grievances related to dams constructed by OPG's predecessor companies on the Nipigon River between 1918 and 1950. OPG has successfully negotiated past grievance settlements with many of Ontario's First Nations.



Social Responsibility Recognition

The CEA awarded OPG the 2014 Sustainable Electricity - *Social Responsibility Award* for its achievements in First Nations/Métis relations and corporate sustainability. The award recognizes OPG for its strong commitment to building and growing mutually beneficial working relationships with First Nations and Métis communities in Ontario. OPG is currently working with more than 50 First Nations and Métis communities from across the province on numerous projects and partnerships.



Outstanding Reviews for Darlington

Darlington Nuclear earned top marks for its performance in 2014 from the CNSC. In the CNSC's annual safety assessment, Darlington achieved the highest standard of "Fully Satisfactory" - the only station to achieve that rating. This is the fifth year in a row of sustained top performance by Darlington. The rating by the regulator was followed by an excellent peer evaluation and maintains the station's standing as among the top performing nuclear plants in the world.



Hydroelectric Improvement Projects

OPG invested in several major hydro improvement projects in 2014 to ensure strong ongoing performance:

- Sir Adam Beck Pump Storage** facility near Niagara Falls - turbine upgrades and rehabilitation;
- Chats Falls GS**, near Ottawa - dam rehabilitation;
- Pine Portage GS**, near Nipigon - turbine runner replacement and generator upgrade;
- Des Joachims GS**, near Pembroke - overhaul and upgrade of Unit 5, part of an extensive asset improvement program to upgrade the entire station;
- McVittie GS**, near Sudbury - two new sluice gates.



Exercise Unified Response

In May, OPG participated in *Exercise Unified Response* at the Darlington nuclear station. The mock emergency response involved more than 1,000 people and 54 agencies who demonstrated how they would protect and inform the public in the unlikely event an accident similar in scale to Japan's Fukushima disaster. Well-versed in emergency planning exercises, OPG demonstrated our capabilities to a spectrum of stakeholders and received congratulations from an independent evaluator impressed with the comprehensive drill.



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General information, including press releases, speeches and financial, environmental and safety information: www.opg.com Follow us on [Twitter@OPG](https://twitter.com/OPG)

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