



Archives of Ontario Private Acquisitions Strategy

Analysis Report of the **Energy Sector** in Ontario

Version 1
September 2015

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1. Purpose

The purpose of this report is to carry forward key recommendations from the Archives of Ontario Private Acquisitions Strategy by conducting examinations of Ontario's major sectors. This report highlights sub-sectors or areas within the private energy sector which are likely to generate records of provincial significance.

In total, Ontario's electricity sector is a \$15 billion annual industry that involves both the public and private sector and employs some 95,000 Ontarians directly and indirectly. Annual investments in electricity in Ontario from private sources also are in the billions of dollars. The generation of electricity in Ontario is a clearly visible reality for almost all Ontarians, and the energy sector has a daily impact on their quality of life and ability to function in a modern society.

The identification and appraisal of activities within the energy sector will drive and support private records acquisition policy for energy sector records in the *Archives of Ontario Private Acquisitions Strategy*.

2. Overview of the Energy Sector in Ontario

The foundations of the current energy sector in Ontario were laid in 1974, when Ontario Hydro was formally created as a Crown Corporation replacing the former Hydro Electric Power Corporation.¹ In 1979, The Porter Commission recommended that the focus of Ontario electricity planning should be on demand management, not supply. This was driven by the cost of the building and operating of nuclear power plants, six of which the province built between 1971 and 1978.² The trio of coal, nuclear and hydro-electric power formed the bulk of Ontario power generation into the early 1990s. However, there were projections in the mid-1990s that supply would not be able to meet demand.³ The projected supply gap was estimated to be significant, but the increase in nuclear supply created by the construction of four new nuclear reactors at Darlington was estimated to fill the gap. The large debt from the building of Darlington put a damper on future building of electrical plants, especially by the public and quasi-public sector.

The passage of the *Energy Competition Act* in 1998 ended the monopoly of power generation by Ontario Hydro and moved the province to a new market-

¹ *Ontario's Long-Term Energy Plan: Building our Clean Energy Future* (Toronto: Queen's Printer for Ontario, 2010), 5.

² World Nuclear Association, *Nuclear Power in Canada* (www.world-nuclear.org), 3.

³ *Ontario's Long-Term Energy Plan*, 5.

oriented electricity system. Ontario Hydro was divided into five separate companies under the authority of the Ministry of Energy.⁴

- 1) The Ontario Energy Board was created to regulate natural gas and electricity utilities,
- 2) The Ontario Power Authority was to deal with system planning and demand forecasting,
- 3) The Independent Electricity System Operator was to manage all producers, transmitters and retailers,
- 4) Hydro One was to manage the wires and transmission systems, and
- 5) Ontario Power Generation was responsible for the generation and sale of electricity in the province.⁵

Under this system, a short lived free market for electricity was opened in 2002. Between 1996 and 2003, while this system was developing, the total generating capacity in Ontario fell by six per cent, while energy demand grew by 8.5 per cent.⁶ The combination of market deregulation, increased demand and reduced supply resulted in a sharp rise in the price of electricity. This led to a cap in prices in 2002. Concerns also grew over the reliance of Ontario on coal power and hence on expensive imported coal.

A blackout in eastern North America in 2003 increased concerns about the long-term stability of electrical supply in Ontario. A combination of nuclear-plant refurbishment, and the creation of renewable power sources such as solar, wind, and further hydro-electric generation, as well as improvements to transmission and distribution lines, helped bring more power sources on line and allowed for the phasing out of coal generated power. The 2007 *Integrated Power System Plan* identified the need to ensure adequate supply; double the amount of renewables; reduce demand; replace coal; strengthen the transmission system; and to ensure stable energy prices.⁷ This was reinforced by the *Green Energy Act* in 2009, which aimed to expedite the growth of clean renewable sources of energy, especially allowing for Feed-in-Tariffs to guarantee rates for certain types of power, and allow such power sources easier access to the overall power grid.

As of 2013, Ontario produced 56% of its power from nuclear power, 22% by water, 10% by gas and oil, 3% by wind, 2% by coal and 7% by other sources. This mix is generally expected to hold in the future, with the exception that wind power is expected to completely replace coal in the overall mix, and energy conservation initiatives as a whole are to lower overall demand.⁸ To keep this mix in place, significant new investment will be required in nuclear, hydro-electric,

⁴ Andrew Battison, *Eliminating Coal Electricity Production in Ontario*, 12.

⁵ *Ibid.*, 14-15.

⁶ *Ontario's Long-Term Energy Plan*, 5.

⁷ *Ibid.*, 7.

⁸ *Achieving Balance – Ontario's Long Term Energy Plan* (Toronto: Queen's Printer for Ontario, 2013), 9.

and wind power, most of which is expected to come from the private sector. For example, since 2003 Ontario has signed more than 16,000 renewable energy supply contracts for wind, water, solar and bio-energy projects. These involve corporate and community projects of varying scale, including “micro” projects involving homeowners, farmers, and small businesses and a vast \$7 billion agreement with Samsung for the production of large solar and wind projects.⁹

3. Analysis of Archives of Ontario Holdings

In examining the holdings of the Archives of Ontario, a search of the Archives Descriptive Database was undertaken to determine what records have been acquired from the private sector that complement the functions of the government with respect to the administration and regulation of energy . This revealed that the Archives’ holdings contain only a small number of private records documenting some of the functions carried out by the Ministry of Energy and its agencies.

The Archives of Ontario has identified the Ministry’s three core functions as:

1. Managing energy supply
2. Promoting energy conservation
3. Regulating the energy sector

The Archives’ private records holdings are not substantial and are, at best, tangentially related to all of these functions. For example:

- 1) F 4617 – Technical Standards and Safety Authority fonds contains material related to fuel safety and pressure vessels, including equipment used at nuclear generating stations. However, the TSSA was established by the Government of Ontario to provide this function and many of its post-1980 records are government records.
- 2) F 4563 – Peter Favot fonds contains several project files relating to solar energy and wood burning, as well as designs for energy efficient communities. However, these only form a small part of the records relating to his overall architectural practice.

4. Methodology for Analyzing the Energy Sector

This section outlines the analysis methodology and rationale for how the sector was broken down and assessed.

⁹ *Ontario’s Long-Term Energy Plan: Building our Clean Energy Future* , 28-29.

Sub-sector Identifications

Sub-sectors within the Energy sector were selected based upon an analysis of major activities related to energy generation, transmission and supply known to occur within Ontario, as well as activities relating to advocacy for or against certain types of power. Sub-sectors were identified based upon the major categories of organizations, bodies and individuals known to be involved or have an interest in such activities within the private sector.

Exclusions and Limitations

This section provides an overview of certain sectors or categories in the Ontario energy sector which were excluded from the analysis.

1. The Ontario Energy Board is excluded as its records are covered in Ontario Regulation 336/07 under the *Archives and Recordkeeping Act*, 2006.

5. Appendix A: Analysis of Energy Sub-sectors

Appendix A has been created for the purpose of examining the scope of Energy Sector with respect to:

1. Identifying and defining sub-sectors and categories within the Energy Sector,
2. Making connections between private sector activities and government functions,
3. Identifying existing holdings in the Archives of Ontario related to the Energy Sector (containing records dated 1980 and later),
4. Providing a rationale for the importance of acquiring documentation within a sub-sector or category, and
5. Identifying level of acquisition priority for each sub-sector based upon the rationale.

Energy Sub-sectors:

For the purposes of analysis, the activities within the Energy Sector have been divided into the following sub-sectors in Appendix A.

1. Corporate power generators
2. Community and individual power generators
3. Power management, transmission and planning agencies
4. Advocacy organizations
5. Alternative energy researchers

6. Raw material suppliers

Government Functional Linkages

The functional linkages provided in Appendix A are based upon the Ministry's three core functions of:

1. Managing energy supply
2. Promoting energy conservation
3. Regulating the energy sector

Appendix A: Analysis of Energy Sub-sectors

Sub-Sector	Sub-Sector description	Related Government Function and responsible Ontario ministry	Related Archives of Ontario private holdings (containing records 1980-and later)	Sub-Sector appraisal rationale	Acquisitions considerations	Priority: High (AO has little to no documentation), Medium (AO has some documentation), Low (AO has significant documentation)
Corporate power generators	This sub-sector includes all companies which operate power plants or other energy producing facilities which organize themselves on a profit motive.	Managing energy supply (Energy)	None	This sub-sector includes companies with a direct interest in the production and sale of power in the province. Records of these organizations will document corporate direction and interest in the energy sector and any divergence from government objectives.	The AO has no holdings in this sub-sector post-1980	HIGH
Community and individual power generators	This sub-sector includes individuals, community agencies, co-operatives and others who operate power plants or other energy producing facilities either directly or indirectly (though partial ownership) on a non-profit or cost-recovery basis.	Managing energy supply (Energy)	None	This sub-sector includes individuals, community agencies and co-operatives with a direct or indirect interest in the production and sale of power in the province. Records of these organizations will document co-operative direction and interest in the energy sector and any divergence from government objectives.	The AO has no holdings in this sub-sector post-1980	HIGH

Sub-Sector	Sub-Sector description	Related Government Function and responsible Ontario ministry	Related Archives of Ontario private holdings (containing records 1980-and later)	Sub-Sector appraisal rationale	Acquisitions considerations	Priority: High (AO has little to no documentation), Medium (AO has some documentation), Low (AO has significant documentation)
Power management, transmission and planning agencies.	This sub-sector includes all agencies responsible for the integrity of the power grid and for planning short and long-term sustainability of energy production in the province. These are almost all quasi-governmental organizations.	Regulating the energy sector (Energy)	F 4617 Technical Standards and Safety Authority fonds	This sub-sector includes organizations that secure the daily power supply for Ontarians. Records of these organizations will document policy priorities and changes in the transmission of energy.	The AO's holdings in this category are very limited for the post-1980 period.	HIGH
Advocacy organizations	This sub-sector includes organizations which advocate for or against various sources of energy in Ontario, or for general conservation of energy.	Promoting energy conservation (Energy)	F 1057 Energy Probe fonds, F 1048 Pollution Probe fonds, F4642 Michael Hough fonds	This sub-category includes organizations active in society on a daily basis with the aim of shaping political discourse on energy options. Records of these organizations will document non-government positions on the generation and transmission of energy in the province, and significant citizen-state interactions in debate on these issues.	The AO's holdings in this category are very limited for the post-1980 period.	HIGH

Sub-Sector	Sub-Sector description	Related Government Function and responsible Ontario ministry	Related Archives of Ontario private holdings (containing records 1980-and later)	Sub-Sector appraisal rationale	Acquisitions considerations	Priority: High (AO has little to no documentation), Medium (AO has some documentation), Low (AO has significant documentation)
Alternative energy researchers	This sub-sector includes all individuals, groups or corporations which research alternate sources of energy.	Managing energy supply (Energy)	None	This sub-category includes individuals whose activities improve the overall quality of life for Ontario through the provision of clean, affordable energy options. Records in this sub-category will document significant innovations in the energy sector, and policy options available to the government for alterations in the generation and transmission of energy.	The AO has no holdings in this sub-sector post-1980	HIGH
Raw material suppliers	This sub-sector includes all organizations responsible for the production and sale of raw materials for the production of energy in Ontario	Managing energy supply (Energy)	None	This sub-category includes organizations whose provision of raw materials are critical to the operation of active energy plants in Ontario. Records from these organizations will document the abilities and limitations available for policy decisions for the securing of raw materials for the generation and transmission of energy in the province.	The AO has no holdings in this sub-sector post-1980	HIGH