



Conservation vs. Electricity Supply

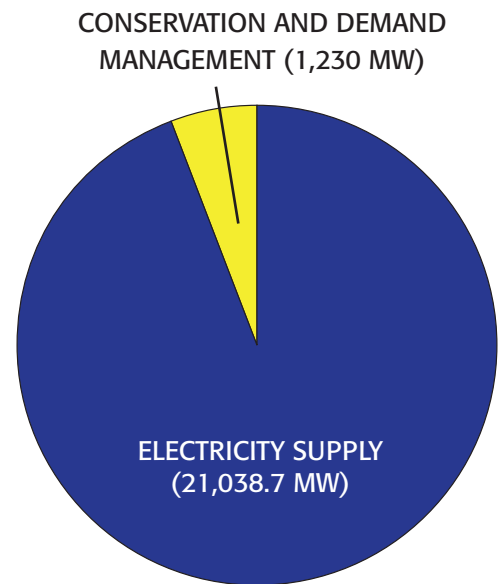
► *A summary of the Ontario Power Authority's procurement efforts*

Electricity Supply Versus Conservation and Demand Management

As of December 31, 2011 the Ontario Power Authority (OPA) has entered into contracts for 21,039 megawatts (MW) of electricity supply. In addition, according to the OPA, its 2006 to 2011 conservation and demand management (CDM) programs reduced demand in 2011 by 1,230 MW. For every MW of demand reduction that it has achieved, the OPA has contracted for 17 MW of electricity supply. Table 1 provides a break-out of the electricity supply and CDM resources that the OPA has procured to date.

Table 1: OPA's Electricity Supply and CDM Procurements

Supply	Capacity
Bruce Nuclear Refurbishment	3,000 MW
Natural Gas Combined-Cycle	4,153.9 MW
Natural Gas Simple-Cycle	2,533 MW
Combined Heat and Power	972.3 MW
Wind	5,811.4 MW
Water	2,349.1 MW
Bioenergy	212.3 MW
Solar PhotoVoltaic	2,006.7 MW
Total	21,038.7 MW
Conservation and Demand Management	1,230 MW



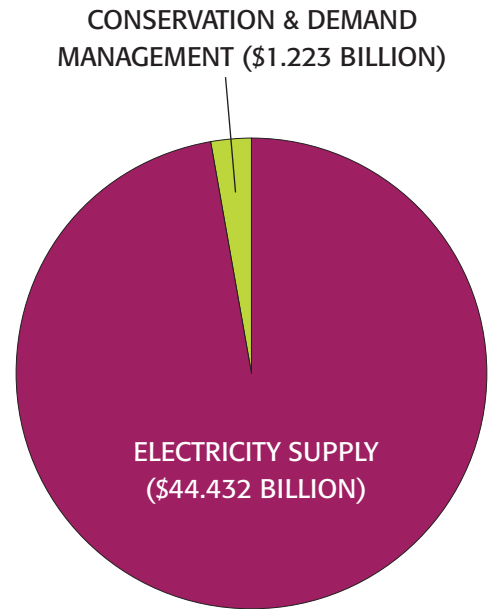
OPA Spending Allocation

As of December 31, 2011, the OPA has spent \$1.233 billion on energy conservation and demand management; and it has contracted for electricity supply with a total capital cost of approximately \$44.4 billion. That is, for every dollar that it has spent on energy conservation, the OPA has contracted for \$36 of electricity supply.

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Table 2: OPA’s Spending Allocation

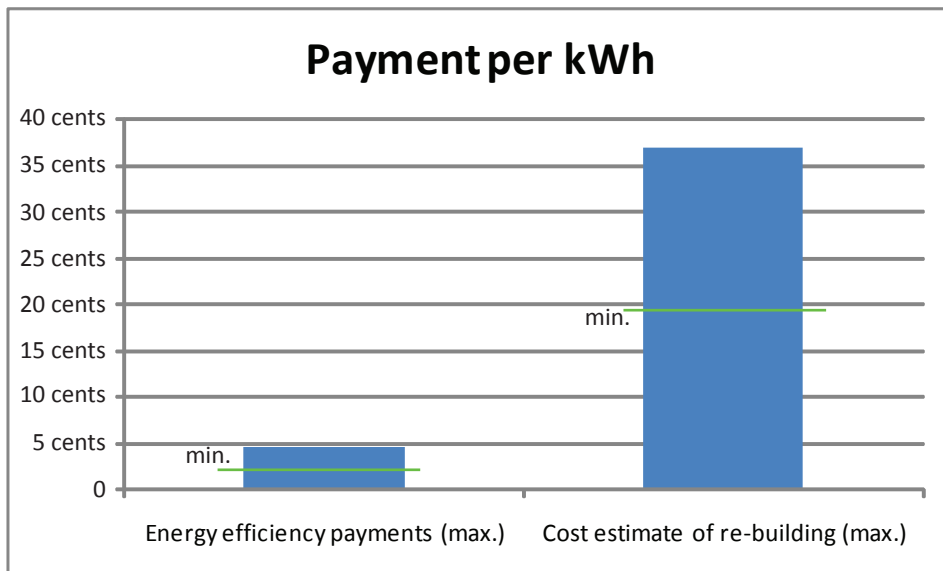
Supply	Spending
Bruce Nuclear Refurbishment	\$7.3 billion
Natural Gas Combined-Cycle	\$3.838 billion
Natural Gas Simple-Cycle	\$0.365 billion
Combined Heat and Power	\$1.374 billion
Wind	\$11.262 billion
Water	\$8.386 billion
Bioenergy	\$0.445 billion
Solar PhotoVoltaic	\$11.462 billion
Total	\$44.432 billion
Conservation and Demand Management	\$1.223 billion



Energy Efficiency Payments versus Cost of New Nuclear

The OPA’s Industrial Accelerator Program pays large industrial customers up to 23 cents for each kWh that their energy efficiency investments save *during the first year* of their operation. Assuming these investments actually deliver energy savings for at least 5 to 10 years, a payment of 23 cents per kWh saved *during the first year* is equivalent to an average annual payment of 2.3 to 4.6 cents per kWh. On the other hand, the cost of electricity from re-building the Darlington Nuclear Station will be approximately 19 to 37 cents per kWh. That is, the OPA’s payments for saving energy are 76 to 94% lower than the cost of new nuclear supply.

Table 3: Energy Efficiency Payments versus the Cost of Re-Building Darlington



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