



Conservation vs. Electricity Supply

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

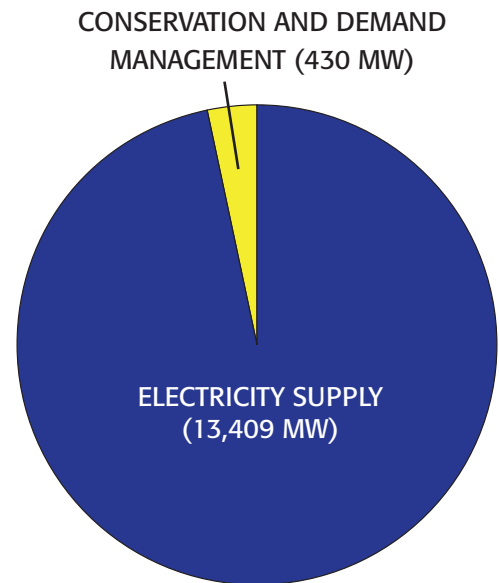
Electricity Supply Versus Conservation and Demand Management

As of December 31, 2009 the Ontario Power Authority (OPA) has entered into contracts for 13,409 megawatts (MW) of electricity supply. In addition, according to the OPA, its 2006 to 2008 conservation and demand management (CDM) programs are reducing demand in 2010 by approximately 430 MW.¹ For every MW of demand reduction that it has reported, the OPA has contracted for 31 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	5,324 MW
Natural Gas Simple-Cycle	393 MW
Combined Heat and Power	983 MW
Wind	1,952 MW
Water	1,140 MW
Bioenergy	91 MW
Solar PhotoVoltaic	526 MW
Total	13,409 MW
Conservation and Demand Management	430 MW



OPA Spending Allocation

As of December 31, 2009, the OPA has spent \$541.6 million on energy conservation and demand management; and it has contracted for electricity supply with a total capital cost of approximately \$23.622 billion. That is, for every dollar that it has spent on energy conservation, the OPA has contracted for \$44 of electricity supply.

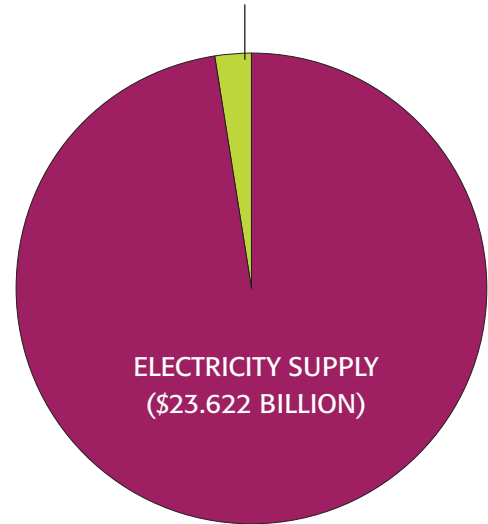
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¹ The OPA has not yet reported on the impact of its 2009 CDM programs.

Table 2: OPA’s Spending Allocation

Supply	Spending
Bruce Nuclear Refurbishment	\$5.9 billion
Natural Gas Combined-Cycle	\$4.919 billion
Natural Gas Simple-Cycle	\$0.365 billion
Combined Heat and Power	\$1.389 billion
Wind	\$3.783 billion
Water	\$4.070 billion
Bioenergy	\$0.191 billion
Solar PhotoVoltaic	\$3.005 billion
Total	\$23.622 billion
Conservation and Demand Management	\$0.542 billion

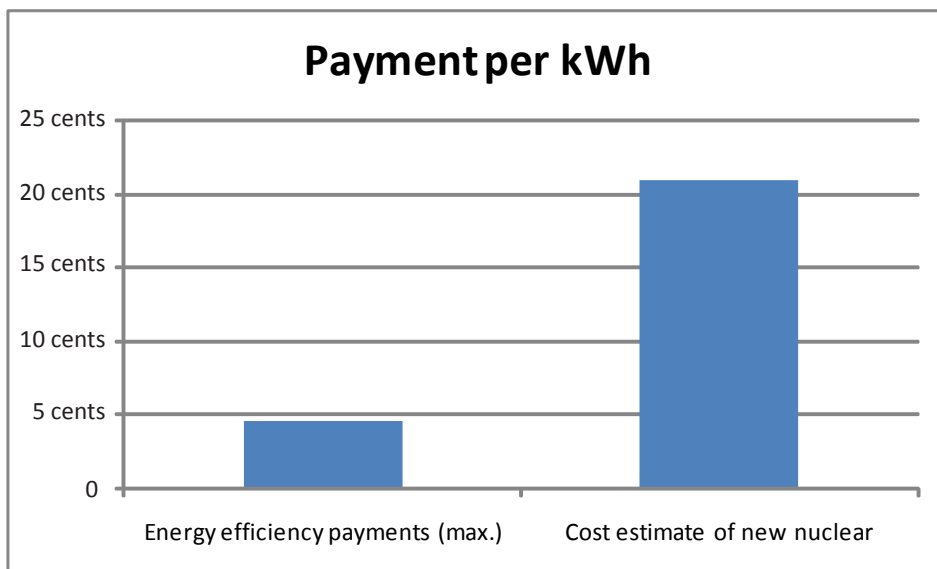
CONSERVATION & DEMAND MANAGEMENT (\$542 MILLION)



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 new nuclear reactors will be approximately 21 cents per kWh or more. That is, the OPA’s proposed payments for saving energy are 78 to 89% lower than the cost of new nuclear supply.

Table 3: Energy Efficiency Payments versus the Cost of New Nuclear



This fact sheet has been produced by the Ontario Clean Air Alliance Research Inc. Thanks to The EJLB Foundation for its generous financial support.