

- The electricity system in Ontario is undergoing significant restructuring, with \$60 - \$80 billion dollars in planned spending - more than all new spending on health care and education combined. Because electricity impacts every aspect of life and work in Ontario, it is vital to plan it right. Decisions that are being made now will have a profound impact for decades to come.
- Every product and service utilizes electricity, so the impact of higher energy costs has a compound and domino effect. Higher energy rates hurt those on lower incomes, reduces consumer spending and impacts the ability of business and industry to remain competitive in the global market.
- We need an energy policy that is affordable, reliable and realistic. We want best environmental performance at lowest cost.
- Ontario is a large province, with colder winters and hotter summers. Our economy is based on industry, manufacturing and agriculture. These factors combine to make us an energy intensive province.
- The past strength of Ontario's electricity system has been a "portfolio" of supply resources - a mix of different generating sources that complement one another. The benefits of one offsets the disadvantages of another.
- About half of the power we use daily is from resources that generate continuously, i.e. nuclear and hydro. As electricity needs fluctuate throughout the day, following lifestyle and work patterns, other resources are required to meet load. These types of power resources ramp up and down quickly to pick up spikes in demand, follow and balance the constant load changes, and are readily available, 24/7, year round. Our existing coal-fired power plants have optimum generating characteristics to meet these needs.
- In spite of the contribution renewable generation can make, wind and solar are intermittent and cannot fulfill this criteria. They can displace the need for some conventional generation, but cannot replace it.
For example, "The cumulative wind power capacity operating in the EU (European Union) now exceeds 48,000 MW." However, "In an average wind year, it will produce approx. 100TWh of electricity, equal to 3.3% of total EU electricity consumption." (from Presentation to the European Working Group on Renewable & Environmental Technologies Berlin - March 13, 2007 - Canadian Trade Commissioner Service)

- There are insufficient hydro resources in Ontario to meet the intermediate load. We will remain, for some time, dependant on a fossil fuel - that is coal, oil or natural gas - to provide intermediate and peak load.
- For this reason, the government is not merely planning to close the coal-fired power stations, they are replacing them primarily with natural gas-fired generation. This is what most people are unaware of.
- The high and volatile costs associated with natural gas, combined with concerns regarding reliable long-term supplies of natural gas make it an unwise and unaffordable option.
- From an environmental perspective, little will be gained by switching from coal to natural gas. Retrofitting our existing publicly owned, paid for coal plants with best available emissions reduction technology will bring emissions within 1-2% those of natural gas.
- When natural gas is burned for electricity it does emit about 40% less greenhouse gas emissions. However, natural gas produces large amount of methane emissions (23 times more potent a greenhouse gas than CO₂) when it is produced, refined and transported, narrowing the gap considerably.
- The amount of gas used to replace coal-fired generation will be more than what is currently used by all residential consumers combined.
- Natural gas is used to heat homes, for agricultural and industrial purposes at 95% efficiency; for electricity generation at 35-50% efficiency

Ontario is entering a critical next decade. Many uncertainties and challenges are expressed by the planning authority. Conservation is vital, but energy experts warn our goals are too ambitious. Renewable energy makes a valuable contribution, but 1000 MW of wind translates optimistically into about 250 MW, and a 40 MW solar farm nets about 7 MW. They are unreliable in terms of when they generate and simply cannot power our industrial and high tech lives.

Nuclear units, essential for baseload power, will require replacement or refurbishment. This is not the time to be dependant upon expensive power generated from private, merchant producers, with an uncertain future fuel supply. Better to retain our coal-fired units and install best available emissions reduction technology, to provide affordable, reliable power as stability for the system heading into a decade of uncertainties.