



# The Lambton Generating Station ▶ Ontario's #2 polluter

## The Lambton Generating Station: Ontario's #2 polluter

The Lambton coal-fired electricity generating station is Ontario's second largest source of air pollution.

- ▶ Lambton is owned by Ontario Power Generation (formerly Ontario Hydro). Ontario Power Generation's sole shareholder is the Government of Ontario.
- ▶ Lambton is Ontario's 2nd largest source of nitrogen oxides emissions (smog and acid rain).
- ▶ Lambton is Ontario's 2nd largest source of greenhouse gas emissions (global warming and climate change).
- ▶ Lambton is Ontario's 2nd largest source of airborne mercury emissions (a potent nerve toxin).
- ▶ Lambton is southern Ontario's 2nd largest source of sulphur dioxide emissions (smog and acid rain)
- ▶ Lambton is Ontario's 2nd largest source of small particulate matter (PM10) which triggers asthma attacks, strokes, lung disease, heart disease and death
- ▶ Lambton emits lead (a nerve toxin) and five cancer-causing substances (arsenic, beryllium, cadmium, chromium and nickel)
- ▶ In 2004 Lambton produced as much air pollution as 1.2 million cars

## Emission Rates

The table below shows the nitrogen oxides (smog), sulphur dioxide (smog), mercury (neuro-toxin) and carbon dioxide (greenhouse gas) emission rates, in kilograms per megawatt-hour (kg/MWh), of each of the Lambton Generating Station's coal-fired boilers. The table also shows the emission rates of a modern natural gas-fired combined-cycle power plant and the emission reduction benefits of switching from coal to natural gas for electricity generation.

Lambton Coal-Fired Power Plant versus Natural Gas-Fired Combined-Cycle Power Plant

Emission Rates kg/MWh	Lambton Unit 1	Lambton Unit 2	Lambton Unit 3	Lambton Unit 4	Natural Gas Combined-Cycle	Emission Reduction Benefits by Switching to Natural Gas
Nitrogen Oxides	2.035	1.891	0.489	0.629	0.25	49-88%
Sulphur Dioxide	7.205	7.121	1.381	0.980	0.02	98-99%
Mercury	0.000014	0.000014	0.000003	0.000003	0	100%
Carbon Dioxide	927.80	927.35	926.87	926.57	367.00	60%
<b>Total</b>	<b>937.040014</b>	<b>936.362014</b>	<b>928.740003</b>	<b>928.179003</b>	<b>367.27</b>	<b>60.4%</b>

## Air pollution is a public health crisis

In 1998 the Ontario Medical Association (OMA) announced that air pollution is “a public health crisis” in Ontario. Air pollution kills 5,800 people per year in our province and costs Ontario \$7.8 billion per year in health care costs, lost work time and other quantifiable expenses according to the OMA. A recent Government of Ontario study found that pollution from Ontario’s coal-fired power plants alone kills 668 people per year in Ontario.

## The Government of Ontario’s coal phase-out commitment

The Government of Ontario has promised to phase-out four of Ontario’s coal-fired power plants (including Lambton) by December 31, 2007 to protect public health and the environment. It has promised to begin the phase-out of the Nanticoke Station by 2007 and complete the phase out by early 2009. A coal phase-out is Ontario’s least-cost option to obtain a dramatic reduction in air pollution and to reduce our greenhouse gas (global warming and climate change) emissions. A coal phase-out will provide Ontario with approximately 50-80% of the total greenhouse gas emission reductions the entire province needs to meet its Kyoto Protocol climate change target in 2010.

The Ontario Clean Air Alliance is recommending a three-pronged strategy to phase-out coal: energy conservation and efficiency; new renewables (e.g., solar, wind, water, biomass); and high-efficiency natural gas-fired power plants as a transition technology to a future 100% renewable electricity system.

## Natural gas supplies

According to the National Energy Board, Canada has approximately 70 years of gas supplies at current levels of production.

Phasing-out Ontario’s coal-fired power plants exclusively by natural gas would raise North American gas demand by less than 1%. As a result of the North American Free Trade Agreement, the price of natural gas in Ontario is determined by the total demand and supply for natural gas in North America. An increase in North American gas demand of less than 1% will have an imperceptible impact on the price of natural gas for home heating in Ontario.

## The alternative – a band-aid solution

According to the Power Workers Union, instead of phasing-out coal, Ontario Power Generation should spend more than \$3 billion of its customers’ money on so-called “clean coal” technologies which would reduce coal plants’ total emissions by only one-half of 1%. This is a band-aid solution that Ontario cannot afford.

## What you can do

Please contact Premier Dalton McGuinty, at [Dalton.McGuinty@premier.gov.on.ca](mailto:Dalton.McGuinty@premier.gov.on.ca), and tell him that you support his decision to phase-out Ontario’s #2 air polluter.

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