



Remarks by Guy Jarvis  
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Check against delivery

It's my pleasure to speak at the Ontario Energy Network. This luncheon series has become a real tradition at the Fairmont – and that's saying something given the venue's history. I'm told this building is actually the third hotel to stand on this site – each meeting the evolving needs of the community over time.

In a way you could say that gas utilities like Enbridge Gas Distribution, which provides energy to this building and many others in the downtown core, are entering a third stage in their own history. Our utility first served businesses along King Street with gas manufactured from coal in the 1800s. In the 1950s, we switched to natural gas mainly from Alberta. And today, while western supplies remain important, natural gas from shale formations in the U.S. northeast also travels through our pipes. These new sources of natural gas have been driving dramatic changes in North America and reshaping natural gas markets around the world over the past decade.

Our two million customers are already benefitting from these changes to the tune of \$400 a year in savings on average for residential customers compared to natural gas prices five years ago. In total, the average annual energy savings for Ontario homes and industry is estimated at about \$4 billion. I would encourage you to stop and think about that number for a second. That is \$4 billion a year in energy savings that Ontario families and businesses can invest and spend elsewhere in our economy. And with more than 100 years' worth of natural gas reserves estimated in the ground, Moody's recently stated what others already have – natural gas prices will continue to remain stable for the foreseeable future.

So how will Ontario capitalize on natural gas? Too often, energy plans in Ontario have focused much more on electricity than gas. But competitive and stable-priced natural gas can play an increasingly critical role in Ontario's energy future.

The Province's decision to phase out coal-fired generation was a big decision and a strong statement. As the province undertakes the announced review of Ontario's Long-term Energy Plan, the government needs to make another big decision and strong statement...a statement that ensures that the value of safe, reliable, and affordable natural gas is a larger part of provincial energy, economic, transportation and environmental planning.

Ontarians want clean and affordable energy options and natural gas offers solutions, particularly in the areas of local electricity generation, expansion into communities currently not served by natural gas and transportation.

New gas supplies are driving a revolution in the natural gas sector, not just here in Ontario but around the world. This new energy landscape presents us with options that were not fully available or recognized when our province's current Long-term Energy Plan was released. When then Energy Minister Brad Duguid presented the plan, it envisioned a strategic role for natural gas as a support for intermittent renewables, as a back-up while nuclear plants are modernized and as a player in some planned combined heat and power projects.

Those roles remain important, but the dynamic around us opens the door to new and deeper opportunities – opportunities that are already being pursued by others beyond our borders. As the province prepares to review its energy plan, Enbridge is encouraging the government to recognize the broader opportunities natural gas presents the province – particularly from an economic and an environmental perspective.

Today I will outline just three key opportunities and propose timely actions for the government to consider. Actions that I believe will allow Ontario to fully benefit from the natural gas revolution in the long-term.

I know that many of you are familiar with today's dramatically changing natural gas supply dynamics, particularly in North America, so I'll just start by touching on this for context briefly.

A number of significant, new economic natural gas shale basins are on our doorstep. The nearby Marcellus and Utica shale formations which stretch across Ohio, Pennsylvania and New York State are already changing gas flows to Ontario. TransCanada has reversed the flow of a pipe that once moved gas into the U.S. It now brings gas into the province through Niagara and the natural gas industry is considering additional ways to ensure that Ontario can further benefit from these new sources.

Enbridge believes that industry best practices in combination with strong regulation will ensure that natural gas continues to be produced safely. And we support strong regulation to ensure that this happens.

In Illinois, a Bill to allow hydraulic fracturing was written in consultation with industry and environmental groups including the Sierra Club. It is considered by many to be the strictest regulation in the U.S. and outlines standards for setbacks from water sources, construction, waste water storage, water monitoring and chemical disclosure. Shale deposits are also found in many other parts of the world and the movement of natural gas is changing elsewhere as well.

One need not look further than the market for liquefied natural gas to get a sense of the sea change that is underway. According to the American Gas Association, following the 2011 Fukushima nuclear disaster LNG use has increased significantly and now delivers almost half of Japan's energy. After the discovery of 100 trillion cubic feet of natural gas offshore, Mozambique has embarked on a plan to build a floating liquefaction facility. And when it opens in 2015, LNG shipments are expected to be one of the largest sources of growth from the \$5.25 billion Panama Canal expansion currently under construction.

The natural gas supply revolution clearly extends well beyond our borders. To ensure that we remain economically competitive, we must take advantages of the opportunities that these changes make possible for Ontario.

The first opportunity I'd like to talk about is power generation.

Today, natural gas fired generation plants are already delivering clean, competitively-priced electricity to Ontario consumers. Unfortunately most people in Ontario have probably heard more about the controversial siting of two large gas-fired plants than the positive role that natural gas is playing in the province. And it's too bad because it's a great story to tell.

Canada is moving toward alternative energy sources – which will happen over the course of the coming decades – and natural gas is helping to make that happen. Since Ontario announced its green energy plan, Ontario has added 5,000 MW of natural gas fired generation to the provincial grid compared to 1,500 MW of renewables. It has been central to Ontario's move away from coal.

The competitive price of natural gas combined with the high efficiency and flexible operating capability of gas fired units suggests that the opportunity should exist in all segments of the province's power demand profile – baseload, intermediate and peaking. There are also other approaches to generating electricity and we would like to see a key role for natural gas there too.

I recently spoke at the Economic Club of Canada in Ottawa with an executive from AGL Resources, the largest natural gas distribution utility in the United States. He spoke about an Executive Order issued by President Obama last year on the topic of combined heat and power or CHP. The order established a national goal of 40 gigawatts of new combined heat and power capacity by 2020 – a 50% increase.

To put that in further perspective, it's 20% more than the total installed capacity of all the generation in Ontario. The White House estimates that nationwide, achieving its goal will save money, generate new capital investment, create jobs, and reduce emissions.

So the question is, what can CHP do for Ontario?

With natural gas prices currently low and expected to remain stable for the foreseeable future, CHP may help address siting issues while at the same time increasing reliability, increasing efficiency and reducing costs.

CHP needs to be a part of the province's Long-term Energy Plan moving forward. It can help address urban electricity supply constraints because it's smaller scale and the technology also uses waste heat, driving significant efficiency gains.

Small CHP applications located in urban centres facing supply constraints can help to eliminate the need for new large-scale transmission infrastructure which is very costly and controversial. These CHP generators have a much smaller footprint than other forms of generation – they can often fit on a transport truck - so they can be built within buildings located in established areas.

A CHP application can also produce 30% fewer carbon dioxide emissions compared to a combined-cycle plant. Consider also that CHP can be commissioned in less than half the time it takes traditional central plant-transmission-based generation capacity. This valuable feature should be taken into consideration in the Province's Long-Term-Energy-Plan.

Institutions and businesses can now install small CHP generators to save on costs, improve reliability and provide locally-generated electricity to address urban supply constraints. Beyond the economic and environmental benefits, more CHP generators in strategic institutions such as hospitals and universities can help improve energy resilience in the event of a major electrical outage. Take for example, New York, where during Hurricane Sandy 50% of the city's hospitals suffered a complete loss of power. Yet, not one hospital equipped with a CHP unit suffered a failure. Great performance from CHP units, and it came at a time of great need.

By increasing the number of decentralized CHP applications in its long-term energy plan, the government can further integrate natural gas into the electricity planning process, enhance grid resilience, and better prepare the province in the event of major prolonged grid outages.

The role of natural gas also extends beyond electricity generation. Natural gas can also displace more expensive and more carbon intensive fuels within our homes and businesses. Enbridge continues to receive enquiries from communities not currently served by natural gas asking if our system could be extended.

It's no wonder. Municipalities served by natural gas often use the cost benefits of the fuel as an economic marketing tool to attract new investment. Although many communities are benefiting from clean and affordable natural gas, there are still many individuals and businesses in Ontario who do not yet have that choice.

Expansion of the natural gas distribution network into communities not yet served by natural gas represents another opportunity. We are working on plans for the possible expansion of our distribution system to some of these new communities so that more Ontarians can benefit from gas and so too is our fellow utility Union Gas. In fact, they are looking at the potential role of bringing LNG into some communities where the cost of building a pipeline is prohibitive.

The reasons are clear. Price differentials between natural gas and other home and water heating fuels mean a town with 1,000 homes could collectively save more than \$2 million a year on energy costs. On an individual basis, there is trapped economic benefit in the pockets of those without access. For example, a typical household using electricity, propane or heating oil is paying as much as \$2,500 more annually for home and water heating compared to those using natural gas from Enbridge.

And for business, expanding access to natural gas may help some newly served communities lower energy costs, help attract investments to create jobs and spur new industries. Beyond the economic benefits, allowing homes and businesses the choice to move away from dirtier sources of energy, such as heating oil, will reduce emissions and benefit the local environment.

Now I know that many people in this room represent hydro utilities so I want to be clear that I am not proposing that we extend the gas grid to all rural areas in Ontario. What I am suggesting is that we look at opportunities where natural gas makes economic sense and may even be able to help local utilities by displacing some load.

The government should not pick the fuel. Selection should be based on the need and what's available. I'm confident that if it's considered objectively, natural gas will find a strong place in the energy mix.

The third area I want to touch on is natural gas for transportation because it provides another enormous area of opportunity for the Province to meet its economic and environmental goals.

This is one area that warrants the attention of the province in broader energy and transportation policy planning. Both compressed and liquefied natural gas for transportation represent a significant opportunity for the province to tackle its economic competitiveness issues by drastically reducing fuel costs for heavy transport and return-to-base fleets. And more importantly, it can help address its environmental goals through reduced greenhouse gas emissions and smog-causing particulate matter.

Natural gas vehicles can help improve Ontario's competitive position by providing a fuel cost savings to fleet operators of up to 40%. This is a competitive transportation fuel option that some of our province's competitors in the global marketplace envy, yet we see little movement to embrace this opportunity. We estimate that if just 10% of Ontario's vehicles converted to natural gas it would result in \$1 billion in annual fuel savings.

In his recent annual review of Ontario's climate change action plans, the province's environmental commissioner highlighted the need to incorporate greenhouse gas reductions into the long-term energy plan and called out transportation reductions as a key area for attention.

Natural gas can be a big part of that solution. It's cleaner than diesel and can significantly lessen the emissions burden on urban air sheds with 20% greenhouse gas emission reductions. The technology is here. And it's proven.

We are not advocating for the conversion to natural gas in place of electric vehicles. Rather, we encourage the government to embrace a broader "clean vehicle policy" that includes natural gas for

medium to heavy duty vehicles that cannot be economically electrified. The transportation sector represents the largest source of emissions in the province. As a result, natural gas for transportation can help Ontario reach its emissions reduction targets with focused and limited government support for truck conversions and fueling infrastructure.

I cannot think of a greater opportunity to both reduce emissions on a broad scale while improving the province's economic position. The U.S. is already moving ahead in the area of natural gas for transportation. And it's already looking beyond return-to-base fleets and long-haul trucks to smaller applications such as agricultural tractors as well.

In Europe, there is also keen interest in natural gas for transportation. An LNG Blue Corridor project is proposed to improve air quality and reduce greenhouse gas emissions by displacing diesel for medium and long distance transportation. Here in Canada, CN is testing locomotives fueled by natural gas in northern Alberta. And we are seeing the market drive some fleet conversions in Ontario, but some limited support by the province for this initiative could vastly speed up the process.

If Ontario is to remain competitive and reduce greenhouse gas emissions, we must look seriously at the natural gas for transportation opportunity and not let it pass us by.

There are clear benefits that can be achieved if Ontario's updated long-term energy planning includes a greater focus on natural gas, particularly for electricity generation, community expansion and transportation.

But how do we get there?

Power generation planning needs to be done without picking fuels. Natural gas should be allowed to compete on its own merits in all segments of the province's generation needs. And the plan should also include a larger focus on the strategic use of CHP to address supply issues.

We encourage the government to consider supporting the expansion of the natural gas distribution system as a way of reducing energy costs and bringing cleaner energy to new communities by including support for this approach in the updated Long-term Energy Plan.

And lastly, the province needs a broader transportation policy that supports a range of low carbon vehicles, including, electric, hybrid and natural gas. We encourage the government to work with industry to find ways to make this happen.

In conclusion, natural gas is providing great value to the province right now.

With significant new opportunities presented by a natural gas supply revolution, Ontario must ensure that its updated Long-term Energy Plan is a true energy plan fully considers all that natural gas has to offer. Whether it's for electricity generation, transportation or expanding the distribution system, natural gas can be a solution.

You will notice common themes in the solutions being put forward by the gas sector. We are not advocating the mass expansion of natural gas infrastructure. We recommend using natural gas more strategically to help address two of the province's biggest challenges – the economy and the environment.

To reiterate, I'm not suggesting that the government pick the fuel. Natural gas should be considered fairly alongside other options.

Whether it is evaluated by economic or environmental measures it's my belief that, if allowed to stand on its merits, natural gas will find a greater place in the provincial supply mix for the benefit of the province and its residents.

The province and others in the industry have my commitment that we are here to work with you to help ensure that Ontario benefits from the best energy, economic, transportation and environmental solutions that natural gas has to offer.

Thank you.