ONTARIO ENERGY ASSOCIATION

Consultation to support the important role for natural gas in Ontario's energy system and economy

OEA Response to ERO 019-9501

Submission Date: January 16, 2025

To shape our energy future for a stronger Ontario.

Ontario Energy Association

ABOUT

The Ontario Energy Association (OEA) is the credible and trusted voice of the energy sector. We earn our reputation by being an integral and influential part of energy policy development and decision making in Ontario. We represent Ontario's energy leaders that span the full diversity of the energy industry.

OEA takes a grassroots approach to policy development by combining thorough evidence based research with executive interviews and member polling. This unique approach ensures our policies are not only grounded in rigorous research, but represent the views of the majority of our members. This sound policy foundation allows us to advocate directly with government decision makers to tackle issues of strategic importance to our members.

Together, we are working to build a stronger energy future for Ontario.

The recommendations and positions contained in OEA submissions represent the advice of the OEA as an organization. They are not meant to represent the positions or opinions of individual OEA members, OEA Board members, or their organizations. The OEA has a broad range of members, and there may not always be a 100 percent consensus on all positions and recommendations. Accordingly, the positions and opinions of individual members and their organizations may not be reflected in this document.

INTRODUCTION

The Ontario Energy Association (OEA) commends the government of Ontario for its proactive efforts to plan for the energy needs of Ontario's growing economy. We appreciate the opportunity to provide feedback on its Consultation to support the important role for natural gas in Ontario's energy system and economy (ERO 019-9501).

CONTEXT SETTING: ENERGY PLANNING

OEA's membership includes representation from all of Ontario's energy resources. We are a broad-based energy association. The OEA believes that the role for all energy resources, including natural gas, should emanate from the provincial government's detailed comprehensive integrated energy planning for the province.

Comprehensive energy planning should underpin the forecast future needs for all energy resources. That work will outline the needs for natural gas and other resources over a relatively long time horizon. This detailed planning should provide the foundation for a clearly communicated government vision for the sector, so there is more clarity and certainty for potential investors and developers of energy resource needs by type. In the government's vision, it should indicate the needs and its plans for all energy systems, including expansion of the natural gas system.

Many energy assets have very long investment horizons. Having the government provide a clear vision and direction will lower costs for customers by reducing perceived risk by investors. With respect to supporting community economic growth, beyond the important role of policy clarity informed by comprehensive planning, the government in Ontario has frequently made decisions to provide support for economic development and affordability objectives. This has included recent natural gas expansion programs and electricity bill reduction programs. Having a detailed comprehensive plan will allow government to optimize the benefits to Ontario energy customers of any investments made to address affordability, expansion or economic development objectives.

The OEA is pleased and very supportive of the government's stated direction to release an integrated energy plan in 2025. An integrated energy plan can be a useful tool to address the points raised above.

CONSULTATION QUESTIONS

What principles should the government provide to the OEB to help inform the Board's ongoing development of natural gas connection policies?

The OEA believes connection policies should be based on the following principles:

- They should support the government's pro-growth agenda
- They should ensure customer choice
- They should support energy affordability objectives
- They should provide investors with financial and economic certainty
- They should ensure timely connections

- They should be based on realistic timelines to build new infrastructure
- They should be informed by input from affected stakeholders
- They should be informed by comprehensive integrated planning for all energy sources that considers all the elements outlined above

The OEA believes that the above noted principles align completely with government objectives for the energy sector as articulated in *Ontario's Affordable Energy Future: The Pressing Case for More Power* and in recent letters of direction to the Ontario Energy Board (OEB).

What role should natural gas play in supporting energy affordability and customer choice in residential and small commercial applications (e.g., space and water heating)?

The availability of natural gas provides Ontario residential and small business customers with choice on their energy options. With choice, customers can choose which options best suit their needs based on whatever criteria are important to customers, including things like affordability, reliability, sustainability. It allows the customer to choose which energy options or setup best suits their individual needs and objectives

Natural gas can also play an important role in aiding emissions reductions and reducing peak electricity needs through hybrid heating. The dual fuel option of hybrid heating offers an important resiliency option for Ontario's residents and businesses during extreme weather events.

What role should natural gas play in supporting economic development in Ontario's industrial and agricultural sectors, including those processes that may be difficult to electrify?

It is widely accepted[1] that a number of large industries are "hard-to-abate", including: cement; steel; chemicals; and some types of agriculture. Natural gas will continue to play an important role in the retention of these sectors and aiding in their expansion as Ontario pursues economic growth. In Ontario's case, this includes its automotive sector; its steel industry; the Sarnia chemical industry hub; fertilizer production; the agriculture sector including southwestern Ontario's expanding greenhouse sector; etc.

The steel industry is an example of where natural gas will be critical to the industry's future plans in Ontario. ArcelorMittal has announced plans to reduce its emissions by 60 percent within this decade.[2] It plans to do this by increasing natural gas use to replace coal, an example where natural gas is critical to industry emissions reduction plans.

With respect to the agriculture sector, the Ontario Federation of Agriculture has been a consistent champion for access to natural gas for rural and farm communities: "Supporting strategic natural gas expansion sustains economic development, job creation, and an

[1] See for example the following IEA report: https://www.iea.org/reports/achieving-net-zero-heavy-industry-sectors-in-g7-members/executive-summary
[2] https://dofasco.arcelormittal.com/media/news-articles/we-re-on-our-way-to-net-zero

affordable cost of living for rural Ontario. When available, natural gas is often the cleanest and most economical fuel option for many rural communities."[3]

In addition to supporting current operations, natural gas infrastructure presents opportunities for decarbonization. The gas system can integrate low-carbon innovations, such as RNG and Carbon Capture & Storage (CCS), by allowing industries to transition to cleaner energy supplies without retrofitting existing systems. These types of solutions are being actively advanced today, but there remain greater opportunities for their utilization.

What role should the government play in supporting and expediting the rational expansion of the natural gas system to make home heating more affordable and support economic growth in communities that are seeking natural gas service?

The government should continue to support expansion to the natural gas system to provide additional customers expanded choices to meet their needs for affordable and reliable energy. Any community expressing interest in connecting to the natural gas system should be considered for community expansion.

Many municipalities remain eager to gain access to natural gas within their communities. There was significant interest following the government's consultation on the future of the Natural Gas Expansion Program (NGEP) in the fall of 2023. Established in 2018 under the Access to Natural Gas Act, the NGEP has facilitated access to natural gas for underserved communities. However, the strong municipal interest in natural gas expansion during Phase 2, as evidenced by over 200 proposals far exceeding available funding, underscores the need for the government to consider extending funding to communities where it makes sense to do so.

Beyond the NGEP, policy should support timely, affordable and accessible energy connections. Forecasted growth in energy needs in Ontario in the near and long-term is forecast to be significant. Therefore, it is important to enable proactive natural gas infrastructure growth to allow for the energy system to meet demand on a timely basis.

For natural gas expansion projects receiving government support, should the approvals processes be streamlined to support affordable home heating for Ontarians? In what ways?

In addition to increased funding to the NGEP, the government should streamline the regulatory process for these projects. Since municipalities themselves express interest in applying for NGEP funding, the OEA recommends improving the program's review timelines, modernizing regulatory processes and streamlining permitting approvals for these government selected projects. These changes would significantly expedite project delivery while reducing costs for households and businesses seeking access to the natural gas system.

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[3] https://ofa.on.ca/resources/ofa-submission-to-the-ministry-of-energy-regarding-the-future-of-the-natural-gas-expansion-program/#:~:text=OFA%20provided%20comments%20on%20the%20future%20of,(NGEP)%20from%20an%20agricultural%20and%20rural%20perspective.

Furthermore, streamlining the process would support customers who have demonstrated a clear preference for natural gas where it will provide a more affordable and reliable option with lower GHG emissions.

For example, intervenor motions related to heat pumps are unnecessarily delaying regulatory hearings for NGEP projects, despite these projects being requested by municipalities and approved by the provincial government. Such motions are redundant, given that alternative energy options are already available, and communities have explicitly expressed their support for natural gas services.

What role should natural gas play in supporting power system security and resiliency?

Based on a detailed assessment of the Ontario electricity grid's future resource needs, the IESO has clearly indicated clearly that electricity generation for peak demand will be hard to abate for the foreseeable future.[4] The IESO has indicated that suitable alternatives to replace natural gas generation and build alternative infrastructure at scale cannot be planned, acquired and built at a rate that would allow for replacement of existing gas generation infrastructure for the foreseeable future.

The IESO also points out that "the application of the Emergency Circumstances, to the extent they are necessary, must recognize the realities of real-time power system operations and be revised to provide confidence that natural gas generation can be relied upon for public safety by adopting the NERC definition for Energy Emergency." The IESO also points out that "while natural gas generation currently only supplies approximately 10 percent of the province's electricity needs, it plays a critical role in maintaining system reliability based on its ability to provide continuous energy throughout the year, under all weather conditions. Further, natural gas generation can be ramped up or down, providing reliability services that help stabilize voltages and frequencies on the transmission grid."

Additionally, Enbridge Gas' Dawn Hub plays a pivotal role in ensuring the security and resiliency of the power system. With approximately 89 TWh of underground natural gas storage and connections to major supply basins across North America, the Dawn Hub safeguards Ontario against upstream supply disruptions and market price fluctuations. It secures the province's natural gas supply at highly competitive prices, with annual purchases equivalent to twice the energy demand of Ontario's entire electricity system. The resilience provided by the Dawn Hub is vital to maintaining the reliability of a clean electricity grid.

The OEA believes that the Ontario government should heed the IESO analysis and advice on the important role natural gas plays for energy system reliability, as system reliability is the IESO's core responsibility and area of expertise.

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[4] see for example: https://www.ieso.ca/-/media/Files/IESO/Document-Library/cer/IESO-CER-Submission.pdf

What role should natural gas play in offsetting higher GHG-emitting fuel sources?

Natural gas can offset higher GHG-emitting fuel sources in a number of ways.

In the residential sector, converting to natural gas can offset the use of higher-emission heating sources such as oil, and propane. Natural gas emits 33% fewer emissions than heating oil and approximately 20% fewer than propane.

In the industrial sector, numerous industries are benefiting from the transition to natural gas, including manufacturing, heavy transportation, and power generation. For example, Ontario's decision to eliminate coal-fired electricity generation, was largely supported by an increase in natural gas-fired generation and was North America's largest GHG reduction initiative at the time. As mentioned above, in the steel industry, transitioning from coal-based production to natural gas as a fuel source is expected to reduce emissions by over 60%.

Natural gas can play a major role in the decarbonization of Ontario's heavy duty transportation sector. It is one of the single best opportunities for cost effective decarbonization. The two key reasons for this are that diesel fuel is a) very expensive at roughly four times the cost of natural gas, and b) carbon intensive at roughly 30% more carbon intensity than natural gas. It makes sense to focus on the higher emitting and most expensive fuels first if the goal is cost effective emissions reductions. The government should consider opportunities to incentivize natural gas transportation.

What are the challenges and opportunities for enhanced energy efficiency, adoption of clean fuels (e.g., RNG, Hydrogen) and emission reduction methods (e.g., carbon capture and storage) to lower emissions in the natural gas system?

The OEA commends the government for its ongoing support for energy efficiency initiatives, and its recent announcement of a long-term funding for new home renovations include new windows, doors, insulation, smart thermostats, heat pumps and rooftop solar panels to reduce energy bills.

There remain significant opportunities to leverage the natural gas system to further objectives for energy efficiency, clean fuels and emissions reduction.

Energy Efficiency Programs

The government should continue supporting energy efficiency programs to optimize Ontario's energy infrastructure. This approach compliments utilities' efforts to expand and enhance their infrastructure to meet growing demand. Initiatives such as the Home Renovation Savings Program, along with programs that support hybrid heating systems or incentivize the conversion of oil boilers to energy-efficient natural gas solutions, should be prioritized.

Carbon Capture and Storage (CCS)

CCS is a safe, proven technology that plays a vital role in reducing GHG emissions, particularly for hard-to-abate industries such as steel, cement, and fertilizer. Both the International Energy Agency and the Canadian Energy Regulator recognize CCS as one of the most critical decarbonization technologies. Currently, CCS projects are effectively lowering GHG emissions worldwide, offering a crucial pathway to reducing operational costs for energy-intensive, hard-to-abate sectors. Additionally, CCS is essential for enabling low-carbon hydrogen production, paving the way for a more affordable and sustainable hydrogen industry in Ontario.

The OEA strongly supports the introduction of the Geologic Carbon Storage Act. However, additional measures are necessary to fully realize the potential of CCS in the province. A key challenge remains the absence of a streamlined regulatory framework for CO2 pipeline development and other transportation methods linking large emitters to geologic carbon storage sites. To ensure Ontario maximizes use of its potential geologic carbon storage capacity, reducing GHG emissions and achieving cost-effective energy solutions, we recommend that Ontario should implement a complementary regulatory process to facilitate the approval of CO2 pipelines.

RNG

Torchlight Bioresources estimates that Ontario's RNG potential from wet organic waste, including landfills, could provide energy equivalent to powering approximately 1.2 million typical homes every year. When agricultural residues and additional landfill capacity are considered, this potential rises dramatically to 6.9 million homes. This represents approximately four to 26 percent of Ontario's annual natural gas demand—a significant opportunity to diversify and decarbonize the province's energy supply.

Currently, most of Ontario's RNG is exported, and as other provinces set ambitious RNG blending targets, this trend is likely to continue. Such dynamics could restrict Ontario's ability to secure the lowest-cost local RNG supplies in the near term. For instance, Quebec's Green Economy Plan aims to increase renewable gas (RNG and hydrogen) to 10 percent of its total gas supply by 2030. Similarly, British Columbia has set a 2030 target for 15 percent of its gas consumption to come from renewable sources, including RNG and hydrogen.

To ensure Ontario capitalizes on its RNG potential and remains competitive, the OEA recommends that Ontario:

- establish binding lower carbon blending targets, similar to those in Quebec and British Columbia, to incentivize investment in RNG infrastructure and ensure access to affordable, local RNG supplies. This approach would support the province's transition to a diversified and sustainable energy future; and
- allow utilities to recover the market price of RNG consistent with the recovery of conventional natural gas.

Hydrogen

Hydrogen is an attractive longer-term option for hard-to-abate sectors, where electrification is not practical. Sectors like heavy transport or industries with high-

temperature processes like steel manufacturing, cement and chemical production are considering hydrogen to lower their emissions.

Hydrogen can also be blended into the pipeline system to lower GHG emissions from the use of natural gas. For this to occur, the government would need to enable the cost-recovery of the incremental cost of hydrogen blended into the gas system. Ontario's pipeline system is ideally suited to be repurposed to a hydrogen network. Enbridge, who serves over 99 percent of Ontario's natural gas customers, is currently undertaking a full system-wide study of its extensive 150,000 km gas pipeline system to determine maximum tolerable blending amounts, up to and including 100% hydrogen.

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Let's unravel complex energy challenges, together.