Enbridge Feedback on Supporting the Important Role for Natural Gas in Ontario's Energy System and Economy

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About Enbridge Gas Inc.

Enbridge Gas is Canada's largest natural gas storage, transmission and distribution company based in Ontario, with more than 175 years of service to customers. The distribution business provides safe, affordable, reliable energy to about 3.9 million homes, businesses and industries in Ontario and is supporting the transition to a clean energy future through net-zero emissions targets in our operations and investments in innovative low-carbon energy solutions. With the recent acquisition of three gas utilities serving customers in five US states, Enbridge owns and operates the largest gas utility franchise in North America. The storage and transmission business offers a variety of storage and transportation services to customers at the Dawn Hub, the largest integrated underground storage facility in Canada and one of the largest in North America. Enbridge Gas is owned by Enbridge Inc., a Canadian-based leader in energy transportation and distribution.

Learn more at www.enbridgegas.com.

Introduction

Enbridge Gas Inc. (Enbridge) commends the Government of Ontario for its proactive approach in consulting on the important role for natural gas in Ontario's energy system and economy (ERO 019-9501). Enbridge welcomes the opportunity to provide feedback and remains committed to supporting Ontario's growth.

As set out in its December 13, 2024 submissions on the government's Integrated Energy Resource Plan (IERP) Consultation (ERO 019-9285), Enbridge applauds this critical government initiative as well and observes many synergies between the proposed IERP and the development of a natural gas policy statement, both of which were recommended by the Electrification and Energy Transition Panel (EETP). Enbridge briefly cites its IERP submissions herein but refers the government to the complete submissions for fuller context.

Executive Summary

Natural gas is critical to supporting Ontario's economy now and in the future by powering the residential, commercial, industrial, agricultural, and transportation sectors, and driving economic competitiveness and growth. It delivers twice the energy and four times the average electric peak supply at a quarter of the cost. This affordable, reliable, and resilient energy source not only ensures the reliability of the electricity grid but also meets the increasing energy demands of Ontario's energy-intensive, hard-to-abate manufacturing and agriculture sectors, the backbone of our economy. By ensuring Ontarians have the choice of affordable, reliable, and resilient natural gas, the province can retain and attract billions of dollars of investments and tens of thousands of jobs, aligning with the government's pro-growth agenda.

In order to ensure Ontarians have access to affordable, reliable energy throughout the energy evolution, the government should create clear regulatory frameworks that not only moves Ontario towards a secure energy future but accelerates and supports innovation, while fostering collaboration among industry stakeholders. By integrating lower carbon solutions, such as energy efficiency programs, renewable natural gas (RNG), hybrid heating systems, carbon capture and storage (CCS), and advancing long-term technologies like low-carbon hydrogen and advanced metering infrastructure (AMI), Ontario can meet growing energy demands reliably and cost-effectively while reducing emissions. The IERP will also be of great assistance to energy utilities and service providers to achieve these objectives in the most efficient manner.

Recommendations

1. *Provide clear government direction on the need for natural gas and gas infrastructure:* The government should explicitly recognize through a multi-faceted approach that natural gas and gas infrastructure are critical components of the province's evolving energy landscape. The Natural Gas Policy Statement (NGPS) should provide guidance to the Ontario Energy Board (OEB) and other government agencies involved in energy regulation for exercising adjudicative functions to be consistent with government policy. In addition to clarity provided by the NGPS, the government should update and amend policy-oriented legislative provisions (e.g., Section 2 of the *Ontario Energy Board Act, 1998*) to highlight the natural gas system's unique and critical role in the long-term energy mix. In this manner, the government can set direction for regulators and other stakeholders that an "all of the above" approach to energy and systems integration must be considered and prioritized in every action. This policy clarity is essential for securing the capital needed to maintain, develop and modernize gas infrastructure, ensuring that utilities have a stable, predictable environment to help keep energy rates affordable for

customers, support economic growth, and safeguard the reliable delivery of energy as Ontario's demand surges.

2. *Establish a clear connection between the NGPS and the IERP to emphasize the critical need for integration of electric and gas planning:* Ensure that consideration of natural gas and gas infrastructure is fully integrated into energy and land use planning processes at every level (provincial, regional and municipal). This will enable reliance upon standardized forecast and planning assumptions, rather than regulators and other stakeholders turning to selective data and information from disparate interest groups that may be inconsistent with provincial government policies. In this regard, the Provincial Policy Statement should also explicitly mandate planning for integration of gas and electric services in regional planning frameworks.
3. *Make Ontario a competitive jurisdiction for investment in energy infrastructure to support the public's interest:* With the Government of Ontario's acknowledgment that the province will need 75% more energy by 2050, significant investment will be *required to meet d*emand. Ontario can compete for private sector dollars by ensuring cost recovery mechanisms are in place that provide regulatory certainty for recovery of and fair returns on the capital needed to ensure that there is infrastructure in place to power the province. The government must ensure that the return on capital aligns with the public interest as Ontario utilities – both electricity and natural gas - deliver vital services crucial for daily life, health and economic activity.
4. *Keep energy affordable and preserve customer choice:* Ontario must adopt a balanced approach—allowing consumers and developers to choose between energy types including gas, electricity, and emerging low-carbon fuels—so that household and business budgets are not unduly burdened. Expanding access to natural gas infrastructure in communities transitioning from higher-emitting fuels (e.g., oil, propane) fosters affordability, reliability, resiliency, and enables lower emissions.
5. *Enable Timely, Accessible, and Affordable Energy Connections:* To ensure timely, accessible, and affordable access to the gas system, it is critical to minimize delays and reduce high upfront costs that would limit equitable access to the benefits natural gas offers. The electricity system's lack of capacity to meet forecast growth necessitates the proactive growth of gas infrastructure to allow for an integrated energy system to meet rapidly increasing demand. Through the IERP, coordinated energy planning, municipal forecasts and provincial goals should be used to support the necessary investment in energy infrastructure in a timely manner. Regulatory processes must be equally agile and nimble to allow utilities flexibility to adjust connection policies as required.
6. *Streamline approvals for natural gas expansion projects:* Increase funding for the Natural Gas Expansion Program and modernize OEB processes (e.g., limit duplicative interventions and tighten procedural timelines) to expedite community-requested gas expansions. Cutting regulatory red tape will reduce project delays, control costs for ratepayers, and promptly deliver cleaner, affordable energy to households and businesses. Additionally, to keep up with energy demand, Ministries like Transportation, Environment, Conservation and Parks, Citizenship and Multiculturalism, etc. should streamline their permitting protocols.
7. *Support industrial and agricultural competitiveness*: Ensure regulatory approvals for securing required natural gas transmission and distribution infrastructure projects to keep Ontario attractive for energy-intensive industries and agricultural operations. Gas infrastructure helps industries cut costs, reduce carbon emissions, and maintain jobs,

especially in sectors where full electrification is not yet feasible (e.g., steel, cement, grain drying).

8. *Advance low-carbon innovations*: Support investment in hybrid heating, carbon capture, RNG, and hydrogen to strengthen Ontario's energy network. Provide regulated cost-recovery mechanisms, set blending targets (e.g., for RNG and/or hydrogen), enable RNG for transportation decarbonization and establish pathways for CO_2 pipeline approvals—all of which will facilitate an achievable and actionable energy evolution without compromising reliability or affordability.

Questions

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

Ontario residents, businesses, industries, and agricultural sectors continue to demand access to affordable, reliable, and resilient natural gas. According to Ontario's Independent Electricity System Operator (IESO), the province's demand for energy is forecast to increase by 75% by 2050, the equivalent of adding four and a half cities the size of Toronto to the electricity grid. To meet this demand and attract investments in hard-to-abate, energy intensive industries and the agricultural sector, the government must ensure that Ontario is truly a competitive jurisdiction for energy investors to attract capital to the province. Natural gas availability in Ontario provides the province with a competitive advantage. To ensure Ontario residents, businesses, industries, and agricultural sectors have the choice to access the natural gas infrastructure while laying the building blocks for low-carbon alternatives, the government should:

a. Enable Timely, Accessible, and Affordable Energy Connections

Ontario residents, businesses and industries continuously demand timely, accessible, and affordable access to the natural gas system. Ensuring there are no delays or high upfront costs that would serve as barriers is critical to enabling equitable access for all Ontarians to benefit from the resilience, reliability and affordability that natural gas offers.

Forecast growth in Ontario in the near and long-term requires policy to support the timely energy connections. As the electricity system is not projected to meet the rapid near-term growth in energy demand currently forecasted to be served by Enbridge, it is important to enable proactive natural gas infrastructure growth to allow for the energy system to meet demand at the pace of the rapid development.

While the government has provided much needed clarification of the revenue horizon component of the gas connection process, addressing the uncertainty caused by the OEB decision in Phase 1 of Enbridge's 2024 Rebasing application. Enbridge welcomes the opportunity for important stakeholders, such as the housing development community, to be heard through a future OEB process to examine connection procedures. In addition to ensuring this process is open, transparent and aligned with government policy, the government should require the OEB to allow for sufficient flexibility in connection process development and evolution to meet fast-paced economic growth in Ontario. While processes, rules and regulations for natural gas connections allow for allocating costs based on forecasted growth, without cost recovery assurances, Enbridge (and other utilities) may not be able to build certain connection infrastructure to support anticipated growth without confirmed customer demand or commitment for all of the capacity. Development and implementation of the IERP should aim to improve coordinated energy planning, municipal planning and standardized forecasting to meet

provincial goals to increase the number of new homes in Ontario. Enbridge and other utilities require nimble and agile regulatory processes, and certainty of investment recovery to drive the investment in infrastructure necessary to meet these goals in a timely manner.

Collaboration between stakeholders—such as the OEB, the IESO, municipalities, businesses driving growth in Ontario and natural gas and electric utilities—will help meet demand forecasts and identify system expansion needs.

b. Ensure Customer Choice and Community Safety by Providing Policy Clarity

Ontarians deserve energy choice based on their own household needs and budget. The government should provide clarity to investors and regulators on the **unequivocal need for natural gas and gas infrastructure during the energy evolution, and the need for its continued maintenance and expansion in Ontario.** This is needed urgently to reduce the regulatory uncertainty that exists without clear government policy direction. The government could also include minor changes to section 2 of the *OEB Act* to clarify the important role of natural gas and natural gas infrastructure in Ontario's diverse energy mix and the need for the OEB to follow and implement government policy in its regulation of natural gas utilities. We are encouraged to see the language in the Minister's 2024 Letter of Direction to the OEB regarding the importance of aligning with the government's "goals, objectives and strategic direction[1]", and that similar direction should be provided in the NGPS.

Safety is a foundational value at Enbridge for the communities we serve, our team members and our assets. The government should provide clarity to ensure that Enbridge can have regulatory certainty on investments made to maintain the natural gas system to meet industry safety standards and requirements of the Technical Standards and Safety Authority. To increase regulatory certainty associated with energy investments in Ontario, it is important that regulatory bodies align with the government's policy direction such as their all of the above approach on energy to support economic development and housing affordability.

c. Prioritize Financial Viability of Energy Utilities to Provide and Serve the Public Interest

The OEB has a clear mandate, as set out in Section 2 of the OEB Act, to facilitate maintenance of a financially viable gas industry for the transmission, distribution and storage of gas, and has a similar obligation for the electric industry. This is absolutely critical to enabling Enbridge Gas and other utilities to continue to serve the public interest by maintaining and growing Ontario's energy systems. Financial viability includes all aspects of utility rate-making, including fundamental accounting practices such as depreciation methodologies to ensure future cost recovery for long-term capital investments. Also related to this is the need for the OEB and the government to ensure that the return on capital for gas and electric utilities aligns with market requirements to attract capital investment to serve the Ontario public interest and deliver vital services crucial for daily life, health and economic activity . Setting an appropriate return on capital for Ontario's utilities that meets the fair return standard is a basic legal requirement. Ensuring more comprehensive financial viability is similarly required to provide a sound financial foundation for Ontario's utilities to have the resources required to meet the current and foreseeable increase in energy demand.

[1] 04-0177

Recognizing that Ontario utilities operate and capital markets, Ontario's utilities must be able to compete for capital on favorable terms with their North American peers. For example, the British Columbia Utilities Commission increased equity thickness for Fortis, and Hydro-Québec is leveraging and ongoing comprehensive financial viability **and ensure cost recovery of prudent investments (returns on and returns of investment) in energy infrastructure**, Enbridge may not be able to attract investment to its Ontario gas distribution business. As a consequence, Enbridge may have to start deferring at best, or cancelling at worst, projects that businesses and communities are depending on. Such actions pose an inherent risk to the government's own strategic direction to ensure a more resilient and secured energy mix in the best interest of Ontarians.

The government should **send a clear signal that for existing and continued capital investments in energy infrastructure, which are required to meet government policy goals and/or the needs of customers, the OEB shall ensure cost recovery mechanisms are in place that provide regulatory certainty for recovery of and fair returns on such capital**. This clarification could be included in minor changes to Section 2 of the *OEB Act,* as noted above, and it could be added to Section 36.2 by outlining that for these priority lines that the OEB shall establish rate recovery mechanisms that allow gas utilities the ability to recover prudent costs.

2. 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)?

Natural gas must play an ongoing role in the energy system to provide energy choice for customer affordability and reasonable building timelines for Ontario's residents and small businesses. Regarding customer choice, Enbridge's 2022 market research of six surveyed communities indicated an average of 77% of respondents were likely, very likely, or extremely likely to connect to natural gas if it became available. This percentage was even higher among respondents with propane and oil-fueled heating, at 85% and 80%, respectively. Further, Enbridge's experience through its DSM programs and managing federal government funding for home energy retrofits is that of the over 80,000 customers that installed electric heat pumps, 99% of those customers remained connected to the gas system, even though they could have chosen to be disconnected. This illustrates the high importance that general service customers place on being connected to the gas system.

The government has emphasized that the province's energy needs are at an all-time high, driven by the government's ambitious goal of building 1.5 million homes by 2031 and fostering economic growth. Meeting this surging demand through the electricity system alone in the allotted timeline is highly unlikely. Ontarians and home developers will demand energy choices that align with their timelines and budgets.

Ontarians deserve a reliable, resilient, and cost-effective energy system that meets their needs today and into the future. Currently, Enbridge Gas serves 3.9 million homes, businesses, and industries in Ontario, which includes serving 75% of Ontario homes. For Enbridge's residential and low-volume commercial customers, staying connected to the natural gas system offers a level of resiliency that remains unmatched by the electricity system. The unit capital cost of delivering annual and peak-hour energy through natural gas is approximately one-quarter that of electricity in Ontario.[2] These figures exclude the

[2]Based on data from 2021 Yearbook of Natural Gas Distributors & 2021 OEB Yearbook for Electricity Distributors

substantially higher costs of expanding the electric grid in today's dollars and the added expense of burying electrical infrastructure to achieve equivalent resiliency.

According to the Financial Accountability Office of Ontario (FAO) 2021 report, rural households face significantly higher energy costs due to limited access to natural gas and higher distribution fees for electricity and alternative fuels. They are nearly twice as likely to rely on electricity or heating oil as their primary heat source.[3] Expanding access to natural gas would provide households with electric baseboard heating and alternative fuel sources with a more affordable heating option, reducing their energy burden and improving affordability and reliability for all Ontarians.

A singular focus on electrification risks significantly increasing customer and system costs, reducing customer choice, and compromising reliability. Progress toward lowering emissions will require action by Ontario's homes and businesses and will only succeed if affordability is prioritized. Maintaining manageable costs ensures continued consumer support. Integrated, proactive, and staged planning is essential to achieving an affordable and sustainable energy evolution. Ontario should consider mandating that municipal decisions related to peak energy delivery should not impose unreasonable incremental costs and requirements on the grids. Requiring mandatory consultation with local electric and gas utility and including a documented feasibility analysis would help ensure that costs imposed on other energy ratepayers are minimized.

The resilience and reliability that natural gas offers Ontarians is critical to ensuring the safety and comfort of residents and businesses. The electricity system which is prone to experience outages due to extreme weather is not forecast to be able to support the load that electrification of a high proportion of home heating would require in the near future. For those reasons, hybrid heating systems that provide dual heating sources offer an immediate opportunity to achieve significant GHG emission reductions and reduce peak electricity demand while ensuring reliable heat even on the coldest days. This added resilience will keep families and seniors safe during extreme weather, delivering comfort and security to Ontarians.

3. **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?**

Many industries, including manufacturing and agriculture, require access to significant volumes of natural gas to consider investments in a jurisdiction, ensuring they remain economically competitive in a global marketplace. This affordable, reliable, and resilient energy source not only provides an alternative to higher-emission fuels but also supports reductions in both operational expenses and GHG emissions for businesses.

Enbridge Gas works closely with Invest Ontario and the Ministry of Economic Development, Job Creation, and Trade to discuss natural gas supply to various opportunities being pursued by the province. Enhanced access to natural gas significantly bolsters Ontario's industrial and agricultural sectors. For instance, the agricultural industry relies on natural gas for cost-efficient grain drying and building heating. These uses are critical to reducing production costs and improving competitiveness, particularly for farmers in rural communities.

Enbridge's commitment to expanding natural gas access is evident in projects like the Panhandle Regional Expansion, a $358 million investment announced in July 2024. This

[3] Das, Runa R. & Martiskainen, Mari & Bertrand, Lindsey M. & MacArthur, Julie L., 2022. "**A review and analysis of initiatives addressing energy poverty and vulnerability in Ontario, Canada**," Renewable and Sustainable Energy Reviews, Elsevier, vol. 165(C).

transmission pipeline expansion is expected to secure approximately 7,000 jobs, facilitate $4.5 billion in investment opportunities, and provide the province with more reliable, affordable, and cleaner energy solutions to power its growing economy.

For companies with energy-intensive manufacturing processes—such as steel and cement production—natural gas remains indispensable. These industries require high-temperature heat that is challenging and often impractical to achieve with electricity alone. Natural gas provides an affordable and reliable energy supply for these critical operations, enabling them to remain competitive while reducing GHG emissions. Beyond affordability, Ontario's extensive natural gas transmission, storage and distribution network offers unmatched reliability, ensuring industries and agricultural operations experience minimal downtime and stable energy costs.

In addition to supporting current operations, natural gas infrastructure presents opportunities to integrate low-carbon innovations, such as RNG and CCS, by allowing industries to transition to cleaner energy supplies without retrofitting existing systems. Enbridge is actively advancing these solutions, leveraging its infrastructure to provide pathways for reducing GHG emissions while maintaining operational efficiency.

Economic development also benefits from the reliability of gas infrastructure in attracting industrial investments and supporting rural economies. A stable and affordable energy supply helps industries expand, creates skilled jobs, and drives local investments. Moreover, access to gas infrastructure enables farmers and agricultural producers to modernize operations, reduce costs, and remain competitive in domestic and international markets.

By expanding access to natural gas and integrating low-carbon solutions, Ontario can foster economic growth, create jobs, and attract investment while supporting its transition to a lower-emissions economy. As industries and agricultural producers continue to depend on reliable energy solutions, natural gas will remain an essential component of Ontario's energy strategy, ensuring economic competitiveness and resilience in an evolving global landscape.

4. **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?**

   a) *Continue to fund the Natural Gas Expansion Program:* The government must ensure equitable access to affordable and reliable energy infrastructure. Any community expressing interest in connecting to the natural gas system should be considered for community expansion. Municipalities remain eager for additional funding opportunities, with significant interest following the government's consultation on the future of the 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 overwhelming municipal interest in natural gas expansion during Phase 2, 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.

   b) *Create an environment for homes to be heated affordably and in a timely manner:* Forecasted growth in Ontario in the near and long-term requires policy to support timely, affordable and accessible energy connections. As the electricity system is not projected to meet the rapid near-term growth in energy demand currently forecasted to be served by Enbridge Gas, it is important to enable proactive natural gas infrastructure growth to allow for the energy system to meet demand on a timely basis.

5. **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, Enbridge recommends improving the project 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.

   Furthermore, streamlining the process would support customers who have demonstrated a clear preference for natural gas, ensuring they are not forced to rely on heating options that are less affordable, less reliable, less resilient, and associated with higher GHG emissions.

   For example, intervenor motions in OEB proceedings related to heat pumps are unnecessarily delaying regulatory hearings for NGEP projects, despite these projects being requested by municipalities and supported 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.

   To address the regulatory uncertainty in OEB processes caused by frequent procedural delays and review motions from intervenors, the broad scope and application of intervenor participation, as well as the extended timelines and increased costs of these processes borne by ratepayers, the following general recommendations are proposed to improve project delivery:

   a. Consider adding all NGEP projects to be eligible for an LTC exemption application under Section 95(2) of the *OEB Act* in order to streamline regulatory processes. Regardless, once government has decided to support a project and given clear direction on natural gas expansion, there should be no unnecessary regulatory delays and interventions challenging project need should not be entertained by the OEB in any manner.

   b. Limit interventions to matters directly within the OEB statutory mandate—such as land use and value for ratepayers—to reduce timelines and minimize costs passed on to ratepayers. Costs paid for such interventions should be carefully scrutinized to ensure ratepayer interests are protected.

   c. Refine the definition of “substantial interest” to ensure participation is limited to directly affected stakeholders that represent landowners, customers or residents and do not allow policy and special interest-oriented interventions whose mandates conflict with government policy.

   d. Prevent duplicative interventions by consolidating overlapping submissions from organizations with similar positions, streamlining proceedings, and reassessing the intervenor compensation model.

   e. Restrict the number and scope of interrogatories to prevent excessive delays and consider implementing a budget cap on intervenor costs or a requirement that intervenors self-fund to further safeguard ratepayer interests.

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

   The natural gas system plays a critical role in Ontario’s energy security, resilience, and reliability. Ontario's gas infrastructure is exceptionally dependable, delivering the equivalent of 90 GW in peak winter capacity. Enbridge Gas' distribution system boasts a reliability rate

of 99.9993%, ensuring uninterrupted energy availability during extreme weather events that can disrupt the electricity grid. This high level of reliability is achieved through various measures, including robust system design, redundancy, segmentation, isolation, condition monitoring, asset management, and damage prevention programs. Unlike the electrical grid, the gas system is less vulnerable to severe weather due to its predominantly underground infrastructure and resilient system design. Historically, Enbridge Gas has experienced minimal, contained, or no impacts from severe weather events that have disrupted energy systems across North America.

Enbridge Gas' ability to serve customers during upstream outages and interruptions is bolstered by the Dawn Hub. With the equivalent of approximately 89 TWh of underground natural gas storage and connections to over a dozen major transmission pipeline systems in Canada and the US, the Dawn Hub is one of North America's largest integrated natural gas storage and transmission facilities and is connected to most major supply basins across the continent and serves customers in Ontario, Quebec, Eastern Canada, and the Northeast US. Through this connectivity and access to storage, the Dawn Hub protects Ontario from upstream supply outages and market price volatility. The utility's upstream gas supply portfolio that brings natural gas into Ontario is contracted with a diverse range of counterparties and structured with varying terms, ensuring competitive pricing and high reliability. In conjunction with the Dawn Hub, this gas supply portfolio secures Ontario's gas supply at very competitive prices, and its annual purchases equate to twice the energy demand of Ontario's entire electricity system. As a result, the Dawn Hub serves as a critical strategic advantage, enhancing Ontario's economic competitiveness and energy security.

Ontario's electricity system benefits significantly from the resilience provided by the natural gas system. With a clean electricity grid supported by diverse resources, maintaining a varied supply mix is essential to ensuring the ongoing reliability of Ontario's power system. Gas-fired generators play a critical role in cost-effectively maintaining system reliability and meeting forecasted supply needs as the province transitions. According to the IESO Natural Gas Phase-Out Study, gas generation offers services that "no other resource today can provide on its own," such as producing large amounts of power to meet high demand and running for extended periods when other resources are unavailable. The study also notes that "newer forms of supply, such as energy storage, are not ready to operate at the scale needed to compensate." Gas generation's flexibility allows it to ramp up or down within minutes, addressing sudden or unexpected changes in demand or the availability of other resources. This adaptability is crucial for managing the variability of wind and solar generation, as well as the constant fluctuations in system demand. In addition, the increasing frequency and severity of extreme weather events underscores the need to maintain resiliency in Ontario's energy systems.

The province must also factor in the staggering scale of energy demands of rapidly growing sectors such as data centers. Without investments in maintaining and growing natural gas infrastructure, Ontario could face energy shortages and an inability to sustain its attraction and growth in data centers and additional industrial expansions.

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

In some instances, natural gas is the energy evolution for hard-to-abate, energy-intensive industries and to some residential customers. Switching from higher-emitting fuels like coal, heating oil, and propane to natural gas can significantly reduce Ontario's carbon footprint. Enbridge is facilitating these emissions reductions by helping customers transition from high-emission energy sources to natural gas. This shift not only lowers emissions but also decreases annual energy consumption through Enbridge's comprehensive energy efficiency and conservation programs.

In the residential sector, converting to natural gas offsets the use of higher-emission heating sources, such as oil, propane, and wood. Natural gas emits 33% fewer emissions than heating oil and approximately 20% fewer than propane. As a component of hybrid heating systems, natural gas helps balance electricity requirements at peak times and provides an opportunity to use lower-carbon gases as part of the energy mix.

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. In the steel industry, transitioning from coal-based production to natural gas as a fuel source can achieve emission reductions of 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.

8. 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?

Achieving lower emissions requires collective action from all Ontario stakeholders. Policymakers, regulators, and utilities must adopt a long-term perspective when evaluating GHG reduction pathways. While total electrification options may meet 2030 goals, they may not be cost-effective supporting in achieving net-zero emissions in the longer term.

At Enbridge, we are committed to a practical approach to the energy evolution. We continue to deliver the energy needed today while advancing innovative solutions for a cleaner energy future. We are accelerating efforts in lower-carbon solutions, including hybrid heating systems, carbon capture technologies, and RNG while laying the groundwork for longer term solutions such as hydrogen. Additionally, Enbridge congratulates the government for announcing the largest energy efficiency program in the province's history and we are proud to be a program delivery partner. However, Enbridge Gas cannot implement these opportunities without continued government support. Enbridge Gas provides the following recommendations:

a) Energy Efficiency Programs

The government should continue supporting gas utility delivered energy efficiency programs to optimize Ontario's energy infrastructure. This approach complements the utilities' efforts to expand and enhance their infrastructure to meet growing demand in the most cost-effective manner. Optimizing these assets will help keep energy affordable for Ontarians over the long term. Initiatives such as the Home Renovation Savings Program, which supports hybrid heating systems, along with programs that support customers in the industrial, agricultural, commercial and low-income segments reduce their energy bills should be prioritized. In addition, incentivizing the conversion of oil boilers or propane to energy-efficient natural gas solutions, should be prioritized.

b) Hybrid Heating

Hybrid heating systems integrate electric heat pumps with high-efficiency gas furnaces and smart controls, offering an immediate opportunity to reduce peak electricity demand, support broader electrification, and achieve significant GHG emission reductions in the near term. In the long term, operating hybrid systems with low- and zero-carbon gases continues to minimize the electrical peak impacts of space heating demand while further driving down GHG emissions. These systems help balance electricity requirements during peak times, maintaining peak demand levels comparable to those experienced today. Moreover, hybrid heating systems provide dual heating sources—natural gas and electricity—ensuring reliable heat even on the coldest days. This resilience keeps families and seniors safe during extreme weather, delivering comfort and security to Ontarians. We applaud the government for including heat pumps in the Home Renovation Savings Program.

c) 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. [4] 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.

While Enbridge strongly supports the introduction of the *Geologic Carbon Storage Act*, 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 for reducing GHG emissions and achieving cost-effective energy solutions, we recommend that Ontario implement a complementary regulatory process to facilitate the approval of CO2 pipelines.

d) Advanced Metering Infrastructure (AMI)

Households and businesses need information about the options available to them in order to make informed decisions about their energy use. Further, operationally, it is becoming more difficult to source analogue Diaphragm meters. As such, the government should support funding for AMI to enable all utilities to help Ontarians make informed decisions about their energy use. The greater adoption of digitalization across energy networks represents one of the cornerstones of the energy evolution. AMI is one of the flagship investments that any utility can make in digitalization and one of the primary enablers of a more digitalized and integrated grid. The adoption of AMI typically drives an overall reduction in the volume of energy being consumed, increases operational efficiency, as well as greater visibility of consumption patterns and trends which would lead to better planning and right sizing of assets.

[4] International Energy Agency, *Net Zero by 2050: a Roadmap for the Global Energy Sector* (October 2021 4th rev.), pp. 7, 60, 79-80; and Canadian Energy Regulator, *Canada's Energy Future 2021* (2021), pp. 10, 16, 60, 76-78

e) 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.[5] To ensure Ontario capitalizes on its RNG potential and remains competitive, we recommend:

- Ontario should 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.
- The government should mandate the OEB to allow utilities to recover the costs of procuring RNG as part of the supply portfolio consistent with how costs are recovered for conventional natural gas.

f) Hydrogen

Longer term, hydrogen is also an attractive 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 is 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.

Conclusion

Enbridge commends the Government of Ontario for its leadership in shaping the future of natural gas, which remains integral to the province's pro-growth agenda. As electricity demand continues to rise, natural gas offers a reliable, affordable, and resilient energy source, while enabling the adoption of innovative solutions like RNG, hydrogen, carbon capture, and hybrid heating systems. Clear, timely government direction and streamlined regulatory processes that deliver effective solutions expeditiously are critical to securing necessary capital, ensuring cost recovery for prudent investments, and expanding service to communities seeking natural gas. Equally important is preserving affordability for residential, commercial, industrial, and agricultural customers. By leveraging the existing natural gas network and blending in low-

[5] Government of British Columbia (2021). CleanBC Roadmap to 2030. p.60.

carbon solutions, Ontario can meet its economic and climate objectives, strengthening energy security and fueling continued prosperity while continuing to deliver energy safely and reliably.

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