

## **Environmental Registry of Ontario**

Nik Spohr Ministry of Energy and Electrification 77 Grenville Street Toronto, ON nik.spohr@ontario.ca

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RE: Consultation to support the important role for natural gas in Ontario's energy system and economy – ERO #019-9501

Dear Nik Spohr,

The Atmospheric Fund (TAF) appreciates the opportunity to provide feedback on Ontario's forthcoming Natural Gas Policy Statement. This policy presents a critical opportunity to align Ontario's energy system with affordability and emissions reduction objectives, paving the way for a resilient, reliable, and sustainable energy future.

**TAF strongly recommends that the policy establish a clear pathway to reduce reliance on conventional natural gas and ultimately phase it out by or before 2050.** This includes transitioning away from natural gas in Ontario's electricity grid and as the primary source for space and water heating. This policy clarity is essential to:

- Signal to utilities, businesses, and consumers the need to invest in clean energy technologies and infrastructure.
- Avoid overbuilding gas infrastructure in new developments that result in stranded assets and costly retrofits.
- Support the development of a cost-effective, phased transition plan that prioritizes affordability and system reliability.

Research from the Canadian Climate Institute's June 2024 <u>Heat Exchange</u> report highlights the importance of aligning energy system planning with net-zero objectives to protect affordability and reliability. The report reveals that, on a cost-optimal path to net-zero, the buildings sector is expected to account for only a minimal share of low-carbon gas use, highlighting the necessity of prioritizing electrification and energy efficiency over alternative gas solutions. Further, the report identifies the expansion of the gas distribution network as incompatible with cost-effectively reaching net-zero, as it risks locking in higher costs and creating stranded assets.

## Challenges of alternative fuels

Natural gas is a carbon-intensive fuel with a limited if any, role in a clean energy system in 2050. Its continued use depends on alternative fuels such as hydrogen, renewable natural gas (RNG), and carbon capture technologies – all of which face significant technological and economic barriers to viability at scale.

Long-term plans are still needed to determine which sections of the natural gas network will be repurposed to carry alternative fuels like hydrogen and RNG where feasible. However, the availability of these fuels by 2050 is expected to be only a small fraction of current natural gas consumption. Even in optimistic scenarios, the Canadian Climate Institute projects that these fuels will replace only 5.1 to 12.7 percent of 2020 total gas demand in buildings. Additionally, Canada's feasible RNG production potential is estimated at only 3.6% of the country's current natural gas consumption. Ontario needs to account for these realities in its forward-planning. Given the limited supply and high costs of these alternatives, they are unlikely to be cost-effective for general heating applications. In the long-term, they are better suited for hard-to-decarbonize sectors, including industrial processes and backup power generation.

Beyond the direct emissions from natural gas combustion, its life cycle also produces fugitive methane emissions, from extraction and fracking to pipelines and distribution. Methane, while shorter-lived in the atmosphere than other greenhouse gases, is significantly more potent in trapping heat. Further, fugitive methane emissions are frequently underestimated, amplifying their climate impacts. Phasing out fossil fuels and addressing fugitive methane emissions are essential to achieving climate targets.

## Alternatives to natural gas expansion

Stronger processes are needed to ensure that the costs of natural gas distribution infrastructure expansion are weighted against viable alternatives that can achieve the same affordability outcomes. This includes establishing criteria for gas use decisions that align with reliability, affordability, and net zero goals. In the short term, this should ensure that any new gas infrastructure is demonstrably compatible with a low-carbon future while maintaining system reliability.

Expanding natural gas distribution infrastructure should be considered a last resort due to the significant risk of stranded assets from the energy transition. These stranded assets could result in long-term costs for ratepayers and taxpayers. **Instead, Ontario should prioritize electrification and energy efficiency as more cost-effective, proven, and sustainable solutions, supported by investments in renewable energy generation and storage technologies to support the effective phase-out of natural gas.** 

In areas without existing gas infrastructure, energy affordability challenges are often better addressed through targeted programs that support energy efficiency, heat pumps, and distributed energy resources such as solar. For example, a geotargeted heat pump program, similar to the Natural Gas Expansion Program, could prioritize retrofits in these areas. This would provide a more cost-effective alternative to expanding gas networks, reducing household heating costs, and offering municipalities additional energy options. It would also provide an electrification pathway for Ontarians without access to the gas network, addressing the lengthy timelines associated with gas infrastructure expansion.

Ontario's goal of building 1.5 million homes by 2031 provides a unique opportunity to align housing development with low-carbon and energy-efficient solutions. Ontario's Expanded Energy Efficiency Framework (2025-2036) estimates that its investments in efficiency programs will deliver savings equivalent to removing three million homes from the grid – demonstrating how these programs can ease the strain on the grid and reduce systemwide costs. To support Ontario's housing targets without overburdening the grid, all new housing should be designed with heat pumps or hybrid-heating, capable of participating in demand response programs. By incorporating high-efficiency standards, electrification readiness, and renewable energy technologies into new housing, Ontario can achieve its housing targets while building a low-carbon, affordable, and resilient energy system.

Sincerely,

Bryan Purcell

VP of Policy & Programs

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The Atmospheric Fund

## **About the Atmospheric Fund**

The Atmospheric Fund (TAF) is a regional climate agency that invests in low-carbon solutions for the Greater Toronto and Hamilton Area (GTHA) and helps scale them up for broad implementation. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders. We are experienced leaders and collaborate with stakeholders in the private, public and non-profit sectors who have ideas and opportunities for reducing carbon emissions. Supported by endowment funds, we advance the most promising concepts by investing, providing grants, influencing policies and running programs. We're particularly interested in ideas

that offer benefits in addition to carbon reduction such as improving people's health, creating local jobs, boosting urban resiliency, and contributing to a fair society.