



while also providing heat, used for warming the greenhouses, and CO<sub>2</sub> for plant fertilization for our strawberries.

For this reason, Great Northern Hydroponics is very supportive of the role natural gas plays in delivering reliable, resilient and cost-effective affordable energy to customers in Ontario over the short, medium and long-term. Due to natural gas's existing infrastructure and its flexibility to be deployed when and where Ontarians need it most, we view natural gas to be irreplaceable in the Ontario energy mix in the short to medium term. Moreover, as natural gas is a critical component to our CHP facility, we are supportive of government as they support an "all-of-the-above" energy policy with the intent to "scale up Ontario's energy supply using all forms" in future procurements.<sup>1</sup> Our responses to the consultation questions below articulate the role natural gas must play in the greenhouse sector and highlight the prominent role natural gas should play in Ontario's energy system long-term. We trust that this feedback will help inform your government as it moves forward with a natural gas policy and look forward to the opportunity to meet with your Ministry to further discuss the feedback highlighted in our response to the consultation questions below.

## **Consultation Questions**

*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?*

Great Northern Hydroponics acknowledges the large role natural gas plays in supporting economic development in Ontario's industrial and agricultural sectors. Specific to agriculture and our operations as one of North America's largest greenhouse operations, the deployment of natural gas is used for not only heating our greenhouse but also generating CO<sub>2</sub>, two elements that are required for plant cultivation and growth. CO<sub>2</sub> is unable to be electrified easily due to a lack of conductive properties and chemical bonds, thus Great Northern Hydroponics foresees natural gas continuing to play a vital role in our operations for the long-term.

The use of natural gas at hydroponic farms also helps ensure our operations remain competitive and efficient. These operations largely support a reduction in GHG emissions as instead of relying on produce being transported long distances from other countries, Great Northern Hydroponics is able to produce food locally which also contributes heavily to food security in Ontario. Cogeneration, or combined heat and power (CHP) plants are inherently more energy efficient than separate systems to create electrical and thermal power, as less fuel is consumed to produce the same amount of energy.

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

---

<sup>1</sup> "Ontario's Affordable Energy Future: The Pressing Case for More Power." Ontario, October 24, 2024. <https://www.ontario.ca/page/ontarios-affordable-energy-future-pressing-case-more-power>.

Great Northern Hydroponics acknowledges the importance of building and maintaining a reliable, resilient and affordable power system in Ontario. As the province undergoes a major energy transition and moves toward electrification, understanding how a natural gas network can support the integration of clean fuels to reduce emissions and how a strong economically viable natural gas network can support power system security and resiliency has become increasingly important.

For Great Northern Hydroponics, a reliable and resilient power system helps to ensure the sustainability of our operations and the consistent production of high-quality crops. Natural gas is able to provide flexible backup power that can ramp up or down in a moment's notice. This flexibility is fundamental to our operations and a critical piece to ensuring reliability of our hydroponic farming systems in an instance of extreme weather variability or another circumstance that impacts our crop management operations.

Great Northern Hydroponics is greatly supportive of the actions the provincial government has taken to better understand the role natural gas must play in Ontario's energy system as the government looks to develop a natural gas policy that can support the use of natural gas long-term. Great Northern Hydroponics believes that natural gas over the long-term must be included in the province's energy mix, particularly in the context of ensuring power in the light of disruptions or intermittent renewable energy sources.

Great Northern Hydroponics also views Ontario's expansive natural gas infrastructure as a distinct competitive advantage for the province and a critical component of regional energy security and price stability. As the IESO's October 2024 updated demand forecast is projecting a 75% increase in Ontario's electricity needs by 2050, it is becoming increasingly apparent that Ontario must embrace an "all-of-the-above" energy policy that does not overlook the role natural gas provides to our jurisdiction, promoting both reliability and affordability.<sup>2</sup>

## Conclusion

In summary, Great Northern Hydroponics would like to thank the Ministry of Energy and Electrification for the opportunity to provide input to highlight the role natural gas must continue to play in Ontario's energy system and economy while informing the role we foresee natural gas playing long-term. We strongly encourage the government to support the greenhouse sector and CHP facilities in Ontario as CHP or cogeneration can play a vital role in lowering regional industrial emissions and expanding electricity production in Ontario. We would be happy to meet with you at your earliest convenience to discuss our feedback on how natural gas is a vital resource that supports our current and future operations.

---

<sup>2</sup> "IESO Updated Demand Forecast," IESO, October 17, 2024. <https://www.ieso.ca/Sector-Participants/IESO-News/2024/10/IESO-Releases-Updated-Demand-Forecast>.



Sincere regards,

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the bottom.

Guido van het Hof

President

Great Northern Hydroponics