



Atura Power

Napanee Generation Station Expansion

Public Meeting

May 16, 2024



Land Acknowledgement

Our project is in the traditional and treaty territory of the Mississauga Anishinaabeg. We believe that it is important to recognize the Mississauga Anishinaabeg for their care and teachings about the earth and our relations and to honour those teachings through our interactions every day.

We also acknowledge the Mohawks of the Bay of Quinte whose treaty territory is in the neighboring location of Tyendinaga. We recognize these lands have been the home of many Indigenous peoples over the centuries, including the Huron-Wendat, the Métis, and the Haudenosaunee.

In light of this history, we dedicate ourselves to moving forward in the spirit of partnership, collaboration, and reconciliation as we learn together and contemplate the possibilities that lay ahead.

About Atura Power



A subsidiary of Ontario Power Generation (OPG), Atura Power owns and operates Ontario's largest, most efficient gas-fired fleet in Ontario.

Plays a key role in the province's electricity system and diverse generation supply.



1. Brighton Beach Generating Station
Capacity 570 MW



2. Halton Hills Generating Station
Capacity 683 MW



3. Portlands Energy Centre
Capacity 550 MW



4. Napanee Generating Station
Capacity 900 MW



5. Napanee BESS Phase 1
Capacity 250 MW



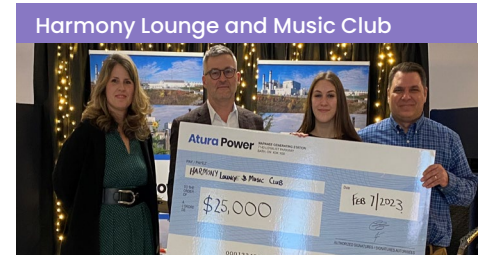
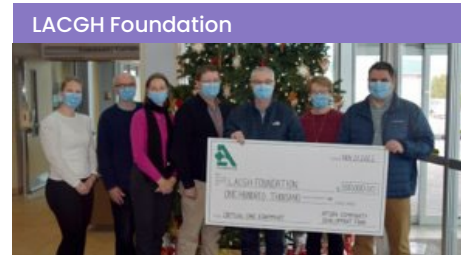
6. Oakville Head Office



Community Outreach and Support

Atura Power is an engaged community partner and supporter in Greater Napanee. The company donated more than \$250,000 to organizations between 2022 and 2024 through the Atura Power Community Development Fund including:

- Lennox and Addington County General Hospital Foundation
- Harmony Lounge & Music Club
- Royal Canadian Legion Branch 137
- Napanee Crunch Female Hockey Association
- Softball Napanee
- United Empire Loyalist Heritage Centre & Park
- Napanee District Secondary School
- Morningstar Mission



IESO Procurement for Reliable Electricity Services



The Independent Electricity System Operator (IESO) is the Crown corporation that operates the province's electricity system.



Ontario is entering a period of emerging electricity demand due to population growth and a greater use of electricity for transportation, heating and energy.

The IESO forecasts that an additional 4,000 megawatts (MW) are needed by the end of the decade to maintain reliability and currently seeking new resources.

Atura Power proposed the Napanee Generating Station (NGS) Expansion in response to the IESO's Long-Term 1 (LT1) procurement process to secure 918 MW from non-storage resources that can be online between 2026-28.

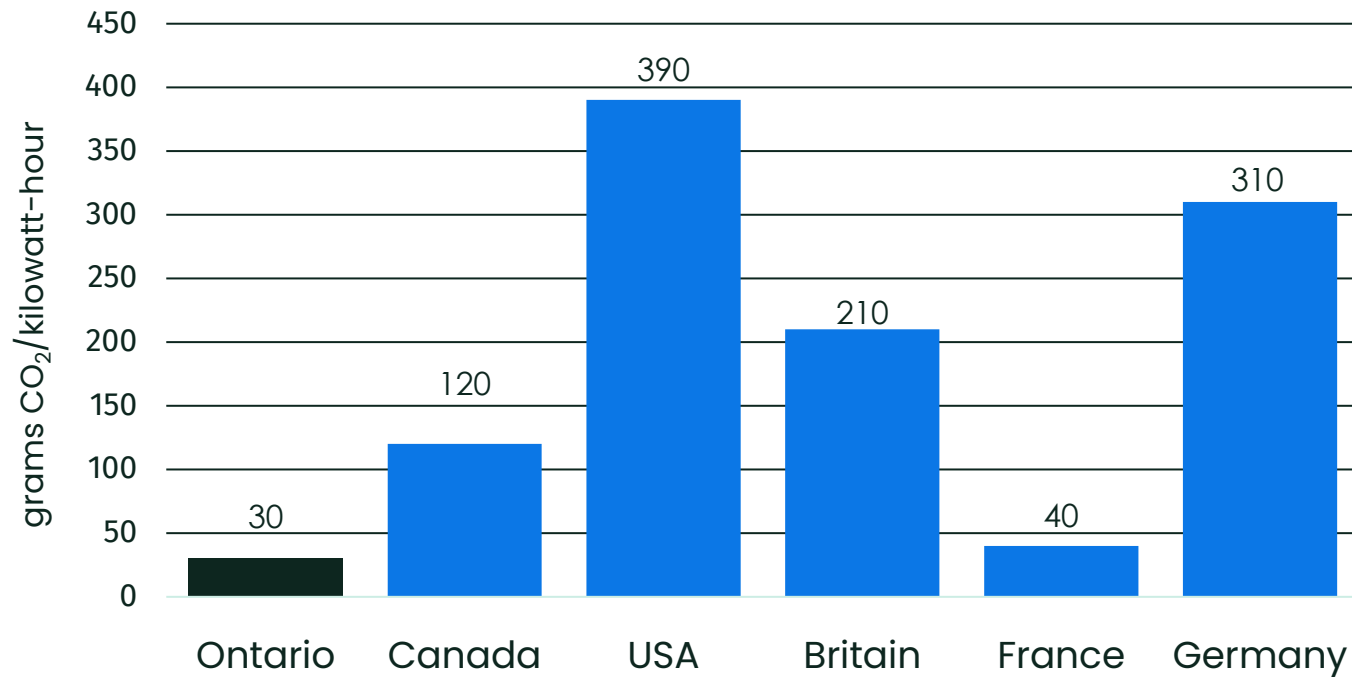
The NGS Expansion project received an IESO LT1 contract on May 9, 2024.

Our Electricity Grid

World Leader in Clean Electricity Supply



Carbon Dioxide (CO₂) Emissions Intensity
– Ontario vs. World



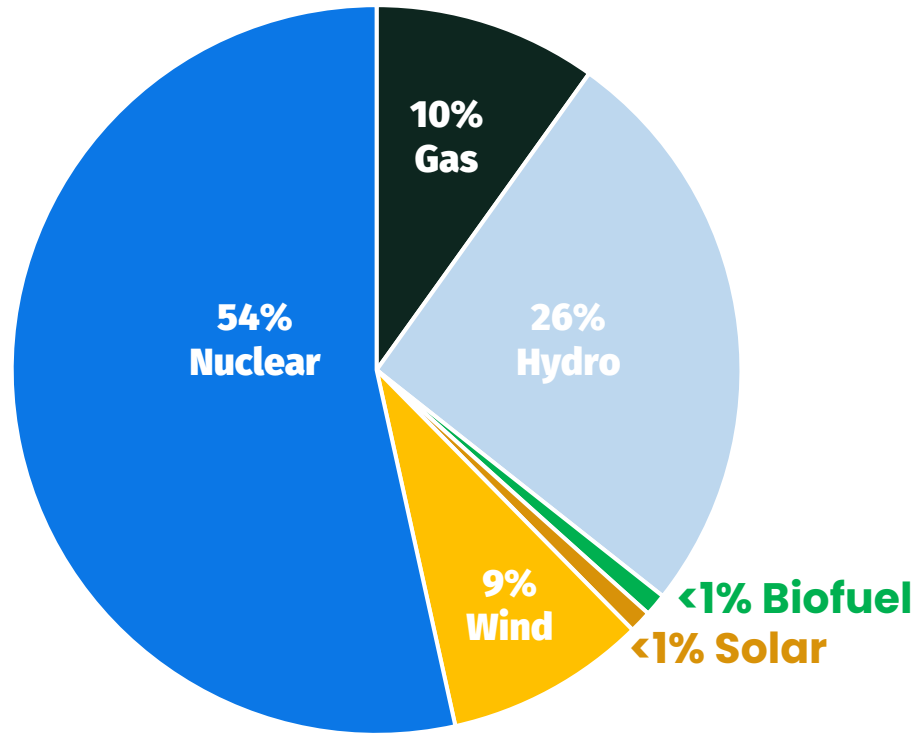
Ontario has one of the cleanest electricity systems in the world.

It is about 90% emissions-free (2022).

Our Electricity Grid



2022 Energy Output

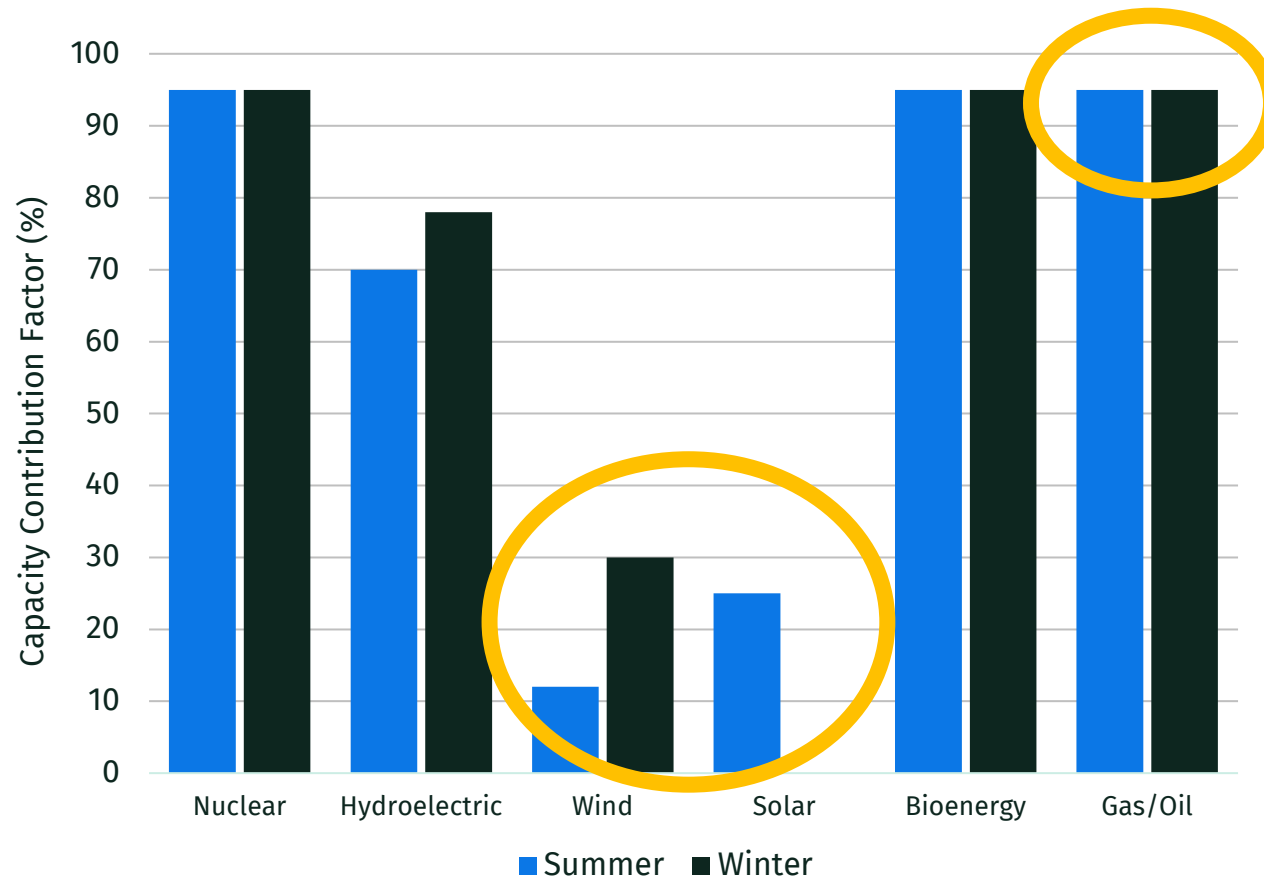


■ Gas ■ Hydro ■ Biofuel ■ Solar ■ Wind ■ Nuclear

Currently natural gas generation resources provide 10% of the electrical supply and helps the system meet peak demand periods.

Natural gas provides reliable, on-demand power when renewable energy sources like wind and solar are not available (i.e., low sunlight / low wind periods).

Why is Gas Needed to Work with Wind & Solar to Meet Summer & Winter Capacity Contribution?



Wind generation varies seasonally.

Solar generation is negligible in the winter. In summer, contributions vary daily, peaking in the early afternoon ahead of peak demand which occurs later in the evening.

Natural gas generation does not vary seasonally and is available when needed.

Why New Natural Gas Generation is Required

Key Features and Benefits of Natural Gas



Solar and wind resources provide intermittent electricity, while natural gas generation provides **reliable, all-weather electricity**.

The electricity system is periodically at risk of blackout at times of severe weather events when wind and solar generation are unavailable.

- 60% of these events last six hours or more and **natural gas is currently the only available option** capable of reliably running for extended periods during these events.
- Additional natural gas generation is needed to address future events that may put stress on Ontario's electricity grid.

A Transitional Resource

Key Features and Benefits of Natural Gas



While Ontario moves towards bringing more non-emitting technologies onto the electricity grid for the long term, **natural gas is needed in the short term to ensure the system stays reliable and affordable** during this transition.

Natural gas is unique in its flexibility, it can be switched on and off quickly and can respond to sudden changes in demand (electrical demand can change by 33% throughout the day).



Achieving a Net-Zero Economy

The Role of Natural Gas in Ontario's Decarbonization

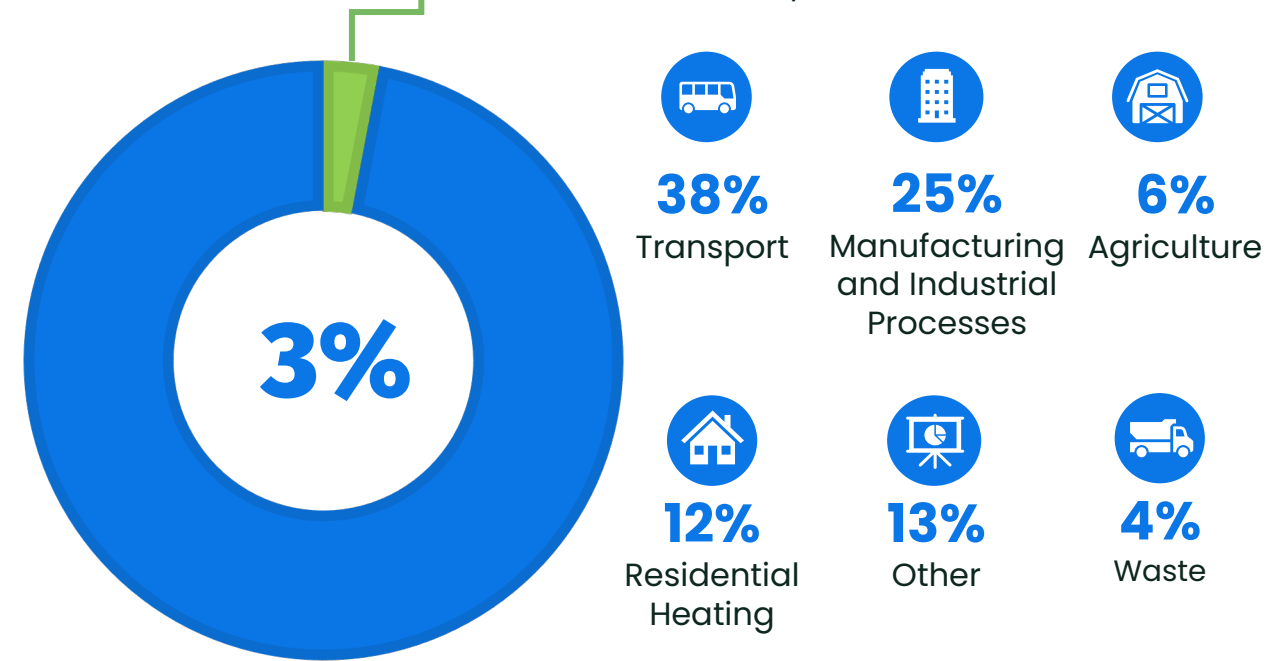


Heavy greenhouse gas (GHG) producing sectors such as transportation and manufacturing can be decarbonized by switching to electricity for energy.

As a low GHG emitting source, the NGS Expansion will become part of the **solution** to meet the increased electricity demand needed for the broader **decarbonization** of our economy.

GHG EMISSIONS IN ONTARIO BY SECTOR*

Over a five-year average, Ontario's electricity system produced less than three percent of total GHG emissions in the province.



*Percentages have been rounded and as a result will not add to 100

Source - <https://www.ieso.ca/en/Powering-Tomorrow/2021/Six-things-to-know-about-the-IESOs-study-on-phasing-out-gas-fired-generation-by-2030>

Health & Safety

Health and safety of Atura Power employees, the people of Ontario and the natural environment is a key value of Atura Power. As such, we operate our facilities within, and in compliance with, all permits, provincial and federal legislation.



Project Contacts



For questions, comments or more information:

- Speak directly with the project team in attendance
- Complete a comment form
- Email the project team

 napaneeexpansion@aturapower.com

- Visit the project webpage

 aturapower.com/napaneeexpansion