

1 Q. Why are supply chain pressures continuing to increase, and when does Hydro expect such
2 pressures to subside?
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5 A. Supply chain pressures associated with the electric utility industry continue to increase primarily
6 due to increasing demand for electricity globally. According to the International Electricity
7 Agency, “Global electricity consumption is expected to increase at the fastest pace in years over
8 the 2025–2027 forecast period of this report, fueled by growing industrial production, rising use
9 of air conditioning, accelerating electrification, and the expansion of data centres worldwide.
10 Global electricity demand rose by 4.3% in 2024 and is forecast to continue to grow at close to
11 4% out to 2027. Over the next three years, global electricity consumption is forecast to rise by
12 an unprecedented 3,500 TWh.”¹

13 According to the Gas Turbine World 2024 Handbook, “There has been a steady increase in the
14 demand for smaller gas combustion turbines due to the growing concerns over grid stability.
15 Grid stability is needed to offset the continuing robust growth of intermittent renewable
16 sources in the power generation energy mix.”² According to the same information source, the
17 expected average price increase in gas combustion turbines year over year is 3%.

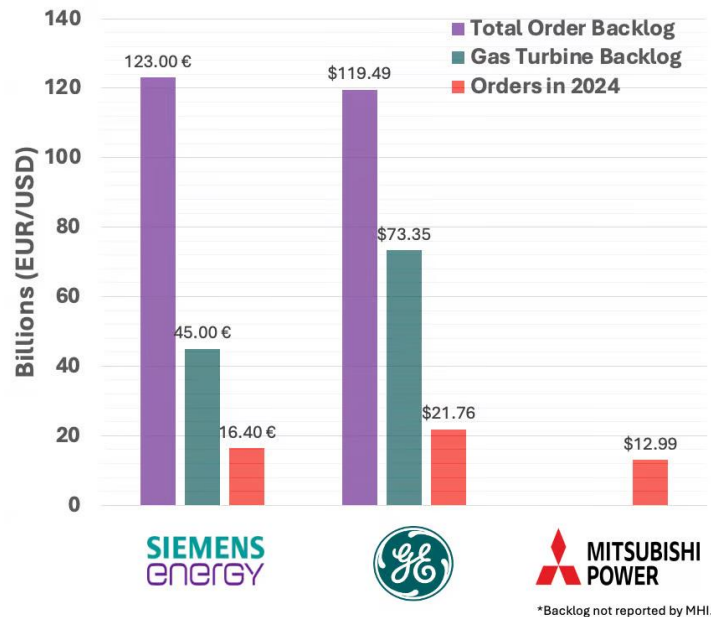
18 As an example of the supply chain pressures that have the potential to impact Newfoundland
19 and Labrador Hydro’s (“Hydro”) proposed projects, as increasing electricity demand associated
20 with electrification and Artificial Intelligence infrastructure creates increased demand for
21 combustion turbines, turbine manufacturers are reporting unprecedented levels of backlogs, as
22 shown in Figure 1.³

¹ <https://www.iea.org/reports/electricity-2025>.

² Gas Turbine World Handbook 2024, <https://gasturbineworld.com>.

³ <https://gasturbinehub.com/the-growing-backlog-of-gas-turbine-orders-implications-for-customers>.

GAS TURBINE BACKLOG AND NEW ORDERS 2024



Source: Siemens Energy, GE Vernova,
Mitsubishi Power (2024 Annual Reports)

[gasturbinehub.com](https://www.gasturbinehub.com)

Figure 1: Gas Turbine Backlog and New Orders 2024

1 It is difficult to predict when supply chain pressures will subside. Based on the current market
2 conditions, the large emerging energy demand associated with electrification and Artificial
3 Intelligence, and the continuous migration to renewable power generation, Hydro considers it
4 likely the demand/supply chain pressures will not subside within the next two to three years,
5 and perhaps not over the next decade.