



Canada's Energy Future 2026

Fact Sheets

Results from the Higher Scenario

This scenario explores how Canada's energy system might evolve if key drivers – Canadian GDP growth, LNG exports and data-centre electricity demand, and global oil and natural gas prices – are higher than those assumed in the Current Measures scenario, the traditional baseline scenario used in this report.

Energy Demand

- Canadian end-use demand is 25% higher by 2050 while real GDP grows by 68%.
- Hydrocarbon use grows slightly, and by 2050 total end-use fossil fuel demand is 9% higher than 2023 levels. In 2050, the share of total fossil fuel demand used for non-combustion purposes – such as petrochemical feedstocks, lubricants, and asphalt – is 23%, compared to around 15% currently.
- End-use electricity demand increases by 73% from 2023 to 2050.
- The scenario assumes 12 GW of data centre load in Canada by 2050. Data centre load growth makes up about a third, or 100 TWh, of the total projected end-use electricity demand growth in this scenario.

Crude Oil

- By 2030, crude oil production is 6.1 MMb/d 2030.
- Production peaks at 6.7 MMb/d in the mid-2040s, and levels out to 6.5 MMb/d in 2050.
- Oil sands leads Canadian production, with oil sands output increasing by 900,000 b/d to reach 4.4 MMb/d in 2050 from 3.5 MMb/d in 2024.
- This scenario assumes Brent crude oil prices rise from recent levels to \$95 USD (real) per barrel by 2030 and then remain flat in real terms thereafter.



Natural Gas

- By 2050, natural gas production reaches 32 Bcf/d, 75% above 2024 levels of 18.3 Bcf/d.
- This scenario assumes international natural gas prices (Henry Hub) increase to \$6.75 USD (real) per MMBtu in 2050.

Electricity Capacity and Generation

- Electricity capacity increases from around 160 GW in 2023 to 360 GW.
- Wind energy makes up the largest capacity additions and growth in generation, which at 40 TWh accounted for 6.5% of generation in 2023, grows to 362 TWh and 31% by 2050.
- By 2050, natural gas capacity without CCUS accounts for 10% of capacity, but only accounts for about 3% of generation.
- Total annual interprovincial electricity inflows (and outflows) more than double, rising from 55 TWh in 2023 to 143 TWh by 2050.

GHG Emissions

- By 2050, GHG emissions are 22% lower than 2005 levels.
- From 2023 to 2050, the largest declines come from electricity (-37 MT), transportation (-25 MT), and heavy industry (-16 MT). The electricity sector stands out, with 90% lower emissions by 2050 compared to the 2005 benchmark.

Emerging Technology

- Hydrogen remains a niche technology, mostly in the industrial sector, with export-focused production rising after 2030.
- Combined, total non-emitting or low-emissions hydrogen production reaches over 2.5 MT by 2050.
- Total end-use bioenergy demand, including electricity and hydrogen produced from bioenergy, increases by 73% by 2050.