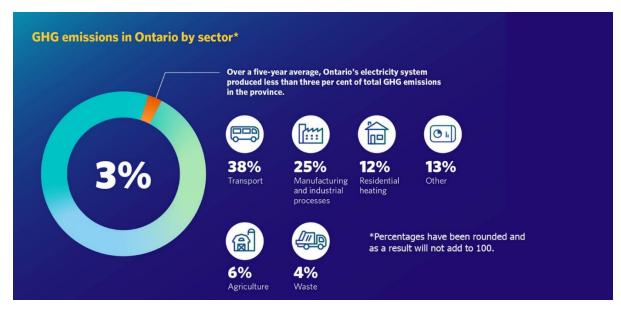
Natural Gas Phase-Out Study

Six things to know about the IESO's study on phasing out gas-fired generation by 2030

Decarbonization and Ontario's Electricity System is a technical assessment examining the feasibility of removing gas-fired generation from Ontario's electricity sector by 2030. According to the study, eliminating gas generation in the province would result in blackouts and hinder electrification, but could be considered given more time and planning. Here's a breakdown of the findings:

1. Ontario's clean power grid is well positioned to support electrification

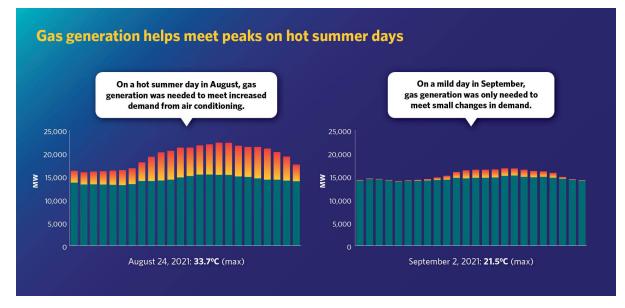
Less than three per cent of all GHG emissions in the province comes from the electricity sector, compared to 38 per cent from transportation and 25 per cent from manufacturing and industry. That means supporting the electrification of vehicles and industry offers a more immediate and cost-effective approach to reducing GHG emissions.





2. Gas-fired generation plays a limited but critical role in keeping Ontario's electricity system reliable

As an energy source, gas is generally always available and can be relied upon to meet demand that fluctuates throughout the day. Gas met only seven per cent of Ontario's energy needs in 2020, but can provide up to 30 per cent on the hottest days of the year when demand is highest.



3. Phasing out gas completely by 2030 is not feasible and would mean blackouts

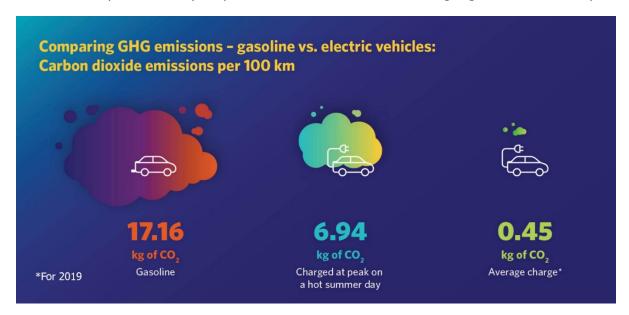
To reach a 2030 deadline, a major overhaul of Ontario's electricity system would be necessary, and would mean relying on some technologies, such as small modular nuclear reactors and storage, which are unproven at the scale we would need them. Even the most optimistic scenario predicts the IESO would need to resort to emergency actions like conservation appeals and blackouts. More time is needed to plan, build, and integrate reliable supply.

4. Completely replacing gas-fired generation by 2030 would increase residential electricity bills by at least 60 per cent

Our lowest-cost model estimates that installing new sources of energy supply and upgrading needed transmission infrastructure would cost more than \$27 billion – increasing the average monthly residential bill by \$100.

5. Electrification offers enormous potential for emissions reduction

An electric vehicle charged in Ontario produces, on average, only three per cent of the emissions of a similar gas-fueled car. Even if it is charged on the hottest summer days when gas is used the most, the result still produces only 40 per cent of the emissions of driving a gas-fueled counterpart.



6. The IESO will sharpen its focus on how the grid can best support decarbonization

Given more time, there would be more options to further reduce emissions. The IESO has been tasked with determining a pathway to zero emissions in the electricity sector.



Learn more by visiting the <u>natural gas phase-out study web page</u>.