Fact Sheet: Ontario's Supply Mix

A Diverse Supply Mix

- A diverse supply, where different types of energy resources complement each other, works to balance supply and demand and maintain the reliability of Ontario's power system. For example:
  - Nuclear, which produces 60 per cent of the province's energy, and "run-of-the-river" hydroelectric facilities, provide long-term, emissions-free generation that operates 24 hours a day producing constant output.
  - Hydro facilities with dams can increase or decrease output as needed, which makes them a flexible source of energy that can respond quickly to system needs. Hydro generation as a whole accounted for 25 per cent of Ontario's energy output in 2020.
  - Wind and solar output, which produced eight per cent and just under one per cent respectively of the province's energy in 2020, varies based on the weather. They can, however, reduce output quickly when they are operating in response to system needs.
  - Natural gas provides almost three quarters of the system's ability to match supply and demand. It is a readily available fuel source that provides energy consistently under all conditions year-round.

The Role of Natural Gas in Ontario's Supply Mix

- While natural gas accounts for 28 per cent of Ontario's total installed capacity, it only accounts for about seven per cent of all electricity generated in the province. That is because natural gas is primarily used during peak demand periods.
- Especially useful in balancing the ups and downs of wind and solar generation, gas generation can increase and decrease output within minutes to follow sudden or expected changes in supply and demand.
- Gas plants are generally located near large population centres to meet local power needs, avoiding the need for potentially expensive or disruptive transmission projects.