Getting Ontario to a Zero-Carbon Electricity Grid and Lower Bills by 2030

By Jack Gibbons for Canadian Association for the Club of Rome

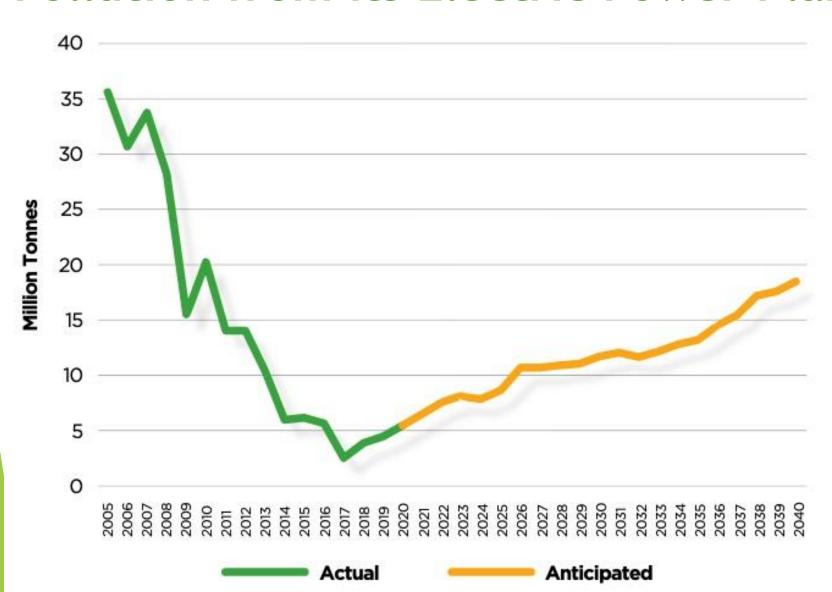
November 2022



Doug Ford's Energy Plan

- Increase the **existing** gas plants' GHG pollution by more than 600% by 2040
- Build new gas plants
- Spent \$28.8 B on high-cost nuclear projects
- Expand Enbridge's system to hook-up more homes to gas

Ontario's Historic and Forecast GHG Pollution from its Electric Power Plants



Build New Gas Plants

Oct. 2022, Ontario Energy Minister directed the IESO to:

- Contract for up to 1,500 MW of new gasfired generation.
- Contracts to last until 2040.

High-Cost Nuclear Projects

Darlington Re-Build	\$12.8 Billion
Bruce Re-Build	\$13 Billion
New GTA Reactor	\$ 3 Billion
Total	\$28.8 Billion

Expand Enbridge gas system to new communities

- Ford Government supports Enbridge's plans to bring gas to "new" gas communities
- Cold Climate Air Source Heat Pumps are better option for homeowners and our climate



Ontario municipalities call for action:

- Return gas plants' pollution to their 2017 level ASAP; and
- Achieve a complete gas power phase-out by 2030.



According to the Oct. 2021 IESO report:

- ► It would be impossible to phase-out gas power by 2030; and
- Attempting to do so will lead to higher electricity rates and blackouts.

These claims are false.

The IESO report:

- Provides a plan to achieve a 99.7% zerocarbon electricity grid by 2030.
- ► Falsely claims that it is not possible to meet remaining 3/10th of 1% of our electricity needs (500 GWh) from carbonfree sources by 2030.

Fearmongering: *Blackouts*

- FACT: In 2030 approximately 33% of our existing gas-fired capacity will still be under contract to the IESO.
- ► FACT: Some of our gas-fired capacity will remain under contract to the IESO until 2040.
- ► FACT: If there is a 500 GWh shortfall of carbon-free electricity, the IESO will dispatch gas plants rather than subject province to blackouts.

Fearmongering: Higher electricity rates

IESO report claims a gas power phaseout would lead to **60% rise** in **residential electricity rates** by 2030.

- ► FACT: IESO report forecasts a gas power phase-out would raise electricity costs by 20%
- ► Fact: A 2% annual increase in residential, commercial and industrial rates between 2021 and 2030 would be a fairer way to pay for a 20% rise in electricity costs by 2030, rather than making residential customers pay more than their fair share.

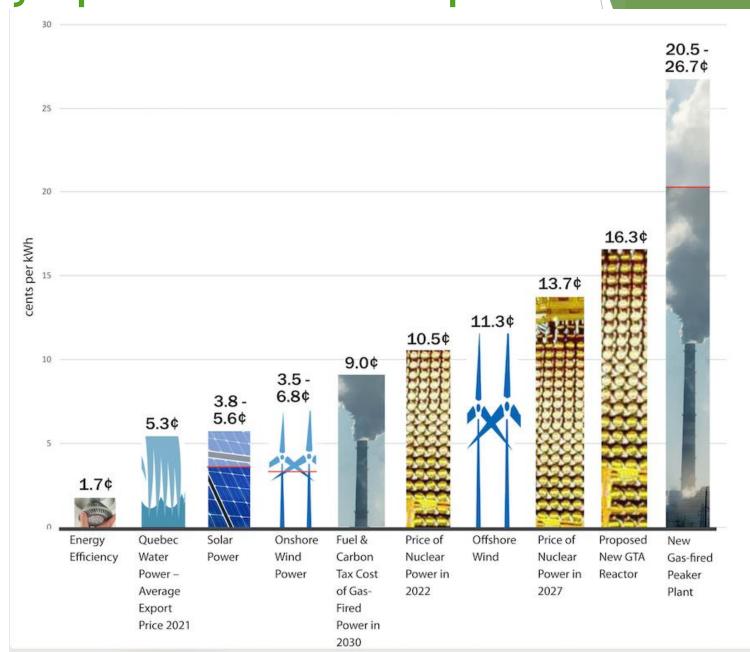
Fearmongering: Higher electricity rates

The IESO Report falsely claims a phase-out would raise costs by 20% by:

- Underestimating the carbon tax savings from a gas power phaseout;
- Ignoring our two lowest-cost storage options:
 - Hydro Quebec's reservoirs
 - EV batteries
- Including the costs of a \$3 billion new GTA nuclear reactor despite the fact that we have much lower cost options.

Ontario Electricity Options: A Cost Comparison

FACT: If the IESO really wanted to reduce electricity rates, it would promote energy efficiency and renewables to phase-out polluting gas power and to avoid the need for high-cost nuclear electricity.



IESO's Dunsky Report (Sept. 28, 2022)

- Ontario's doesn't need NEW gas plants to keep lights on
- By investing in energy efficiency, solar electricity and energy storage, we can reduce our electricity costs by up to \$290 billion

Climate and Economic Lunacy

- ► On Oct. 6, 2022, Energy Minister Todd Smith directed IESO to contract for up to 1,500 megawatts (MW) of new gas-fired generation capacity
- ► [N.B. The Portlands Gas Plant on the Toronto waterfront is 550 MW]

Our plan to return the gas plants' pollution to their 2017 level:

- ▶ Ban gas-fired electricity exports to U.S.
- Double our spot market purchases of Quebec waterpower using existing transmission lines.
- ► Purchase all energy efficiency savings, solar and wind power that can keep our lights on at less than today's price of nuclear electricity (10.5 cents per kWh).



We can achieve a complete gas power phase-out by 2030 by:

- Expanding our transmission links with Quebec and using Hydro Quebec's reservoirs to act like a giant battery for our wind and solar energy; and
- Installing bi-directional chargers for our electric vehicles (EVs) so that their batteries can provide power to the grid during peak demand hours.



FACT: In 2030, the capacity of our EVs batteries will be more than twice the capacity of our gas plants.

Put OPG's gas plants on stand-by reserve between 2030 and 2040 To provide emergency back-up power to our electricity grid if we temporarily have insufficient carbon-free electricity resources to meet our need due to an extreme event

Open Letter to PM Trudeau & NDP Leader Jagmeet Singh

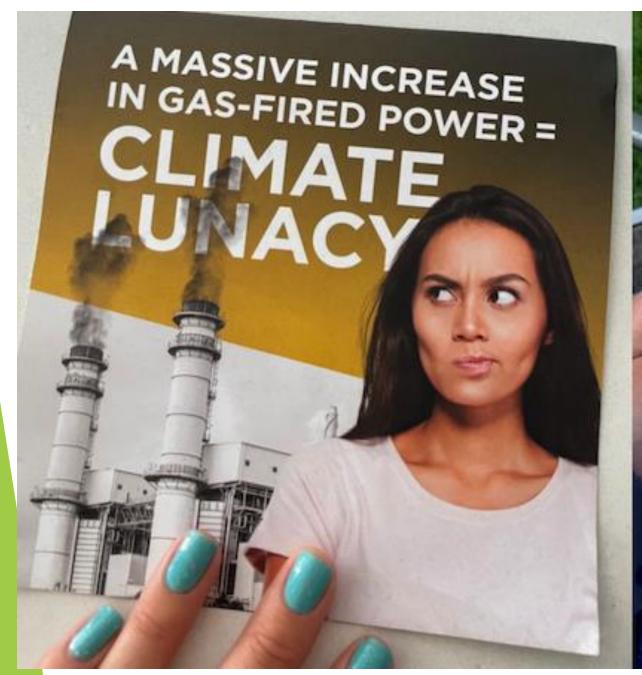
- OCAA and more than 30 other organizations are asking Prime Minister Trudeau and NDP Leader Jagmeet Singh to work together to establish federal Clean Electricity Regulations which will:
 - Prohibit the building of new gas plants in Ontario effective immediately; and
 - Require Ontario to move to a net zero-carbon electricity grid by 2030.

https://www.cleanairalliance.org/OpenLetterSignOn/

What you can do

- ► Go to:

 https://www.cleanairalliance.org/OpenLetterSignOn/ to send an email to Trudeau & Singh in support of our request
- Ask your community groups to sign on to our letters to Trudeau & Singh
- ► Distribute our *Climate Lunacy* pamphlet to your friends and neighbours: www.CleanAirAlliance.org/pamphlets
- Meet your M.P. and ask her/him to support our Open Letter requests





Climate Lunacy Part 2: Doug Ford's Plan to hook-up more homes to gas

- Doug Ford supports Enbridge's plans to expand its gas network to serve "new" gas communities in rural Ontario.
- Average homeowner in existing gas communities can save \$10,000 by installing cold climate air-source heat pump (ASHP) when her gas furnace comes to the end of its life.
- Average homeowner in **new** gas community can save \$20,000 by installing ASHP instead of hooking up to gas.
- ▶ With our existing electricity supply mix, switching to heat pump reduces your home heating GHG pollution by 35%.

To learn more: www.CleanAirAlliance.org/heat-pump-primer

Helping homeowners lower their energy bills and GHG pollution

- Many homeowners choose gas furnaces because they have a lower upfront capital cost than an ASHP.
- Ask Doug Ford and your M.P.P. to direct our electric utilities to provide no down payment, no interest loans for cold climate ASHP.
- Distribute our *Don't let Enbridge take you for a ride pamphlet!* to your friends and neighbours:

www.CleanAirAlliance.org/pamphlets



Jack Gibbons jack@cleanairalliance.org

Angela Bischoff angela@cleanairalliance.org

CleanAirAlliance.org
NoNewGasPlants.ca