

Getting Ontario to a
Zero-Carbon

Electricity Grid by 2030
and Lower Bills



ONTARIO
CLEAN AIR
ALLIANCE

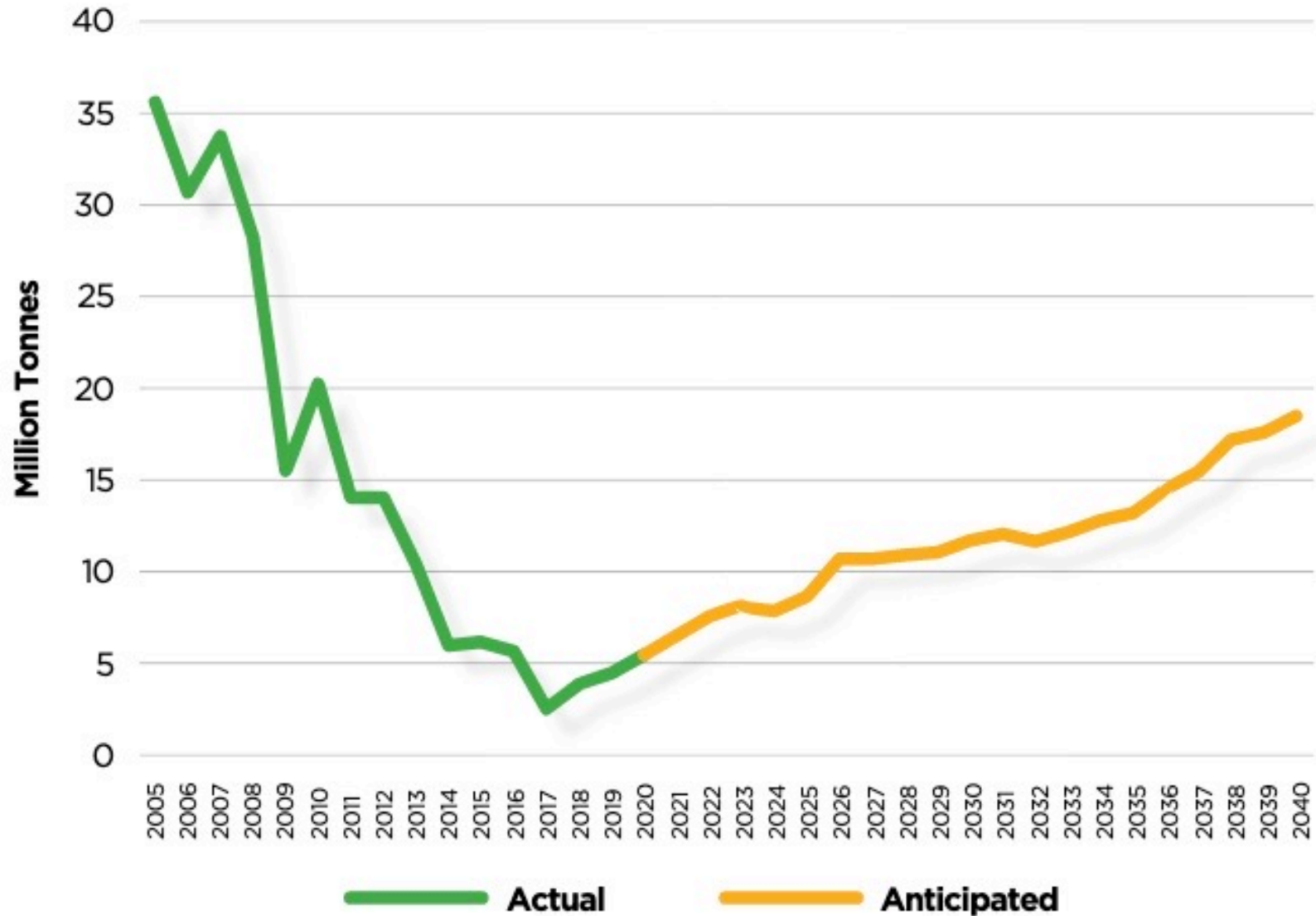
Doug Ford's Electricity Plan



Increase the gas plants' GHG pollution by more than 600% by 2040

Spend \$28.8 Billion on high-cost nuclear projects

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



High-Cost Nuclear Projects

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



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 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.

Joe Oliver, Chair of the IESO

The IESO report:

- ▶ Provides a plan to achieve a 99.7% zero-carbon 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 carbon-free sources by 2030.

Fear- mongering: *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.

Fear- mongering: *Higher electricity rates*

IESO report claims a gas power phase-out 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.

Fear- mongering: *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 phase-out;
- ▶ Ignoring our two lowest-cost storage options; and
- ▶ Including the costs of a \$3 billion new GTA nuclear reactor as part of its phase-out plan.

Fear- mongering: *Higher electricity rates*

Carbon Taxation

- ▶ **FACT:** IESO assumes gas plants will be subject to a carbon tax of only \$50 per tonne in 2030 despite the fact that the Government of Canada is planning to raise the carbon tax to \$170 per tonne in 2030.
- ▶ **FACT:** IESO assumes only 5% of gas plants' GHG pollution will be subject to carbon tax in 2030.
- ▶ **FACT:** That is, IESO's analysis assumes gas plants will be subject to a carbon tax of only \$30.5 million in 2030.
- ▶ **FACT:** Assuming that 100% of gas plants' pollution is subject to a \$170 per tonne carbon tax, the carbon tax savings from a gas plant phase-out in 2030 will be up to \$2 billion.

Fear- mongering: *Higher electricity rates*

Storage

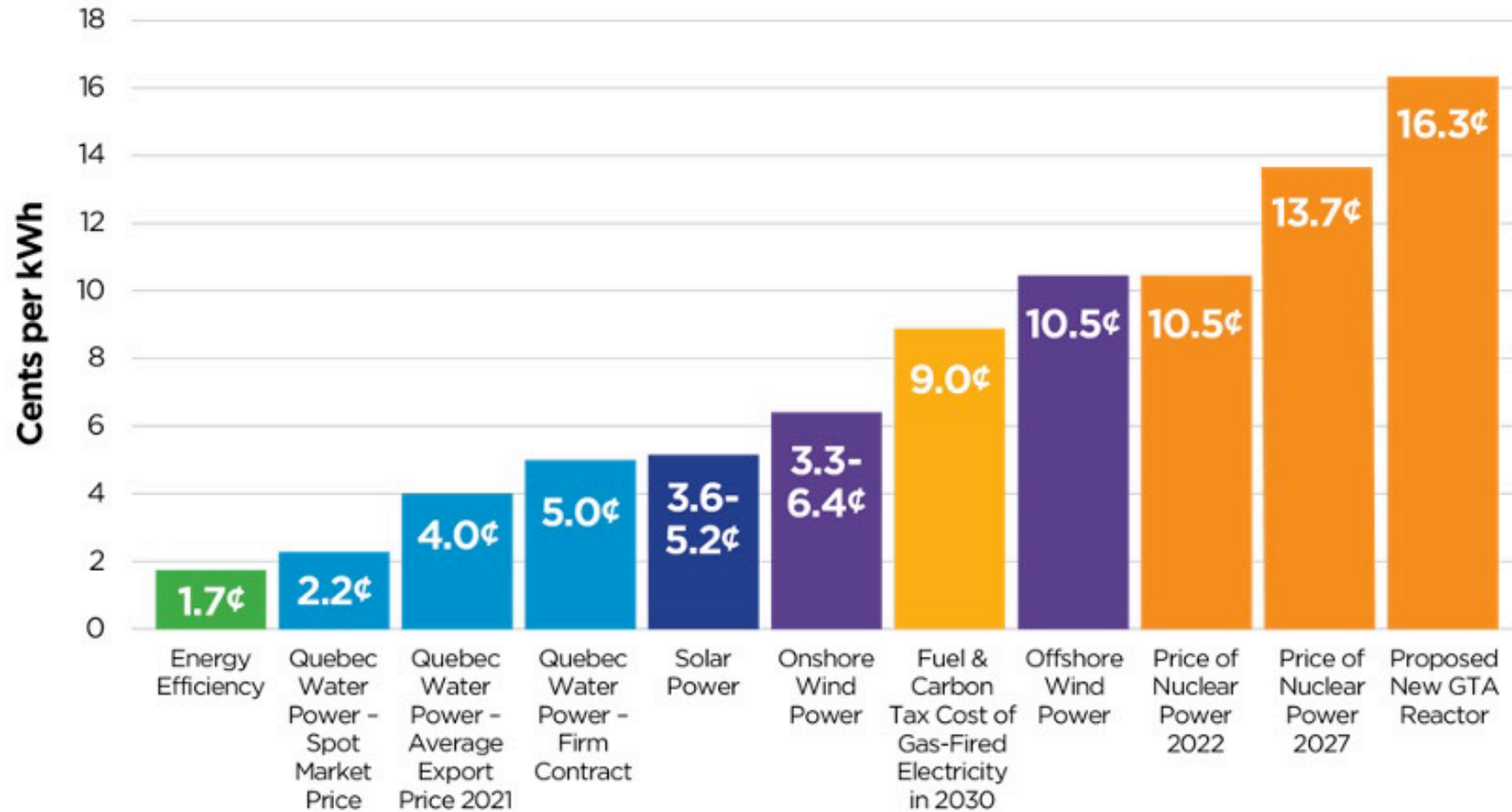
- ▶ The IESO report failed to consider our lowest-cost storage options:
 - Hydro Quebec's reservoirs; and
 - Installing bi-directional chargers for our electric vehicles (EVs) so that their batteries can provide power to the grid during peak demand hours.
- ▶ **FACT:** According to [an MIT study](#), Hydro Quebec's reservoirs – which can act like a giant battery – are the lowest-cost storage options for wind and solar energy.
- ▶ **FACT:** In 2030, the capacity of our EVs' batteries will be [more than twice](#) the capacity of our gas plants.

Fear- mongering: *Higher electricity rates*

New GTA Reactor

- ▶ The IESO report includes a **\$3 billion** new GTA reactor as part of its phase-out strategy despite the fact that energy efficiency, wind and solar and Quebec water power can phase-out gas power at less than half the cost.

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 needs to go back to the drawing board

The IESO needs to develop an unbiased, fact-based, least-cost plan to:

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

A **least-cost** electricity plan *can* phase-out gas power by 2030 *and* lower our electricity bills.

We can return the gas plants' pollution to their 2017 level by:

- Banning gas-fired electricity exports to U.S.
- Doubling our spot market purchases of Quebec waterpower using existing transmission lines.
- Purchasing 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

Progress since the gas power phase-out campaign launched in Feb. 2020

- ▶ 32 municipalities, representing almost 60% of the Ontario's population, have called for the phase-out of gas power.
- ▶ Andrea Horwath (NDP) and Mike Schreiner (GPO) have called for the phase-out of gas power by 2030.
- ▶ Prime Minister Trudeau has promised to make Canada's electricity system net zero by 2035.
- ▶ On Oct. 7, 2021, Ontario's Energy Minister Todd Smith directed the IESO to develop a plan to phase-out Ontario's gas plants by an unspecified date.

Our Proposed Priorities Before the June 2022 Provincial Election

- ▶ Communicate to public, media and our political leaders that we *can* phase-out gas power by 2030 *and lower* our electricity bills.
- ▶ Persuade Steven Del Duca (Liberal) and Doug Ford (PC) to call for a gas power phase-out by 2030.

What you can do

- ▶ **Sign our petition** asking Doug Ford and Steven Del Duca to endorse moving ON to a zero-carbon electricity grid by 2030:
OntarioClimateAction.ca
- ▶ **Distribute our pamphlet** ➡
- ▶ **Sign up for our electronic newsletter:**
CleanAirAlliance.org/newsletter

Ontario's Growing Climate Crisis



Gas Plant GHG Pollution to increase by more than 600%



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