

Feedback Form

Gas Phase-Out Impact Assessment – May 27, 2021

Feedback Provided by:

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Organization: For our Kids, Climatefast

Email: [REDACTED]

Date: June 11/2021

To promote transparency, feedback submitted will be posted on the Gas Phase-Out Impact Assessment webpage unless otherwise requested by the sender.

Please provide feedback by June 17, 2021 to engagement@ieso.ca. Please use subject:

Feedback - Gas Phase-Out Impact Assessment

Questions

Topic	Feedback
Are there additional considerations the IESO has not identified in defining the scope of the assessment to examine the reliability, operability, timing, cost and wholesale market implications of reduced emissions on the electricity system?	Click or tap here to enter text.

General Comments/Feedback

engagement@ieso.ca

Subject: Gas Phase-Out Impact Assessment

Response for IESO, Demanding a Clean Energy Future for our Kids and Grandchildren! June 11/2021As a parent, grandparent and concerned citizen, I represent an “everyday” Ontarian, a voter, taxpayer, retiree and most importantly, a caregiver for my grandchildren and a mother of three. You can never put a price on your loved ones. Every day, evidence mounts that our children’s health, safety and future existence is in question due to climate crisis impacts. Phasing out gas and transitioning to renewable energy must be a priority as there is no time left to squander. There are so many multiple (short and long-term) benefits to the health and well-being of Ontarians and globally, as emissions is the main culprit. That is science. We know that ramping up gas-plant production will increase emissions by 300%. Why are we still questioning science, the experts? IESO’s assessment must consider the true social costs as well as the environmental costs, along with the immediate and long-term financial costs for producers and consumers. Reliability Research and real-world examples show existing solutions being used now, with the capability to meet the reliability needs of Ontario’s electricity demands-they have been proven to work at this scale. 1. Ontario Clean Air Alliance’s report: “Phasing Out Ontario’s Gas-Fired Power Plants: A Road Map” (updated Jan. ‘21) provides clear direction for phasing out gas in Ontario by 2030, achievable through a combination of conservation, made-in-Ontario wind and solar, water power and storage imports from Quebec. Implementation of energy efficiency measures alone could reduce electricity consumption by almost 50% by 2030! Why are we still ignoring this most significant fact? 2. A study undertaken by the Pembina Institute looked at whether clean energy solutions can deliver a reliable supply of electricity in an affordable way, focusing on Alberta, using modelling and examples from across Canada and the US. The study showed that “the clean portfolios provide the same services as the gas plant at a lower cost over the lifetime of the energy source” and “non-emitting renewable energy portfolios (as in wind, solar, battery energy storage) can reduce consumer costs along with climate and health impacts while delivering the same or greater services as gas plants.” (1) This is a win/win. 3. The global transition to renewable energy is rapidly gaining pace, with the US as only one example. Under Biden, the US is investing billions in clean energy and research. The recent budget for 2022 includes major funding for Department of Energy (DOE), programs to drive clean energy innovation, including \$4.7 billion in regular-year funding for DOE’s Office of Energy Efficiency and Renewable Energy. (2) These investments reflect confidence in the reliability and capacity of renewable energy to meet the country’s needs. Cost and Wholesale Market Challenges raised in IESO’s presentation include the unknown cost of ending current contracts for gas generation. We cannot afford to be short-sighted by another unsafe, costly purchase plan by Ontario, as no future means no economy. Additional considerations that must

be part of the assessment are the significant drop in prices for renewable power sources, long-term savings for producers and consumers, growing investment opportunities, creation of umpteen jobs, and lower health-care and absentee costs related to chronic and acute illness caused by emissions and climate change events already. It is happening now. 1. Phasing out gas and transitioning to renewable energy will be economically advantageous to Ontario; renewable energies are the energy source of the future. By phasing out gas, investing in infrastructure to bring in Quebec hydro power, (they've been asking us) and by developing its own renewable energy sector, Ontario will be more self-reliant and attract international investment in clean-tech innovation and research. If we fail to grasp this opportunity now, the province will fall farther behind and we cannot make up for increased emissions-the largest risk of all. 2. Prices for renewable power have dropped dramatically in the past decade due to economies of scale. Wind is currently priced at 3.4 to 7.0 cents/kWh for onshore and 11.2 cents/kWh for offshore. Solar costs 3.8 - 5.5 cents/kWh. Prices are expected to fall further through to 2030. Water power is also a reliable source of electricity and has been offered to Ontario from Hydro Quebec at a very favourable price of 5.0 cents/kWh. The city of Cornwall has sourced its electricity from Hydro Quebec for the past 50 years! and their residents pay an average of 35 % less than Hamilton residents and 40% less than Toronto electricity customers. This is outrageous for taxpayers in Ontario, and now under a pandemic; most importantly is the health and safety concerns. 3. Transmission upgrades along existing corridors between Quebec and Ontario would significantly increase the amount of hydro power Ontario could import. While these upgrades could cost upwards of \$1.44 B, these costs are relatively low compared to \$25.8 B to rebuild Ontario's 10 aging nuclear reactors or the \$3 B Ontario recently spent on purchasing gas plants. 4. The Rocky Mountain Institute (US-based, independent, non-partisan, non-profit organization of experts, estimated in the 2019 report that the projected drop in the cost of clean portfolios means that clean energy sources are likely to be cheaper than the operating costs of 90% of gas plants, as early as 2035. Many aging nuclear reactors should be decommissioned. It is a Fukushima/Chernobyl waiting to occur. (3) Effects on Human Health, the impact of reducing emissions on the health of people and the planet has to be the primary consideration, because healthy people and communities are the province's biggest economic asset; our children are the future! Canadian Association of Physicians for the Environment (CAPE)'s Call to Action on Climate Health from 2019 cited data linking chronic exposure to fine particulate air pollution resulting from the burning of fossil fuels to 7,100 premature deaths in Canada per year and annual health-related costs of \$53.5 billion. Air pollution is not just pollens or previous air pollution. The Call to Action goes on to say that "... climate solutions directed at cars, trucks, coal plants, industry, and oil and gas extraction, would save many lives, reduce rates of heart disease, asthma and lung cancer, and cut healthcare costs for the people of Canada, while reducing climate emissions." With climate predicted to increase and worsen our unbalanced ecosystems, health and safety will worsen; the healthcare system is already in crisis as is our well-being. (4) Children are especially vulnerable to the adverse effects of air pollution and climate change as a result of fossil fuel combustion. Due to their rapid growth, immature immune and detoxification systems, unborn children and young children are particularly affected biologically. Children breathe more air/kg of body weight than do adults and require three to four times the amount of food on a body-weight basis than adults, so they are more exposed to pollutants in air and food; pollutants that come from the combustion of fossil fuels. We can no longer ignore the stats in front of us. The effects of fossil fuel combustion are long-term, lasting multiple decades as children grow and mature, and they cannot necessarily be reversed. Phasing out fossil fuels ASAP will minimize these impacts on our children/grandchildren and ensure future generations are not exposed to these health risks. As a retired nurse, it all makes sense and also how it relates to ethical decision-making. (5) The impacts on human health are significantly higher for members of vulnerable communities, particularly low-income and racialized communities, who are most often physically situated more closely to the sources of pollution and least resourced to be able to deal with the impacts. Along with air and water pollution, GHG emissions hasten the climate crisis, leading to more frequent dangerous heat events, more extreme weather events such as flooding and drought, extreme and unprecedented wildfires which threaten food and housing security, and above all, irreversible damage to the environment. As the International Institute for Sustainable Development has made clear, gas expansion is inconsistent with the Paris Agreement goals of pursuing all efforts to keep warming to 1.5C. As they note: "In

the median 1.5°C scenario used in the IPCC Special Report on 1.5°C (IPCC, 2018]; International Institute for Applied Systems Analysis & Integrated Assessment Modeling Consortium, 2018), global gas use is halved from 2020 to 2040.” Further, “Most scenarios see power generation almost completely decarbonized by mid-century, even in a 2°C world (IPCC, 2018, p. 112).” We cannot ignore medicine-it is science-based. (6) In addition, according to the recent Net Zero by 2050 report from the International Energy Agency’s (IEA) all new fossil fuel projects must be stopped if we are to have a chance at meeting the goal of net zero by 2050.(7) Increasing Ontario’s greenhouse gas emissions (GHGe) by ramping up gas-fired power plants would endanger Canada’s ability to meet its international climate goals and worsen our climate crisis-endangering the health and wellbeing of Ontarians by exposing them to extreme weather events, deadly heat-waves, destructive flooding, wildfires and more insect-borne/zoonotic illnesses. *Ontario is currently being sued by seven youth climate activists for rolling back the province’s climate targets and replacing them with a significantly weaker 2030 target. The earth can no longer afford more carbon; it spews it back into our atmosphere. Our lungs will not last unless we change to renewables. (8) The applicants in the case are asking the Court to order Ontario to mitigate the disasters that climate crisis is causing and set a science-based GHG reduction target. This is imperative! The government’s attempt to dismiss the case failed and the case is now proceeding to a full hearing. If, as in a growing number of jurisdictions globally, the applicants win the case, this should put any plans to ramp up gas-plants in jeopardy. It is a grave liability to Ontarians and the planet, especially now. My response to the IESO’s request for feedback is that the IESO’s assessment must include the global surge in development of renewable energy, and the opportunities this development brings in terms of jobs, revenue, economy, clean air, water, lands due to reduced greenhouse gas emissions. Ramping up gas-plants production is reckless and would take Ontario further backwards; phasing-out gas plants and investing in the transmission of renewable energy and available hydro power from Quebec will help propel Ontario forward into a clean energy future. References (1) Reliable, affordable: The economic case for scaling up clean energy portfolios, Oct. 2019, Pembina Institute (2) <https://cleantechnica.com/2021/06/03/5-wins-for-clean-energy-innovation-in-bidens-budget/> (3) The Growing Market for Clean Energy Portfolios, 2019, Rocky Mountain Institute (4) Howard C, Rose C, Rivers N. Lancet Countdown 2018 Report: Briefing for Canadian Policymakers. Canadian Medical Association, Canadian Public Health Association, The Lancet; 2018 November (5) Perera F. “Pollution from Fossil-Fuel Combustion is the Leading Environmental Threat to Global Pediatric Health and Equity: Solutions Exist” International Journal of Environmental Research and Public Health, 2018 (6) <https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf> p. VI. (7) <https://www.iea.org/reports/net-zero-by-2050> (8) <https://ecojustice.ca/case/genclimateaction-m>*We must be leaders in Ontario and globally by adhering to science/medicine. Governments and scientists around the world agree that we need to cut emissions in half by 2030! https://theyee.ca/News/2021/06/11/Vancouver-Council-Votes-Against-Delay-Climate-Emergency-Plan/?utm_source=daily&utm_medium=email&utm_campaign=110621. "Vancouver City bylaw will require new homes built after Jan. 1 to use zero-emissions heat and hot water systems, effectively banning natural gas hookups." Climate + Gas=Dangerous, costly, unhealthy!.

Thank you for this opportunity to provide stakeholder and community input to IESO’s assessment of the implications of phasing out gas-powered electricity in Ontario.

Sincerely,

Erica Walker