

Feedback Form

Gas Phase-Out Impact Assessment – May 27, 2021

Feedback Provided by:

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Date: 17 June 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?	Yes. The IESO should consider its duty to protect the health and wellbeing of Ontario’s children and vulnerable populations from the air pollution caused by NO2 emissions from gas-fired electricity generation. The IESO should consider the harm caused by greenhouse gas emissions from energy generation and its duty to align with Canada’s commitments to dramatically cut energy generation, as highlighted by the Intl. Energy Agency and in current lawsuits. The IESO should consider the rapidly declining costs of renewable generation and energy storage, and the potential for cheap hydropower from Quebec.

General Comments/Feedback

Thank you for the opportunity to provide feedback on this critical question. Like many ordinary Ontarians, I am strongly of the opinion that my electricity generation should reflect the values of our country, which go far beyond the basic mandate of “cheap and reliable”. Our choices of electricity sources should reflect the highest ethical standards, while safeguarding the health and wellbeing of my own family and of all Ontarians – especially our most vulnerable. For all of these reasons, the IESO should phase out gas-powered generators entirely, and seek to expand wind and solar with grid-scale storage, while obtaining cheap hydroelectric power from Quebec. Only this will avoid the massive ramp-up in air pollution and greenhouse gas emissions that would arise when our nuclear plants retire.

Direct threats to public health from gas-fired plants: I worry about the effect of air pollution on my own children, on my wife who has a cardiac arrhythmia, and likewise on the health of all children and vulnerable populations in Ontario. Our air quality has improved from when our electricity came from coal, but the air is not truly clean – largely because of the NO2 emissions from gas-powered generators, and the resulting creation of particulate and ozone pollution. If we burn more gas to replace aging nuclear plants, this pollution will worsen dramatically. There is ample evidence linking air pollution, especially fine particulates, to a wide range of negative health outcomes including heart disease, dementia, asthma, lung cancer, and early death from all causes. Canadian Association of Physicians for the Environment maintains a toolkit for health professionals [1] that links chronic exposure to fine particulate air pollution resulting from the burning of fossil fuels to 7,100 premature deaths per year within Canada, and annual health-related costs of \$53.5 billion. To quote that document:

“Fine particulate matter increases the risk of ischaemic heart disease (IHD), ischaemic stroke, chronic obstructive pulmonary disease (COPD) and lung cancer in adults and acute lower respiratory infections in children under five years of age (Forouzanfar et al., 2016; WHO, 2016). There is also emerging evidence of the association between PM2.5 and obesity,

diabetes, attention deficit hyperactivity disorder, autism, neurodegenerative disease, premature birth and low birthweight (Landrigan et al., 2017)."

Threats to public health from climate change: An immensely greater threat to our children's health and wellbeing comes from the vast changes to the global climate caused by greenhouse gas emissions, which are an inevitable by-product of using natural gas or any other fossil fuel to generate electricity (given that carbon capture and sequestration is unproven and prohibitively expensive). As stressed by the U.N. Intergovernmental Panel on Climate Change [2], any global warming beyond 1.5 °C above pre-industrial levels implies a cascading, catastrophic breakdown of weather and climate systems; increasingly common natural disasters like wildfires, hurricanes, floods and droughts; loss of food security; widespread destruction of the natural ecosystem; and conflict leading to waves of migration. Most immediately, Canadians would suffer degraded health and quality of living due to the inhalation of wildfire smoke and the spread of diseases, such as tick-borne diseases. Accordingly, Canada has committed to cutting GHG emissions nearly in half in the coming decade and to zero by 2050. To quote the International Institute for Sustainable Development [3] "In the median 1.5 °C scenario used in the IPCC *Special Report on 1.5 °C* [2], global gas use is halved from 2020 to 2040." Furthermore, "Most scenarios see power generation almost completely decarbonized by mid-century, even in a 2°C world (IPCC, 2018, p. 112)." In this context, it is not surprising that the International Energy Agency now calls for an immediate halt to the creation of any new fossil fuel infrastructure worldwide [4].

Reliability and affordability: Old arguments that renewable energy sources are unreliable or overly expensive are no longer tenable. The cost of wind and solar power are both falling precipitously; on the global market they are already below any fossil fuel cost, including natural gas [5]. And while renewables will continue to get cheaper due to technological development and economies of scale, fossil fuels will very likely become more expensive as their production is curtailed and national and international policies, such as carbon taxes, intensify. Furthermore, extremely inexpensive hydroelectric power is available from Quebec at even lower prices than other renewables [6].

Ethical, legal, and treaty obligations: In addition to the extremely weighty considerations already listed, is worth remembering that gas burned for electrical generation is extracted at significant costs to human and environmental wellbeing. In Canada, fossil fuel extraction and transport invariably occurs on or across unceded treaty lands and without the free, prior, and informed consent of First Nations peoples and their traditional elders, as required by the UN Declaration on the Rights of Indigenous Peoples [7] – and by common decency. In a year when the bodies of hundreds of Indigenous children have been found in a mass grave at just one of the residential schools, and following a year in which massive protests over native title and fossil fuel transport led to the shutdown of the national rail system, these considerations must not be ignored.

Furthermore, it is important to bear in mind that the Province of Ontario is currently defending a lawsuit brought by young Ontarians [8]. This lawsuit seeks to establish that the Province has failed to uphold its children's Charter rights to life, liberty, and security of the person by taking actions that degrade its commitments to reducing climate change. This lawsuit has survived a Provincial motion to dismiss, which means it is increasingly likely that Ontario will soon be subject to a legal obligation to abandon projects that contribute to greenhouse gas emissions.

Final comments: The worldwide transition to renewable energy is rapidly gaining pace, with the US as only one example. Under the Biden administration, the US is investing billions in clean energy production and research. The recent budget set out 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. These investments reflect massive confidence in the reliability and capacity of renewable energy, and imply that Ontario is at severe risk of being left behind in the global energy transition.

In short, I strongly urge you to phase out gas as a source of electricity in Ontario.

Sincerely,

Chris Matzner

[1] <https://cape.ca/wp-content/uploads/2019/05/Climate-Change-Toolkit-for-Health-Professionals-Updated-April-2019-2.pdf>

[2] IPCC Special Report: Global Warming of 1.5 C (2018). <https://www.ipcc.ch/sr15/>

[3] <https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf>

[4] <https://www.iea.org/reports/net-zero-by-2050> ^[1] _[SEP]

[5] <https://ourworldindata.org/cheap-renewables-growth#the-price-decline-of-electricity-from-renewable-sources>

[6] https://www.cleanairalliance.org/wp-content/uploads/2021/02/GAS_REPORT_2021_WEB.pdf

[7] <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>

[8] <http://climatecasechart.com/non-us-case/mathur-et-al-v-her-majesty-the-queen-in-right-of-ontario/>