This document sets out the basis for the complaint that Seniors for Climate Action Now! (SCAN!) is making to the Competition Bureau concerning the offences that Enbridge Gas Inc. is committing under Part VII of the Competition Act (R.S.C. 1985, c. C-34).

The Competition Act was enacted in 1985.[1]

It is described as "*An Act to provide for the general regulation of trade and commerce in respect of conspiracies, trade practices and mergers affecting competition".*

The purpose of the act is "to maintain and encourage competition in Canada in order to promote the efficiency and adaptability of the Canadian economy, …in order to ensure that small and medium-sized enterprises have an equitable opportunity to participate in the Canadian economy and **in order to provide consumers with competitive prices and product choices. (**emphasis added).

In Part VII.1 of the Act**: Deceptive Marketing Practices**, the Act states:

> **74.01 (1)** A person engages in reviewable conduct who, for the purpose of promoting, directly or indirectly, the supply or use of a product or for the purpose of promoting, directly or indirectly, any business interest, by any means whatever,
>
> **(a)** makes a representation to the public that is false or misleading in a material respect;
>
> **(b)** makes a representation to the public in the form of a statement, warranty or guarantee of the performance, efficacy or length of life of a product that is not based on an adequate and proper test thereof, the proof of which lies on the person making the representation; or
>
> **(c)** makes a representation to the public in a form that purports to be
>
> **(i)** a warranty or guarantee of a product, or
>
> **(ii)** a promise to replace, maintain or repair an article or any part thereof or to repeat or continue a service until it has achieved a specified result, if the form of purported warranty or guarantee or promise is materially misleading or if there is no reasonable prospect that it will be carried out.

In this document, SCAN! presents evidence that Enbridge Gas Inc's marketing campaign in support of the Clean Home Heating Initiative in Ontario contains false and misleading representations that are deceptive marketing practices and which therefore constitute offenses under article 74.01(1)(a) of the Competition Act.

[1] https://laws-lois.justice.gc.ca/eng/acts/c-34/page-1.html

Enbridge's False and Misleading Misrepresentations

Enbridge Gas Inc. (EGI) implements the **Clean Home Heating Initiative** in Ontario under a sole-source contract awarded to the company in 2022 by the Ford provincial government.

The website can be found here: https://www.enbridgegas.com/sustainability/clean-heating/hybrid-heating. The text includes five statements that are either false or misleading. These are quoted verbatim from the CHHI website.[2]

- "An electric heat pump with smart controls is paired with a condensing natural gas furnace to make a hybrid heating system. The system switches between energy sources to cool and heat your home as efficiently as possible…
- "Smart controls automatically switch between natural gas and electric heat, based on which source is the most efficient at a given time.
- "Hybrid heating uses two systems to heat as efficiently as possible.
- "By optimizing the home's energy mix based on the source that's a reliable and cost effective, energy costs are reduced over the long term.
- "Hybrid systems reduce greenhouse gas emissions by as much as 30 percent so homeowners will also be taking action on climate change."

These claims can be categorized as follows:

1. The statement that a hybrid heating system heats a home "as efficiently as possible". This claim is false.
2. The statement that a hybrid system reduces energy costs 'over the long term'. This claim is misleading.
3. The statement that hybrid systems reduce greenhouse gas emissions by as much as 30 percent and that homeowners will be "taking action on climate change." This claim is both false and misleading.

Heat pump efficiency

The greater thermal efficiency of heat pumps is well-established and proven. The efficiency of a heat pump is more than 100 percent. When outdoor temperatures are above freezing, a heat pump can operate with an efficiency of over 300 percent.

The following statement is taken verbatim from the federal government's on-line publication : **Heating and cooling with heat pumps** [3]

> The electricity input into the heat pump is used to *transfer* thermal energy between two locations. This allows the heat pump to operate more efficiently, with typical efficiencies well over 100%, i.e. *more* thermal energy is produced than the amount of electric energy used to pump it.

[2] https://www.enbridgegas.com/sustainability/clean-heating/hybrid-heating
[3] https://natural-resources.canada.ca/energy-efficiency/energy-star-canada/about/energy-star-announcements/publications/heating-and-cooling-heat-pump/6817#b5

This level of efficiency cannot be matched by a heating system using natural gas. Even the most efficient condensing gas furnace cannot achieve 100% efficiency. It is physically impossible. A home heating system that includes natural gas can never heat a home "as efficiently as possible". Only a fully electric heat pump installation can make this claim.

Therefore, all claims by Enbridge Gas Inc. in its marketing materials and advertising that assert that a hybrid heat pump system heats a home as efficiently as possible are false.

Reduced energy costs

On the **Clean Home Heating Initiative** website [4], Enbridge claims that, by installing a hybrid heating system, a homeowner's "energy costs are reduced over the long term." The cost of operating a hybrid heat pump system obviously depends on both the cost of electricity and the cost of natural gas, since a hybrid system consumes both types of energy. The claim by Enbridge that a hybrid system reduced costs over the long term, therefore depends entirely on the assumption that the cost of natural gas will decline over 'the long term.'[5] This is not a realistic scenario.

According to evidence filed with the Ontario Energy Board in 2022, Enbridge faces the spectre of what has been called a 'death spiral' as the transition to fully electric forms of heating and cooling gathers pace. In the report commissioned by Enbridge from consulting firm Concentric Energy Advisors, the firm explained that the risk to natural gas companies like Enbridge posed by the transition to renewable energy has fundamentally changed over the last five years. The report states that as the carbon tax rises to $170 per tonne by 2030, "the price advantage of natural gas compared to electricity will continue to erode." [6]

Although no one can see into the future with absolute certainty, it is extremely unlikely that the cost of natural gas will decline over the 'long term'. For Enbridge to make this assertion on the CHHI website is clearly misleading.

Reduced greenhouse gas emissions

The electricity generated in Ontario is among the cleanest in the world, resulting in only 30 grams of carbon dioxide equivalent (CO_2e) emitted per kilowatt-hour of electricity

[4] https://www.enbridgegas.com/sustainability/clean-heating/hybrid-heating
[5] The claim is not based on the assumption that the cost of *electricity* will decline 'over the long term', because the statement refers to the source which is 'reliable and cost-effective'. This clearly refers to natural gas.
[6] See the National Observer Risk of 'death spiral' for Enbridge increases: rate hike application https://www.nationalobserver.com/2023/02/22/news/risk-death-spiral-enbridge-increases-rate-hike-application#:~:text=Fossil%20fuel%20giant%20Enbridge%20faces%20the%20risk%20of,switch%20to%20cleaner%20and%20cheaper%20sources%20of%20energy.

consumed.[7] Unsurprisingly, the emissions of greenhouse gases generated by the combustion of natural gas is more than an order of magnitude higher. For example, according to the Canada Gas Association, in 2021 the average gas-connected home consumed 2385 cubic metres of natural gas.[8]. The emissions produced by the combustion of natural gas are estimated by the government as 1921 gCO_2e per cubic metre. Multiplying the two factors together, it follows that the average Canadian home heated with natural gas will emit approximately 4.6 *tonnes of CO2e per year*.[9].

A switch from natural gas heating to a 3-ton heat pump in a cold climate could increase a home's electricity consumption by as much as 10,000 kWh per year, the electricity for which would generate (in Ontario) about 10,000 x 30/1000 = 300 $kgCO_2e$ /yr of greenhouse gas emissions. This level of emissions is 15 times less than a home heated by natural gas.[10] More importantly, none of these emissions is in the home itself.

The claim that a hybrid heat pump system reduces emissions by 30 percent is merely stating the obvious, which is that a switch from gas heating to a hybrid heat pump system running on electricity most of the time obviously reduces the amount of natural gas a home consumes. But what Enbridge does not say is that a fully electric heat pump system would reduce greenhouse gas emissions in the home to zero. In other words, choosing to install a hybrid heat pump that relies on natural gas instead of a cold-climate heat pump that does not, homeowners actually increase their emissions of greenhouse gases by over four tonnes a year. The claim made by Enbridge that a home could reduce its emissions by "as much 30 percent" and that participating homeowners "will be taking action on climate change" is grossly misleading.

Martin Bush
Seniors for Climate Action Now!

8 April 2024

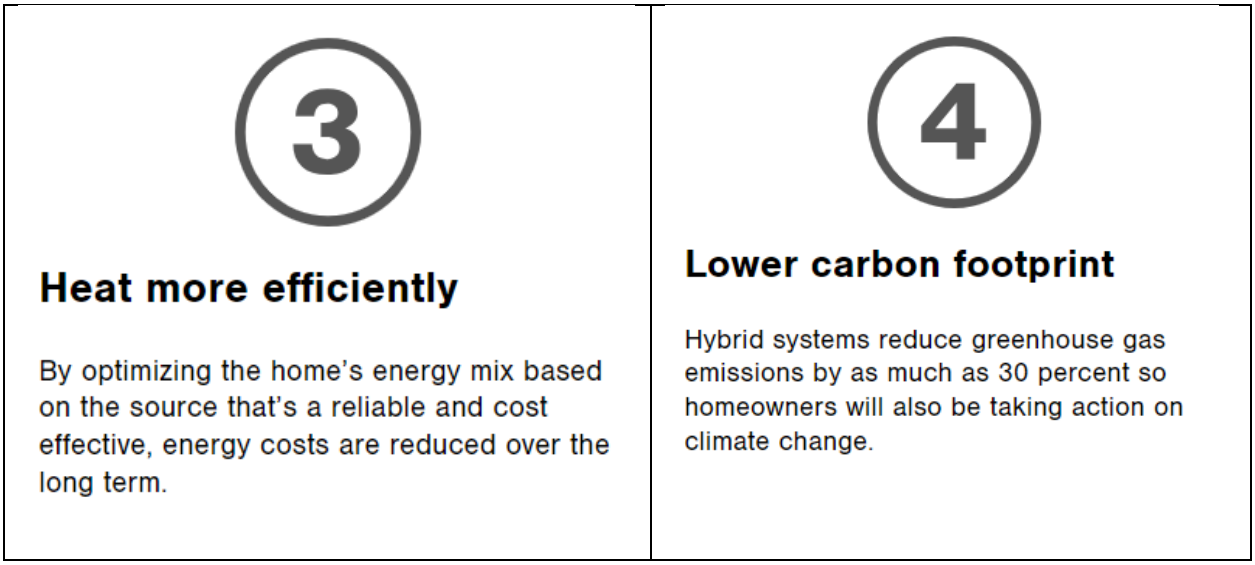
[7] https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/federal-greenhouse-gas-offset-system/emission-factors-reference-values.html
[8] https://www.cga.ca/natural-gas-statistics/natural-gas-facts/#:~:text=In%202021%20the%20average%20residential%20natural%20gas%20customer,year%2C%20depending%20on%20the%20climate%20in%20the%20region.
[9] https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/federal-greenhouse-gas-offset-system/emission-factors-reference-values.html
[10] https://www.energysage.com/electricity/house-watts/how-many-watts-does-an-air-source-heat-pump-use/

Appendix 1

Screen shot excerpts from Enbridge website promoting the Clean Home Heating Initiative.[11]

How does hybrid heating keep energy costs low?

Hybrid heating uses two systems to heat as efficiently as possible. An electric air-source heat pump will heat the home when temperatures are moderate and electricity rates are low. When temperatures are cooler, or at times when electricity rates are at their peak, the system automatically switches to the condensing natural gas furnace, ensuring comfort on cold winter days. The home will also be cooled efficiently by the heat pump.



[11] https://www.enbridgegas.com/sustainability/clean-heating/hybrid-heating