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From: Charles DeLand

To: Canadians Concerned about Climate Change

Date: August 6, 2024

Re: LET CONSUMERS LEAD THE WAY ON GREEN VEHICLES AND HEAT PUMPS

The federal government and many provinces are working toward reducing greenhouse gas (GHG) emissions with Ottawa committing to achieving a net-zero economy by 2050. However, governments need to proceed more cautiously with two of their key policy levers – zero-emission vehicles and heat pumps – and let consumers lead the way.

Reducing emissions comes at an economic cost. The trick is to ensure Canadians still have the products and services they need while minimizing the cost of each GHG tonne not emitted. This is not an easy task in a complex, energy-intensive economy in which Canadians feel their budgets are stretched. Including upfront and continuing costs, battery-powered electric vehicles and heat pumps are often not yet the best choice.

Markets are powerful. Prices can efficiently allocate resources between buyers and sellers, and signal misalignments between them, such as shortages or surpluses. For this reason, many economists favour pricing carbon emissions, and letting markets work to integrate that information into transactions.

In contrast, "top-down" initiatives – regulations that mandate certain actions – can be costly. While useful in some cases, such as standardizing pollution controls on industrial equipment, or gradually tightening engine fuel-efficiency requirements, such regulation can fail to allow enough adjustment time or remain inflexible to innovative, and cheaper, ways to achieve the outcomes Canadians need.

Transportation provides an example. Emissions from cars, trucks, planes and trains made up 22 percent of Canada's emissions in 2022. The federal government's Electric Vehicle Availability Standard requires a national target of 100-per-cent zero-emission light vehicles by 2035, with an interim target of 60 percent by 2030. Easier said than done. The 2035 target will be difficult to meet, according to research by Brian Livingston for the C.D. Howe Institute. It will be virtually impossible to meet it for the light-truck models chosen by 82 percent of buyers. In 2023, only about 2 percent of Canadian pickup truck buyers went with a battery-electric version.

Transitions take decades and Canadians need more time. The federal government ought to eliminate year-based targets. At a minimum, it ought to allow flexibility for significantly greater numbers of popular hybrid vehicles. Other easy, consumer-friendly ideas: abolishing Canada's 13-per-cent duty on bicycles and eliminating restrictions on the use of so-called "Class 3" electric bicycles, which are slightly faster and allow longer commutes.

Governments have proposed top-down policies in the housing sector, too, which is responsible for about 13 percent of Canadian emissions. These include policies to replace fossil fuel furnaces and boilers with electricity-powered equipment, specifically heat pumps. While heat pumps are becoming more popular among Canadians, they are far from universally accepted or appropriate. In 2023, roughly 7 percent of Canadian households reported using a heat pump. Despite far-from-universal adoption, a recent report from the Canadian Climate Institute encourages provincial utility regulators to start to take steps to disfavour natural gas connections, making the case that provincial governments should stop treating natural gas as the default option.

Abandoning cheap and reliable natural gas now would be more expensive for Canadians.

Heat pumps are generally more expensive than gas furnaces, especially for existing homes and apartments. My 2022 C.D. Howe Institute <u>report</u> estimated retrofits to meet 2050 federal targets would cost \$4.5 billion to \$6.3 billion a year. Operating costs can be high in inefficient buildings and places with high electricity prices.

Canadians have relied on natural gas for more than a century: distributors, contractors, building managers and homeowners are familiar with gas infrastructure and equipment and how to maintain them. While heat pumps can be the best choice in many cases, they are not always the best in all climates or power-price environments. Canadians are still getting used to them. Adoption elsewhere is uneven, too: Heat pump sales are falling in the US and Europe despite policy pushes.

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Historically, consumers drove energy transitions: from hard-to-transport coal to cheap and reliable piped natural gas, from kerosene to electric light powered by dams and nuclear plants, from horses to cars, and from sailing ships to diesel container ships. The same is true for EVs and heat pumps: If they are better choices, people will choose them.

Policymakers should favour policies that make things cheaper and better for Canadians: Cheap and efficient power, low import tariffs and support for research and development, as examples. Rather than discouraging what works such as by banning natural gas connections, provincial regulators should encourage the market to find better and cheaper options while maintaining a focus on reliability and affordability. Only when it's abundantly clear that Canadians have moved on should support for important infrastructure start to be withdrawn.

Charles DeLand is the Calgary-based associate director of research at the C.D. Howe Institute. To send a comment or leave feedback, email us at blog@cdhowe.org.

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