Intelligence MEMOS

From: Charles DeLand

To: Canadians Concerned about Climate Change

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Re: WHAT'S UNDER THE HOOD OF OTTAWA'S EMISSIONS REDUCTION ROADSTER?

Like many governments around the world, Canada's federal government proposes significant policy changes to reduce emissions. More than just significant, the changes propose to alter many industries. This is not to say there will not be benefits or that Canada should do nothing, but Canadians deserve to understand the benefits and costs.

On December 31, at the same time many Canadians prepared themselves for New Year's Eve celebrations, the federal government released its regulatory impact statement to supplement its plan to reduce car and light truck greenhouse gas (GHG) emissions.

The civil servants responsible probably did not mean to, but they underscored a recurring apprehension about the government's far-reaching, economy-wide Emission Reduction Plan's (ERP) sector-by-sector roadmap to reduce emissions by 2030.

Namely, how much will Canadians' pay?

Canadians should welcome the impact statement's analysis and its publication, even as they surely will not all agree with the assumptions. External examination and debate strengthen eventual implementation. Before asking taxpayers to spend money and before undertaking actions that may harm economic well-being, policymakers should invite scrutiny from all sides.

The proposed car and light truck regulations would require sellers of these vehicles to meet specified targets of zero-emission vehicles (ZEVs) beginning in 2026. The impact statement outlines the policy's costs and benefits, contingent on several assumptions.

Higher actual costs or lower achieved benefits erode the policy's value.

One of the statement's key inputs is the EV price premium compared to conventional cars and light trucks (chargers are a big cost too). Most electric vehicles are still pricey at $50,000 and up. Tesla's Model 3, its cheapest, is listed at about $55,000. Prices have come down, but the Hyundai Kona is representative. Its gas-powered version is available for just over $25,000, while the EV model will set you back $47,000, a premium of $22,000.

Meanwhile, Ottawa's financial model projects that differential to fall to $985 by 2020.

Really?

Maybe, but if the actual gap is larger, resulting costs will be higher too.

Another example: the statement's analysis ignores the extra cost – bigger batteries – to ensure electric trucks have towing capacity. Including an equivalent towing package to the current internal-combustion truck fleet (in an attempt to compare apples to apples) adds almost $38 billion to the policy's cost.

The analysis assumes Canadians save money by avoiding gasoline or diesel fuel. If fossil fuel costs fall, so does the benefit. And any cost overruns in rolling out charging infrastructure will also erode the value.

For such a consequential set of policies, the Emissions Reduction Plan has been too vague. There needs to be more and better modeling detail and transparency, as recommended by participants in a C.D. Howe Institute special policy seminar last year. They also called for realistic timelines for the large, complex projects with long permitting processes that are going to be required, along with as greater overall policy certainty.

In another example of the aggressive ambitions of federal plans, Canada would need to retrofit over 400,000 homes per year with heat pumps to meet Ottawa's emission reduction target for the building sector, according to a recent paper, and would cost between $4.5 billion to $6.3 billion annually. It would also require more than half a million retrofits each year, up from the current 20,000.

Policymakers and their analysts should ask themselves whether their models include real-world constraints to making them real. One way to assess a policy's realism is to begin with the world as it is and envision or map out a physical pathway to achieving it. For example, C.D. Howe Institute research examining company-by-company capacity and intention to assemble and sell electric vehicles produced a sales forecast of only 310,000 electric vehicles by 2030, far below the federal government's number of 1.1 million.

Not all programs deliver the results they promise. Research shows that energy efficiency-focused building retrofit programs save less energy and emissions than they should. Appropriate prediction methods, such as from anonymized actual utility data, can help and get the most bang for the taxpayer buck.

Given the ERP's scale and potential impact, the government owes it to Canadians to say how much it will cost, and exactly how they came up with the numbers. To build trust and improve policy, the government should make sure modeling be transparent and open to debate and adjustment. They also need to track the benefits and costs and alter policy should new data suggest it.

Polling data and, arguably, election results suggests that most Canadians support policy action to reduce emissions. That is not enough. Maintaining that support, reducing emissions in the long run, while improving Canadians' standard of living requires a full and open understanding of the tradeoffs involved.

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