

# Intelligence MEMOS



From: Ryan Kellogg  
To: The Hon. Marc Garneau, Minister of Transport  
CC: The Hon. Catherine McKenna, Minister of Environment and Climate Change  
Date: April 6, 2017  
Re: **SHOULD CANADA AND THE US ADOPT A MARKET-BASED APPROACH TO FUEL ECONOMY?**

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Volatile gasoline prices have caused regulators and carmakers alike to question the cost and effectiveness of fuel economy standards in recent years, with some arguing they are too stringent and others saying they should be even stronger. The reality is, we just don't know what the cost of gas is going to be years from now—it could be anywhere from more than twice today's price to less than half of today's price. With unpredictable gasoline prices, a standard indexed to prices offers the greatest benefits.

Unfortunately, the success of a fixed fuel economy standard—the current US and Canadian policy—hinges on that price signal. If gasoline prices are higher than expected, consumers may opt for vehicles that are even more efficient than the rule requires, suggesting that the fixed rule is too lenient and is missing out on potentially greater fuel and emissions savings. If prices are lower than expected, consumers will demand less efficient vehicles, raising compliance costs for automakers who must comply by reducing prices for their most efficient models.

As the Trump administration takes a [closer look at](#) fuel standards in the coming months, there's one approach that could make everyone happy: [indexing the standard](#) to rise and fall with the price of gasoline. When gasoline prices are high, the standards would ratchet up to become binding, achieving maximum, cost-effective fuel and emissions savings. This would fully leverage consumers' willingness to pay for more fuel-efficient cars to save money on gas. When gasoline prices are low, the standards would ratchet down, avoiding overly burdensome costs for automakers.

The current standards do aim to provide the flexibility needed to account for unpredictable gasoline prices. For example, the standards are footprint-based, meaning that vehicles with a relatively large wheelbase are assigned a relatively less stringent standard. This allows consumers to choose gas-guzzling cars when gasoline prices are low, and choose vehicles that offer greater efficiency when gasoline prices are high.

But, this approach is not enough to compensate for the distortions to vehicle size that are introduced by a footprint-based standard. Instead, an indexing system would allow automakers to adjust vehicle production volumes to more closely match consumer preferences. For example, automakers could manufacture more gas-guzzlers when gasoline prices are low and more efficient models when gasoline prices are high. In the medium to long term, an indexed standard could potentially allow for even greater flexibility—though it would be important to ensure that standards only adjusted incrementally to avoid implementing a set of standards in a given year for which automakers had not produced suitable vehicles.

This is potentially a solution that could satisfy automakers—who right now say complying with fuel economy standards is too expensive—while also delivering the maximum benefits for consumers and the general public by reducing greenhouse gas pollution at the lowest cost. Without the political will for a strong gasoline tax, this market-based approach could be the best option. And, it doesn't require new legislation from Congress.

*Ryan Kellogg is a Professor at the University of Chicago Harris School of Public Policy and author of the NBER Working Paper [Gasoline Price Uncertainty and the Design of Fuel Economy Standards](#).*