



February 20, 2007

Chad Mariage
Clerk, House of Commons
Legislative Committee on Bill C-30
Ottawa, Canada
K1A 0A6

For distribution to Committee members:

Re: Relevance of the claim that only one per cent of emissions are from new cars

On Tuesday, February 6, 2007, Pollution Probe was invited to appear as a witness before the Legislative Committee on Bill C-30. The subject of the afternoon session was transportation and representatives of the Canadian Vehicle Manufacturers' Association, the Canadian Auto Workers, the Association of International Automobile Manufacturers of Canada and the Sierra Club of Canada presented their views regarding the regulation of fuel efficiency standards for light-duty vehicles in Canada.

On several occasions, automaker and union representatives declared that new cars in Canada only constitute one per cent of all greenhouse gas emissions, nationally. Pollution Probe believes that reference to this figure is intended to minimize the significance of implementing new vehicle fuel efficiency standards. The implication is that due to the relatively small contribution of *new* cars to Canada's total GHG emissions, developing a world-class fuel efficiency standard is not worth the effort.

Pollution Probe strongly objects to this notion on two main points:

1. The figure has no relevance to the task of setting a fuel efficiency standard in Canada.
2. The one per cent figure is likely underestimates the contribution of new vehicles to overall fleet GHG emissions.

How industry arrives at the one per cent figure

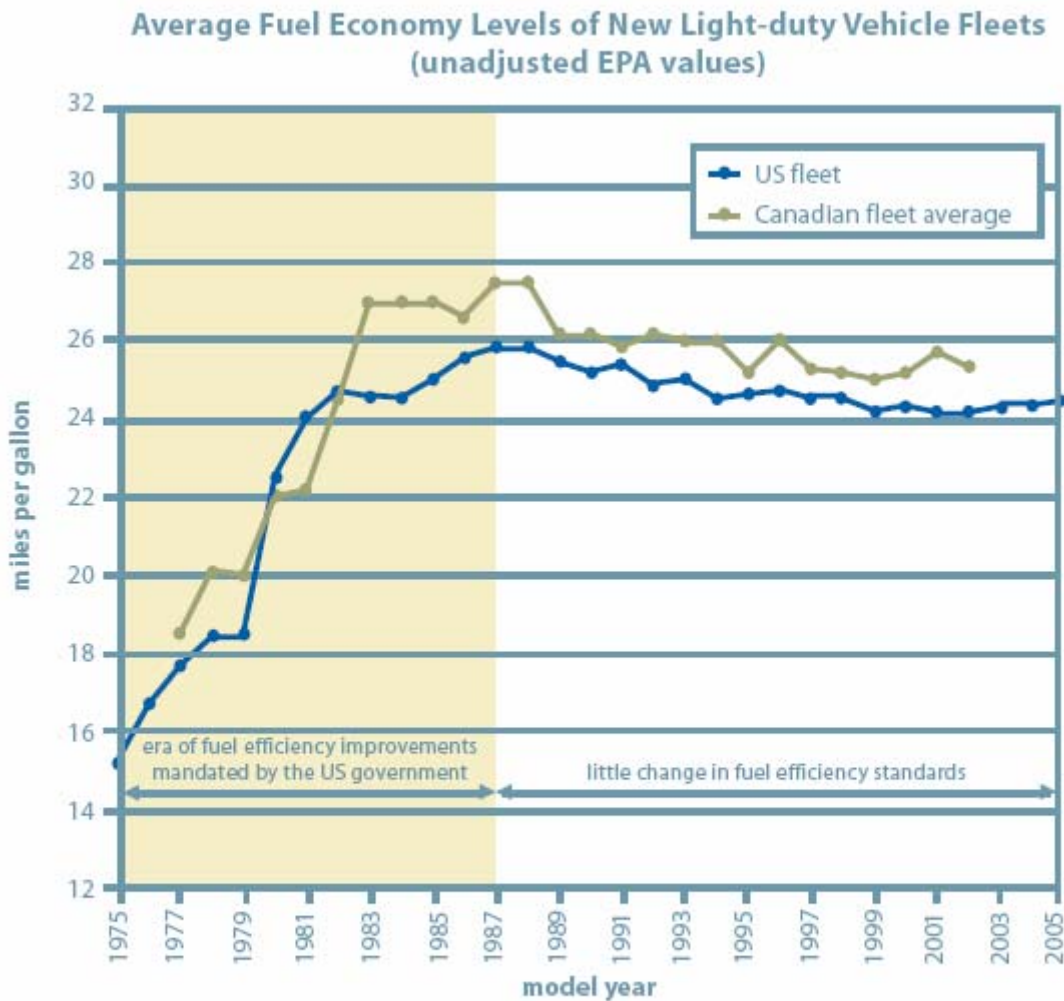
A news release posted on the CVMA website dated October 18, 2006 entitled, *Canada's Clean Air Act – Key Facts Concerning Auto Emissions in Canada*, includes a calculation summarized as follows¹:

- The light-duty vehicle fleet (i.e., all passenger cars and light trucks in Canada) is the source of 12 per cent of total GHG emissions in Canada.

- New vehicles comprise roughly 8 per cent of the total fleet in any given year.
- Thus, new cars only emit 8 per cent of 12 per cent of GHG emissions, or about 1 per cent overall ($0.08 \times 0.12 = 0.0096$ per cent).

The one per cent figure is misleading and irrelevant to the discussion

Representatives of the automakers and the auto workers' union suggested to the Committee that removing old vehicles from Canada's roads would contribute more to reducing GHG emissions than regulating fuel efficiency in new vehicles, which comprise only about 8 per cent of the entire fleet. Since a policy option that removes from Canadians 92 per cent of the vehicles they own is not under serious consideration, we are led to conclude that replacing older vehicles with newer models will effectively improve fleet-wide fuel efficiency levels in Canada. The underlying assumption is that newer vehicles are always more fuel efficient than the older vehicles they replace. However, this is a big assumption that is not supported by the facts. Consider the following chart:



Source: US data from US Environmental Protection Agency. *Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2006*; Canadian data from Natural Resources Canada

The chart shows that average fuel economy levels in new vehicle fleets has *declined* over the past twenty years. Given this trend, simply replacing older vehicles with newer vehicles would have little effect on fleet GHG emissions. The reason is that new light-duty vehicle fleets sold in Canada and the U.S. are not showing significant improvement in fuel efficiency over previous years' fleets.

Fuel efficiency standards are a prerequisite for accelerated vehicle retirement programs. In other words, accelerating fleet "turn-over" in order to significantly reduce GHG emissions will only work if new vehicle fuel efficiency levels are constantly and significantly improving.

Pollution Probe does not oppose vehicle retirement programs as a concept, particularly because it will serve to accelerate the introduction of new vehicles that are subject to the Government of Canada's new Tier II vehicle emissions standards, while vehicles built under less stringent emission standards are scrapped. This should have a positive impact on local air quality. However, in the context of GHG emissions and climate change, we view vehicle retirement as a *complementary measure* to a world-class vehicle fuel efficiency standard – not an alternative.

The one per cent figure is likely incorrect

Beyond the misleading nature of the "one per cent" figure, the industry's calculation is flawed to start with. In multiplying the percentage of new light-duty vehicles comprising the fleet in Canada by the fraction of GHG emissions emitted by that fleet, the industry makes a big assumption that all vehicles are driven the same distance each year regardless of age. But according to data in the Government of Canada's Canadian Vehicle Surveyⁱⁱ, this assumption is erroneous. On average, vehicles accumulate more kilometers traveled in the first year ownership (approximately 23,000 km), after which distance traveled decreases at roughly 4 per cent per year. Therefore, new vehicles contribute more to fleet-wide GHG emissions in proportion to their population, because they are driven more than older vehicles.

A more accurate approach would be to calculate the contribution of new vehicles to the total kilometers traveled of the entire fleet. From this perspective, the contribution of new model year vehicles to fleet wide GHG emissions is probably closer to 12 per cent – not 8 per cent. The relevance of this discrepancy is mainly academic, as the number still appears relatively small, but it illustrates the need for government to conduct thorough policy analysis on this issue. For example, it would probably be more helpful to consider the GHG contribution of vehicles in the first 10 years of service, rather than just the newest model year. Canadian survey data indicate that vehicles belonging to model years 1995 to 2005 contribute approximately 80 per cent of total light-duty vehicle GHG emissions, even though they only represent 65 per cent of all registered vehicles.

Pollution Probe recommends a world-class fuel efficiency standard for Canada

A world-class fuel efficiency standard not only contributes to mitigating climate change, it also generates world-class fuel savings for consumers and economic benefits. As an auto-producing nation Canada should establish an independent capacity on this issue, and refrain from blindly adopting other jurisdiction's fuel efficiency targets and timelines. There is a responsibility to develop sound policy for the public good on this issue, but the

potential benefits and negative impacts on the domestic auto industry should be carefully considered. A proper policy development process led by the government and drawing upon the resources of experts, knowledgeable consultants and the appropriate stakeholders is needed to correctly assess the nature of the auto industry in Canada and its place in the global market, and to accurately define the trade-offs.

By building Canada's analytical capacity on this issue, beginning with the development of a world-class fuel efficiency standard over the next 12-18 months, we will be better-equipped to confidently make policy that works for Canada. We will also be better able to define long-term strategies for the auto sector that keeps Canada engaged and competitive in the global marketplace.

Pollution Probe would be pleased to offer its assistance and expertise in this regard.

Sincerely,



Ken Ogilvie
Executive Director
Pollution Probe

cc. Louis Ranger, Deputy Minister, Transport Canada
Cassie Doyle, Deputy Minister, Natural Resources Canada
Michael Horgan, Deputy Minister, Environment Canada
Richard Dicerni, Deputy Minister, Industry Canada

ⁱ Canadian Vehicle Manufacturers Association website. 2006. Latest News from the CVMA, *Primer on Auto Emissions in Canada*.

http://www.cvma.ca/eng/news/2006/article_20061018_01.asp.

ⁱⁱ Statistics Canada, Transportation Division. 2006. *Canadian Vehicle Survey: Annual 2005 (revised)*. Catalogue no. 53-223-XIE.