

CTA SUBMISSION



2017 Pre-Budget Consultations

Canadian Trucking Alliance (CTA)

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Introduction

The Canadian Trucking Alliance is a federation of the provincial trucking associations representing over 4,500 trucking companies. The trucking industry's economic goals are aligned with Canada's commitment to reducing greenhouse gases. The Canadian trucking industry is recognized as a world leader in fuel efficiency and conservation. The current Canadian heavy truck fleet is, when payload is considered, 22 per cent more fuel efficient and emits 22 per cent less GHG than the US fleet. The industry wants to transition to lower carbon heavy trucks, trailers and fuel. There is a payback to becoming more fuel-efficient – fuel is the 2nd largest component of operating costs. However, there are significant obstacles and costs associated with the transitioning from initial stage adoption to a mature lower carbon market. The 2017 federal budget can play a significant role assisting and accelerating investment in equipment and technology designed to reduce GHG from trucking.

Vitals

Trucking is the dominant mode of freight transportation in Canada, moving approximately 90 per cent of all consumer products and foodstuffs and almost two-thirds (by value) of Canada's trade with the United States. The industry generates over \$65 billion in revenues per year. In terms of GDP, the transportation services sector represents 4.2% of total economic output, or \$53 billion. The for-hire trucking sector accounts for 31% of the total share – more than air (12%), rail (11%) and marine (2%), combined. As such, trucking is a good leading indicator of economic activity. The trucking industry is responsible for creating over 400,000 direct jobs in Canada – approximately 300,000 of which are truck drivers. Nearly 1% of the Canadian population and over 1.5% of the labour force are truck drivers by profession. The for-hire segment of the industry produces roughly \$24 billion in personal income on an annual basis, which in turn generates \$4.2 billion in personal income taxes and \$4.1 billion in indirect taxes for government.

Service

The simple reason trucking is the dominant mode of freight transportation is the flexible, timely, door-to-door service that only trucks can provide. Trucking works with all the other modes, but its major market is the time-sensitive delivery of small shipments of lighter-weight, high value-added products over relatively short distances. The just-in-time inventory system, which remains a key to Canada's international competitiveness, is built around the truck. Other modes – like rail and marine – dominate in the movement of heavier, bulkier commodities that are generally less time-sensitive over longer distances. Overall, the three modes would overlap or compete on a very small proportion of the freight market – certainly less than 5 per cent.

Regulation of Heavy Truck Emissions

In recent years, heavy trucks have been the target of increasingly tough emissions regulations:

- ❶ **Air Quality** -- Between 2003 and 2010, progressively more stringent air quality emission standards (distinct from greenhouse gases (GHG)) were phased in for heavy-duty truck engines, resulting in the near-zero emission trucks. Emissions of certain air pollutants such as particulate matter (PM), nitrous oxides (NOx), and HC (hydro carbons) – which contribute to poor air quality and smog – were virtually eliminated from heavy-duty trucks during this period. The societal benefits were enormously positive. However, the unintended consequences of these engine emission standards were that overall engine performance, fuel efficiency, and reliability were negatively affected – raising operating costs and impacting productivity. In the end, the newer trucks brought to market during this period simply did not perform as well and were less reliable than pre-2003 models. The industry's negative experience with the installation of emission reduction equipment has created a level of mistrust within the industry when it comes to regulating unproven technology.

- ② **Carbon** – Phase I of the GHG-reduction regulations for heavy-trucks and engines took effect in 2014 in Canada and the United States. The rule which sought to achieve a 20 per cent reduction in GHG, did not require the purchasers to utilize technology still in the developmental stage to achieve this result. Instead, “off-the-shelf” proven, market-ready technologies were sufficient. Phase II which will set even more aggressive targets for tractors and engines (further 24 per cent CO₂ reduction for Class 7/8 tractors between 2021-27) and for the first time will include trailers (8 per cent CO₂ starting in 2018 compared to 2017 model-year trailers) is in the process of being introduced in both the United States (where the US Environmental Protection Agency published its final rule in April 2016) and Canada (which is currently developing its rule). Phase II could be much more disruptive than Phase 1. The costs of new tractor-trailers (and retrofitting existing equipment) will rise.

It is important to understand that trucking unlike most other sectors is subject to both emissions regulation and carbon pricing.

Federal Carbon Price

In addition to implementing the Phase II GHG-reduction standards for heavy trucks, the Government of Canada has announced its intention to introduce a minimum price on carbon of \$10 per tonne in 2018, rising by \$10 per tonne per year to \$50 per tonne by 2022. A \$50 per tonne carbon price could increase diesel prices by 11 cents per litre – or about 17 ½ % of current wholesale prices. These increases are not easily absorbed in a low margin industry currently dealing with choppy and uncertain economic growth. It would be CTA’s strong preference that there be a consistent, national approach to carbon pricing. However, several provinces have already introduced (or are in the process of introducing) carbon pricing mechanisms. British Columbia and Quebec have a carbon tax. Quebec also has a cap and trade system that Ontario is joining. Alberta is taking a hybrid approach. The lack of a consistent, harmonized national approach adds to the cost and administrative burden on industries like trucking which crosses provincial and international borders. The federal government is coming somewhat late to the game. It needs to avoid adding further to the burden on the Canadian supply chain which must remain competitive continentally and globally.

Put Carbon Pricing/Excise Tax Revenues to Work

It is also imperative that revenues generated from federal carbon pricing and from the federal excise tax on diesel fuel (which serves no policy purpose and is an archaic way to tax business inputs at odds with the GST/HST) are not used to raise general revenues or handed over to the provinces, but are dedicated to supporting early adoption of GHG-reduction equipment, technologies and alternative fuel in the industries affected. For trucking, about 18 billion litres of on-road diesel fuel is consumed annually. A federal carbon pricing program could generate an additional \$2 billion in government revenues. The excise tax generates an additional three-quarter billion dollars a year from the trucking industry. These funds – totaling almost \$3 billion -- should be plowed back into accelerating GHG-reduction by the industry. Carbon reducing programs that target long-haul trucks will generate the most return on government investment as this sector of the trucking industry consumes the most fuel.

Alternative Fuels in Trucking

Currently, the only potential alternative to diesel fuel for large heavy trucks in certain long-haul applications is natural gas, which produces 17% lower GHG than diesel, reducing CO_{2e} from a typical long-haul tractor (200,000 km per year) by 50 tonnes per year. (Although the GHG reductions are not as large due to distances travelled, incentives for smaller commercial vehicles, such as Class 4, also show beneficial returns – e.g., when comparing life cycle emissions for a Class 4 truck with an average annual operation of 25,000 km a CO_{2e} reduction of about 26 tonnes per year is achievable). A 2015 study by the *Delphi Group* found that compressed natural gas (CNG) highway trucks -- in a mature adoption scenario -- would have a payback of under two years. Return to base trucks would have a payback after just over three years. That said, the degree of financial risk is significant in an initial rollout phase. The obstacles to increasing the use

of natural gas in heavy trucks are significant and include the purchase price of a natural gas tractor (\$60,000 or 30-40% premium over the cost of a conventional diesel tractor), retrofitting maintenance shops and the lack of re-fueling infrastructure. Moreover, since companies are unlikely to use their CNG retrofitted maintenance bay to full capacity (at least in the short/medium term), this represents a proportional increase in cost from the mature scenario. Initially, because of low volume, fueling stations will likely be equipped with smaller compressors which in turn means higher fuel prices. An additional difference between mature and initial markets is the value of the trucks at resale. There is a risk, for early adopters, that CNG trucks will have a lower resale value than diesel trucks until the market is more established.

Recommended Measures: 2017 Budget

- ① **Accelerate CCA Rates for New Tractors & Trailers** – Eligible equipment for accelerated capital cost allowance must be compliant with Phase II GHG standards and natural gas powered tractors. CTA has long argued Canadian CCA rates for tractors are not competitive with US depreciation rates. In Canada, tractors (Class 16) are depreciated at a 40% (declining balance) per annum rate. (By comparison, in the US tractors are depreciated on a double declining balance basis making them a 3-year asset). The following tables depict the current differential treatment under Canadian CCA vs US depreciation rules:

Canada CCA Rate vs US Depreciation for a Truck Tractor				
	Canada		United States	
	Annual %	Cumulative %	Annual %	Cumulative %
Year 1	20.0	20.0	33.3	33.3
Year 2	32.0	52.0	44.5	77.8
Year 3	19.2	71.2	14.8	92.6
Year 4	11.5	82.7	7.4	100.0
Remaining Balance	--	17.3	--	0.0

The following table assumes a purchase price of \$180,000 for a new conventional tractor:

Impact of Adopting US Depreciation Rate for Truck Tractor in Canada						
	Current Canadian CCA			Based on US Depreciation Rate		
	Open. Balance	CCA	Remain. Bal.	Open. Balance	CCA	Remain. Bal.
Year 1	180,000	36,000	144,000	180,000	59,940	120,060
Year 2	144,000	57,600	86,400	120,060	80,100	39,960
Year 3	86,400	23,040	63,360	39,960	26,640	13,320
Year 4	63,360	20,700	42,660	13,320	13,320	0

Trailers (Class 10) are depreciated at a 30% declining balance rate. There are several precedents where the federal and provincial governments have provided accelerated CCA rates to various industries to support investment in fuel efficiency/conservation, including:

- **Classes 43.1 & 43.2 (Sched. II, *Income Tax Regulations*)** – Provide accelerated CCA (30% & 50%, respectively, on a declining-balance basis) for investments in specified clean energy generation & conservation equipment as an exception to basing CCA rates on the useful asset life.
 - **2006 Federal Budget** – Accelerated CCA for energy generation equipment using renewable fuel in pulp and paper sector.
 - **2008 Federal Budget** – Accelerated CCA for new railway locomotives to 30% from 15% “to encourage rail operators to acquire newer, more fuel-efficient fleet of locomotives...”
 - **2010-11 Quebec Budget** – Increased CCA rates for new heavy trucks to 60% from 40%; 85% for natural gas tractors. This is even more advantageous than US depreciation rates and was done as part of the province’s climate change action plan.
- ② **Establish Trucking Industry GHG-Reduction Fund** – There are several precedents for the establishment of a special fund to provide an additional capital injection to assist/promote investment and allow the market to mature. Such a fund would complement programs in some provinces and would apply to GHG-reduction equipment and technologies as well as assistance towards the purchase of natural gas heavy trucks and related infrastructure. These include:
- **Quebec Programme Ecocamionnage** -- Introduced in 2014, a \$28.3 million, 3-year program of financial assistance (up to \$1 million per applicant per year) to freight transportation for acquisition/installation of technologies that have demonstrate a potential to reduce GHG emissions like aerodynamic fairings and deflectors, chassis skirts, low rolling resistance tires, anti-idling devices & natural gas tractors.
 - **Ontario Green Commercial Vehicle Program** – Starting in 2017/18, \$125-\$170 million will be provided to buy low-carbon vehicles/technologies, e.g., natural gas trucks and shop conversion, aerodynamic/anti-idling devices, electric trailer refrigeration, etc.
 - **Ontario Natural Gas Network** -- \$75-\$100 million to establish network of natural gas fueling stations.
 - **NRCAN Anti-Idling Device Program** – From 2003-2006, the highly successful Commercial Transportation Energy Efficiency Rebate program, provided a 20% rebate to trucking companies for installing pre-qualified cab heating/cooling systems. \$5.8 million from NRCAN generated \$30 million industry investment (13,280 units) reducing idling time by 2,200 hours per truck and reducing GHG by 200,000 tonnes per year.
- ③ **Restore Excise Tax Exemption for Diesel Fuel Used by Anti-Idling Devices** -- The 2016 budget eliminated the long-standing excise tax exemption for diesel used in or by a vehicle to generate electricity (if more than 1/2 the electricity is for purposes other than operation of the vehicle, e.g., anti-idling devices such as auxiliary power units (APUs) that heat/cool truck cabs. This is inconsistent with the policy of not taxing home heating fuel and reducing GHGs.

The payback in reduced GHG from these initiatives improves the greater the level of market adoption.

Conclusion

By improving its fuel economy, the trucking industry can do its part to improve its carbon footprint and contribute to the GHG-reduction targets the federal government has identified. To accelerate these improvements, revenues generated from the excise tax on diesel fuel and any potential funds generated from carbon pricing mechanisms, need to be reinvested in the industry – now more than ever. With government assisting by investing in proven technologies such as aerodynamic fairings, auxiliary power units, wide-base less rolling resistant tires and alternative fuels such as natural gas, the trucking industry can expedite and enhance its transition toward a low-carbon output.