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2022-2023: Green freight programs survey on the freight industry

Executive Summary

Prepared for Natural Resources Canada

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Prepared for Natural Resources Canada
Supplier name: Phoenix Strategic Perspectives Inc.
January 2023

This public opinion research report presents the results of a 15-minute telephone survey of 300 representatives of the Canadian freight transportation industry who were involved in or knowledgeable about the management or implementation of trucking fuel efficiency programs and policies within the business' fleet of vehicles. The fieldwork was conducted from October 24 to November 14, 2022.

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Executive Summary

The department of Natural Resources Canada (NRCan) commissioned Phoenix Strategic Perspectives (Phoenix SPI) to conduct survey research to assess Freight Transportation Medium and Heavy-duty Vehicle (MHDV) industry awareness and uptake of Zero Emission Vehicles (ZEVs) and Retrofits.

1. Research purpose, objectives and intended use of results

The Greening Freight Programs (*SmartWay*, *SmartDriver* and the Green Freight Program) are three programs that provide training, tools, and resources to help Canada's fleets lower fuel consumption, operating costs, and harmful vehicle emissions. The purpose of the research was to assess perspectives on reducing fuel use and improving energy efficiency in freight transportation among the MDHV industry.

The specific research objectives included:

- Determine whether companies have implemented retrofits and, if so, what types of retrofits were completed in the past three years.
- Understand the barriers, if any, to retrofitting fleets.
- Assess use, and perceived importance, of fleet energy assessments.
- Understand interest in fleet energy assessments, including reasons companies have not considered an assessment.
- Measure perceived importance of government funding programs that support fleet retrofits.
- Assess familiarity with the Green Freight Assessment Program¹ and awareness of provincial/territorial rebate programs for fleets retrofits.
- Measure participation in government funding programs for fleet retrofits and determine preferred types of funding.
- Understand whether government funding will motivate companies to consider retrofitting fleets.
- Explore awareness, and implementation, of repowering.
- Understand whether government funding will motivate companies to consider repowering engines.
- Assess intent to repower fleet engines in the next two to three years.

The results of this research will be used to: 1) enhance NRCan's understanding of inflection points and potential federal funding assistance needs to increase the uptake of ZEV purchases and retrofits; and 2) to inform program and policy development for natural resources or in relation to Government of Canada and Ministerial priorities.

¹ This program has since been renamed the Green Freight Program (GFP), which relaunched on December 12, 2022.

2. Summary of findings

Company Profile

- Companies represented in this survey were distributed regionally as follows: Atlantic Canada (5%), Quebec (20%), Ontario (37%), and the West (37%).
- Most companies have fewer than 100 employees: 26% employ fewer than five employees and 62% employ between five and 99 employees. Eleven percent of companies surveyed reported having 100 or more employees.
- The vast majority of companies have fewer than 100 trucks in their fleets. Specifically, 30% have fewer than five trucks and 65% have between five and 99 trucks in their fleet. Four percent of companies have 100 or more trucks in their fleet.
- The type of fleet reported by companies varied: 39% have exclusively for-hire fleets, 33% exclusively private fleets, and 27% have a combination for-hire and private.

Retrofits

- Nearly three-quarters (74%) of the companies surveyed have *not* implemented any retrofits to the trucks in their fleet in the past three years. Conversely, about one in five (22%) companies have implemented retrofits.
- Among companies that have recently implemented retrofits to their trucks, 71% installed cab heaters. Following this, approximately half have implemented route optimization technology (57%), cab coolers (54%), and/or predictive cruise (52%).
- When it comes to retrofitting their fleets, more than one-third of companies (37%) reported no barriers. The most common barrier identified by companies is cost (29%). This was followed at a distance by supply chain/vehicle or part availability (10%) and lack of required knowledge or expertise (7%).

Fleet Energy Assessments

- Six percent of companies have had a third party conduct an energy assessment of their fleet. Among companies that have not had an energy assessment, 20% would consider having a third-party energy assessment.

Government Funding Programs

- The majority of freight industry representatives surveyed believe that government funding programs that support fleet retrofits are at least somewhat important. Specifically, 39% said these programs are very important, while an additional 29% viewed them as somewhat important.
- Seventeen percent of freight industry representatives surveyed reported unaided awareness of the Government of Canada's Green Freight Assessment program (GFAP). Awareness increased to 21% when respondents were provided a description of the program. This program has since been renamed the Green Freight Program (GFP).
- Awareness of provincial/territorial rebate programs for fleet retrofits is also low – 13% of freight industry representatives surveyed said they aware of these rebate programs.

- Use of government funding programs for fleet retrofits is not widespread. Specifically, 5% of respondents said their company has participated in a government funding program. When considering future participation in a government funding program for fleet retrofits, 40% of companies would prefer to receive a grant, 26% a tax credit, 19% a point-of-sale rebate, and 1% a cost sharing contribution.
- Seven in 10 companies that have *not* implemented retrofits **and** report cost as a barrier to doing so, would be motivated by the availability of government funding to consider retrofitting its fleet.

Repowering

- Almost half (45%) of companies surveyed are reportedly aware that repowering existing engines can be a cost-effective alternative to purchasing a new Original Equipment Manufacturer (OEM) vehicle. One in five (19%) companies have repowered existing truck engines within their fleet. For companies that have repowered existing engines, most of them (94%) reported using diesel to repower their fleet.
- Among companies that have partially repowered their fleet, two-thirds (65%) would consider repowering more engines if government funding was available.
- Among companies *not* interested in repowering their fleet in the next two to three years, 43% believe it will not provide sufficient cost-savings and 20% believe that repowering their fleet would be too expensive. Just over one-third (36%) are planning on buying a new fleet (and therefore not interested in repowering any engines).

Concluding observations

The following are offered as concluding observations:

Companies are investing in upgrades to their fleet

Many of the companies surveyed have purchased new trucks for their fleet, including approximately one-third which have reportedly replaced more than half of their fleet within the last five years.

Retrofit cost is a barrier

An important finding is that most companies have *not* implemented any retrofits to their fleet in recent years. For a number of these companies, the cost associated with implementing retrofits is considered as a main barrier.

Awareness of government rebate programs aimed at fleet retrofits is low

Despite cost being identified as a hindrance to retrofitting, awareness and use of government funding programs aimed at encouraging fleet retrofits is low. Although participation in federal and provincial rebate programs is low, freight industry representatives attribute value to these programs, with more than two-thirds saying programs that support fleet retrofits are important.

Opportunity to increase participation in the rebate programs

The findings suggest there is significant opportunity to increase participation in the rebate programs because many companies that have not implemented retrofits would be motivated to do

so by the availability of government funding. However, many of these companies would require government incentives to cover more than 50 percent of associated costs to make retrofitting financially feasible.

Opportunity to increase knowledge of repowering

There is also significant opportunity to increase knowledge of repowering existing engines as a cost-effective alternative to purchasing new vehicles. Although some companies have already repowered existing trucks, many of the freight industry representatives surveyed were not aware that this is a cost-saving alternative. Furthermore, when asked why their company is not interested in repowering, representatives pointed to the perception that doing so does not provide enough cost-savings benefit and/or that it is too expensive.

3. Methodology

A 15-minute telephone survey was conducted with a random sampling of 300 representatives of the Canadian freight transportation industry who occupy a position of owner/operator or senior level manager. The sampling frame was purchased from Dun & Bradstreet (D&B Canada) and drawn from NAICS code 4841 (General Freight Trucking)—specifically: 48411 (Local) and 48412 (Long Distance) and NAICS code 4842 (Specialized Freight [except Used Goods] Trucking Local—specifically: 484220 (Local) and 484230 (Long Distance).

All respondents were involved in, or knowledgeable about, the management or implementation of trucking fuel efficiency programs and policies within the business' fleet of vehicles. The results were weighted to reflect the actual distribution of businesses operating in this sector in Canada and can be considered accurate to within $\pm 6\%$, 19 times out of 20. The margins of error are greater for results pertaining to subgroups of the total sample. The fieldwork was conducted from October 24 to November 14, 2022.

4. Statement of political neutrality

I hereby certify as a Senior Officer of Phoenix Strategic Perspectives that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the *Communications Policy* of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not contain any reference to electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leader.



Alethea Woods
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5. Contract value

The contract value was \$78,553.08 (including applicable taxes).