CTA

THE CANADIAN
TRANSPORTATION ALLIANCE

Working towards the future of
Canada's transportation market

Consumer Survey 2022

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INTRODUCTION

To better understand the mindset of Canadians relative to transportation and decarbonization efforts, the Canadian Transportation Alliance (CTA) commissioned Abacus Data to conduct a survey of Canadian adults to explore such topics as consumer opinions relative to alternative vehicle powertrains, how often consumers use their vehicles and for what purposes, consumer intentions to purchase a new vehicle and whether they might purchase an alternative fuel vehicle, and awareness and support for government policies relative to decarbonization. The survey interviewed 1,500 Canadian adults from January 7 – 11, 2022, using the Lucid exchange platform, returning an accuracy of plus/minus 2.53% at the 95% confidence level.

SUMMARY

Canadians say they are very supportive of the direction of government to reduce emissions from the transportation sector and believe that an incentives approach is preferrable to policies that mandate certain transitions, although the majority still support a more assertive approach. They also believe addressing the emissions of vehicles is the best approach to achieving targeted emissions reductions, and are nearly unanimous in their belief that additional investment is required to support infrastructure, vehicle and fuel development.

However, personal vehicles are essential to most Canadians, with 87% of households reporting they own at least one vehicle and 92% of those saying they drive their vehicle at least once per week. On average, Canadian vehicle owners drive 174 kilometres each week. Consequently, any change will have a direct effect on their lives.

The majority of Canadians (91%) are open to alternative vehicles for their future transportation needs, but there remains a lack of knowledge or confidence in vehicle availability and infrastructure to fully support that transition in the near term. When asked what type of vehicle they are likely to purchase in the future, 51% expect that vehicle will be powered exclusively by a combustion engine, while another 24% think they may purchase a hybrid vehicle.

More than half of Canadians (56%) expect to purchase a vehicle within the next two years. The two most important attributes influencing the decision to purchase a vehicle are cost and fuel efficiency, whereas impact on the environment was only listed as a top-three attribute by 22% of consumers. This indicates that, while Canadians are generally supportive of the environmental direction the government is pursuing, their vehicle purchase decisions are primarily based upon personal economic considerations.

The full results of the survey are available at www.ctalliance.ca. The following pages highlight key results.

VEHICLES AND DRIVING BEHAVIOUR

As Canada considers options for removing carbon emissions from the transportation sector, it is important to understand who this will affect and how. According to the survey, 87% of Canadians live in a household that has at least one vehicle and 37% have more than one. Of these vehicles, 84% of households say that one of their vehicles is powered by an internal combustion engine (ICEV). Hybrid (HEV) and electric vehicles (EV) make up 5% and 3%, respectively. In addition, the majority of Canadians prefer larger vehicles, with 55% reporting a sport utility vehicle or pick-up truck is among the vehicles they own, while 49% say at least one of their vehicles is a car.

Canadians also rely significantly on their vehicles, with 92% saying they use their vehicle at least once per week and 39% reporting they use their vehicle every day to commute to work. (It is important to note this survey was fielded during the COVID-19 pandemic. It could be assumed this commuting statistic would have been higher before the pandemic.)

On average, Canadians say they drive 174 kilometres each week, but there is wide variation with 41% of Canadians saying they drive fewer than 100 kilometres each week and 4% saying they drive more than 700 kilometres each week. Driving range varies among provinces, with Canadians residing in the Atlantic provinces reportedly driving the most at 243 kilometres per week while those in British Columbia drive the least at only 145 kilometres each week.

Driving is also the preferred mode of transportation, outpacing other options by a wide margin. In fact, 75% of Canadians say they use public transit less than once per month or never and 85% report a similar frequency with regards to ridesharing or carpooling. Consequently, any decarbonization efforts will have the greatest effect if focused on vehicles and their fuels (an approach survey respondents support); however, given the reliance of Canadians on their vehicles, this approach will have a significant impact on the Canadian people, and strategies to address this sector should pay careful attention to their impact on Canadian households.

Figure 1: Percent of households with different vehicle styles

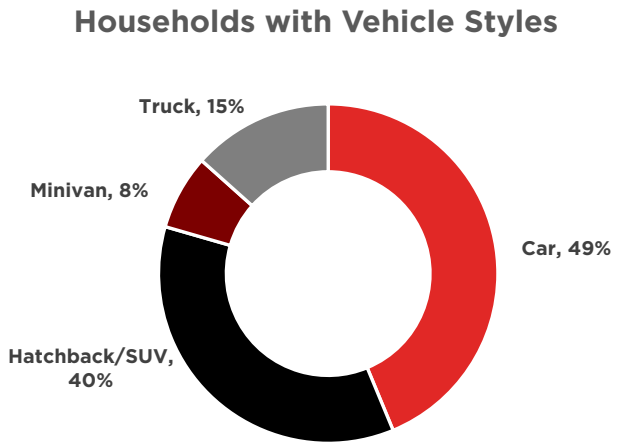


Figure 2: Percent of households with different vehicle types

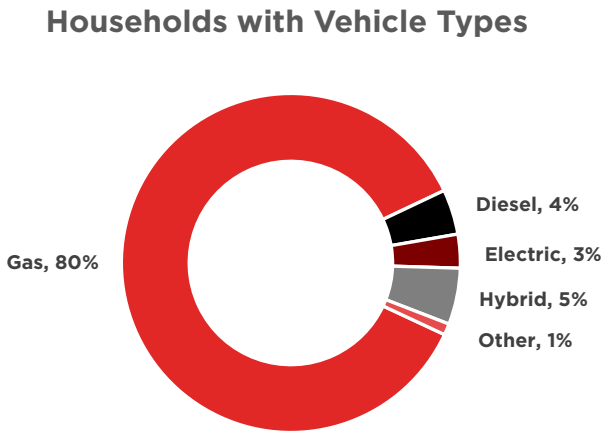
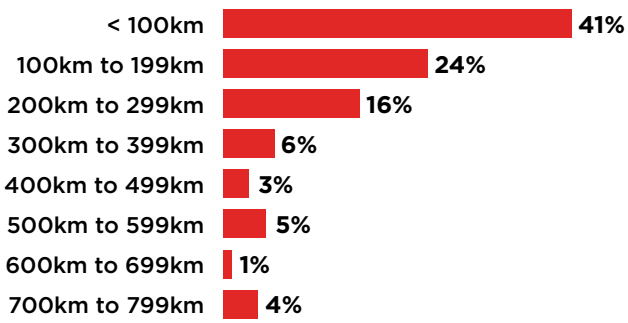
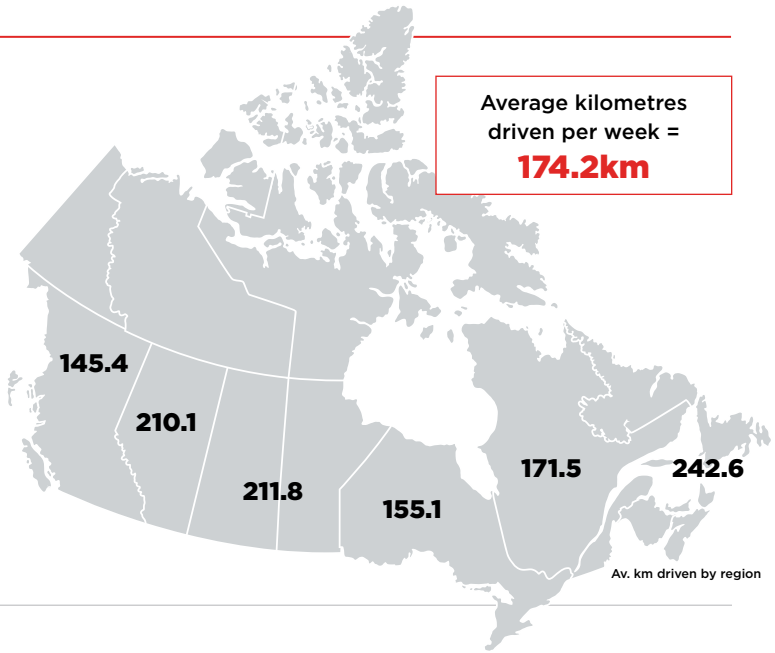


Figure 3: Average kilometres driven per week by province



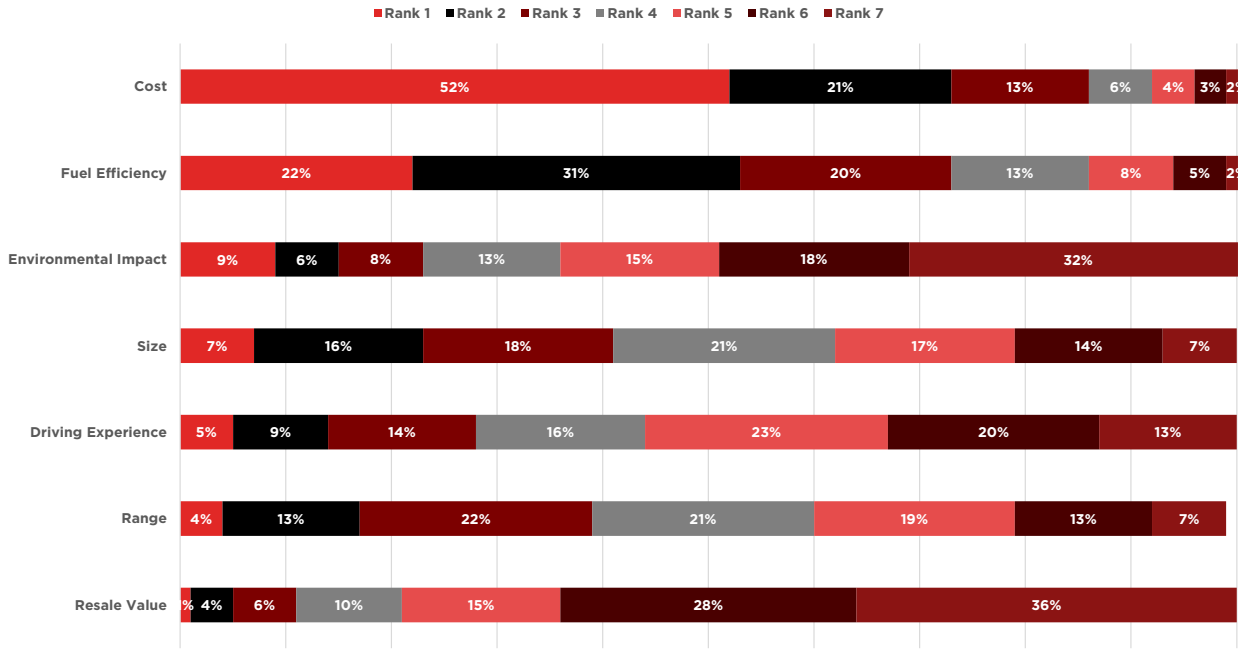


THEIR NEXT VEHICLE

A quarter of Canadians (27%) say they typically purchase a vehicle at least every five years, whereas 44% say they purchase a vehicle every 5 – 10 years. For the 56% in the market to purchase a vehicle in the next two years, 37% say they will be shopping for a new vehicle compared with 19% who will likely shop for a pre-owned vehicle. Regardless, there is consistency with regards to what is most important to the Canadian shopping for a vehicle.

When asked to rank by priority the vehicle attributes that were most important to them, 52% said cost was the number one factor, with fuel efficiency ranking as the top priority for 22%. Cost and fuel efficiency were among the top three priorities for 85% and 73% of Canadians, respectively. Vehicle size and range were among the top three priorities for 41% and 39%, respectively, whereas environmental impact was among the top three priorities for 22% of respondents.

Figure 4: Most important vehicle aspects when making a purchasing decision



THEIR VIEW OF ALTERNATIVE VEHICLES

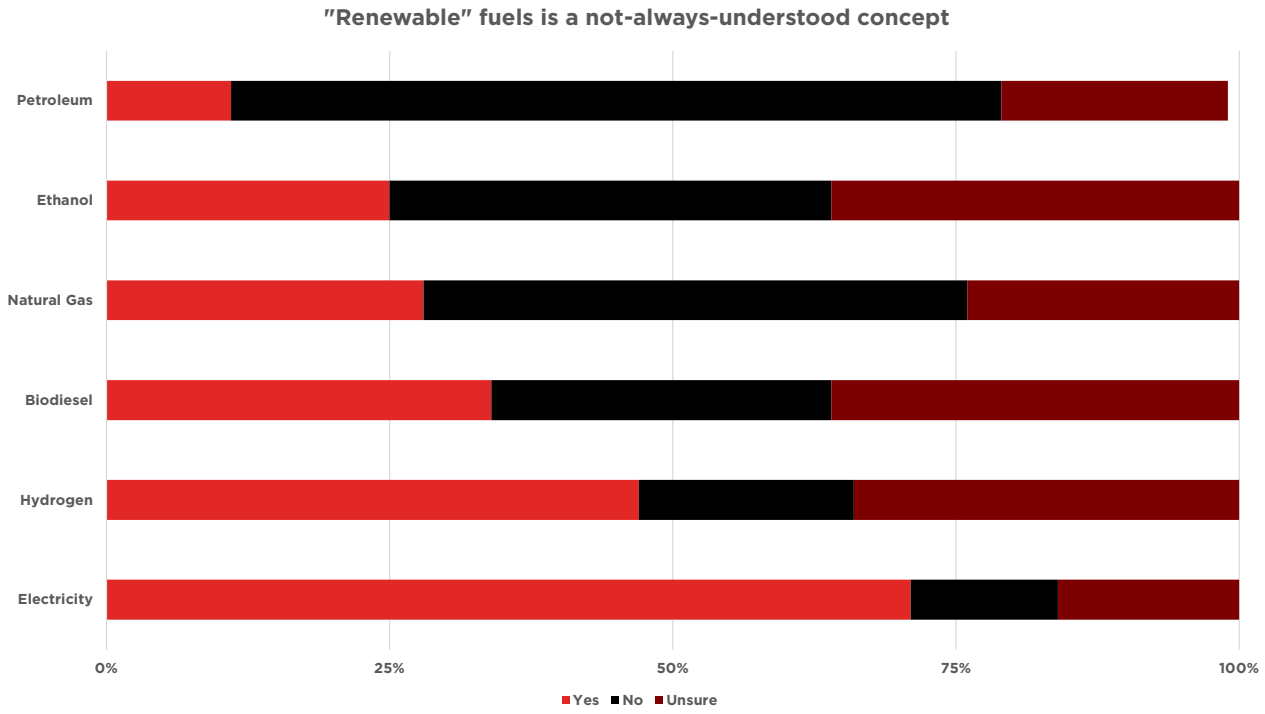
Many of the strategies to decarbonize transportation centre around converting consumers to use alternative-powered vehicles. While this strategy is generally supported by Canadians, there are significant challenges that must be overcome, the first being consumer awareness.

There is a general lack of familiarity regarding vehicle technologies and fuel options. In fact, 11% of Canadians said petroleum was a renewable fuel and 20% said they were unsure. Meanwhile, 71% said that electricity was a renewable fuel, but only 34% and 25% said the same about biodiesel and ethanol, respectively. Although 82% of respondents said they were somewhat/very familiar with ICEVs, only 39% and 35% were familiar with vehicles capable of running on higher biofuel blends and hydrogen vehicles, respectively.

When asked if they would be open to considering a variety of alternative vehicles, the majority of Canadians answered yes. In fact, 91% of respondents said they were open to purchasing an alternative vehicle, such as an HEV, an EV, a vehicle that can run on higher biofuel blends or a hydrogen-powered vehicle. In addition, 75% of respondents said they were actively considering an alternative vehicle and 44% said they were committed to purchasing one.

However, when asked if they would consider purchasing a specific type of alternative vehicle, the responses varied among vehicle types. Seventy-four percent of Canadians who were open to alternative vehicles would (definitely/probably/might) consider purchasing an EV and 75% would consider an HEV. In addition, 60% would consider a vehicle that can run on higher biofuel blends and 57% would consider a hydrogen-powered vehicle.

Figure 5: Canadians are not always clear on which fuels are renewable



For those who are open to, considering or committed to alternatives, there is not much difference in terms of what is most important to them when making a purchase decision. Cost and fuel efficiency are consistently the most important criteria.

Figure 6: Level of interest in alternative vehicles

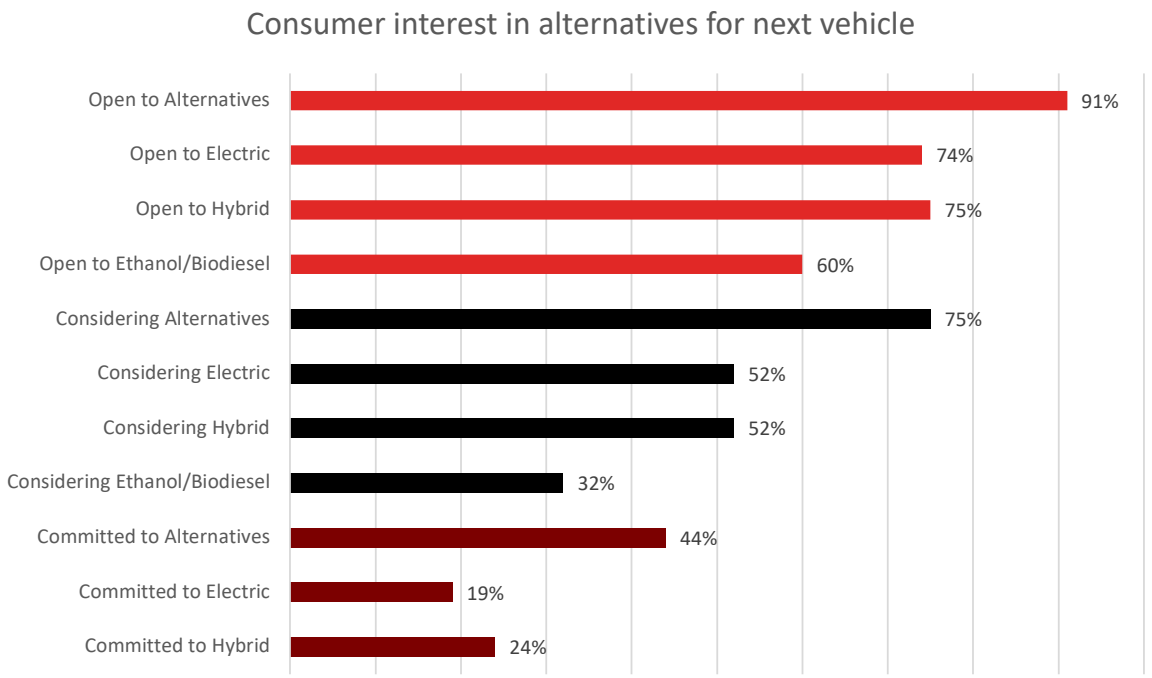
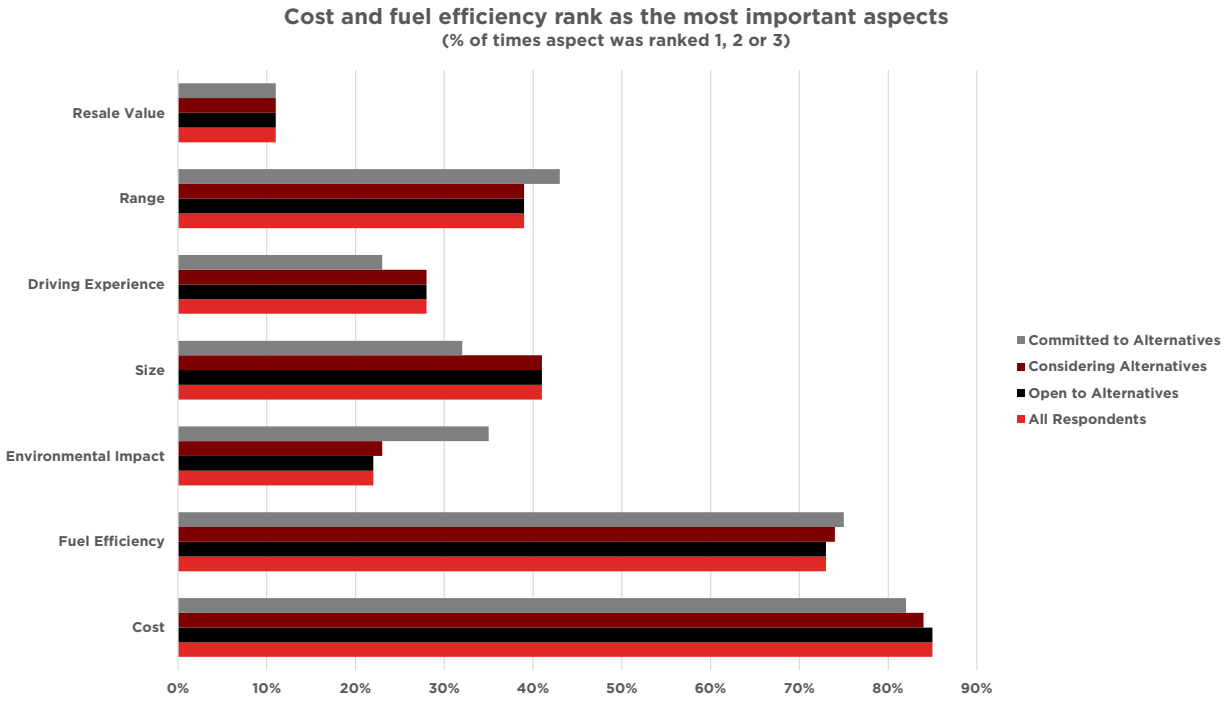


Figure 7: Most important vehicle aspects when making a purchasing decision

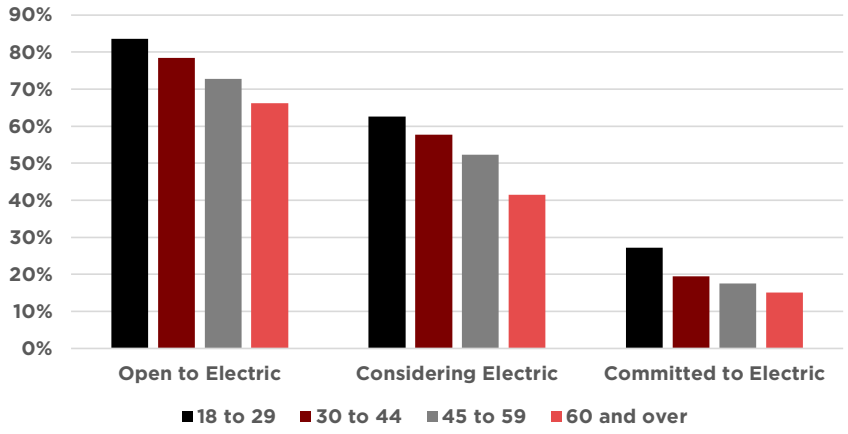


INTEREST IN ALTERNATIVES BY DEMOGRAPHIC SEGMENT

The survey captured key demographic data from which it is possible to determine if alternative vehicles appeal more to some people than to others. Some key findings include:

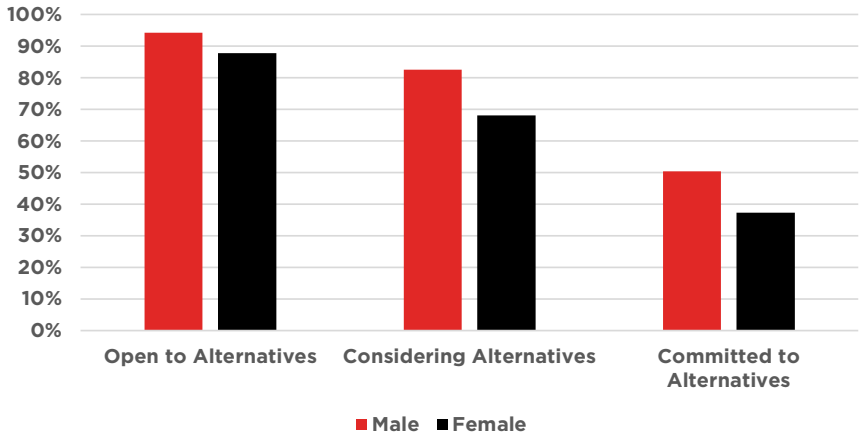
- **Age:** There is very little variation in general interest in alternatives (those who said they are open to, considering or committed to) among different age brackets. However, those 18-29 show the greatest interest specifically in EVs within each category.

Figure 8: Interest in alternatives by age group



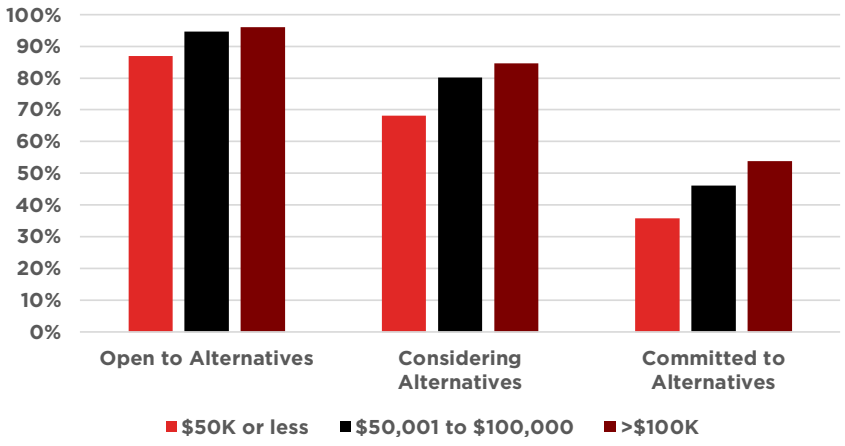
- **Gender:** Across nearly all categories and vehicle types, male respondents showed more interest in alternatives than female respondents.

Figure 9: Interest in alternatives by gender



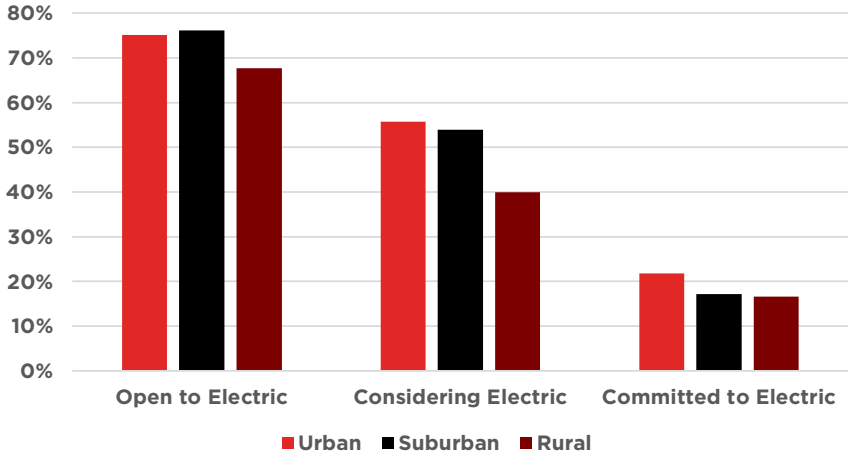
- **Income:** Households with progressively higher incomes showed greater interest in alternatives, with those earning more than $100,000 showing the most interest in all vehicle types.

Figure 10: Interest in alternatives by income bracket



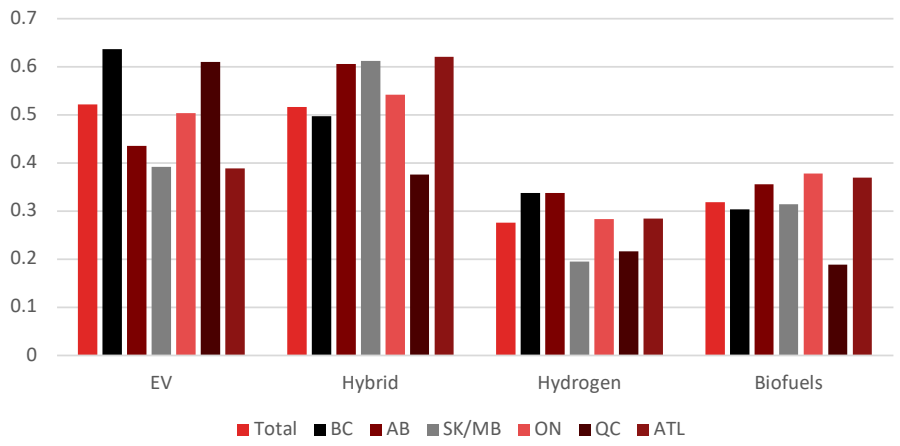
- **Area Type:** There was inconsistent variability among those who lived in urban, suburban or rural markets. In general, urban and suburban residents showed slightly more interest in EVs, whereas rural residents were more interested in hybrids. There was no variability with regards to biofuel-enabled vehicles.

Figure 11: Interest in alternatives by area type



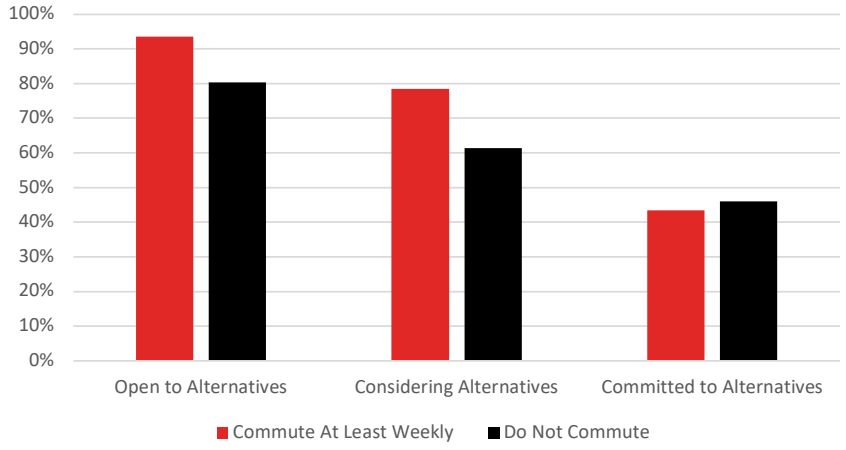
- **Region:** There was significant variability in Canadian interest in alternative vehicles among the provinces. British Columbia and Quebec reported the greatest interest in electric vehicles, whereas Alberta, Saskatchewan/Manitoba and the Atlantic provinces showed the strongest interest in hybrids. Overall, interest in hydrogen and biofuel-enabled vehicles was lower in all provinces than the electric or hybrid vehicles, with some provincial variability.

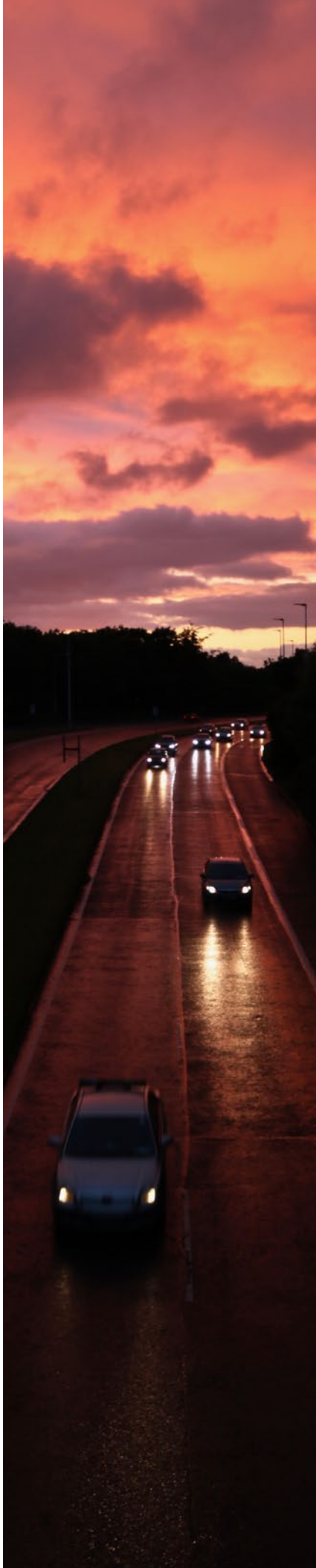
Figure 12: Interest in alternatives by region



- **Commute:** Those who commute to work at least weekly were generally more interested in alternatives than those who do not commute but were less committed to EVs.

Figure 13: Interest in alternatives by commute



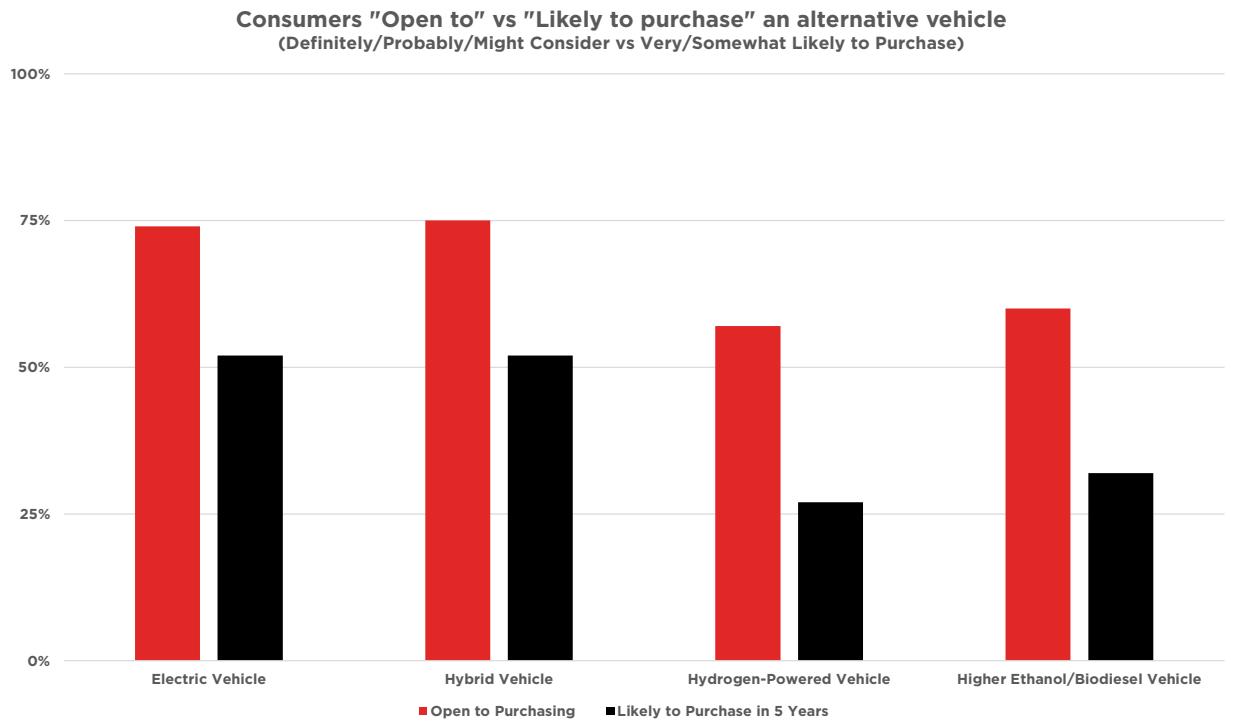


LIKELIHOOD TO PURCHASE ALTERNATIVE VEHICLE

Canadian responses relative to alternative vehicles changed when asked if they are likely to purchase a specific alternative vehicle within the next five years, with 52% saying they were very or somewhat likely to purchase an EV or an HEV. The numbers drop to 32% and 27% for higher biofuel blend capable vehicles and hydrogen vehicles, respectively.

Despite their willingness to consider alternative vehicles, half of Canadians still expect their next vehicle to be equipped with an ICEV that runs on gasoline (49%) or diesel (2%). A quarter of respondents (24%) are likely to purchase an HEV and one-fifth (19%) believe they will purchase an EV. The following table presents the top five reasons why a consumer might be unlikely to purchase a certain type of alternative vehicle.

Figure 14: Not all Canadians "Open to" alternatives are "Likely to purchase" in five years



TOP 5 REASONS WHY CONSUMERS ARE UNLIKELY TO PURCHASE...

Electric Vehicle	Fuel Efficient Combustion Engine Vehicle	Higher Ethanol/Biodiesel Vehicle
Cost of vehicles (59%)	Don't know enough about them (42%)	Don't know enough about them (57%)
Lack of recharging points (56%)	Rather buy different type of efficient vehicle (39%)	Fuel not widely available (31%)
Insufficient range (52%)	Cost of vehicles (37%)	Rather buy different type of efficient vehicle (26%)
Concerned about cold winters (40%)	Lack of variety of vehicles (19%)	Cost of vehicles (25%)
Concerned about reliability (40%)	Rather buy traditional fossil fuel vehicles (12%)	Lack of variety of vehicles (23%)

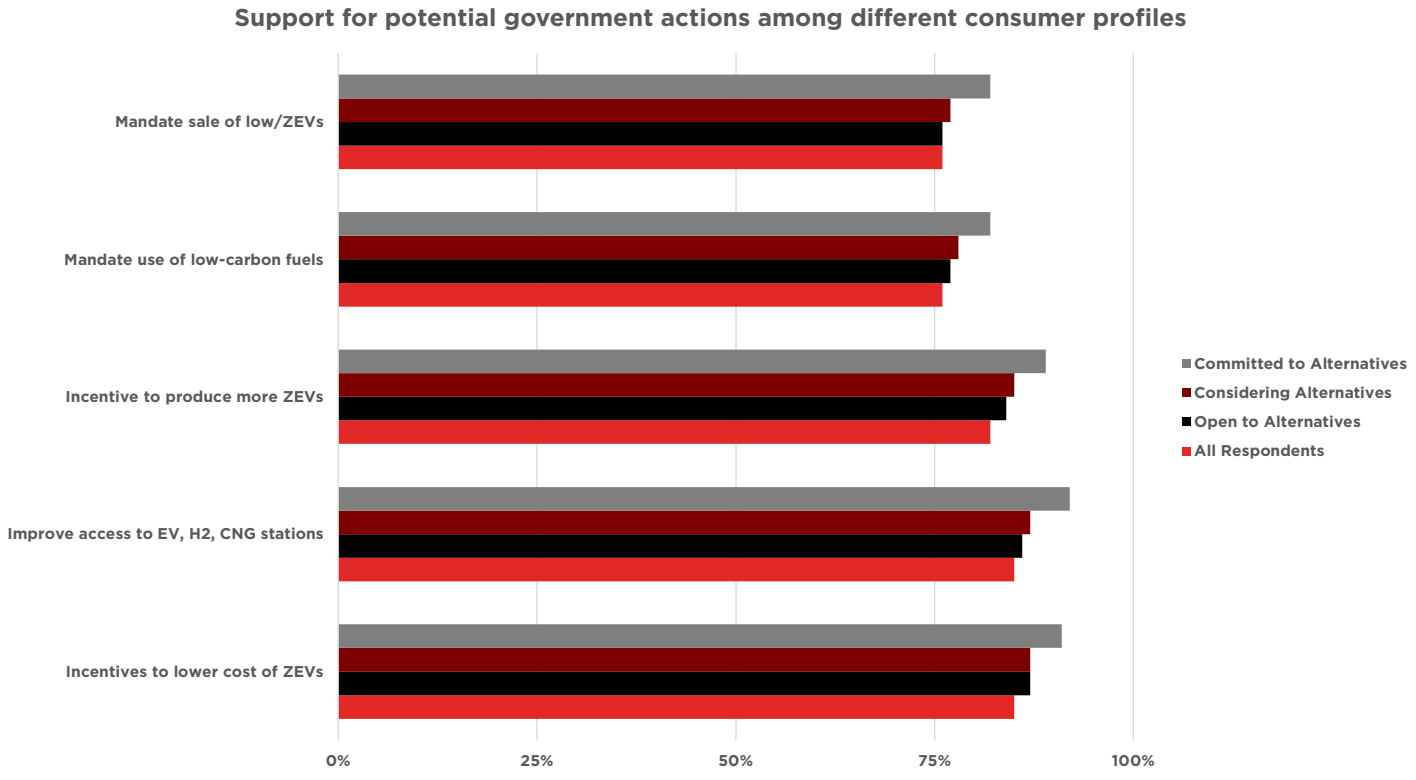
THEIR PERCEPTION OF GOVERNMENT ACTIONS

Canadians are relatively familiar with government efforts to address emissions, with 62% and 61% saying they are somewhat/very familiar with emissions targets for 2030 and 2050, respectively. Despite general familiarity with the overall objective, less than half (47%) were somewhat/very familiar with the government's declaration promising all new cars and vans would be zero-emissions by 2040.

In terms of how to achieve the emissions objectives, 61% believe it is very/most important to increase the number of lower-emissions vehicles. Nearly all Canadians (~90%) support government policies to support investment in infrastructure for lower/zero-emissions vehicles, such as increasing the availability of charging stations, alternative fuels, hydrogen and natural gas stations.

They also support (82%) incentives for the automobile industry to produce more zero-emissions vehicles. In addition, 76% support mandated use of lower-carbon fuels and mandated sale of low/zero-emissions vehicles. It is noteworthy that consumer support for certain policy options does not vary much between all respondents and those who are open to, considering or committed to alternative vehicles.

Figure 15: Canadians are very supportive of potential government actions



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About CTA: Founded by a collective of Canadian vehicle and transportation market stakeholders in 2020, the Canadian Transportation Alliance (CTA) is a non-advocacy, non-partisan, not-for-profit organization that aims to deliver objective, fact-based, third-party research to help educate government bodies, consumers, and business stakeholders on a variety of issues affecting the Canadian transportation market.

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