

# Tobacco and polluting vehicles: Regulating better to curb consumption

#### **AUTHOR**

Valérie Tremblay, Project Manager - Sustainable Mobility | Équiterre

#### **REVISION**

Julien Beaulieu, Legal Researcher | Université de Sherbrooke Anne-Catherine Pilon, Policy Analyst – Sustainable Mobility | Équiterre Marc-André Viau, Director – Government Relations | Équiterre

#### **CONTRIBUTIONS**

Andréanne Brazeau, Policy Analyst – Climate and Energy | Équiterre Heidi Comtois, Consultant et Masters student in Public and International Policy | Université de Sherbrooke

Julie-Christine Denoncourt, Project Manager – Reduction at Source | Équiterre Lisa Pastor Lallemand, Policy Intern – Climate and Energy | Équiterre

#### **GRAPHISME**

Marianne Legault, Graphic Designer | Équiterre

#### **TRADUCTION**

Lee Zimmerman

© Équiterre - June 2024

## **About Équiterre**

Équiterre's mission is to make the necessary collective transitions towards an equitable and environmentally sound future more tangible, accessible and inspiring. As we look toward 2050, Équiterre will seek to develop practical solutions to contribute to the transformation of social norms and public policy; to steer our methods of agriculture, production, consumption, and transportation towards being low carbon and compatible with environmental and social justice and designed at the regional and community level.

Recognized for its credibility and pragmatism, it brings together experts in education, mobilization and public policy. Équiterre seeks to influence public, corporate, and government decision making in an effort to accelerate the transition to a more environmentally responsible, equitable and resilient society. The organization proposes solutions that seek to demonstrate, mobilize and influence towards the desired social transformation. Its expertise, achievements, network, and reach

make it a pivotal actor in the climate and environmental movement.
Buoyed by its 30 years of experience, Équiterre is one of the most influential environmental organizations in Quebec and Canada, with over 126,000 followers and 22,500 members.

For several years now, Équiterre has looked at the role of consumption and marketing, with a special focus on gas-powered vehicles, in the environmental crisis. In 2019, the organization launched the research project <u>Understanding the rise of light-duty trucks in Canada</u>, which looked into the auto industry's role and practices.

With its wealth of knowledge and proposed solutions, Équiterre is advancing its efforts as part of the Quebec-wide awareness campaign on the impacts of sport utility vehicles, Assess what your true needs are, and the Let's reverse the trend coalition, which is calling for stricter regulations on automobile advertising in Canada.

### **Executive summary**

#### Context

The Quebec and Canadian governments seem to agree on the need to reduce the number of gas-powered vehicles on our roads, and have adopted targets for prohibiting the sale of such vehicles by 2035. But without short-term disincentives, these vehicles will continue to circulate and generate adverse impacts on public health and the environment well after this target date.

The fight against tobacco use proved that governments have the tools and the regulatory powers to curb the consumption of a product hazardous to the public. The policies that grew out of that fight succeeded in restricting tobacco consumption and in mitigating its adverse effects.

Thus, the aim of this report is to examine the public policies that helped reduce tobacco use in Quebec and Canada, as well as the existence of similar mechanisms for gas-powered vehicles. Although these products serve different purposes, our analysis remains relevant to understand the impact of regulations on products deemed harmful to public health.

#### Methodology

The report conducts a comparative analysis of the policies regulating tobacco consumption and the use of gas-powered vehicles while examining current trends across a review of the literature and news analysis. It also explores automobile policies at the national and international levels, guided by data compiled in Équiterre's 2022 study on the rise of light-duty trucks in Canada.

#### **Observations**

The evolution of automobile use can be compared to that of tobacco consumption in the 20th century. The similarities are striking as to their impacts on public health and the environment, in fact. The mass advertising strategies employed by the automobile industry call to mind those of the tobacco industry, with their emphasis on values like freedom and prestige and their promotion of a lifestyle rather than of a simple product. And as is the case with tobacco consumption, automobile use creates a dependence not only through the practical necessity of getting from A to B, but also through a deeply rooted psychological attachment. Infrastructure and land use continue to favour automobile use, reinforcing this dependence. Lastly, both industries are major contributors to air pollution, their products containing similar toxic substances

and impacting the most vulnerable communities in particular. However, while tobacco consumption has declined thanks to beefed-up regulations, the number of gas-powered vehicles continues to rise, underscoring the need for a similar strengthening of the regulations.

The evolution of tobacco regulations in Canada, marked by advertising bans, graphic warnings on packaging and tax hikes, led to a significant reduction in the rate of tobacco use: from **50% in 1965 to 10% in 2020**. Conversely, the regulations on polluting vehicles, marked by the introduction of emission and fuel consumption standards and by incentives to purchase ZEVs, did not prevent a steady rise in the number of vehicles on our roads: from **12.6 million in 1990 to 24.3 million in 2020**. As for automobile advertising, despite notices and guidelines, self-regulation remains the order of the day, with no strict legal restrictions, although the *Competition Act* and the *Consumer Protection Act* prohibit deceptive practices, albeit with a limited and general scope. Whereas tobacco advertising has been banned for decades now, automobile advertising remains largely unregulated.

The two industries have used similar tactics to delay regulations, such as disinformation campaigns and the promotion of superficial solutions. The automobile industry, like its tobacco counterparts, has played down the harmful effects of its products and resisted regulations by advancing economic and practical arguments. Our dependence on the automobile, reinforced by dedicated infrastructures and an image of prestige, is comparable to tobacco dependence. And both industries have offloaded responsibility for the adverse impacts onto the consumer while using social responsibility strategies to enhance their image. Voluntary regulations have proven ineffective, as was the case with the tobacco industry. Strict regulations are what is needed to protect public health.

#### Recommendations

Despite government commitments to climate action and electrification, current measures are insufficient to curb the increase in the number of polluting vehicles and reduce vehicle GHG emissions. Drawing inspiration from the fight against smoking—which has been marked by actions ranging from its recognition as a public health issue to the regulation of advertising and usage locations, and the implementation of fiscal measures—several courses of action can be explored and rapidly deployed to discourage the purchase of gasoline-powered vehicles.

Recommendation	<b>Sub-recommendations</b>	
Recognize the rise in the number of polluting vehicles as a public health issue		
Tighten controls on automobile advertising	Create a Canadian code on automobile advertising	
	Make it mandatory to display information on environmental and safety impacts and on vehicle prices	
	Include messages promoting sustainable mobility	
	Publish guidelines on environmental performance	
	Institute a monitoring mechanism to ensure compliance with advertising standards	
	Phase out advertising on polluting vehicles	
Increase the number of low- or zero-emission zones		
Ban events sponsorships and public partnerships		
Reform the	Introduce a more effective feebate system	
automobile tax system	Index gasoline taxes	
	Implement per-kilometre pricing	

## Table of contents

Executive summary	4
List of acronyms and symbols used	8
List of tables and figures	9
Introduction	10
1. Emergence of a public health issue	11
1.1. Tobacco use	11
1.2. Polluting vehicles	14
1.3. Findings	18
2. Regulatory history	20
2.1. Tobacco use	20
2.2. Polluting vehicles	27
2.3. Findings	33
3. Recommendations	36
3.1. Recognize the rise in vehicle use as a public health issue	36
3.2. Tighten the regulations on automobile advertising	37
3.3. Increase the number of zero- and low-emission zones	42
3.4. Ban event sponsorship and public partnerships	43
3.5. Disincentivize car purchases through environmental taxes	43
Conclusion	47
Appendices	49
References	52

## List of acronyms and symbols used

\$ Canadian dollars

CAFC Company Average Fuel Consumption

CO<sub>2</sub> Carbon dioxide

Code Canadian Code of Advertising Standards

GHG Greenhouse gas km Kilometre(s)

TPCA Tobacco Products Control Act

TPAPLR Tobacco Products Appearance, Packaging and Labelling Regulations

SAAQ Société de l'assurance automobile du Québec

EV Electric vehicles

Polluting Light vehicles fuelled by gasoline or diesel

vehicles

CUV Crossover utility vehicles

SUV Sport utility vehicles
ZEV Zero-emission vehicles

## List of tables and figures

Table 1	Evolution of tobacco marketing practices, 1920-2020
Table 2	Evolution of automobile advertising practices, 1900-2020
Table 3	Impacts of automobile use
Table 4	Information requiring disclosure in automobile advertisements
Table 5	International practices to counter automotive greenwashing
Table 6	Proposals for a fee-rebate system
Figure 1	Tobacco regulations timeline
Figure 2	Timeline for regulations on gasoline-powered vehicles

### Introduction

In the run-up to banning the sale of gasoline-powered vehicles in 2035, the Quebec and Canadian governments must control their use in order to phase out their purchase. In this regard, what lessons can be drawn from the regulation of tobacco?

Reducing the number of gasoline-powered vehicles on our roads seems to be the most effective way of lowering road transport greenhouse gas emissions (GHG) and helping achieve carbon neutrality, as it requires automakers and the population to abandon the production and consumption of gas-guzzlers in favour of less polluting modes of transport. To that end, Quebec and Canada announced in 2021 a halt to sales of new light-duty vehicles running on gasoline or diesel beginning in 2035.

By 2035, however, there is every indication that sales of new vehicles will continue to rise. Barring any measures to discourage people from buying these vehicles in the shorter term, their presence on our roads and their well-known impacts on society will certainly persist well beyond the introduction of the sales ban and thereby undermine the Canadian and Quebec governments' efforts to significantly improve their record on GHG. And yet, these governments possess the expertise and authority to reduce consumption of a product that is harmful to the public. A case in point: Canada's initiatives to regulate tobacco showed the effectiveness of measures to regulate a product's consumption and mitigate its impacts.

Using a comparative analysis of the issues and regulatory controls concerning the consumption of tobacco and polluting vehicles, this report seeks to answer the following question: Which public policies were successful in reducing tobacco use in Quebec and Canada and are there comparable mechanisms for polluting vehicles? While these two products are *used very differently* — tobacco being a luxury and the automobile being a means of transportation —, this analysis remains relevant to understand the impact of regulation on the use of a product deemed to be harmful.

-

<sup>&</sup>lt;sup>1</sup> "Polluting vehicles" hereafter.

## Emergence of a public health issue

From advertising practices to effects on air quality, there are numerous parallels between tobacco consumption in the previous century and the consumption of polluting vehicles today. Despite their public health issues, both products have been widely accepted. This section examines how public perceptions of tobacco and vehicles have evolved over the years.

#### Box 1: Definition of a public health issue

A public health issue is a problem or concern that affects the health and well-being of a population as a whole. These issues can be linked to illness prevention, promotion of healthy lifestyles, access to health care, epidemic management or other aspects of public health.

Public health issues can be caused by various factors, such as individual behaviours, environmental conditions, government policies or socio-economic factors.

#### 1.1. Tobacco use

The evolution of tobacco use, which went from a largely accepted practice to a recognized public health issue in Canada, is a complex process that occurred over several decades. Understanding this evolution requires examining the combination of various factors, including cultural values, scientific research and public awareness campaigns.

Historically, tobacco consumption is deeply rooted in Canadian culture. Tobacco use goes back several centuries within Indigenous populations, for ceremonial and medicinal purposes. Tobacco was then adopted by European settlers and became increasingly popular in Canada during the 19th century and in the early 20th century. During this period, tobacco consumption was encouraged in various ways, including cultural practices, social interactions and advertising by tobacco

companies. At the time it was associated with notions of leisure, relaxation and socializing.

#### 1.1.1. The tobacco culture

Tobacco popularity continued rising after the First World War, thanks to the industrialization of its production, innovations in cigarette manufacture and aggressive advertising campaigns by tobacco producing companies. Tobacco products were widely available for sale throughout the 20th century, mainly in local stores, smoke shops and various other retail points of sale. Tobacco companies invested massively in marketing and advertising campaigns to promote their products, employing such methods as the written press, radio, and television and, later on, the internet. These media depicted tobacco use as glamorous, sophisticated and socially desirable (Table 1) while targeting demographic categories to drive up consumption.

Table 1. Evolution of tobacco marketing practices, 1920-2020

Period	Characteristics
1920- 1940	Tobacco advertising took off with the advent of colour ads in magazines and newspapers, featuring endorsements by physicians (some of them fictional) and a tobacco health association. Tobacco was also promoted as a symbol of independence, especially by campaigns like <i>Torches of Freedom</i> . This period also saw tobacco become a major radio sponsor.
1950- 1960	Cigarettes were featured in film and television, even for children. At the same time tobacco companies launched campaigns questioning scientific studies, such as <i>A Frank Statement</i> . Television became the main advertising vehicle, with many shows sponsored by the tobacco industry. Celebrities and athletes were often used to promote cigarette brands, such as the famous <i>Marlboro Man</i> .
1970- 1990	The tobacco industry sponsored sports and cultural events, as well as sports teams. Billboard advertising also became common. In addition, cigarettes would often be subtly inserted in films and television shows.
2000- 2020	With the emergence of electronic cigarettes, advertising targeted young people, using the same tactics as used for traditional cigarettes.

Source: SRITA (undated).

Tobacco consumption habits began changing in the 20th century. In the first few decades, tobacco use spread to both men and women, and among all age segments and social classes. It was present in various social settings, particularly in the workplace, at home, in restaurants and bars and on public transit. In the mid-20<sup>th</sup> century, tobacco use was ubiquitous among the Canadian and Quebec population from all walks of life, transcending social and economic barriers. But the perception of tobacco use underwent a transformation when scientific research provided increasing evidence of the associated health risks. This undermined its social acceptance.

#### 1.1.2. Role of science and mobilization

In the 1960s, a series of major Canadian studies established unequivocal links between tobacco and a myriad of serious health problems. Canada was among the first countries to recognize the hazards associated with tobacco and to begin tackling these issues.

In 1961, the results of a Health and Welfare Canada study into the effects of cigarette use among Canadian veterans were released. The study, launched in 1954, revealed a 60% death rate among smokers (Dunsmuir et al., 1998). In 1963, the Royal College of Physicians and Surgeons of Canada produced a groundbreaking report on the consequences of tobacco use on health, prompting Canadian Health Minister Judy LaMarch to stun the country by declaring in the House of Commons: "There is scientific evidence that cigarette smoking is a contributory cause of lung cancer and that it may also be associated with chronic bronchitis and coronary heart disease." (Canadian Cancer Society, 2013). The following year, a report by United States Surgeon General Terry Luther determined that tobacco use causes lung cancer. These findings triggered a growing public health movement that challenged traditional perceptions of tobacco as a harmless luxury.

The second half of the 20<sup>th</sup> century saw the emergence of local movements and rights advocacy organizations in Canada, like the Coalition québécoise pour le contrôle du tabac and the Non-Smokers' Rights Association (Info-tabac, 2013). These groups called for stricter regulations and public health initiatives aimed at reducing tobacco consumption. Through public demonstrations, media campaigns and educational initiatives, they helped mobilize public opinion and secure community support for the fight against tobacco

The research and advocacy actions that ensued helped highlight the urgency of the problem and led the Canadian government to implement various anti-tobacco measures aimed at reducing tobacco use and protecting public health. These measures, detailed in <u>section 2</u>, helped frame tobacco use as a

societal and public health issue and, in so doing, helped lower tobacco consumption in Quebec and Canada over the past several decades.

#### 1.1.3. Impacts of tobacco use

The leading avoidable cause of illness and premature death in Canada, tobacco use is responsible for 85% of new lung cancer cases and can lead to other serious health consequences, including respiratory disorders and heart disease. This is true of not only smokers, but everyone exposed to secondary smoke as well (Health Canada, 2023). Secondary smoke contains numerous chemical substances that harm human health, especially children's health.

#### Box 2: The hidden face of tobacco

Beyond its recognized effects on health, tobacco has serious consequences for the environment. From tobacco growing to consumption, this product leaves a detrimental footprint on the planet. Globally

speaking, the tobacco industry is responsible for the destruction of 600 million trees and 200,000 hectares of land, for the loss of 22 billion tons of water, for 84 tons of CO<sub>2</sub> emissions and for the production of 500 billion cigarette butts (WHO, 2022).

Beyond their impacts on health and the environment, tobacco use and secondary smoke generate enormous costs.<sup>2</sup> In 2020, the costs associated with tobacco use totalled \$11.2 billion in Canada (CCSA, 2023).

Although tobacco use has been declining since the beginning of the 21<sup>st</sup> century, it remains a major challenge for many in Canada, particularly among certain vulnerable populations. Among young adults, for example, vaping frequency rose between 2017 and 2022 (Statistics Canada, 2023a). In 2022, tobacco use was up significantly among Indigenous peoples and LGBTQ+ individuals (Health Canada, 2022b). And so a number of challenges remain in the fight against tobacco consumption and its broader effects on society.

#### 1.2. Polluting vehicles

As was the case with tobacco, the evolution of automobile consumption in Canada has brought on a deep societal transformation, especially in terms of mobility and landscape in both cities and suburbs.

<sup>&</sup>lt;sup>2</sup> These fall into four categories: healthcare costs (hospitalization, medication, etc.); lost productivity costs (related to death and disability at work); criminal justice costs (police intervention, legal proceedings, etc.); and other direct costs (funding of research and prevention programs).

#### 1.2.1. The automobile culture

Historically, the automobile was a luxury item that only the well-off could afford. But with the industrialization of automobile manufacturing in Canada beginning in the 1920s, the automobile became increasingly affordable and accessible for middle class households. Filling stations and garages became increasingly ubiquitous (Tremblay, 2012). The first shopping centres, drive-in theatres and motels appeared, making it necessary to provide parking facilities (Beaudet, 2019). This marked the start of the automobile culture in Quebec and Canada.

In the mid-20<sup>th</sup> century, automobile dependence took off, to such an extent that cars became a fact of daily life. In the post-World War context, the auto industry saw rapid growth and ramped up production to respond to the growing demand for cars, stimulated by the increase in household purchasing power but also by advertising. Advertising campaigns went from emphasizing vehicle features to playing up the lifestyle and social status aspects of owning a car **(Table 2)**.

Table 2. Evolution of automobile advertising practices, 1900-2020

Period	Characteristics
1900- 1980	<ul> <li>→ Print advertising (in colour as of 1930)</li> <li>→ Practical information on the vehicle (price, speed, mechanical parts)</li> <li>→ Simple imagery (photo of vehicle and description)</li> </ul>
1980- 1990	→ Television advertising (as of 1980)  → Automobile as social status symbol  → Ostentatious imagery  → Lifestyle-type advertising
2000- present	→ Advertising in the written press and on the radio, television, and internet → Vehicle is associated with emotions

Source: Mowat (2015).

The expansion of our road system, marked by the construction of the Trans-Canada Highway, together with urban sprawl also drove up automobile use in the country. At the same time, technical advances in automobile manufacturing helped improve vehicle safety, comfort, and performance.

#### 1.2.2. Role of science and mobilization

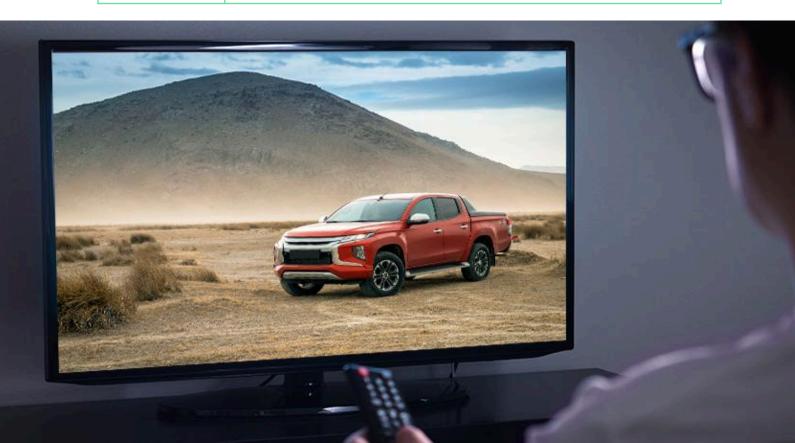
The end of the 20th century marked the end of the "golden age" of the automobile. Citizen movements rose up increasingly in Canada's major cities, including Montreal, to protest against noise pollution from traffic and the impacts on urban sprawl (Poirier, 2013). Following the release of the Brundtland report on

sustainable development ("Our Common Future"), these criticisms were accompanied by environmental concerns, with a growing number of scientific publications linking vehicles with various environmental and health problems.

Since the end of the 20<sup>th</sup> century, there has been growing public awareness of these impacts. Such groups and organizations as Greenpeace and Équiterre emerged, advocating policy measures to curb automobile use. Paradoxically, issues associated with gasoline-powered vehicles have also risen **(Table 3)**.

Table 3. Impacts of automobile use

Sphere	Impacts
Environment	<ul> <li>→ Air pollution due to fuel combustion</li> <li>→ Soil and surface water contamination due to toxic substances from vehicles</li> <li>→ Deforestation, fragmentation of natural habitats and loss of land due to construction of road infrastructures and urban sprawl</li> <li>→ Noise pollution caused by engine noise</li> <li>→ Depletion of energy reserves</li> </ul>
Society	<ul> <li>→ Injuries and deaths caused by traffic collisions</li> <li>→ Health problems linked to noise and air pollution</li> <li>→ Urban spaces lost to the road network</li> <li>→ Social inequities linked to lower availability of and access to other means of transportation</li> </ul>



	<ul> <li>→ Decline in active mobility linked to urban sprawl</li> <li>→ Increase in stress linked to traffic congestion</li> </ul>
Economy	<ul> <li>→ Health system costs linked to impacts of air pollution, traffic collisions and sedentary lifestyles</li> <li>→ Significant costs to build, maintain and expand road infrastructures</li> <li>→ Household debt due to vehicle ownership costs</li> <li>→ Decline in property values near highways</li> <li>→ Loss of productivity in the workplace due to traffic</li> <li>→ Transformation of urban development and commercial supply</li> </ul>

Source: Miner et al. (2024).

#### 1.2.3. Impacts of the automobile

Between 1990 and 2021, GHG emissions from light-duty vehicles went from 70 to 75 megatons of carbon dioxide  $(CO_2)^3$  and today make up 11% of Canada's total emissions (ECCC, 2021). In 2015 alone, use of gasoline-powered light-duty vehicles in Canada was responsible for 2.8 million tons of carbon monoxide, 122,403 tons of volatile organic compounds and 110,929 tons of nitrous oxide (Health Canada, 2022a). This air pollution is the source of several respiratory and heart disorders, including asthma and arrhythmia, as well as premature death.

#### Box 3: Light-duty trucks as source of exacerbation

Light-duty trucks — a category that includes sports utility vehicles (SUV) and crossover vehicles (CUV), vans and pickup trucks (Appendix I) — accounted for 85% of vehicle sales in Canada (Statistics Canada, 2024) and were featured in 79% of automobile advertising (Équiterre, 2021b). Their popularity has exacerbated many issues associated with gasoline-powered vehicles.

On average, a light-duty truck emits more GHG, consumes more fuel per kilometre (km), travels greater distances, requires more space, causes more collisions and costs more than a standard car (Morency et al., 2022).

However, the solutions for tackling these issues have been limited to date to improving vehicle technology, through such means as manufacturing zero-emission vehicles (ZEV). Although ZEVs are gaining in popularity, they represent but a small fraction of the cars on Canadian roads and do not solve all the problems caused by automobiles, as is the case for electronic cigarettes...

<sup>3</sup> For light trucks alone, GHG emissions rose from 25 to 50 megatons of CO2 between 1990 and 2021 (ECCC, 2021).

#### 1.3. Findings

In light of the above, it can be said that the evolution of automobile use is on a par with that of tobacco consumption over the 20<sup>th</sup> century. Contrary to cigarettes, vehicles are useful. Despite their *markedly different uses*, the similarities regarding the evolution of their consumption and, in particular, the extent of their impacts make it possible to compare them and to see both as public health issues, with a need for regulation of each product's promotion and consumption.

#### 1.3.1. Automobile, tobacco: same advertising strategy?

Beyond the industrialization of their production, tobacco and gasoline-powered vehicles owe their popularity to massive advertising. The advertising tactics previously employed by the tobacco industry are similar to those currently used by the automobile industry. First, the messaging shares the same values: masculinity, freedom, competitiveness, seduction, prestige... Second, the messaging contradicts the science on occasion: tobacco was originally marketed as being good for health and recommended by doctors, while the automobile is associated with nature and physical activity. Last, the thing that makes advertising for these two products so similar is that in both cases, there is an emphasis on lifestyle. Advertisers do not sell these products as a simple commodity, but as an experience.

#### 1.3.2. Sources of dependence

Not only is tobacco and automobile use ubiquitous in social practices, but each can create dependence on the part of its user. We know today that tobacco use can trigger physical dependence on account of nicotine (a very addictive chemical substance contained in tobacco products) and withdrawal symptoms when the user ceases consumption. But the dependence on tobacco, much like the dependence on the automobile, is also psychological. In fact, the opportunity in earlier years to buy tobacco products freely and to smoke everywhere was a significant contributory factor in reinforcing the need to smoke. On top of that, buildings were designed to facilitate tobacco use (ashtrays on tables, cigarette vending machines, areas set aside for smoking...).

Similarly, automobile use is greatly facilitated by land use planning and the development of infrastructures dedicated specifically to this pursuit, often to the detriment of other mobility options. This configuration makes the automobile essential for daily travel, especially in rural and peri-urban areas. The dependence on the automobile also stems from promoting and maintaining a positive image of cars and their attendant lifestyle via advertising and the dominant culture (Laviolette, 2020). In fact, [translation] "cars are still considered by many to be a prestige item, a symbol of their professional success, social

status and even identity. [...] Not to mention the feelings of freedom, control, and independence these vehicles give the person who gets behind the wheel" (Boutros, 2019). Although users do not feel the physical dependence that tobacco users feel, their psychological connection to the automobile remains deeply rooted.

#### 1.3.3. Air pollution as central theme

The repercussions of tobacco use and vehicles have been recognized by scientists and the public, as explained earlier. An exhaustive comparison of their impacts reveals that both are major sources of air pollution and are very harmful to human health. In fact, the toxic composition of cigarette smoke is not dissimilar to that of car exhaust fumes: while cigarette smoke contains benzene, nitrosamines, formaldehyde, hydrogen cyanide, polycyclic hydrocarbons and carbon monoxide, car exhaust fumes contain benzene, particulates, nitrogen oxide, polycyclic hydrocarbons and carbon monoxide (Boyle et al., 2020).

While automobile pollution affects everyone, like tobacco use, the pollution and threat to road safety associated with car use affect first and foremost the least well-off. The desire on nearly everyone's part to breathe clean air is the connective thread between the two (Boyle et al., 2020).

#### Box 4: The parallels between smoking and driving a vehicle

"The parallels between smoking and [...] driving gas cars are, if not exact, oddly close. Tobacco causes damage to the consumers, and tobacco companies benefit from the way that they hook their most loyal customers, and while, for example, SUVs are marketed as providing protection for drivers, their physical size, weight and pollution levels create a more dangerous and toxic urban environment for both drivers and pedestrians."

- From the Badvertising report Smoking out the climate (2020)

But where the similarities end between tobacco consumption and use of gasoline-powered automobiles is that the latter continues to rise, while the former declined once the government recognized it as a public safety issue and began regulating it. The next section looks back at the regulatory history of tobacco and gasoline-powered vehicles in Quebec and Canada.

## 2. Regulatory history

Measures were put in place – at first voluntary, then increasingly restrictive – to regulate tobacco use in Canada. What was the impact on tobacco consumption and how did the industry react, compared with the regulations imposed on the automobile industry? This section revisits the history of regulatory and lobbying initiatives in the tobacco and automobile sectors.

#### 2.1. Tobacco use

Legislation played a crucial role in recognizing tobacco as a public health issue. That said, the current regulatory framework did not arrive overnight, thanks to the opposition mounted by the tobacco industry. Beginning in the 1960s, measures were phased in and then strengthened to regulate tobacco use and marketing across Canada. Here are some of the milestones.

#### 2.1.1. Tobacco industry adopts voluntary code

In 1964, to avoid the adoption of a mandatory regulatory framework, Canada's tobacco industry proposed submitting to a voluntary code that would monitor its marketing practices. For example, the industry pledged to target its advertising at adults and to stop "implying that cigarette smoking is essential to romance, prominence, success, or personal advancement" in its advertising (Info-tabac, 2017). However, since the word "essential" was only vaguely defined, the industry sidestepped this commitment by continuing to associate tobacco with such notions as luxury and seduction in its advertising. This continued right into the early 2000s (Info-tabac, 2017). Meanwhile, in 1965 the federal Department of Health commissioned a national survey on tobacco consumption (Dunsmuir et al., 1998).

#### Box 5: Self-regulation as a means of defence

Until the early 1960s, the link between tobacco use and cancer had not been officially established. The tobacco industry carried out public relations campaigns to raise doubts about the harmful effects of tobacco use. Once these links had become increasingly evident, the industry publicly committed to changing its practices and claimed that self-regulation sufficed (Brownell and Warner, 2009). "A Frank Statement", published in 1954, provides a good illustration of this tactic.

1965: 50% of Canadian adults smoke (Reid et al., 2022).

#### 2.1.2. An (additional) agreement on voluntary measures

In the wake of the World Health Organization's Framework Convention<sup>4</sup> on Tobacco Control (WHO, 2003) and the recommendations in the report by the House Committee on Health, Welfare and Social Affairs, the government tabled Bill C-248 in 1971 (Dunsmuir et al., 1998). The bill would have banned advertising for tobacco products and required manufacturers to place warnings on packaging, in addition to limiting the amount of nicotine found in tobacco products (Attorney General of Canada, 2010). But the bill did not end up being debated; instead, the government and the tobacco industry reached agreement on voluntary guidelines that would end television and radio advertising of tobacco products

1975: 45% of Canadian adults smoke (Reid et al., 2022).

#### 2.1.3. Coming into force of the TPCA

Four years after the introduction of the National Strategy to Reduce Tobacco Use, the federal government passed the *Tobacco Products Control Act* (TPCA) in 1989. Among other things, it called for **raising the legal age for cigarette purchase to 18** (beginning in 1993), prohibiting lifestyle advertising in non-print media and halting tobacco sponsorships. It also introduced the requirement to attach warnings to tobacco product packaging. The TPCA marked the beginning of the process to establish a comprehensive regulatory framework aimed at lowering tobacco consumption and protecting public health.

<sup>&</sup>lt;sup>4</sup> The World Health Assembly is the supreme decision-making body of the World Health Organization (WHO). Its main function is to improve WHO policies and programs.

Meanwhile, another federal law, the *Non-smokers' Health Act*, took effect in 1989. It **regulated tobacco consumption in the workplace**, **public transit** and in federally regulated sectors. In Quebec, it was the *Act respecting the protection of non-smokers in certain public places*, passed in 1986, that prohibited smoking in specific public places, such as the classroom.

#### Box 6: The RJR-MacDonald judgment

In 1990, the Canadian Tobacco Manufacturers Council challenged the TPCA in the courts, claiming that it was an attack on freedom of expression, which is guaranteed under the *Canadian Charter of Rights and Freedoms*.

Then, in 1994, the validity of the TPCA was challenged before the Supreme Court of Canada by tobacco companies RJR-MacDonald and Imperial Tobacco. In 1995, the RJR-MacDonald judgment struck down five sections of the TPCA, including the ban on lifestyle advertising and on sponsorships, as well as the warning requirement. These were found to be inconsistent with the right to freedom of expression (*RJR-MacDonald Inc. v. Canada, 1995*).

1990: 31% of Canadian adults smoke (Reid et al., 2022).

#### 2.1.4. Adoption of the Tobacco Act

Despite this setback, Ottawa pursued its regulatory efforts and passed the *Tobacco Act* in 1997. Replacing the TPCA, the *Tobacco Act* imposed composition standards for tobacco products and further restricted young people's access to tobacco. It prohibited tobacco product advertising, except for print media publications targeting an adult readership and in places where young people are prohibited from accessing tobacco under law. It also banned sponsorships, but pressure from the arts and sports communities – which had received major funding from tobacco manufacturers – led the government to postpone the ban until 2003 (Info-tabac, 2003).

Quebec followed suit in 1998 by passing its own *Tobacco Act*. It prohibited consumption in the workplace in medium- and large-sized businesses as well as certain public establishments, and required non-smoking sections to be set up in certain public places. Restrictions were also placed on events' sponsorship by cigarette companies, and businesses were prohibited from displaying tobacco or tobacco packaging in public view and from using a slogan (*The Tobacco Act*, 1998).

A few years later, in 2000, the *Tobacco Products Information Regulations* were approved by the Canadian Parliament. These regulations required **new more visible and more graphic health warnings on cigarette packaging** (Info-tabac, 2007). Canada was the first country to require this type of warning. To date, over 115 countries and territories have followed its lead.

Between 2001 and 2014, Canada and Quebec raised tobacco taxes nearly every year.

2000: 24% of Canadian adults smoked (Reid et al., 2022).

#### 2.1.5. Restrictions on sponsorships

Three years later, in 2003, additional provisions in the federal Tobacco Act kicked in. Tobacco company sponsorship of sports and arts events was prohibited, along with in-store promotion of tobacco.

#### Box 7: Another court case citing freedom of expression

In 2002, three tobacco companies challenged the federal *Tobacco Act* before the Quebec Court of Appeal on the grounds that it violated their rights to freedom of expression. In 2005, the Court struck down the prohibition on "creating an erroneous impression" in advertising, as well as the ban on tobacco companies using their corporate name to sponsor events (*JTI-MacDonald Corp. v. Canada, 2005;* Imperial Tobacco Canada Ltd. v. Canada, 2005; Rothmans, Benson & Hedges Inc. v. Canada, 2005).

In 2007, the federal government once again found itself before the highest court in the land, defending the constitutionality of its legislative measures, which were supported by the provinces. This time, in a unanimous ruling, the Supreme Court of Canada upheld the constitutionality of the advertising restrictions, the ban on sponsorships and the warnings on cigarette packaging at the national level (Canada v. JTI-Macdonald Corp., 2007). That same year the Competition Bureau of Canada reached agreement with tobacco producers that they would stop using words like "light" and "smooth" when marketing cigarettes (Canada, 2007a).

#### Box 8: Lawsuits against tobacco companies

Between 2004 and 2012, many provinces passed legislation to sue tobacco companies and seek compensation for public health care costs linked to decades of tobacco use. In 2004, the statute adopted by British Columbia was challenged by the Canadian Tobacco Manufacturers Council and other tobacco companies before the Supreme Court of Canada, which upheld its constitutionality (CBC News, 2012).

In 2011, various tobacco companies tried to name the federal government as a third-party defendant in the cases brought against them by the provinces, but the Supreme Court of Canada ruled against them (Fitzpatrick, 2011).

2010: 17% of Canadian adults smoke (Reid et al., 2022).

#### 2.1.6. Beefed up measures on advertising and packaging

Following the sponsorships' prohibition in 2003, a number of amendments were brought to the *Tobacco Act*. In 2009, the **advertising restrictions were extended to all print media**. In 2010, the federal government **banned cigarette and cigarillo flavours**, except for menthol, which was later prohibited for all tobacco products in 2018. In 2011, the *Tobacco Products Labelling Regulations* were adopted, **strengthening the requirements for warnings on cigarette packaging** to ensure they covered 75% of the surface.

In 2015, Quebec's *Tobacco Act became the Tobacco Control Act,* subjecting vaping to the same regulatory framework as that for tobacco. This statute introduced several measures regulating tobacco use, including a ban on smoking in commercial terraces and within nine metres of public establishments.

2015: 13% of Canadian adults smoke (Reid et al., 2022).

#### 2.1.7. Warnings made more visible

Much like the Quebec statute, in 2018 the federal *Tobacco Act* was renamed the *Tobacco and Vaping Products Act*. It **subjected vapid products to the same restrictions as those for tobacco**, including a ban on advertising.

In 2019, regulations requiring **plain packaging for all tobacco products** were adopted. Each package must now be of the same drab brown colour, with clear gray text and minimal graphics (Seale, 2020).

#### Box 9: Importance of plain packaging

"[...] research shows cigarette packaging is the most important type of advertising for tobacco in Canada. The tobacco industry knows this too — that's why they have fought so vigorously against this change and why we have been pushing back for Canadians."

- Andrea Seale, Chief Executive Officer of the Canadian Cancer Society (2020)

In 2023, Canada introduced the Tobacco Products Appearance, Packaging and Labelling Regulations (TPAPLR)<sup>5</sup>, requiring that **warnings on the risks of tobacco consumption be printed on each individual cigarette** – a world first (La Presse canadienne, 2023).

That same year, Quebec **hiked the tax on tobacco** for the first time since 2014, raising the price of a carton of 200 cigarettes to \$130 (Duval, 2023). In addition, rules were adopted to **prohibit flavours and limit nicotine concentration in vaping products**. These measures were criticized by the tobacco industry, on the grounds that they would encourage black market sales (Girard-Bossé, 2023).

In 2024, the Quebec and Canadian governments announced, in their budget updates, a new tax increase on tobacco.

#### Box 10: A smoke-free world or a smokescreen?

In the face of stricter regulations, a number of tobacco manufacturers turned to electronic cigarettes, with some companies even looking to the day when they might stop selling traditional cigarettes. For example, in 2017 Philip Morris International launched the Foundation for a Smoke-Free World, promoting "smoke-free" products like e-cigarettes and their benefits. This initiative allowed the company to engage in lobbying to weaken tobacco regulations (STOP, 2020).

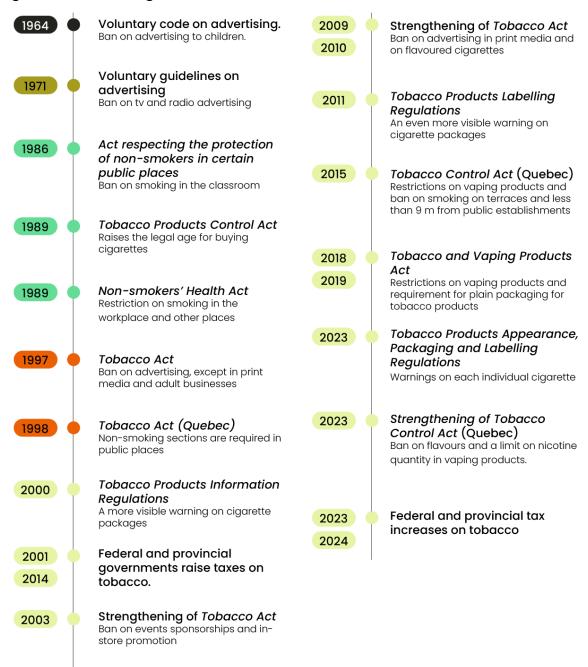
<sup>&</sup>lt;sup>5</sup> TPAPLR brings together all the requirements concerning the appearance, packaging and labeling of tobacco products in a single regulation. It repeals the Tobacco Products Information Regulations and the Tobacco Products Labelling Regulations (Health Canada, 2024).

#### 2020: 10% of Canadian adults smoke (Reid et al., 2022).

In conclusion, despite the tobacco industry's opposition, Canada gradually strengthened its laws and regulations to lower tobacco consumption and protect public health. Measures like the advertising ban, health warnings on packaging and tax increases helped steadily reduce tobacco use in Canada. In fact, the number of adults who smoke in Canada went from 50% in 1965, with the introduction of voluntary measures, to 31% in 1990, after the first legislation had been passed. In 2020, this figure plummeted to 10%, which speaks to the cumulative impact of regulatory efforts over several generations (Reid et al., 2022).



Figure 1. Tobacco regulations timeline



#### 2.2. Polluting vehicles

Instituting an environmental protection regulatory framework for gasoline-powered vehicles has been a gradual process, influenced by a variety of factors. Despite the obvious need to lower polluting emissions, the automobile industry has often shown reticence toward the adoption of strict regulations. Nevertheless, as the decades have gone by, measures have been phased in to regulate emissions and the marketing (but not advertising) of gasoline-powered vehicles. Here are some of the milestones in this process.

#### 2.2.1. Weak standards

After the Canada–US Auto Pact of 1965, the Canadian government adopted the same vehicle emissions standards as the United States for the years 1973 and 1974. In 1970, Canada passed its first legislation on automobile pollution, the *Motor Vehicle Safety Act*. This statute empowered the government to develop vehicle manufacturing and emissions control standards, but when the United States adopted stricter emissions standards and required automakers to install catalytic converters in 1975, Canada opted for weaker standards to avoid the costs of installing these devices. This divergence between the Canadian and American standards lasted until 1988. In the intervening years, the Canadian standards allowed three times as many nitrogen oxides, five times as many hydrocarbons and seven times as much carbon monoxide as the American standards (Anastakis, 2009).

#### Box 11: Tactics used by the Big Three (part 1)

Following the passage of the U.S. Clean Air Act and the announcement of new regulations governing automobile pollution in 1970, the major North American automakers – Ford, Chrysler and GM – reacted in dramatic fashion. While some companies are threatening to halt automobile production, others are insisting on their being able to comply with the standards voluntarily, without the need for compulsory measures. What's more, some companies are running ads questioning the links between vehicle emissions and air quality (Cooke, 2017).

In parallel with emissions standards, in 1980 the federal government introduced Company Average Fuel Consumption (CAFC) targets for vehicles sold in the country, effective with the 1980 model year. Inspired by the U.S. regulations, this measure was initially voluntary and was designed to encourage automakers to improve the fuel efficiency of their vehicles (Beauregard-Tellier, 2004).

In 1981, Parliament attempted to make the CAFC target mandatory by passing the *Motor Vehicle Fuel Consumption Standards Act*. However, this legislation was not enacted until 2007, as carmakers had proposed to meet these targets voluntarily (Canada, 2007b). In 1990, a new CAFC target, aligned with US standards, was introduced, covering light-duty commercial vehicles for the first time (Beauregard-Tellier, 2004).

#### Box 12: Tactics used by the Big Three (part 2)

In the 80s and 90s, the major automakers maintained their position from decades past and continued to oppose vehicle fuel consumption regulations, both in the USA and Canada. They argued that these standards would deprive their customers of a product they wanted, and would be highly detrimental to their businesses. What's more, they questioned the positive impact of these regulations on global warming (Cooke, 2017).

1990: There are 12.6 M vehicles and light-duty trucks on the roads in Canada (Statistics Canada, 2019).

#### 2.2.2. Regulating GHG emissions

In 2010, the Government of Canada enacted the *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*. Establishing national standards for GHG emissions for all new vehicles sold, the regulations are designed to promote the manufacture of low-emission vehicles by requiring importers and automakers to ensure that their fleet average GHG emissions meet established standards (ECCC, 2018). Although aligned with US standards, it is important to note that they are less restrictive in the case of light-duty trucks, a decision motivated by concerns related to the safety of lighter vehicles and competition between manufacturers (Morency et al., 2021).

#### Box 13: Lower standards for light-duty trucks

At the time, light-duty trucks were seen primarily as commercial vehicles, which justified less stringent standards for their GHG emissions in order to preserve corporate competitiveness (Morency et al., 2021). Although most light-duty trucks are now used by private individuals, the auto industry has maintained its position in favour of less stringent standards for these vehicles, because they offer higher profit margins than standard cars (Équiterre, 2021a). This situation has contributed to the increasing number of light-duty trucks in Canada and in Quebec.

In Quebec, it was a year earlier, in 2009, that the government adopted its own *Regulations on greenhouse gas emissions from motor vehicles*. The purpose of these regulations was to establish average GHG emission standards for 2010 to 2016 model-year motor vehicles initially marketed in the province. In 2011, Quebec

amended its regulations to recognize the new requirements set out by the Canadian and U.S. federal governments (MELCCFP, 2024).

2010: There are 20.3 M vehicles and light-duty trucks on the roads in Canada (Statistics Canada, 2020).

In 2014, the Federal Regulations were amended to include GHG emission standards for the 2017 to 2025 model years. These changes were criticized as offering too much flexibility to automakers in complying with emissions standards. This is due to the possibility of using advanced technology multipliers, accumulating credits for past or future years, and receiving credits for improvements in the efficiency of air conditioning systems (Rous, 2019).

2015: There are 22 M vehicles and light-duty trucks on the roads in Canada Canada (Statistics Canada, 2020).

#### 2.2.3. The ZEV standard and the sales ban

To encourage the supply of electric vehicles (EVs) and reduce transportation-related GHG emissions, Quebec adopted a ZEV standard in 2018. Under this standard, carmakers need to **accumulate credits by selling ZEVs on the Quebec market**. The number of credits required increases each year (MELCCFP, 2024).

In 2023, the Quebec government toughened its ZEV standard, bringing in its 2025-2035 standard in order to achieve its goal of having **100% of new vehicles sold in Quebec being electric by 2035**. Quebec thus becomes the first province in North America to enshrine its 100% EV sales target into law. The province is aiming for 2 million EVs on its roads by 2030.

That same year, the federal government amended its *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* to include a ZEV standard. Like Quebec's, the federal ZEV standard requires automakers to meet annual VZE sales targets, which will increase each year to reach 100% by 2035. In other words, **Canada too will ban the sale of new gasoline-powered vehicles as of 2035**.

#### Box 14: The automotive industry's response to the ZEV standard

As was the case in Quebec (CVMA, 2016; 2020; Saint-Arnaud, 2023), the federal ZEV standard has been widely criticized by the automotive industry. They claim that they will not be able to meet the government's ZEV sales targets, pointing to weak consumer demand and the lack of sufficient public charging infrastructure. Instead, the industry is calling for a tripling of federal purchase subsidies and greater numbers of charging stations. However, according to a study by the Sustainable Transportation Action Research Team (START, 2022), this proposal will not help meet Canadian ZEV sales targets, and will only increase car manufacturers' profits. In fact, the auto industry "can perfectly well meet ZEV sales targets by changing the way it invests and prioritizes product pricing, rather than trying to maximize profits." (Équiterre and Environmental Defence, 2022)

2020: There are 24.3 M vehicles and light-duty trucks on the roads in Canada (Statistics Canada, 2023b).

#### 2.2.4. A new framework for controlling automobile advertising

First established in 1963 under the auspices of Advertising Standards Canada (ASC), the Canadian Code of Advertising Standards (hereafter referred to as the Code) is the primary instrument for regulating advertising in Canada. It includes 14 articles that apply to automotive advertising, ranging from misleading statements to price transparency to depictions of unlawful conduct (ASC, 2019).

In 2006, some 45 years later, ASC published a Notice on Automobile Advertising, in response to a multitude of public complaints about unsafe driving practices depicted in ads. This notice proposed four guidelines for evaluating complaints, including: "Would it be reasonable to interpret the situation depicted as condoning or encouraging unsafe driving practices?" (ASC, 2006). These were expanded in 2009, following a recommendation from the Société d'assurance automobile du Québec (SAAQ), although they are limited to the area of road safety (Appendix 2).

At the same time, in 2007, ASC published another Notice, this time addressing environmental claims in advertising, in response to their increasingly frequent use. This notice also includes four guidelines for assessing whether a "green" claim is problematic, such as "Does the advertisement highlight only one positive environmental aspect of the advertised product, while ignoring other characteristics or aspects that may be harmful to the environment?" (ASC, 2007).

While strengthened by these guidelines, the Code remains a non-binding self-regulatory tool, independent of existing advertising legislation, such as the federal Competition Act and Quebec's Consumer Protection Act. Its effectiveness **depends on the advertising industry's good faith**. In the event of non-compliance with the Code, ASC requests that the advertisement in question be withdrawn or amended. If the advertiser fails to comply, ASC informs the media concerned, as well as the Competition Bureau of Canada.

Adopted in 1985 and 1971 respectively, a few years after the Code was introduced, the Competition Act and the Consumer Protection Act govern automobile advertising and prohibit misleading advertising practices (Appendix 3). These laws are administered respectively by the Competition Bureau and Quebec's Office de la protection du consommateur (OPC), which have the power to investigate and initiate legal action in matters of misleading advertising, in addition to opening the way for private recourse before the courts. The dissemination of erroneous or misleading information on a vehicle's environmental performance, or failure to disclose relevant information on the subject, may result in criminal or administrative penalties or prosecution.

However, since coming into force, these laws have not been widely used to regulate advertising practices in the automotive industry. In fact, they are general, and apply to all sectors of the economy. They do not explicitly indicate which advertising practices are likely to be false or misleading. For example, they do not specify whether lifestyle advertising by car companies is problematic, nor do they clearly indicate whether such advertising should be accompanied by disclosures about the environmental and health impacts of vehicles.

#### Box 15: The legal vacuum in automobile advertising

At present, there is no federal or Quebec legislation specifically designed to regulate automotive advertising from an environmental perspective. The automotive industry is not subject to any specific code or law governing its advertising practices, and this despite a steady increase in the number of automobile advertisements.

Current regulations governing the automotive industry are out of sync with the goal of ending the sale of gasoline-powered vehicles by 2035. Instead of a gradual reduction in sales and a decrease in their visibility in advertising, we have instead witnessed a significant increase in the number of light-duty vehicles on the road in Canada, rising from 12.6 million to 26.3 million between 1990 and 2020. In addition, by 2022, the automotive industry ranked as the third largest investor in

digital advertising in the country (eMarketer, 2023). This misalignment between government objectives and industry practices underscores the need for more stringent measures. It is therefore imperative that legislation and regulations be made tougher if we are to be able to make progress towards our targets.

Figure 2. Timeline for regulations on gasoline-powered vehicles



#### 2.3. Findings

We can see that there's a real mismatch between the way the tobacco industry is regulated and the way the automotive industry is regulated. While automobile advertising is still only just beginning to be regulated, tobacco advertising has been banned for decades. Despite the years that separate them, a similar observation can be made regarding the way the automotive and tobacco sectors are being regulated: both were slow to see regulations come in, due in part to political and legal pressure from the respective industries. There are many similarities in the tactics used by the tobacco and automotive industries aimed at delaying any form of regulation, whether through misinformation campaigns, the promotion of false solutions or self-regulatory approaches.

#### 2.3.1. What impacts?

History shows striking similarities between past misinformation tactics used by the tobacco industry to counter regulation and those used by the automotive industry today. Just as cigarette manufacturers long denied the dangers of smoking despite overwhelming scientific evidence (Kenner, 2015), automakers often downplayed the harmful effects of gasoline-powered vehicles.

In the 60s, they minimized the impact of vehicles on driver and passenger safety, opposing the introduction of compulsory seat belts. In the 70s, they opposed the use of catalytic converters, minimizing the impact of vehicle emissions. They did so again in the 80s and 90s, when stricter standards for fuel consumption and vehicle emissions were proposed. Then, in the 2000s, they launched campaigns to question the actual role of transportation in air pollution. In short, just as the tobacco industry has done with every regulatory development, the auto industry has questioned the need for, and feasibility of, regulations to make its products safer and cleaner. The same thing is happening with the ZEV standards.

#### Box 16: L'intransigeance de l'industrie automobile

"From seatbelts, to fuel economy standards to climate science, the auto industry has always put their profit over the safety of people and the planet. And every time, the government has had to step in to make it right. The auto industry is doing it again."

- Excerpt from an Environmental Defence video (2023)

#### 2.3.2. False solutions

The tobacco and automotive industries have both deployed sophisticated public relations campaigns to promote solutions that don't actually solve the problems caused by their products. This strategy includes the promotion of "smoke-free" products, such as electronic cigarettes, which can be compared to "partial zero emission vehicles" or "more fuel-efficient" vehicles. However, these alternatives fail to adequately reduce the negative impacts of these products. For example, although EVs can reduce the GHG emissions associated with their users' travel, they, like gasoline-powered cars, pose problems in terms of road safety, use of urban space and energy and natural resources.

The other tactic commonly used by industry to absolve itself of the impact of its products is to shift the blame onto the customer. We often hear arguments such as "Consumers are responsible for the impacts on their health when they choose to smoke" (Brownell and Warner, 2009) or "We produce large vehicles to meet consumer demand." In addition, industries tend to shift responsibility onto

governments, as shown by the car industry lobby's reaction to the ZEV standard. They also often resort to the strategy of "corporate social responsibility," associating themselves with causes or events designed to boost their public image and make people forget the negative impact their products have on society (Brownell and Warner, 2009). In practice, the money donated to these causes represents a tiny fraction of their revenues, and is sometimes accompanied by tax benefits.

#### 2.3.3. Good faith alone is not enough

Since the 1960s, industry self-regulation has been put forward on numerous occasions in various sectors to slow down the adoption of restrictive measures imposed by governments, particularly in environmental matters. The tobacco and automotive industries, for example, have lobbied hard to block all forms of regulation. Criticizing government regulations aimed at restricting their activities, they frequently claimed that such measures would be harmful to the economy or difficult to implement.

However, the voluntary approach adopted by the tobacco industry up until the late 1980s proved ineffective in reducing tobacco consumption and its harmful effects. Similarly, the automotive industry benefited from non-binding fuel consumption standards until the early 2000s, and continues to take advantage of legal uncertainty in the area of advertising. These practices have contributed to a sharp rise in the number of cars on the road and in GHG emissions, with huge investments in advertising.

Certainly, the tobacco and automotive industries have a financial interest in stimulating demand for their products, creating a conflict of interest inherent in any attempt at self-regulation. By favouring a voluntary approach, there is a high risk that public health protection will be compromised for the benefit of commercial interests. The Volkswagen case, which fraudulently used software to manipulate engine emissions in order to comply with government standards, is a striking illustration of this reality. Strict regulations, like those applied to tobacco, are needed to transform industrial practices and effectively guarantee the protection of public health.

### 3. Recommendations

Despite government commitments in the areas of climate protection and electrification, current measures are inadequate when it comes to curbing fleet growth and reducing GHG emissions from vehicles. Drawing inspiration from the fight against tobacco - which has been marked by actions ranging from recognition as a public health issue, to control of advertising and the places where smoking is allowed, to the application of tax measures - there are numerous courses of action that can be explored and rapidly deployed to discourage the purchase of gasoline-powered vehicles. The government should also draw on international best practices in order to respond effectively on this issue.

# 3.1. Recognize the rise in vehicle use as a public health issue Recognition by the governments of Canada and Quebec of the rising number of polluting vehicles as a public health issue is crucial, as demonstrated by Minister LaMarsh's 1963 statement on smoking. It raises public awareness of the risks of automobile pollution and justifies the allocation of financial resources to concrete solutions, such as the development of the public transit system.

This recognition also legitimizes the adoption of stricter regulations to reduce emissions and the number of polluting vehicles on the road. In fact, it was this recognition that enabled the federal government to adopt legal provisions aimed at controlling the marketing of tobacco products, such as the ban on advertising.

Governments can take a number of steps to achieve this recognition. This can take the form of a motion in Parliament, the development of a specific national strategy, as was the case with the National Strategy to Reduce Tobacco Use in 1985, or the establishment of a committee to make recommendations for tackling this public health problem.

#### Box 17: Creation of an advisory committee on polluting vehicles

An independent, multi-sector advisory committee could be formed to place the issue of the rise in polluting vehicles in Canada on the political agenda. Its mission would be to assist the federal government in developing and implementing public policies governing polluting vehicles.

Following the example of the 1969 report by the Commons Health, Welfare and Social Affairs Committee, this committee could produce a national investigation report on the rise in the number of polluting vehicles, including recommendations for regulating advertising, use, sale and purchase.

#### 3.2. Tighten the regulations on automobile advertising

The regulation of automobile advertising represents a crucial step forward following acknowledgement of the growth in the numbers of polluting vehicles. In fact, almost 50% of new car buyers say they are influenced by advertising (Équiterre, 2021), which is clearly linked to the rise in the number of vehicles. At present, there is a legal vacuum in this area, underscoring just how urgent it is to tighten the regulatory framework. This measure, widely supported with nearly 60% approval in Quebec (Équiterre, 2023), would be both effective and cost-effective for governments to implement.

To achieve this, Équiterre recommends that the federal government **create an advertising code specific to the automotive industry**, along the lines of the precedents established for tobacco advertising prior to its ban. This Canadian automotive advertising code should be designed in line with the government's climate objectives, notably the ban on the sale of gasoline-powered vehicles by 2035. It should also be restrictive and consistent with existing laws and regulations (Appendix 3), and enforced by the authorities responsible for advertising regulation. In other words, the Canadian Radio-television and Telecommunications Commission (CRTC) and ASC could regulate and approve car ads before they are broadcast, as is the case for ads aimed at children or those for alcoholic beverages.

When it comes to implementing this recommendation, the existing legal framework could prove invaluable. Indeed, the Supreme Court of Canada has repeatedly ruled, in the context of tobacco advertising regulations, that corporate freedom of expression can be restricted when government measures to solve a problem are reasonable and justified (Info-tabac, 2017). This case law provides a solid basis for governments to legitimize the imposition of restrictive measures on

the automotive industry, given the urgency and severity of the public health and environmental issues at stake.

#### 3.2.1. Make it mandatory that certain information be displayed

It should be mandatory to include certain information in automobile advertising, similar to the tar and nicotine content and health warnings on cigarette packaging. In Canada and Quebec, there are currently no requirements to display the negative environmental impact of vehicles in automobile advertising. A CIRANO survey also revealed that any such information is often absent from dealer sales pitches (Gruber et al., 2024).

In principle, the *Consumer Protection Act* prevents companies from "omitting any important fact" when advertising to consumers but does not explicitly state what information is "important" when it comes to automobile advertising.

According to an analysis conducted by Équiterre (2021), only 5% of ads mention fuel economy, and only 41% mention the vehicle's retail selling price, whereas financing terms are highlighted. In addition, none of the ads for light-duty trucks mention the increased danger they pose to other road users.

#### Box 18: The heavy burden of public safety

Because of their greater weight and height, light-duty trucks can pose a heightened safety risk to road users. Compared to cars, collisions caused by SUVs are 10% more numerous and involve 28% more fatalities for the person driving the other vehicle.

In Quebec, in 2019, collisions involving SUVs had the highest fatality rate at 1,427 out of 7,265 collisions (Morency et al., 2022).

In any future Canadian automobile advertising code, Équiterre recommends that the federal government make mandatory the display of information on safety risks for passengers and other road users, environmental impacts (including GHG emissions and the extraction of natural resources), and prices.

At the same time, Équiterre recommends that the Quebec government **define**, **by regulation**, **those material facts that must be disclosed by manufacturers and dealers** under Section 219 of the *Consumer Protection Act* in the advertising they produce (e.g. video or radio ads). Specifically, disclosures should include the following key information:

Table 4. Information requiring disclosure in automobile advertisements

Information to be included	Example
Information regarding the risks of different types of vehicles to the safety of passengers and other road users	Crash test results
Information on the environmental impact of various vehicle types	Volume of GHGs emitted per 100 km or over the vehicle's life span
Comparative cost information	<ul> <li>→ Vehicle's retail price</li> <li>→ Comparison of initial and annual vehicle costs with those for a mid-size sedan</li> </ul>
Reference to the ban on the sale of internal combustion vehicles by the year 2035	

#### 3.2.2. Include transportation alternatives in advertisements

In the same vein, Équiterre recommends that the governments of Canada and Quebec **require that automobile advertising include a warning message intended to promote more environmentally friendly transportation solutions**. This would better inform consumers as to the impact of their choices in terms of

This would better inform consumers as to the impact of their choices in terms of vehicle purchases and, more generally, in terms of transportation.

Governments could draw inspiration from the regulations adopted by France, which require advertisers to include a message promoting sustainable mobility in car ads broadcast on TV, in theatres and over the radio (Decree of December 28, 2021). This regulation also stipulates that the message must cover 7% of the ad, remain on-screen long enough to be read, and be accompanied by the hashtag #SeDéplacerMoinsPolluer [travelpolluteless] (Alter, 2022). Canada's recent Emissions Reduction Plan demonstrates that the federal government is aware of this type of practice, and of its power on the issue, but is opting for a non-compulsory approach.

#### Box 19: A channel for promoting sustainable mobility

"Automakers could be encouraged to include messages in their advertisements to prioritize walking or cycling over short distances, learning from the French regulation that requires automakers to include messaging in vehicle advertisements regarding sustainable transportation options."

- Excerpt from Canada's 2030 Emissions Reduction Plan (ECCC, 2022)

## 3.2.3. Restrict the representation of natural elements and the use of environmental values

Following the example of regulations aimed at banning the association of tobacco with certain advertising themes, Équiterre recommends that the Competition Bureau and Quebec's OPC, respectively, **publish guidelines governing environmental performance messaging in automobile advertising**.

More specifically, this code should **indicate that the portrayal of off-road vehicles, the promotion or depiction of environmental damage, and the use of terms related to the preservation of nature or the environment constitute misleading marketing practices**. The code should also recommend that companies provide consumers with comprehensive information on the environmental footprint of their products.

Given that nearly seven out of ten advertisements feature light-duty trucks in natural settings (Équiterre, 2021b), this restriction is intended to prevent the misleading use of nature to conceal the true environmental impact of vehicles. In this way, Canada would be joining numerous other countries that have banned car ads that encourage environmentally damaging behaviours.

Table 5. International practices to counter automotive greenwashing

Country	Advertising regulatory control measure	
Australia	Advertisers must ensure that automobile advertisements do not show deliberate or significant environmental damage.	
New Zealand	Ads must not depict or encourage environmental damage or degradation; care must be taken when areas of significant conservation value are featured in an ad.	
Belgium	Advertising must not encourage behaviour that is detrimental to the environment.	
	Advertising must not contain any misleading claims or illustrations regarding the environmental properties and characteristics of a product or service.	

Source: Ad Standards (n.d.); ASA (2022); SPF Économie (n.d.); FEBIAC (2023).

The government also needs to ensure a more rigorous implementation of existing legislation on advertising (<u>Appendix 3</u>). Both the *Competition Act* and the *Consumer Protection Act* include provisions prohibiting false or misleading advertising representations. However, it seems that these laws are rarely applied

to automobile advertising. Many ads, moreover, feature vehicles on the edges of waterways, encouraging consumers to imitate this practice, even though it is illegal. Current Canadian legislation, which prohibits the depiction of illegal behaviour in advertising, needs to be rigorously enforced in such cases.

#### Box 20: Selling a lifestyle

"Vehicles criss-cross a dry riverbed, speed along the trails of a remote forest or the path to the summit of a mountain. What they're trying to sell us isn't a car: it's a lifestyle—a passport to adventure, a ticket to a world where there are no boundaries."

- Excerpt from an article entitled "Le monde utopique du VUS" (Rivest, 2021)

#### 3.2.4. Ensure compliance with existing advertising standards

To ensure compliance with the code and advertising guidelines specific to the automotive industry, Équiterre recommends that the OCP and the BCC, respectively, enter into a voluntary agreement with a representative body from this industry regarding the types of information automobile advertising should communicate. Section 314 of the *Consumer Protection Act* includes an express provision for this type of agreement.

Where these standards are not met, consumers can then address their complaints to this body, and if dissatisfied with the resolution, turn to the OCP or the Competition Bureau for an appropriate response.

#### 3.2.5. Gradually reduce vehicle advertising

Équiterre recommends a **phased reduction in the advertising of gasoline-powered vehicles** in Canada, based on the model used for tobacco.

Like the gradual ban on tobacco advertising, which began with audiovisual media before being extended to print media, we propose that the governments of Canada and Quebec adopt a similar process for automobile advertising. Aligned with their joint commitment to ban the sale of gasoline-powered cars by 2035, **this gradual ban would begin as early as 2025, culminating in a total ban by 2030**.

Initially, the plan would be to limit automobile advertising in spaces used for public utilities, such as bus, bicycle, and metro stations. Subsequently, this restriction would be extended to private advertising spaces, such as billboards.

While some jurisdictions, such as the City of Amsterdam and France, have already brought in measures to ban the advertising of polluting products in certain

contexts (Frost, 2022), by adopting this regulatory framework, Canada could become the first country to plan a phased reduction in the visual depiction of gasoline-powered vehicles in advertisements, and to do this concurrent with the end of the sale of the said gasoline-powered vehicles, making it a world leader, just as it was in the fight against smoking.

#### 3.3. Increase the number of zero- and low-emission zones

Government restrictions on where tobacco can be consumed have undeniably curtailed its use, thereby safeguarding the health of non-smokers. Similarly, Équiterre believes that **increasing the number of zones free from road traffic-related air pollution** is essential in order to protect public health, and also to encourage the shift to sustainable modes of transportation. Initiatives already implemented in other metropolitan areas around the world could be adopted by major Canadian and Quebec cities, with the support of provincial and federal governments.

One such initiative could be to **consider expanding the number of pedestrianized areas**, potentially making them permanent, in order to reduce car traffic and promote active travel. For example, although Montréal currently has eleven summer pedestrianized streets, only two arterial streets have been fully pedestrianized year-round since 1980 (Moquin-Beaudry, 2024).

One other measure could be the **establishment of low-emission zones**, in which polluting vehicles would be subject to a road tax, along with **zero-emission zones**, where only electric vehicles would be allowed to circulate free of charge. A number of European cities have already implemented these types of zones, and Montréal plans to follow suit by 2030 (La Presse canadienne, 2022). These measures could be facilitated by a system of coloured stickers, similar to what is done in Paris (ibid).

Finally, it would be wise to **increase the number of parking spaces reserved for small or zero-emission vehicles, while raising parking rates for the most highly-polluting vehicles**. This would help limit traffic from polluting vehicles and free up public space for other modes of transport. For example, in 2023, the city of Chicoutimi announced the introduction of parking spots reserved for small cars in its downtown core as a means of improving traffic flow (Labrie, 2023).

These actions should be implemented in areas where cycling infrastructure and public transportation services are adequate to ensure an effective transition from polluting vehicles to more environmentally friendly modes of travel.

#### 3.4. Ban event sponsorship and public partnerships

As demonstrated by the sponsorship bans imposed on tobacco companies at the federal level in 2003 and in Quebec in 1998, governments have the power to prohibit the sponsorship of specific products. Équiterre recommends that both levels of government repeat this approach by **prohibiting corporate sponsorships of publicly funded sporting and cultural events, and by banning partnerships with public organizations**. And so, in order to ensure full coordination of government actions, it is essential that the objectives of the policy on the sale of gasoline-powered vehicles be harmonized with those of the policy on event sponsorship and partnerships by specifically targeting the association of gasoline-powered vehicles with sponsorships.

Over the past few years, the automotive industry has forged a number of public partnerships and sponsored a number of sporting and cultural events to increase its visibility and legitimacy. For example, Subaru Canada gives purchasers of its Forester Wilderness SUV a pass to access Canada's provincial and national parks, thereby promoting the use of light-duty trucks in natural environments. At the same time, brands such as Chevrolet partner with major cultural events such as the Francos de Montréal and the Festival d'été de Québec..

Event sponsorship and public partnerships with the automotive industry give it considerable visibility and legitimacy in the eyes of the public. By associating itself with well-known brands and events, the industry influences purchasing behaviours (Gruber et al., 2024). Prohibiting these practices is crucial to promoting public health, reducing pollution and preserving the independence of events. By restricting the representation of gasoline-powered vehicles at popular events, the government is sending a strong message about its commitment to the fight against air pollution and for public health, while aligning itself with the objectives of promoting sustainable forms of travel.

# 3.5. Disincentivize car purchases through environmental taxes

The effectiveness of tax policies such as the steady increase in cigarette taxes in deterring tobacco use, has been confirmed by numerous studies (Bader et al., 2011). However, vehicle and fuel taxes have risen marginally in recent years. To financially encourage consumers to avoid the purchase of polluting vehicles, it will be imperative to consider measures such as a more efficient fee-rebate system, fuel tax indexation and low-emission zones. It is also essential to consider the equity aspects associated with the introduction of these environmental tax measures.

#### 3.5.1. Introduce a fee-rebate system

It is critical that effective measures be implemented, in order to reduce the demand for polluting vehicles in Canada and Quebec, in line with the objectives of reducing GHG emissions and promoting ZEV vehicles. Équiterre recommends that governments **implement a fee-rebate system**, which has the benefit of funding the subsidies for electric vehicles out of the fees applied to polluting vehicles.

Currently, existing levies imposed in Canada and Quebec are neither sufficiently dissuasive nor adequate to fund substantial rebates. For example, the federal government applies a green tax on gas guzzlers (CRA, 2013) and an additional tax on luxury vehicles (CRA, 2022), but these measures affect only a small portion of the market and therefore have only a limited impact on GHG emissions. Quebec, for its part, is planning additional registration fees for EVs. Quebec, meanwhile, is looking at increased registration fees for large-displacement vehicles (SAAQ, 2023), but the amount is still negligible, when compared with the full purchase price of the vehicles impacted, not to mention the fact that it has not been indexed since 1992.

#### Box 21: Importance of the municipal level of government

Municipalities have a crucial role to play in reducing the use of vehicles, especially the most high-polluting ones. In 2023, Rosemont-La-Petite-Patrie in Montreal, as well as Lyon and Paris, increased parking fees for light-duty trucks (Lubeck, 2023). Similarly, the previous year, Washington increased registration fees for polluting vehicles (Mercier, 2022).

When it comes to rebates, the subsidy programs for the purchase of ZEVs, such as the iZEV program and *Roulez vert*, have significant weaknesses. They do not encourage the purchase of used electric vehicles, benefit mainly affluent households (Martinek, 2021) and penalize people without access to home charging facilities (Lee and Brown, 2021). What's more, they do not encourage the retirement or replacement of vehicles by alternate modes of travel.

Équiterre proposes a number of measures (**Table 6**) for implementing a fee-rebate system capable of effectively discouraging the purchase of polluting vehicles while simultaneously stimulating the transition to cleaner vehicles.

Table 6. Proposals for a fee-rebate system

Jurisdiction	Fee	Rebate
Canada	Bring together the green levy and iZEV programs under a single administrative agency, thereby enabling the review and adjustment of levy and rebate measures to be carried out in tandem	<ul> <li>Update the iZEV program to:         <ul> <li>→ Include used ZEVs;</li> <li>→ Tailor incentives for purchasing ZEVs to household incomes, and cap eligibility according to income (e.g., \$100,000);</li> <li>→ Support the purchase of electrically assisted bicycles by offering a purchase subsidy of 50% to low-income households and 20% to middle- and high-income households;</li> <li>→ Establish a program to retire polluting vehicles.</li> </ul> </li> </ul>
	Subject all polluting vehicles to the green levy on gas guzzlers and raise the excise tax rate	
Québec	Index the registration fees for polluting vehicles	Update the Roulez vert program in order to:  → Tailor ZEV purchase incentives to household incomes and cap eligibility based on income (e.g., \$100,000).;  → Offer subsidies or alternate incentives to EV owners who are unable to afford their own charging stations;  → Establish a mechanism for the phase-out of vehicles that pollute.

#### Box 22: Looking to a reform of how automobiles are taxed

Canada and Quebec could take lessons from other jurisdictions when it comes to imposing levies. For example, since 2024, France has had a bonus-malus system applied to the purchase of polluting vehicles, along with a tax based on vehicle weight

(Lachance, 2024). In Wallonia, Belgium, beginning in 2025, vehicle purchases will be subjected to higher registration taxes, based on their impact on infrastructure, the environment, and safety (Wallonia, 2022).

#### 3.5.2. Index the federal and Quebec gasoline taxes

To discourage the purchase of polluting vehicles, Équiterre recommends that the Quebec and federal governments **index gasoline taxes**. Currently, federal excise taxes on gasoline and diesel fuel and the Quebec excise tax have remained unchanged for decades, since 1995 and 2013 respectively (Godout and Robert-Angers, 2024). By way of comparison, several countries, such as Australia,

Sweden and the Netherlands, have introduced this kind of mechanism (Pavic, 2024). The current price of fuel does not reflect the social and environmental cost of carbon pollution, which encourages consumers to opt for more polluting vehicles and drive more. Conversely, studies show that consumers would be inclined to reduce their gasoline consumption if the price increased significantly (Équiterre, 2021a). A marked and sustained increase in the price of gasoline in Quebec and Canada would therefore constitute a major disincentive to purchase vehicles that pollute.

#### 3.5.3. Establish a system of kilometre-based pricing

At the same time, Équiterre is urging governments to **introduce kilometre-based pricing for polluting vehicles only**, as a means of discouraging their purchase and use. This is also a solution that could help fund public transit in certain metropolitan areas (Radio-Canada, 2022).

This approach, which works to complement the fee-rebate system, represents an interesting alternative to replace the current gasoline taxation system, over the medium term. Kilometre-based pricing imposes a charge based on the number of kilometres a vehicle travels over the road network. This system, which has already been introduced in Germany for heavy vehicles and in Utah for light vehicles, encourages reduced distances travelled by individual vehicles.

In the future, when the majority of vehicles are electric, and gasoline tax revenues decline, kilometre-based pricing could become a key mechanism for regulating road use and encouraging the transition to more sustainable modes of transportation (Pavic, 2024).

#### Box 23: When environmental taxation equals fairness

Specific exemptions would be needed to ensure the fairness of automobile-related tax measures. Exemptions could be granted for people using gasoline-powered vehicles for work, those living in regions where electric charging infrastructure is inadequate, or those with large families. Adjustments based on household income and geographical area would also be required. The tax revenues generated should be used equitably to fund sustainable transportation alternatives.

### Conclusion

Polluting vehicles represent a major public health issue. They contaminate the air we breathe on a daily basis, and have serious repercussions on our environment and road safety, most notably as a result of the proliferation of light-duty trucks. That's why the governments of Quebec and Canada have announced a ban on their sale by 2035. However, this report highlights the lack of sufficient dissuasive measures for curbing the purchase of these vehicles. Since 1990, the number of vehicles on the road has almost doubled, rising from 12.6 million to 24.3 million in Canada.

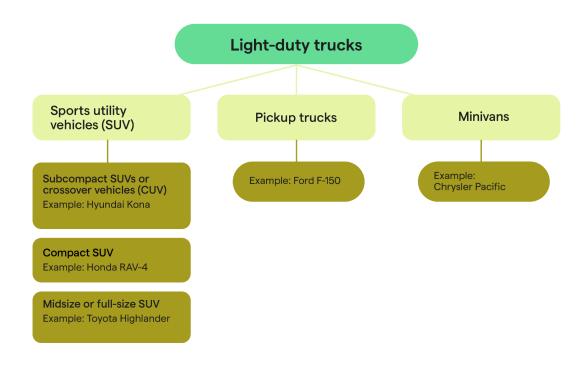
Paradoxically, although the sale of tobacco has not been banned, it has been subject to numerous regulations designed to reduce consumption and the deleterious effects it has on public health. From advertising bans to graphic warnings on packaging and higher taxes, this approach has borne fruit: since 1965, the smoking rate in Canada has fallen from 50% to 10%. We call on governments to adopt a similar approach to pollution-causing vehicles.

It's time for the governments of Quebec and Canada to adopt effective public policies, along the lines of those put in place against tobacco, to curb the increase in the number of polluting vehicles and meet their climate and electrification targets.

Of all the report's recommendations, controls on advertising are the next logical step. It's inconsistent to promote safe, green and sustainable transportation while letting the auto industry promote the opposite. We have a target to eliminate the sale of gasoline-powered vehicles by 2035. It's imperative that we stop promoting what we've decided to ban. We know what to do, we know that it can be done, and the public agrees. So, what are we waiting for?

## **Appendices**

#### Appendix 1. Classification of light-duty trucks



Source: Morency et al. (2021).

#### **Subcompact SUV**

The subcompact SUV is built on an enlarged subcompact or compact platform, with a size and interior midway between these two vehicle types, except for the height, which is midway between a car and a compact SUV (Transport Canada, 2023). This vehicle type, often without all-wheel drive and towing capacity, resembles a hatchback in terms of trunk capacity. Nevertheless, it is the entry point to the SUV market, basically replacing the subcompact car model. Once buyers opt for a subcompact SUV, they rarely go back to cars. Its gasoline consumption is slightly over that of compact cars and well over that of subcompact cars (+22%), this difference also applying to electric models (+9%) (NRCAN, 2021). In terms of safety, it poses a similar risk to pedestrians and cyclists, since its size and weight are comparable. In 2023, subcompact SUVs accounted for 15% of vehicle sales and 20% of light-duty truck sales (Crépault, 2024).

#### **Compact SUV**

Compact SUVs are mounted on a monocoque chassis and boast the features of a truck: more height, all-wheel drive, towing capacity and oversize tires. Except for

the height, its dimensions are between those of compact and midsize cars (Transport Canada, 2023). The oversized electric models like the Tesla Model Y or Kia EV6 are often included in the category by mistake. Compact SUVs consume 22% more than compact cars and 10% more than midsize cars, and in the case of electric models, 11% more (NRCAN, 2021). In terms of safety, compact SUVs are comparable to cars when they have a forward-leaning grille and a rounded front. The new more angular designs, however, generate a 26% increase in mortality in collisions with pedestrians (IIHS, 2023). In 2023, compact SUVs accounted for 31% of vehicle sales and 37% of light-duty truck sales (Crépault, 2024).

#### **Midsize SUV**

Midsize SUVs have all the features of a truck and are not at all like cars. They consume 31% more gasoline or electricity than midsize cars (NRCAN, 2021). The danger they pose to pedestrians varies between +26% and +45%, according to the hood height and the square shape of the vehicle (IIHS, 2023). In 2023, midsize SUVs made up 11% of vehicle sales and 14% of light-duty truck sales, and constitute an increasingly popular segment alongside compact SUVs (Crépault, 2024).

#### Appendix 2. Automobile advertising guidelines

#### Supplemental guideline Is the automobile operated in violation of applicable laws or beyond reasonable speed under the circumstances taking into account the portrayed road, weather, traffic and surrounding conditions (e.g. children in the area) or over usual speed limits in Canada? 2 Does the depiction of the performance, power or acceleration and braking of the automobile, taking into consideration the advertisement as a whole including visual (both images and text) and audio messages, convey the impression that it is acceptable to exceed speed limits or to otherwise operate an automobile unsafely or illegally? 3 Does the depiction of racing and rallies, and of other competition environments, taking into consideration the advertisement as a whole including visual (both images and text) and audio messages, convey the impression that production automobiles could be driven like racing or competition automobiles on a public roadway? 4 Is the advertisement encouraging or endorsing automobile use that is aggressive, violent or injurious toward other road users, or that denigrates or disparages cautious behaviour when using an automobile?

Source: SAAQ (2012).

# Appendix 3. Legal provisions applicable to automobile advertising in Québec and Canada

#### Competition Act (Canada)

52. (1) No person shall, for the purpose of promoting, directly or indirectly, the supply or use of a product or for the purpose of promoting, directly or indirectly, any business interest, by any means whatever, knowingly or recklessly make a representation to the public that is false or misleading in a material respect.

74.01 (1) A person engages in reviewable conduct who, for the purpose of promoting, directly or indirectly, the supply or use of a product or for the purpose of promoting, directly or indirectly, any business interest, by any means whatever,

- (a) makes a representation to the public that is false or misleading in a material respect;
- (b) makes a representation to the public in the form of a statement, warranty or guarantee of the performance, efficacy or length of life of a product that is not based on an adequate and proper test thereof, the proof of which lies on the person making the representation; or
- (c) makes a representation to the public in a form that purports to be
  - (i) a warranty or guarantee of a product, or
  - (ii) soit d'une promesse de remplacer, entretenir ou réparer tout ou partie d'un article ou de fournir de nouveau ou continuer à fournir un service jusqu'à l'obtention du résultat spécifié,

if the form of purported warranty or guarantee or promise is materially misleading or if there is no reasonable prospect that it will be carried out.<sup>6</sup>

#### Consumer Protection Act (Québec)

219. No merchant, manufacturer or advertiser may, by any means whatever, make false or misleading representations to a consumer.

220. No merchant, manufacturer or advertiser may, falsely, by any means whatever,

- (a) ascribe certain special advantages to goods or services;
- (b) hold out that the acquisition or use of goods or services will result in pecuniary benefit;
- (c) hold out that the acquisition or use of goods or services confers or insures rights, recourses or obligations.

221. No merchant, manufacturer or advertiser may, falsely, by any means whatever,

- (a) hold out that goods are of a specified standard;
- (b) ascribe certain characteristics of performance to goods or services.

<sup>&</sup>lt;sup>6</sup> This section will soon be amended to include a provision on greenwashing, under section 236 of Bill C-59, An Act to implement certain provisions of the fall economic statement tabled in Parliament on November 21, 2023 and to implement certain provisions of the budget tabled in Parliament on March 28, 2023.

228. No merchant, manufacturer or advertiser may fail to mention an important fact in any representation made to a consumer.

239. No merchant, manufacturer or advertiser may, by any means whatever,

- (a) distort the meaning of any information, opinion or testimony;
- (b) rely upon data or analyses falsely presented as scientific.

## Act respecting the conservation and development of wildlife (Québec)

128.6. No person may, in a wildlife habitat, carry on an activity that may alter any biological, physical or chemical component peculiar to the habitat of the animal or fish concerned.

### References

Act respecting the conservation and development of wildlife. RLRQ c-61.1. <a href="https://www.leqisquebec.gouv.qc.ca/en/tdm/cs/c-61.1">https://www.leqisquebec.gouv.qc.ca/en/tdm/cs/c-61.1</a>

Act respecting the protection of non-smokers in certain public places. L.R.Q. p-38.01.

https://www.legisquebec.gouv.qc.ca/en/document/cs/P-38.01?&target=

Act to increase the number of zero-emission motor vehicles in Québec in order to reduce greenhouse gas and other pollutant emissions. RLRQ a-33.02. https://www.legisquebec.gouv.qc.ca/en/document/cs/A-33.02

Ad Standards. (2006). Advisory Re: Automobile Advertising. https://adstandards.ca/code/ad-standards-advisories/advisory-automobile-advertising/

Ad Standards. (2007). Advisory on Environmental Claims. <a href="https://adstandards.ca/code/ad-standards-advisories/advisory-environmenta">https://adstandards.ca/code/ad-standards-advisories/advisory-environmenta</a> <a href="https://adstandards.ca/code/ad-standards-advisories/advisory-environmenta">https://adstandards.ca/code/ad-standards-advisories/advisory-environmenta</a> <a href="https://advisory-environmenta">|-claims-advertising/</a>

Ad Standards. (2019, July). Canadian Code of Advertising Standards. <a href="https://adstandards.ca/code/the-code-online/">https://adstandards.ca/code/the-code-online/</a>

Ad Standards. (s.d.). *Motor vehicle advertising.* <a href="https://adstandards.com.au/issues/motor-vehicle-advertising/">https://adstandards.com.au/issues/motor-vehicle-advertising/</a>

Advertising Standards Authority (ASA). (2022, November). *Advertising Standards Code*. <a href="https://www.asa.co.nz/codes/codes/advertising-standards-code/">https://www.asa.co.nz/codes/codes/advertising-standards-code/</a>

Alter, L. (2022, January 4). French Car Ads to Have Cigarette-Style Warning Labels Promoting Green Alternatives. Treehugger. <a href="https://www.treehugger.com/french-car-ads-to-have-cigarette-style-warning-labels-5214582">https://www.treehugger.com/french-car-ads-to-have-cigarette-style-warning-labels-5214582</a>

Anastakis, D. (2009, March). A 'War on Pollution'? Canadian Responses to the Automotive Emissions Problem, 1970-80. *The Canadian Historical Review, 90*(1), 101-137. https://doi.org/10.3138/chr.90.1.99

Arrêté du 28 décembre 2021 pris pour l'application de l'article D. 328-3 du Code de la route (2021) (France).

https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000044590170

Bader, P., Boisclair, D. and Ferrence, R. (2011, November). Effects of Tobacco Taxation and Pricing on Smoking Behavior in High Risk Populations: A Knowledge Synthesis. *International Journal of Environmental Research and Public Health,* 8(11), 4118-4139. <a href="https://doi.org/10.3390/ijerph8114118">https://doi.org/10.3390/ijerph8114118</a>

Beaudet, G. (2019, August 7). Le parc de stationnement, vestige de la culture de l'automobile [radio interview]. In *La matinale d'été*. Radio-Canada Ohdio. <a href="https://ici.radio-canada.ca/ohdio/premiere/emissions/matinale-ete/segments/chronique/127616/stationnement-parking-voiture-automobile-etage-surface-souterrain-urbanisme">https://ici.radio-canada.ca/ohdio/premiere/emissions/matinale-ete/segments/chronique/127616/stationnement-parking-voiture-automobile-etage-surface-souterrain-urbanisme</a>

Beauregard-Tellier, F. (2004, January 19). Fuel Efficiency of Motor Vehicles in Canada. Parliamentary Research Branch.

https://publications.gc.ca/collections/Collection-R/LoPBdP/PRB-e/PRB0348-e.pdf

Boutros, M. (2019, March 25). *La dépendance à la voiture est-elle psychologique?* Le Devoir.

https://www.ledevoir.com/societe/transports-urbanisme/550597/la-dependance-a-la-voiture-est-elle-psychologique

Boyle, D., Simms, A., Tricarico, E., Murray, L. and Gillett, R. (2020, August). Smoking out the climate: Lessons from the advertising ban on tobacco for tackling the climate emergency. Badvertising.

https://static1.squarespace.com/static/5ebd0080238e863d04911b51/t/5f1fe0809 9156872c6cale59/1595924618033/Smoking+Out+The+Climate+FINAL.pdf

Brownell, K. D. et Warner, K. E. (2009, March). The Perils of Ignoring History: Big Tobacco Played Dirty and Millions Died. How Similar Is Big Food? *Milbank Quarterly*, 87(1), 259-294. https://doi.org/10.1111/j.1468-0009.2009.00555.x

Canada. (2007a, July 31). Competition Bureau Reaches Further Agreements with Six Cigarette Companies to Stop Using "light" and "mild" on Cigarette Packages. <a href="https://www.canada.ca/en/news/archive/2007/07/competition-bureau-reaches-further-agreements-six-cigarette-companies-stop-using-light-mild-cigarette-packages.html">https://www.canada.ca/en/news/archive/2007/07/competition-bureau-reaches-further-agreements-six-cigarette-companies-stop-using-light-mild-cigarette-packages.html</a>

Canada. (2007b, November 7). *Motor Vehicle Fuel Consumption Standards Act Proclaimed.* 

https://www.canada.ca/en/news/archive/2007/11/motor-vehicle-fuel-consumption-standards-act-proclaimed.html

Canada (Attorney General) v. JTI-MacDonald Corp., 2007 SCC 30. https://decisions.scc-csc.ca/scc-csc/scc-csc/en/item/2369/index.do

Canada Revenue Agency (CRA). (2013, July 19). *Goods subject to excise tax*. <a href="https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/x3-1/x3-1-goods-subject-excise-tax.html">https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/x3-1/x3-1-goods-subject-excise-tax.html</a>

Canada Revenue Agency (CRA). (2022, September 8). Subject Vehicles Under the Select Luxury Items Tax Act.

https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/ltn2/subject-vehicles-under-select-luxury-items-tax-act.html

Canadian Cancer Society. (2013, June 14). *Canada's war on tobacco turns 50*. <a href="https://www.newswire.ca/news-releases/canadas-war-on-tobacco-turns-50-512604771.html">https://www.newswire.ca/news-releases/canadas-war-on-tobacco-turns-50-512604771.html</a>

Canadian Centre on Substance Use and Addiction (CCSA). (2023). Canadian Substance Use Costs and Harms (2007-2020).

https://csuch.ca/documents/reports/english/Canadian-Substance-Use-Costs-and-Harms-Report-2023-en.pdf

Canadian Vehicle Manufacturers' Association (CVMA). (2016, April 2). Automotive industry reaction to the tabling of Bill 104.

https://www.cvma.ca/press-release/automotive-industry-reaction-to-the-tabling-of-bill-104/

Canadian Vehicle Manufacturers' Association (CVMA). (2020, November 16).

CVMA Statement on Quebec Internal Combustion Engine ban.

<a href="https://www.cvma.ca/statement/cvma-statement-quebec-internal-combustion-engine-ban/">https://www.cvma.ca/statement/cvma-statement-quebec-internal-combustion-engine-ban/</a>

CBC News. (2012, November 19). A legal history of smoking in Canada. <a href="https://www.cbc.ca/news/health/a-legal-history-of-smoking-in-canada-1.982">https://www.cbc.ca/news/health/a-legal-history-of-smoking-in-canada-1.982</a> <a href="https://www.cbc.ca/news/health/a-legal-history-of-smoking-in-canada-1.982">https://www.cbc.ca/news/health/a-legal-history-of-smoking-in-canada-1.982</a>

Competition Act. R.S.C. (1985), ch. C-34. https://laws-lois.justice.gc.ca/eng/acts/c-34/FullText.html Consumer Protection Act. RLRQ p-40.1. https://www.legisquebec.gouv.gc.ca/en/document/cs/P-40.1

Cooke, D. (2017, December). Time for a U-Turn: Automakers' History of Intransigence and an Opportunity for Change. Union of Concerned Scientists. <a href="https://www.ucsusa.org/resources/time-u-turn">https://www.ucsusa.org/resources/time-u-turn</a>

Crépault, A. (2024, February 23). Tous les chiffres de ventes de véhicules neufs au Québec en 2023. Automédia.

https://www.automedia.ca/tous-les-chiffres-de-ventes-de-vehicules-neufs-au-quebec-en-2023/

Dunsmuir, M., Blanchette, C., Chenier, N. M., and Dupuis, J. (1998). *Tobaccp and Health: Government Responses*. Parliamentary Research Branch. <a href="https://publications.gc.ca/Collection-R/LoPBdP/modules/prb98-8-tobacco/index-e.htm#HISTORIQUE">https://publications.gc.ca/Collection-R/LoPBdP/modules/prb98-8-tobacco/index-e.htm#HISTORIQUE</a>

Duval, A. (2023, February 8). La taxe sur le tabac augmente au Québec, mais reste la plus faible au pays. Radio-Canada.

https://ici.radio-canada.ca/nouvelle/1954382/hausse-taxe-tabac-lutte-tabagisme-quebec

eMarketer. (2023, July). *Digital Ad Spending by Industry 2022, Canada* [unpublished document].

Environment and Climate Change Canada (ECCC). (2018, August 28). Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations: discussion paper.

https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/automobile-truck-emission-regulations-discussion.html

Environment and Climate Change Canada (ECCC). (2023, April 14). Canada's National Greenhouse Gas Inventory (1990–2021).

https://www.canada.ca/en/environment-climate-change/news/2023/04/canadas-national-greenhouse-gas-inventory-19902021.html

Environmental Defence. (2023, July 5). *Times Change but Car Compant Excuses Stay the Same* [video]. YouTube.

https://www.youtube.com/watch?v=hvE2W01SHrE

Équiterre. (2021a, October 19). Équiterre. (2021a, 19 October). The rise of light-duty trucks in Canada: Reversing the trend. Synthesis. <a href="https://cms.equiterre.org/uploads/Fichiers/Full-report.pdf">https://cms.equiterre.org/uploads/Fichiers/Full-report.pdf</a>

Équiterre. (2021b). Sans limite: La publicité automobile au Canada. <a href="https://cms.equiterre.org/uploads/sanslimite-lapubliciteautomobileaucanada.">https://cms.equiterre.org/uploads/sanslimite-lapubliciteautomobileaucanada.</a>

Équiterre and Environmental Defence. (2022). *Profiting from Pollution: How the auto industry is fighting against clean car regulations.* 

https://cms.equiterre.org/uploads/Profiting-from-Pollution-Main-Report-ENG.pdf

Équiterre. (2023, September 6). SUVs: The majority of Quebecers in favour of stricter regulations on car ads.

https://www.equiterre.org/en/articles/poll-suvs-quebec-equiterre-advertising

FEBIAC. (2023). Code FEBIAC en matière de publicité pour les véhicules automobiles, leurs composants et accessoires.

https://staging.febiac.be/sites/default/files/media/file/2023-10/20230322%20-%20FEBIAC%20-%20Code%20de%20Publicite.pdf

Fitzpatrick, M. (2011, July 29). *Top court rules feds not liable in smoking lawsuits*. CBC News.

https://www.cbc.ca/news/politics/top-court-rules-feds-not-liable-in-smoking-lawsuits-1.992038

Frost, R. (2022, August 24). France becomes first European country to ban fossil fuel ads - but does the new law go far enough? Euronews.

https://www.euronews.com/green/2022/08/24/france-becomes-first-european-country-to-ban-fossil-fuel-ads-but-does-the-new-law-go-far-e

Girard-Bossé, A. (2023, November 1). Exit les vapoteuses aromatisées au Québec. La Presse.

https://www.lapresse.ca/actualites/sante/2023-11-01/exit-les-vapoteuses-aromatisees-au-quebec.php

Godbout, L. and Robert-Angers, M. (2024, March 4). *It's time to index fuel taxes*. Policy Options.

https://policyoptions.irpp.org/magazines/march-2024/index-fuel-taxes/

Gruber, V., Peignier, I. and Dubuc, C. (2024, January 10). *Pratiques et tactiques de vente des concessionnaires automobiles au Québec.* CIRANO. <a href="https://doi.org/10.54932/BRYK4403">https://doi.org/10.54932/BRYK4403</a>

Health Canada. (2022a, March). Health Impacts of Traffic-Related Air Pollution in Canada.

https://publications.gc.ca/collections/collection\_2022/sc-hc/H144-91-2022-en\_a.pdf

Health Canada. (2022b, 19 December). *Overview of Canada's Tobacco Strategy*. <a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-tobacco-strategy/overview-canada-tobacco-strategy/html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/canada-tobacco-strategy/overview-canada-tobacco-strategy.html</a>

Health Canada. (2023). *Health effects of smoking and second-hand smoke*. <a href="https://www.canada.ca/en/health-canada/services/smoking-tobacco/health-effects-smoking-second-hand-smoke.html">https://www.canada.ca/en/health-canada/services/smoking-tobacco/health-effects-smoking-second-hand-smoke.html</a>

Imperial Tobacco Canada Ltd. v. Canada (Attorney General), 2005 QCCA 725. https://t.soquij.ca/k2W9E

Info-tabac. (2003, November). Fin des commandites du tabac et promotion dans les bars.

https://info-tabac.ca/fin-des-commandites-du-tabac-et-promotion-dans-les-bars/

Info-tabac. (2013). Petite histoire de la lutte contre le tabac au Québec. <a href="https://info-tabac.ca/petite-histoire-de-la-lutte-contre-le-tabac-au-quebec/">https://info-tabac.ca/petite-histoire-de-la-lutte-contre-le-tabac-au-quebec/</a>

Info-tabac. (2017, March). La fin de la publicité pour les produits du tabac : une bataille épique.

https://info-tabac.ca/la-fin-de-la-publicite-pour-les-produits-du-tabac-une-bataille-epique

Insurance Institute for Highway Safety (IIHS). (2023, November 14). Vehicles with higher, more vertical front ends pose greater risk to pedestrians. <a href="https://www.iihs.org/news/detail/vehicles-with-higher-more-vertical-front-ends-pose-greater-risk-to-pedestrians">https://www.iihs.org/news/detail/vehicles-with-higher-more-vertical-front-ends-pose-greater-risk-to-pedestrians</a>

JTI-MacDonald Corporation v. Canada (Attorney General), 2005 QCCA 726 <a href="https://www.canlii.org/en/qc/qcca/doc/2005/2005qcca726/2005qcca726.html">https://www.canlii.org/en/qc/qcca/doc/2005/2005qcca726/2005qcca726.html</a>

Kenner, D. (director). (2015). *Merchants of Doubt* [documentary film]. Participant Media.

Labrie, C. (2023, April 18). Des stationnements réservés aux petites voitures au centre-ville de Chicoutimi. Le Quotidien.

https://www.lequotidien.com/2023/04/18/des-stationnements-reserves-aux-petites-voitures-au-centre-ville-de-chicoutimi-df239d3a1c78d61d191711d36327a210/

Lachance, N. (2024, March 19). Seriez-vous prêts à payer 90 000\$ de taxes vertes pour rouler avec un pick-up ou une voiture sport? Le Journal de Québec. <a href="https://www.journaldequebec.com/2024/03/19/90-000-de-taxes-pour-rouler-avec-un-pick-up">https://www.journaldequebec.com/2024/03/19/90-000-de-taxes-pour-rouler-avec-un-pick-up</a>

La Presse canadienne. (2022, April 9). Climat : une éventuelle « zone zéro émissions » à Montréal.

https://ici.radio-canada.ca/nouvelle/1875460/climat-zone-zero-emission-mon treal

La Presse canadienne. (2023, May 31). Des avertissements liés au tabagisme bientôt imprimés sur chaque cigarette. Radio-Canada.

https://ici.radio-canada.ca/nouvelle/1983623/avertissements-tabagisme-imprimes-sur-cigarettes-canada

Laviolette, J. (2020, October). L'état de l'automobile au Québec : constats, tendances et conséquences. Fondation David Suzuki.

https://fr.davidsuzuki.org/wp-content/uploads/sites/3/2020/10/Rapport\_Fondation-David-Suzuki-Final-Part1-Dependence-auto-10.2020.pdf

Lee, B. and Brown, S. (2021, May). Social & locational impacts on electric vehicle ownership and charging profiles. *Energy Reports*, 7(2), 42-48. <a href="https://doi.org/10.1016/j.egyr.2021.02.057">https://doi.org/10.1016/j.egyr.2021.02.057</a>

Loi concernant la lutte contre le tabagisme. L.R.Q. I-6.2. https://www.legisquebec.gouv.qc.ca/fr/document/lc/L-6.2?langCont=fr#sc-nb:

Lubeck, A. (2023, July 14). Une «aberration écologique»: les VUS devront payer plus cher pour se stationner à Paris. 24 heures.

https://www.24heures.ca/2023/07/14/une-aberration-ecologique-les-vus-devront-payer-plus-cher-pour-se-stationner-a-paris

Martinek, L. (2021). Adoption des véhicules électriques au Québec : enjeux sociaux et fiscaux. Chaire de gestion du secteur de l'énergie - HEC Montréal. <a href="https://energie.hec.ca/cqse-hec-re022021/">https://energie.hec.ca/cqse-hec-re022021/</a>

Mercier, H. (2022, June 13). Washington impose des frais d'immatriculation en fonction du poids des véhicules [chronique]. In *Le 15-18*. Ohdio. <a href="https://ici.radio-canada.ca/ohdio/premiere/emissions/le-15-18/segments/chronique/405064/district-columbia-saaq-plaque">https://ici.radio-canada.ca/ohdio/premiere/emissions/le-15-18/segments/chronique/405064/district-columbia-saaq-plaque</a>

Miner, P. Smith, B., Jani, A., McNeill, G. and Gathorne-Hardy, A. (2024, February). Car harm: A global review of automobility's harm to people and the environment. Journal of Transport Geography, 115. https://doi.org/10.1016/j.itrangeo.2024.103817

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP). (2024). Les émissions de gaz à effet de serre des véhicules automobiles.

https://www.environnement.gouv.qc.ca/changements/ges/reglement.htm

Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP). (2024). Norme véhicules zéro émission (VZE). <a href="https://www.environnement.gouv.gc.ca/changementsclimatiques/vze/">https://www.environnement.gouv.gc.ca/changementsclimatiques/vze/</a>

Moquin-Beaudry, L. (2024, April 11). *Vers une troisième vague de piétonnisation*. Pivot.

https://pivot.quebec/2024/04/11/vers-une-troisieme-vague-de-pietonnisation/

Morency, C., Milord, B. and Bourdeau, J.-S. (2021, June). Les camions légers: Définitions et évolution de l'offre. Chaire Mobilité - Polytechnique Montréal. <a href="https://cms.equiterre.org/uploads/rapport1\_chairemobilite\_1.pdf">https://cms.equiterre.org/uploads/rapport1\_chairemobilite\_1.pdf</a>

Morency, C., Milord, B., Bourdeau, J.-S., Verrault, H. and Khan, N. A. (2022, February). Les camions légers: Impacts de la transformation du parc de véhicules légers au Québec. Chaire Mobilité - Polytechnique Montréal. <a href="https://cms.equiterre.org/uploads/Rapport3">https://cms.equiterre.org/uploads/Rapport3</a> ChaireMobilite.pdf

Motor Vehicle Fuel Consumption Standards Act. R.S.C. (1985), ch. M-9. <a href="https://laws-lois.justice.qc.ca/eng/acts/m-9/">https://laws-lois.justice.qc.ca/eng/acts/m-9/</a>

Motor Vehicle Safety Act. S.C. (1993), ch. 16. https://laws-lois.justice.gc.ca/eng/acts/m-10.01/ Mowat, J. (2015, November 18). A Brief History of Automotive Marketing. PrintMag. <a href="https://www.printmag.com/advertising/a-brief-history-of-automotive-marketing/">https://www.printmag.com/advertising/a-brief-history-of-automotive-marketing/</a>

National Association of City Transportation Officiels (NACTO). (2023, July 21). *Tell USDOT That Deadly Vehicles Shouldn't Receive 5-Star Safety Ratings*. <a href="https://nacto.org/2023/07/21/tell-usdot-that-deadly-vehicles-shouldnt-receive-5-star-safety-ratings/">https://nacto.org/2023/07/21/tell-usdot-that-deadly-vehicles-shouldnt-receive-5-star-safety-ratings/</a>

Non-smokers' Health Act. R.S.C. (1985), ch. 15. https://laws-lois.justice.gc.ca/eng/acts/n-23.6/

Pavic, C. (2024, February 15). *Indexer la taxe sur l'essence?* Le Devoir. https://www.ledevoir.com/economie/807331/fiscalite-indexer-taxe-essence

Poirier, V. (2013, September 11). « If you think, don't drive! »: l'automobile comme objet de critiques environnementales, 1960-70. Nouvelle initiative Canadienne en histoire de l'environnement.

https://niche-canada.org/2013/09/11/if-you-think-dont-drive-lautomobile-comme-objet-de-critiques-environnementales-1960-70/

Radio-Canada. (2022, October 20). Un système de tarification kilométrique étudié dans le Grand Montréal.

https://ici.radio-canada.ca/nouvelle/1926175/tarification-kilometrique-montrea

Tobacco Products Appearance, Packaging and Labelling Regulations.

DORS/2019-107. <a href="https://laws-lois.justice.qc.ca/eng/regulations/SOR-2019-107/">https://laws-lois.justice.qc.ca/eng/regulations/SOR-2019-107/</a>

Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations. DORS/2010-201. https://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-201/

Regulation respecting greenhouse gas emissions from motor vehicles. RLRQ q-2, r. 17. https://www.legisquebec.gouv.qc.ca/en/document/cr/Q-2,%20r.%2017

Tobacco Products Labelling Regulations (Cigarettes and Little Cigars).

DORS/2011-177. https://laws-lois.justice.gc.ca/eng/regulations/SOR-2011-177/

Tobacco Products Information Regulations. DORS/2000-272. https://laws-lois.justice.gc.ca/eng/regulations/SOR-2000-272/ Reid, J., Hammond, D., Burkhalter, R. and Rynard, V. (2022). *Tobacco Use in Canada: Patterns and Trends, 2022 Edition*. University of Waterloo. <a href="https://uwaterloo.ca/tobacco-use-canada/sites/default/files/uploads/files/tobacco-use\_in\_canada\_2022\_4.pdf">https://uwaterloo.ca/tobacco-use-canada/sites/default/files/uploads/files/tobacco-use\_in\_canada\_2022\_4.pdf</a>

Natural Resources Canada (NRCAN). (2021). 2021 Fuel Consumption Guide. <a href="https://natural-resources.canada.ca/sites/nrcan/files/oee/pdf/transportation/tools/fuelratings/2021%20Fuel%20Consumption%20Guide.pdf">https://natural-resources.canada.ca/sites/nrcan/files/oee/pdf/transportation/tools/fuelratings/2021%20Fuel%20Consumption%20Guide.pdf</a>

Rivest, G. (2021). Le monde utopique du VUS. BESIDE. https://beside.media/fr/nouveaux-recits/le-monde-utopique-%20du-vus/

RJR-MacDonald Inc. v. Canada (Attorney General), 1995 3 SCR 199. https://decisions.scc-csc.ca/scc-csc/scc-csc/en/item/1290/index.do

Rous, T. (2019). Canada's Vehicle GHG Regulations: Addressing Rising Emissions From The Light-Duty Truck Class [unpublished document]. Horizon Advisors.

Rothmans, Benson & Hedges Inc. v. Canada (Attorney General), 2005 QCCA 727. <a href="https://t.soquij.ca/Go4k7">https://t.soquij.ca/Go4k7</a>

Saint-Arnaud, P. (2023, April 21). Québec soumettra deux projets pour rehausser les normes. La Presse.

https://www.lapresse.ca/actualites/environnement/2023-04-21/emissions-deges-des-vehicules/quebec-soumettra-deux-projets-pour-rehausser-les-norm es.php

Seale, A. (2020, March 4). L'emballage neutre des paquets de cigarettes, une réalisation historique. La Presse.

https://www.lapresse.ca/debats/opinions/2020-03-04/I-emballage-neutre-des-paquets-de-cigarettes-une-realisation-historique

Service public fédéral (SPF) Économie. (undated). Code de la publicité écologique.

https://economie.fgov.be/sites/default/files/Files/Ventes/code-publicite-ecologique.pdf

Société de l'assurance automobile du Québec (SAAQ). (2012). Rapport sur l'encadrement de la publicité automobile.

https://saaq.gouv.qc.ca/blob/saaq/documents/publications/rapport-encadrement-publicite-automobile.pdf

Société de l'assurance automobile du Québec (SAAQ). (2023, December 13). Coût d'immatriculation additionnel pour les véhicules de forte cylindrée.

https://saaq.gouv.qc.ca/saaq/tarifs-amendes/immatriculation/cout-immatriculation-additionnel-vehicules-forte-cylindree

Statistics Canada. (2019, 11 September). Number of Transportation Vehicles/Equipment, Canada (Table 12-1).

https://www144.statcan.gc.ca/nats-stna/tables-tableaux/tbl12-1/tbl12-1-CAN-eng.htm

Statistics Canada. (2020, September 10). *Vehicle registrations, by type of vehicle, inactive (Table 23-10-0067-01)*.

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2310006701&request\_locale=en

Statistics Canada. (2023a, September 11). Canadian Tobacco and Nicotine Survey, 2022.

https://www150.statcan.gc.ca/n1/daily-quotidien/230911/dq230911a-eng.htm

Statistics Canada. (2023b, November 2). Vehicle registrations, by type of vehicle and fuel type (Table 23-10-0308-01).

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2310030801&request\_locale=en

Statistics Canada. (2024). New motor vehicle registrations, quarterly (Table 20-10-0024-02).

https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2010002401&request\_locale=en

Stanford Research into the Impact of Tobacco Advertising (SRITA). (undated). Cigs vs. eCigs. https://tobacco.stanford.edu/comparisons/cigs-vs-ecigs/

Stopping Tobacco Organizations & Products (STOP). (2020). Addiction at Any Cost: Philip Morris International Uncovered. <a href="https://exposetobacco.org/pmi-uncovered/">https://exposetobacco.org/pmi-uncovered/</a>

Sustainable Transportation Action Research Team (START). (2022). Modélisation d'une norme sur les véhicules zéro émission et de subventions pour les véhicules légers au Canada (2023-2035).

https://cms.equiterre.org/uploads/Rapport\_technique\_Axsen\_FR\_2023-01-25-205806\_mixj.pdf

Tobacco and Vaping Products Act. S.C. (1997), ch. 13. https://laws-lois.justice.gc.ca/eng/acts/t-11.5/

Toyota Canada. (2019, May 21). Crossovers vs. SUVs - What's the Difference? https://www.toyota.ca/toyota/en/connect/3671/crossover-vs-suv

Transport Canada. (2023, November 29). Canadian Vehicle Specifications (CVS) [data ensemble].

https://open.canada.ca/data/en/dataset/913f8940-036a-45f2-a5f2-19bde76c1 252

Tremblay, A. (2012). L'avènement de l'automobile au Québec : une petite Révolution tranquille au tournant du XXe siècle. *Cap-aux-Diamants*, (111), 17-21. <a href="https://www.erudit.org/fr/revues/cd/2012-n111-cd0331/67579ac.pdf">https://www.erudit.org/fr/revues/cd/2012-n111-cd0331/67579ac.pdf</a>

Wallonie. (2022, June 27). Vers une réforme de la fiscalité automobile. https://www.wallonie.be/fr/actualites/vers-une-reforme-de-la-fiscalite-automobile

World Health Organization (WHO). (2022, 31 May). WHO raises alarm on tobacco industry environmental impact.

https://www.who.int/news/item/31-05-2022-who-raises-alarm-on-tobacco-industry-environmental-impact