

Summary Report

The Rise of Light-Duty Trucks in Canada: Reversing the Trend.

In Canada, the transportation sector is responsible for one-quarter of greenhouse gas (GHG) emissions, with more than half coming from light-duty trucks. Domestic light-duty truck sales increased by 280% between 1990 and 2018.

A phenomenon with consequences in many sectors.

Climate

Between 1990 and 2018, the number of light-duty trucks increased by **280%** and their GHG emissions by **156%**, while the number of cars increased by 10% and their GHG emissions decreased by 19%.

[ECCC \(2018\)](#).

Finances

Light-duty trucks cost on average **\$10 000** more than a standard in Canada. Since 1981, **65%** of the increase in household spending on transportation was due to the purchase of new light-duty trucks.

[Morency et al. \(2021a\)](#).

Use of space

In 20 years, the space occupied by Montreal's vehicle fleet has increased by **46%**, from 1,338 to 1,948 hectares, the equivalent of losing **1,355** American football fields in area.

[Morency et al. \(2021b\)](#)

Public safety

Crashes involving sport utility vehicles (SUVs) are more fatal for the person driving the other vehicle (**+28%**) and more common (**+10%**).

[Banholzer \(2020\)](#); [Monfort et Nolan \(2019\)](#).

Road network

The higher number of larger and heavier vehicles results in longer and more frequent traffic jams and causes premature wear and tear.

[Morency et al. \(2021b\)](#)

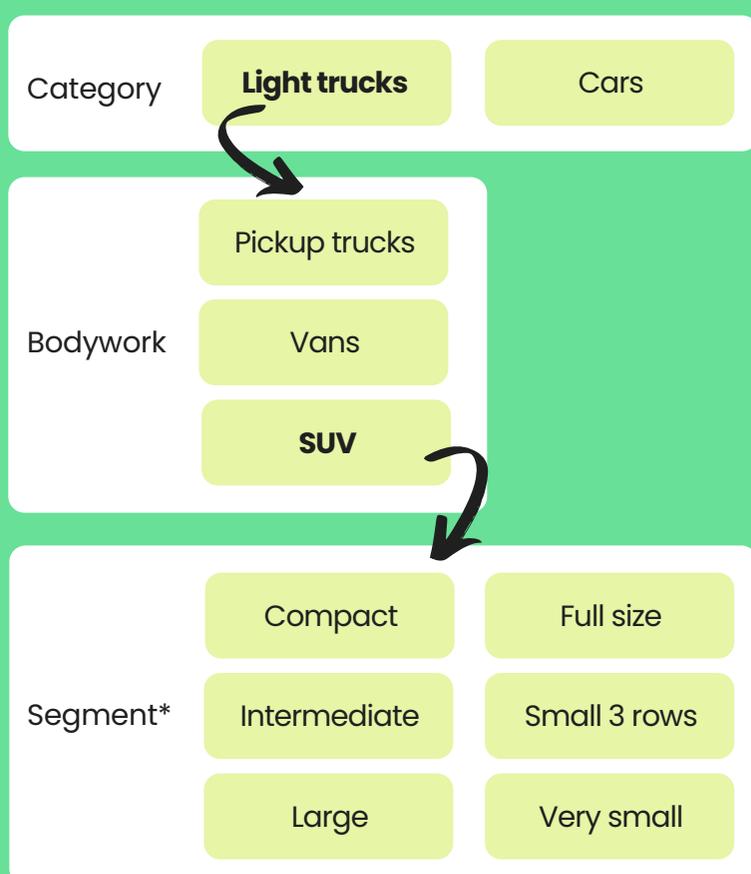
Definitions and issues regarding classification.

What is a light-duty truck?

A light-duty truck is:

- 1) either **4-wheel drive** or with a gross vehicle weight rating of more than **6,000 pounds** and has one of the **4 features defined** by the Government of Canada, such as an approach angle of at least 28 degrees;
- 2) designed to: carry more than **10 people**; provide **temporary shelter**; carry goods on an **open platform**; provide a volume for the **carriage of cargo** greater than that for the carriage of passengers; or permit the carriage of cargo with the **seats removed**.

[Morency et al. \(2021\)](#).



*Examples of SUV segments used by the industry. [Morency et al. \(2021\)](#).

Inconsistent vehicle classifications

In Canada, there is **no consensus on the definition** of light-duty vehicles.

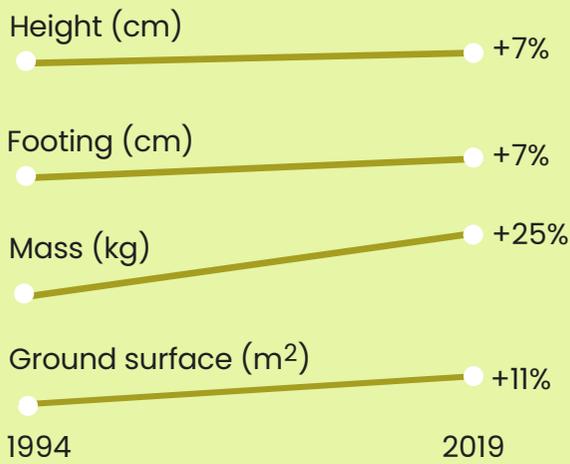
Light trucks are **defined differently between levels of government, departments, provinces and within the automotive industry**: weight, passenger capacity, primary function, etc.

Very **different vehicles** are classified in the **same category**, and **similar vehicles** in **different categories**.

The light truck category is subject to **less stringent GHG emission standards** than cars.

Understanding the evolution in the supply of light-duty trucks.

Evolution of vehicle characteristics in Canada



+42%  

increase in the number of models offered in Canada since 1994, from 278 to 383 models.



The arrival of **crossover utility vehicles (CUVs)** in 2000, which are often smaller than traditional SUVs, has contributed to the popularity of light trucks.

+60%  

increase in the number of versions per model offered in Canada since 1994, from 556 to 889 versions.

[Morency et al. \(2021\)](#).

Understanding the demand for light-duty trucks.

Diversifying demand

Before

- Household with above average income
- Men
- People aged 55+ years
- Large families
- People living in suburban or rural areas

Today

- All income levels
- More women
- More people aged between 35 and 44 years
- More couples with no children
- More people living in urban areas

[Morency et al. \(2021a\)](#)

Social factors

- Dependency on solo driving
- Impression of increased security
- Influence of purchasing behaviour of family and friends

Economic factors

- Increased income and access to credit
- Maintenance of a stable oil price
- Favourable credit rates

Political factors

- Less stringent GHG emission standards
- Planning policies favouring urban sprawl

Industry practices

- Extended financing and attractive discounts
- Diversifying offer and introduction of less expensive CUVs
- Massive investments in marketing and preferred advertising for large vehicles

Understanding what motivates the purchase of light-duty trucks.

Socioeconomic context

Pickup trucks

- I carry material for work
- I tow recreational vehicles
- I am between 45 and 65 years old
- I live in a rural setting

SUV

- I already own an SUV
- My household is high income
- I have a large family
- I am between 25 and 34 years old
- I live in the suburbs or in the city

[CIRANO \(2021\)](#)

Traditional media, such as television and radio, and **social networks** also have an important **influence** on the **choice of vehicle** purchased.



Psychological aspects

- I value ambition and influence
- I like to drive
- I have less of an environmental identity
- I perceive my vehicle as indispensable



Vehicle-related aspects

- I am concerned about safety in the event of a collision and in winter conditions
- I seek comfort
- I prefer 4 wheel drive and a high driving position



External influence

The most common sources of information used when buying a vehicle are, in order: the **dealership, friends and family** and **third party websites**.

Understanding the role of automobile advertising.

Disproportionate investments

The automotive sector is the **2nd** largest investor in **digital advertising** in Canada with a **19%** share or **\$1,6 billion**.

79%

of automobile advertising in Canada promotes light-duty trucks.



Weak legal framework

In Canada, there is no federal control over automobile advertising before it is aired; the Canadian system acts only after receiving complaints.

The **environment** has **not yet been incorporated** into Canadian advertising **laws and standards**.

Problematic advertising messages



No mention of the vehicle's CO₂ emissions or fuel consumption



Dominance of the environment often presented by off-road vehicles.



Attractive financing terms and discounts, but full vehicle price often missing.



Promotion of a lifestyle around the individual car where vehicles appear safe.



Best practices

New Zealand

Advertisements shall not depict environmental damage in areas of significant conservation value.

United Kingdom

Advertisements must include the vehicle's fuel consumption and CO₂ emissions.

Sweden

Terms such as "environmentally friendly" can only be used if the product improves or does not harm the environment.

Belgium

The use of off-road locations in advertisements is restricted and misleading messages about environmental effects are prohibited.

[Brazeau et Denoncourt \(2021\)](#)

Reversing the trend: Équiterre's recommendations.



1 Recognize the rise of light-duty trucks in Canada as a climate and public health and safety issue.



2 Establish an automatic and universal classification system for light-duty vehicles.

To ensure a coherent framework for the automotive industry, promote cooperation between governments and facilitate the monitoring of government objectives.



3 Establish an independent advisory committee.

To assist the government in developing and implementing measures to reduce the supply and demand for light trucks.



4 Implement measures to reduce the demand for large vehicles.

- Establish a self-financing fee-rebate system
- Maintain the progressive increase in the price of carbon
- Introduce kilometre-based pricing
- Introduce a program to retire gas-guzzling vehicles



5 Implement measures to reduce the supply of large vehicles.

- Reform light-duty vehicle GHG emission regulations
- Impose "green requirements" on the auto industry



6 Increase regulation surrounding automobile advertising.



7 Develop campaigns to promote sustainable mobility.