Choosing a fuel-efficient vehicle

There are many factors to consider when you purchase a new vehicle. You may consider comfort, brand name, image, environmental impact and even emotional factors, along with practical factors such as the type of vehicle needed, purchase price and operating costs.

Fuel can be a substantial portion of a driver’s annual operating expenses. The fuel consumption ratings listed in Natural Resources Canada’s Fuel Consumption Guide range from 1.9 L/100 km combined city and highway driving for an electric Subcompact to 21.4 L/100 km for an SUV. Over a year the cost of fuel can range from $403 to $5,307. Additionally, carbon dioxide emissions can range from 0 to 476 g/km.

**Diesel**

Diesel Engine

A diesel engine is more efficient than its gasoline counterpart. This fact, combined with diesel fuel’s 10% average higher energy content per litre, results in a 15 to 30% reduction in fuel consumption.

**Plug-in Hybrid Electric Vehicles (PHEVs)**

Plug-in Hybrid Electric Vehicles (PHEVs)

To recharge their batteries, PHEVs need to be plugged in.

A series PHEV uses an internal combustion engine and an electric motor to propel the vehicle. In a blended PHEV, an internal combustion engine and an electric motor are connected to the wheels, and both propel the vehicle under most driving conditions. In both cases electric-only operation can occur.

PHEVs are hybrids that have high-capacity batteries that can be charged by plugging them in.

When operating in electric-only mode, a PHEV produces no tailpipe emissions.

**Battery-Electric Vehicles (BEVs)**

Battery-Electric Vehicles (BEVs)

BEVs are the most fuel-efficient vehicles.

To recharge their batteries, BEVs need to be plugged in.

BEVs use an electric motor that draws electricity from on-board rechargeable batteries. They are the most fuel-efficient vehicles available, with an average combined consumption rating of 2.3 L/100 km. However, electric vehicles have a limited driving range, typically 100 to 435 km, depending on conditions. BEVs produce no tailpipe emissions.

**HYBRID-ELECTRIC VEHICLES**

Hybrid-Electric Vehicles (HEVs)

HEVs use both a conventional internal combustion engine and an electric motor to achieve greater vehicle operating efficiency. A hybrid’s battery is recharged by the internal combustion engine and cannot be plugged in.

The typical hybrid offers fuel savings and CO₂ reductions of 20 to 40%.

**Plug-in Hybrid Electric Vehicles (PHEVs)**

Plug-in Hybrid Electric Vehicles (PHEVs)

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PHEVs are hybrids that have high-capacity batteries that can be charged by plugging them in.

When operating in electric-only mode, a PHEV produces no tailpipe emissions.