



2014 FUEL CONSUMPTION GUIDE



Natural Resources Canada's Office of Energy Efficiency Leading Canadians to Energy Efficiency at Home, at Work and on the Road

Aussi disponible en français sous le titre : Guide de consommation de carburant Cat. No. M141-5/2014E-PDF (On line)
ISSN 1717-466X

 \odot Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources Canada, 2014

For information regarding reproduction rights, contact Natural Resources Canada at ${\bf copyright.droitdauteur@nrcan-rncan.gc.ca}.$

Contents

Introduction	
A message from vehicle manufacturers	1
Comparing vehicles	1
About fuel consumption ratings	1
EnerGuide Label for Vehicles	2
Alternative fuels and technologies	3
The most fuel-efficient vehicles	4
Saving fuel: Tips on driving and maintenance	4
Understanding the tables	5
Vehicle tables	
Cars	<i>F</i>
Vans	E
Pickup trucks	(
Sport utility vehicles	[
Plug-in hybrid electric vehicles	E
Battery electric vehicles	F

This guide is produced by Natural Resources Canada (NRCan) in cooperation with vehicle manufacturers. The Office of Energy Efficiency (OEE) at NRCan thanks the Canadian Vehicle Manufacturers' Association and Global Automakers of Canada for their assistance in the production of the 2014 Fuel Consumption Guide. Special thanks are extended to Environment Canada for collecting and compiling the fuel consumption data provided by vehicle manufacturers.

The OEE, Canada's centre of excellence for energy, efficiency and alternative fuels information, is mandated to strengthen and expand Canada's commitment to energy efficiency in order to help address the Government of Canada's policy objectives. The annual *Fuel Consumption Guide* is one of a variety of decision-making tools available from the OEE that make the relative energy efficiency and energy performance of different products more visible to Canadian consumers.

Introduction

The 2014 Fuel Consumption Guide provides model-specific fuel consumption information about 2014 model year light-duty vehicles. The information can be used to compare the fuel consumption of different models and help you to select the most fuel-efficient vehicle that meets your everyday needs. The guide is published on the Web at vehicles.nrcan.gc.ca.

Fuel use is an ongoing expense and should be considered when purchasing or leasing a vehicle. Choosing the most fuel-efficient and appropriate size of vehicle, driving in a fuel-efficient manner, using your vehicle only when needed and following the manufacturer's operation and maintenance recommendations for your vehicle can save you fuel and money year after year — even more if fuel prices rise.

The choices you make about the vehicle you drive and how you drive it also have a significant impact on the environment and our health. Greenhouse gases (GHGs), particularly carbon dioxide (CO_2) , are produced when fuel is burned in your vehicle's engine. CO_2 emissions are directly proportional to the amount of fuel consumed – for every litre of gasoline used, about 2.3 kilograms (kg) of CO_2 are generated. Although not directly harmful to our health, CO_2 emissions contribute to climate change.

Visit **vehicles.nrcan.gc.ca** to find out more about buying and driving your vehicle to save fuel, save money and reduce your impact on the environment.

A message from vehicle manufacturers

The 2014 *Fuel Consumption Guide* and the EnerGuide fuel consumption label included with all new light-duty vehicles are produced in cooperation with vehicle manufacturers and Natural Resources Canada.

Purchasing a new vehicle is a major decision involving many factors. The information in this guide will assist you in comparing relative fuel consumption ratings among vehicles that meet your utility, performance and lifestyle needs. A range of fuel-efficient technologies is available across the fleet of new vehicles.

While the fuel consumption ratings of a vehicle are one purchase consideration, how you operate and maintain your vehicle also affects the amount of fuel consumed. To optimize fuel efficiency, your vehicle must be properly maintained and run on clean, high-quality fuels. To reduce the amount of fuel you use, always follow the recommendations for fuel formulation and for vehicle maintenance and operation provided in your owner's manual.

Together we can reduce the amount of fuel used for personal transportation and the resulting GHGs.





Comparing vehicles

Use the vehicle tables in this guide to compare the fuel consumption information for 2014 model year vehicles. The vehicle with the best fuel consumption ratings and lowest estimated annual fuel cost will save you fuel and money for years. Remember, the lower the litres per 100 kilometres (L/100 km) rating, the lower the fuel consumption.

To compare the fuel consumption ratings of 1995 to 2014 model year vehicles before you buy or lease, use our Fuel Consumption Ratings Web tool at **vehicles.nrcan.gc.ca**.

About fuel consumption ratings

The fuel consumption information contained in the annual *Fuel Consumption Guide* is collected in conjunction with Environment Canada's Energy and Transportation Directorate. Environment Canada monitors the emissions of new light-duty vehicles sold in Canada by collecting detailed data from manufacturers and importers and by testing selected vehicles.

Vehicle manufacturers test their own vehicles using standardized testing and analytical procedures to generate the fuel consumption data published in this guide and shown on the EnerGuide Label for Vehicles. Environment Canada compiles the data received from the vehicle manufacturers, and NRCan uses this data and other information to publish the *Fuel Consumption Guide*.

Vehicle manufacturers are not required to submit fuel consumption data for the following:

- sport utility vehicles (SUVs) and passenger vans with a gross vehicle weight rating (GVWR) of
 more than 4 536 kg (10 000 pounds [lb.]) GVWR is the weight of the vehicle plus maximum
 carrying capacity (passengers and cargo)
- other vehicles with a GVWR of more than 3 856 kg (8 500 lb.) or a curb weight of more than 2 722 kg (6 000 lb.) curb weight is the weight of the vehicle without passengers and cargo

Vehicles that exceed these limits are not tested, so their fuel consumption is not available for the guide or the EnerGuide label.

Also, in some cases, fuel consumption information was unavailable before publication, so some new vehicle models may not appear in this guide. To find the latest updated ratings, use our Fuel Consumption Ratings Web tool at **vehicles.nrcan.gc.ca** or consult your vehicle manufacturer or dealer.

Fuel consumption testing

It would be difficult to drive every model of new vehicle on the road to measure fuel consumption, and almost impossible to consistently duplicate on-road testing results because many variables can affect a vehicle's performance. Instead, a controlled laboratory testing procedure is followed to ensure that all vehicles are tested under identical conditions and that the results are consistent and repeatable.

1

The fuel consumption ratings shown on the 2014 EnerGuide label are based on two driving cycles (2-cycle testing methodology):

- city test simulates urban driving in stop-and-go traffic
- highway test simulates a mixture of open highway and rural road driving, typical of longer trips

NEW: Starting with the 2015 model year, vehicle manufacturers will use an improved testing procedure to determine the fuel consumption ratings of new light-duty vehicles. The Government of Canada has approved new test methods that are more representative of typical driving conditions and styles. These new test methods adjust the current city and highway ratings to account for air conditioner usage, cold temperature operation and driving at higher speeds with more rapid acceleration and braking (5-cycle testing methodology). It is important to know that, in most cases, for the same make and model, the new test methods produce ratings that are 10 to 20 percent higher than the current EnerGuide label ratings because they account for additional factors that better approximate everyday driving.

Because 2014 is a transition year for the introduction of the new fuel consumption testing, the vehicle tables in this guide provide both the current EnerGuide label ratings and estimated ratings that reflect the new test methods.

Note: For 2014 advanced technology vehicles, manufacturers were given the option of choosing either 2-cycle or 5-cycle test methodologies. For those manufacturers who submitted 2-cycle EnerGuide label ratings, these are provided in 2-cycle tables (see Tables E and F). Fuel consumption ratings based on the new 5-cycle testing method are also provided in separate tables (see Tables E and F) for all 2014 advanced technology vehicles. Remember, the 2-cycle fuel consumption ratings are not directly comparable to those based on the new 5-cycle testing method.

Your fuel consumption will vary

Fuel consumption ratings show the fuel consumption that may be achieved with a properly maintained vehicle driven with fuel efficiency in mind. The ratings provide a reliable comparison of the fuel consumption of different vehicles. However, no test can simulate all possible combinations of conditions that may be experienced by drivers. Your vehicle's fuel consumption will vary from published ratings, depending on how, where and when you drive.

The following factors will significantly affect the fuel consumption of your vehicle: your driving style and behaviour, vehicle acceleration, braking and driving speed, overall age and condition of your vehicle, temperature, weather, traffic and road conditions, and drive systems and powered accessories (e.g. air conditioning) installed on your vehicle. In addition, small variations in vehicle manufacturing will cause fuel consumption differences in the same make and model, and some vehicles do not attain optimal fuel consumption until they are "run in" for about 6 000 to 10 000 km.

Hybrid vehicles are particularly sensitive to driving conditions and behaviours and can exhibit greater variations in fuel consumption than conventional vehicles. Moderate differences in how, where and when you drive can have a significant impact on how much your hybrid's gasoline engine is used.

Published ratings are a useful tool for comparing vehicles before you buy, but keep in mind that even the new ratings that better reflect everyday driving are based on standardized tests and may not accurately predict the fuel consumption you will get on the road.

For more information on fuel consumption ratings and factors that affect fuel consumption, including tips to get the most fuel savings out of your new vehicle, visit **vehicles.nrcan.gc.ca**.

EnerGuide Label for Vehicles

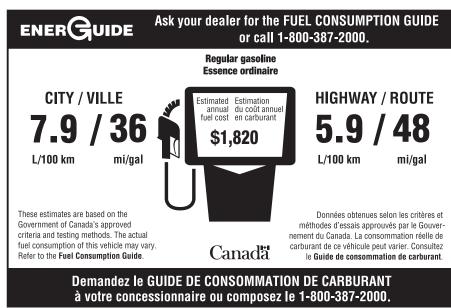
EnerGuide is the official Government of Canada mark for rating and labelling the energy consumption or energy efficiency of products including new vehicles, appliances, heating and cooling equipment, and houses that have had an energy efficiency evaluation. For more information on EnerGuide, visit **oee.nrcan.gc.ca/energuide**.

The EnerGuide Label for Vehicles is affixed to all new light-duty vehicles for retail sale in Canada, including passenger cars, pickup trucks, SUVs and vans. The label provides the model-specific fuel consumption values for the vehicle to which it is affixed. Use the EnerGuide label to compare new vehicle fuel consumption information and identify the most fuel-efficient new vehicle that meets your everyday needs.

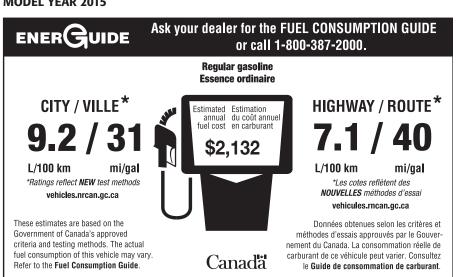
The EnerGuide label is affixed to the vehicle alone or as part of the vehicle options and price label. EnerGuide labels should remain on new vehicles until they are sold. If a new vehicle has no label, ask the dealer for the manufacturer's fuel consumption information for the vehicle.

For model year 2015 vehicles that you see at the dealership, the EnerGuide label will look the same but will provide fuel consumption ratings based on the new test methods. It may appear that the 2015 vehicle has worse fuel consumption than the 2014 vehicle because, for the same make and model, the new test methods can produce fuel consumption ratings that are 10 to 20 percent higher than the "current" ratings. The following labels show how the ratings for the same vehicle will change based on the new test methods.

MODEL YEAR 2014



MODEL YEAR 2015



Demandez le GUIDE DE CONSOMMATION DE CARBURANT à votre concessionnaire ou composez le 1-800-387-2000.

Remember: The fuel consumption of the vehicle has not changed – the new test methods used to determine the ratings are more reflective of on-road driving conditions and styles.

To see the ratings of all 1995–2014 model year vehicles adjusted to reflect the new test methods, use our Fuel Consumption Ratings Web tool at vehicles.nrcan.gc.ca.

Alternative fuels and technologies

Ethanol

Ethanol is a renewable fuel made from plants, which absorb CO₂ while growing. This absorption offsets some of the CO₂ emissions released from the tailpipe when ethanol is used to fuel a vehicle. Because of this, using ethanol in place of non-renewable fossil fuels, such as gasoline, reduces GHG emissions.

All major vehicle manufacturers design their vehicles to run year-round on gasoline containing an ethanol blend of up to 10 percent (E10), without modification. Several manufacturers offer flexible-fuel vehicles (FFVs) that can run on ethanol blends of up to 85 percent ethanol (E85) and 15 percent gasoline.

Biodiesel

Biodiesel is another fuel made from renewable resources (plant or animal materials). Using blends of diesel fuel with biodiesel can reduce GHG emissions compared with using unblended diesel. New diesel-powered vehicles are designed to operate on diesel fuel containing up to 5 percent biodiesel (B5) year-round, without modification.

Hybrid-electric vehicles

Hybrid-electric vehicles combine a battery-powered electric motor with a conventional internal combustion engine. Thus they offer the driving range and rapid refuelling of conventional vehicles, together with features of electric vehicles. Hybrids cannot be charged using external electricity – they use the gasoline engine, regenerative braking and the energy produced from coasting to recharge their batteries. Through increased fuel efficiency and reduced fuel use, hybrids can reduce GHG emissions.

Advanced technology vehicles

PLUG-IN HYBRID ELECTRIC

Plug-in hybrid electric vehicles (PHEVs) are hybrids with high-capacity batteries that can be charged by plugging them in. Although PHEVs do not have to be plugged in to be driven, they will not achieve optimal fuel consumption or maximum driving range without charging. There are two basic types of PHEVs available:

- series PHEVs an internal combustion engine is used to generate electricity only; an electric motor is used to propel the vehicle. They can run in electric-only mode until the battery needs to be recharged. The engine will then generate the electricity needed to power the electric motor. When operating in electric-only mode, series PHEVs produce no tailpipe emissions.
- blended PHEVs an internal combustion engine and an electric motor are connected to the wheels, and both propel the vehicle under most driving conditions. Electric-only operation may occur at lower speeds.

BATTERY-ELECTRIC

Battery-electric vehicles (BEVs) are propelled by an electric motor (or motors) that draw electricity from on-board rechargeable batteries. When the batteries run low, they must be plugged in to recharge. Electric vehicles produce no tailpipe emissions.

For more information on alternative fuels and advanced vehicle technologies, visit **vehicles.nrcan.gc.ca**.

The most fuel-efficient vehicles

NRCan recognizes the most fuel-efficient new light-duty vehicles in their class sold in Canada each model year. Best-in-class vehicles have the lowest estimated annual fuel use, based on 20 000 km driven and a combined rating of 55 percent city and 45 percent highway. For each class, the most fuel-efficient conventional vehicle and the most efficient advanced technology vehicle (where applicable) are recognized.

To see the most fuel-efficient vehicles for model year 2014, visit vehicles.nrcan.gc.ca.

Saving fuel: Tips on driving and maintenance

Once you have chosen the most fuel-efficient vehicle for your everyday needs, you can optimize your vehicle's efficiency and reduce your vehicle's impact on the environment by following these tips.

Consult your owner's manual. It contains important information about how to drive and maintain your vehicle for optimum performance and efficiency.

Driving tips

ACCELERATE GENTLY: The harder you accelerate the more fuel you use. In the city, where
about half of the fuel you consume is used to accelerate your vehicle, you can save as much as
15 percent by pressing the pedal gently. Imagine an open cup of coffee on your dashboard —
don't spill it!

- **MAINTAIN A STEADY SPEED**: You will not only consume less fuel but also help enhance traffic flow, minimize emissions and enjoy safer driving conditions. Use cruise control for highway driving, where conditions permit, to maintain a steady speed and optimize your fuel savings.
- ANTICIPATE TRAFFIC: Hard braking and rapid acceleration burn more fuel and are unsafe.
 Drive defensively and watch ahead for changes in traffic flow. When possible, leave plenty of space between you and the vehicle in front of you.
- AVOID HIGH SPEEDS: The faster a vehicle travels above 80 km/h, the more fuel it consumes.
 For example, a vehicle uses about 20 percent more fuel to travel at 120 km/h than to travel at 100 km/h. Slow down for safer and more fuel-efficient driving.
- COAST TO DECELERATE: By anticipating slowdowns and removing your foot from the
 accelerator as early as possible, you can decrease your speed and conserve fuel. Most vehicles
 today have fuel-injection systems that automatically shut off the flow of fuel to the engine
 when the accelerator is released, so take advantage by coasting.
- DON'T IDLE UNNECESSARILY: If you are going to be stopped for more than 60 seconds when parked turn the engine off.
- USE AIR CONDITIONING SPARINGLY: Due to the extra load on the engine, air
 conditioning can increase your vehicle's fuel consumption by 20 percent. Roll down your
 windows when city driving, or use your vehicle's flow-through ventilation on the highway.
- LIGHTEN YOUR LOAD: Roof and bicycle racks decrease your vehicle's aerodynamics and heavy items in your trunk add weight, causing your vehicle to burn more fuel. Take only what you need.
- MAKE ONE LONG TRIP INSTEAD OF SEVERAL SHORT ONES: Separate trips of less than 5 km do not allow a cold engine to reach its peak operating temperature, resulting in increased fuel consumption and emissions. Combine trips into one outing to save time, fuel and money.
- DRIVE LESS OFTEN: You can reduce your fuel consumption to zero by walking, biking, carpooling or using public transit.

Maintenance tips

- FOLLOW YOUR VEHICLE'S RECOMMENDED MAINTENANCE SCHEDULE:
 A poorly maintained vehicle may consume more fuel. Poor maintenance adversely affects performance, may result in higher levels of emissions and often leads to expensive repairs and lower resale value.
- CHECK FLUID LEVELS AT LEAST ONCE A MONTH: Check and change the engine
 oil, engine coolant, automatic transmission and other fluids according to the manufacturer's
 recommendations in your owner's manual.
- **CHECK YOUR TIRES**: Measure the inflation level of your tires once a month, preferably when they are cold. Operating a vehicle with the tires under-inflated by just 56 kilopascals (8 pounds per square inch) can reduce the life of the tires by more than 10 000 km and increase the vehicle's fuel consumption by up to 4 percent. To find your vehicle's recommended tire pressure, look for the vehicle information placard affixed to your vehicle, or check your owner's manual.

Understanding the tables

Model

AWD	All-wheel drive – vehicle designed to operate with all wheels powered	
4WD/4X4	Four-wheel drive – vehicle designed to operate with either two wheels or four wheels powered	
FFV	Flexible-fuel vehicle – vehicle designed to operate on gasoline and ethanol blends of up to 85 percent ethanol	

Vehicle classes

Beginning with model year 2014, the vehicle classes used in this guide have been aligned with those used in the United States. Vehicles are now divided into the classes shown below. Note that the Special Purpose class used in previous years has been renamed as the Sport Utility Vehicle class.

CARS				
Class	Interior volume			
Two-seater (T)				
Compact				
Minicompact (I)	less than 2 405 L (85 cu. ft.)			
Subcompact (S)	2 405–2 830 L (85–99 cu. ft.)			
Compact (C)	2 830-3 115 L (100-109 cu. ft.)			
Mid-size (M)	3 115–3 400 L (110–119 cu. ft.)			
Full-size (L)	3 400 L (120 cu. ft.) or more			
Station wagon				
Small (WS)	less than 3 680 L (130 cu. ft.)			
Mid-size (WM)	3 680–4 530 L (130–159 cu. ft.)			

LIGHT TRUCKS				
Class	Gross vehicle weight rating			
Pickup truck				
Small (PS)	less than 2 722 kg (6 000 lb.)			
Standard (PL)	2 722–3 856 kg (6 000–8 500 lb.)			
Sport utility vehicle				
Small (US)	less than 2 722 kg (6 000 lb.)			
Standard (UL)	2 722-4 536 kg (6 000-10 000 lb.)			
Minivan (V)	less than 3 856 kg (8 500 lb.)			
Van				
Cargo (VC)	less than 3 856 kg (8 500 lb.)			
Passenger (VP)	less than 4 536 kg (10 000 lb.)			

Engine size/Motor/Cylinders

Total displacement of all cylinders (in litres [L]); electric motor peak power output (in kilowatts [kW]); number of engine cylinders.

Transmission

A = Automatic; **AM** = Automated manual; **AS** = Automatic with select shift; **AV** = Continuously variable; **M** = Manual; Number of gears/speeds (1–10)

Fuel type

X = Regular gasoline; Z = Premium gasoline; D = Diesel; E = E85; B = Electricity

Fuel consumption

Fuel consumption ratings are shown in litres per 100 kilometres (I/100 km). To compare fuel economy ratings expressed in miles per imperial gallon (mpg) or in miles per U.S. gallon (mpg [U.S.]), use our Fuel Consumption Ratings Web tool at **vehicles.nrcan.gc.ca**.

For FFVs, consumption values are provided for both gasoline and E85.

LABEL RATINGS

City and highway ratings are based on current testing methods and shown on the 2014 EnerGuide label.

NEW RATINGS

City and highway ratings are based on the new test methods that better reflect everyday driving. Note that these are approximate values that were generated from the label ratings, not from vehicle testing.

ADVANCED TECHNOLOGY VEHICLES

For 2014 advanced technology vehicles, manufacturers were given the option of choosing either 2-cycle or 5-cycle test methodologies. For those manufacturers who submitted 2-cycle EnerGuide label ratings, these are provided in 2-cycle tables (see Tables E and F). Energy/fuel consumption ratings based on the new testing methods are also provided. Ratings using different testing methods are not directly comparable.

For PHEVs, consumption values are provided for electric-only or blended electric and gasoline mode, and for gasoline-only operation.

To help you compare vehicles that use electricity, a conversion factor is used to convert electrical energy consumption values, expressed in kilowatt hours per 100 kilometres (kWh/100 km), into gasoline litres equivalent per 100 kilometres ($L_{\rm e}/100$ km). One litre of gasoline contains the energy equivalent of 8.9 kWh of electricity.

Estimated annual fuel cost

Using the EnerGuide label ratings, estimated annual fuel costs for model year 2014 are based on forecast prices of \$1.30/L for regular gasoline, \$1.42/L for premium gasoline, \$1.29/L for diesel fuel and \$0.12/kWh for electricity. Pricing for E85 is not provided in this guide.

Remember: Fuel prices higher than the above forecasts will result in annual costs higher than those in this guide and on the EnerGuide label.

Estimated annual fuel use

Using the EnerGuide label ratings, estimated annual fuel use is based on an annual driving distance of 20 000 km and a combined rating of 55 percent city driving and 45 percent highway driving.

The values provided for PHEVs reflect the two distinct modes of operation: 20 000 km driven exclusively in electric mode and 20 000 km driven exclusively in gasoline-only mode.

Note: The combined rating used to determine annual fuel use is calculated using city and highway fuel consumption values that are later rounded for publication. Consequently, vehicles with identical published city and highway fuel consumption ratings may not have identical estimated annual fuel use values because of the rounding process.

Estimated CO, emissions

Using the EnerGuide label ratings, tailpipe CO₂ emissions are based on the amount and type of fuel and conversion factors of 2.3 kg of CO₂ per litre of gasoline, 2.7 kg of CO₂ per litre of diesel fuel, 1.6 kg of CO₂ per litre of E85, and 0 kg of CO₂ per kWh of electricity.

NEW: Beginning with model year 2014, the CO₂ emissions values listed in the guide will be expressed in grams per kilometre (g/km) driven, to align with international standards. To convert the annual CO₂ values used in previous years to g/km, divide the kilograms per year by 20.

Remember: The lower your fuel use and CO, emissions, the lower your impact on the environment.

Range

For advanced technology vehicles, range is the estimated driving distance (in kilometres) on a fully charged battery or full tank of fuel.

Recharge time

For advanced technology vehicles, recharge time is the estimated time (in hours) to fully recharge the battery at 240 volts.

Converting to miles per gallon

To convert between L/100 km and mpg(imperial), use the following formulas:

$$mpg = \frac{282.48}{L/100 \text{ km}} \qquad L/100 \text{ km} = \frac{282.48}{mpg}$$

To convert between L/100 km and mpg (U.S.), use the following formulas:

mpg (U.S.) =
$$\frac{235.21}{L/100 \text{ km}}$$
 $L/100 \text{ km} = \frac{235.21}{\text{mpg (U.S.)}}$

1 imperial gallon = 1.2 U.S. gallons

Note: Many vehicles now have an onboard trip computer that can display on-road fuel use. In addition to fuel consumption values shown in L/100 km, fuel economy values are usually shown in **mpg (U.S.)**.

L/100 km	mpg	mpg (U.S.)
2.0	141	118
3.0	94	78
4.0	71	59
5.0	56	47
6.0	47	39
7.0	40	34
8.0	35	29
9.0	31	26
10.0	28	24
11.0	26	21
12.0	24	20
13.0	22	18
14.0	20	17
15.0	19	16