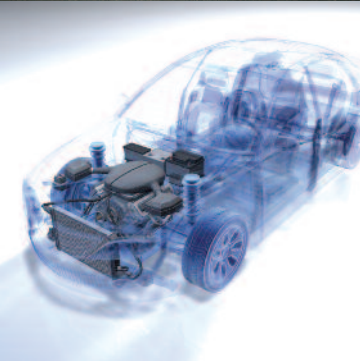


BUSTING MYTHS

ABOUT
FUEL EFFICIENCY
AND DRIVING



Canadians want to see reductions in their vehicle's fuel consumption, because it's good for the environment and good for their pocketbooks.

Many Canadians are unaware of how much fuel they can save by using new vehicle technologies and adopting eco-driving techniques. The fact is that by using technologies available today and those expected in the near future, new cars in Canada could consume 30% less fuel without sacrificing safety or performance. With some degree of trade-off against acceleration rates, reductions of 50% and more are possible in the near future.¹

In addition, Canadians could save up to 10-20% (and possibly more) on their fuel use in their current vehicles, simply by adopting a few key strategies in how they drive and the ways in which they maintain their vehicle.

Research has revealed that there are a number of myths that prevail among drivers about vehicles and driving habits. Many of these myths cloud the fact that every one of us can drive more efficiently, regardless of whether we drive an economy car, a luxury vehicle, or an SUV.

This brochure tackles the myths that exist about the new generation of fuel efficient vehicles, as well as some common beliefs about driving and car maintenance, including:

1. Newer vehicles are always more fuel efficient than older vehicles – **MYTH!**
2. It's more fuel efficient to use A/C on the highway than to leave the windows down – **MYTH!**
3. Choosing a fuel efficient vehicle means compromising safety – **MYTH!**
4. The best way to warm up your car in the winter is to let it idle – **MYTH!**
5. Choosing a fuel efficient vehicle means sacrificing comfort and space – **MYTH!**

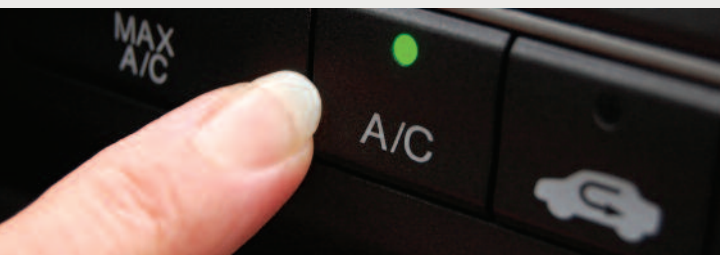
For more information about any of these myths, please refer to CAA and Pollution Probe's *Primer on Automobile Fuel Efficiency and Emissions*. This primer highlights facts about automobile fuel efficiency, including how it can be improved, what industry and government are doing to address the issue, and what you can do to reduce your current and future automobile emissions.

¹ According to experts at Argonne National Laboratories in the U.S.



MYTH – Newer vehicles are always more fuel efficient than older vehicles

While new vehicles produce much less smog-causing air contaminants than older, pre-2004 vehicles, average fuel efficiency levels haven't changed much since the mid-1980s. According to Transport Canada's Fuel Consumption Program, the average fuel efficiency of vehicles sold in the 2006 model year was no higher than those sold in the 1986 model year – twenty years earlier! Fortunately, in recent years, average fuel efficiency levels of new vehicles sold generally appear to be on an upwards trend.



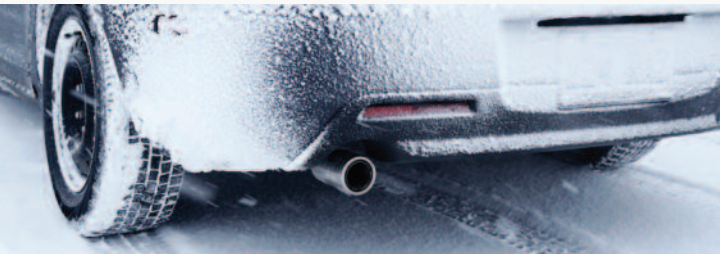
MYTH – It's more fuel efficient to use A/C on the highway than to leave the windows down

At normal highway speeds, there is a modest increase in air resistance if you have your windows down; however, the energy lost to this increase in air resistance is usually much less than the energy required to power your vehicle's air conditioner. It is only at speeds well above the posted legal limits when it becomes more fuel efficient to roll your windows up and turn on the A/C (and you should never drive this fast anyway!). As a general guide, until the noise from the wind rushing past the open windows becomes too loud to speak over, you are probably saving more fuel by keeping the windows down and the air conditioning off. If you choose to drive with the windows down to save fuel and reduce emissions, be mindful of your driving conditions – leaving windows open can sometimes pose a threat to occupant safety. With an open window, there is a risk of an object entering through it, and this can be a source of distraction when driving in heavy traffic.



MYTH – Choosing a fuel efficient vehicle means compromising safety

Recent analyses of modern vehicles and highway fatality statistics in the U.S. find no relationship between the fuel efficiency of vehicles and the risk of injury in a collision. The safety-versus-fuel efficiency myth stems from a shift in vehicle design decades ago. In the late 1970s, vehicles underwent significant *downsizing* to reduce weight and reduce fuel consumption. This fostered a belief among the public that fuel efficiency was only a feature of smaller, lighter cars. But because lighter cars of that time did not fare well in collisions with heavier vehicles, people assumed that you had to sacrifice safety for better fuel economy. Today, vehicle weight is no longer an accurate predictor of either fuel efficiency or safety performance. Technological sophistication and engineering design are the preferred means to make new vehicles as safe and fuel efficient as possible. Your next vehicle can be very safe and highly fuel efficient – there's no need to compromise! But remember, just because a vehicle is more fuel efficient than other vehicles it doesn't necessarily mean it's a safer choice. Always research both the fuel efficiency and safety ratings of a vehicle before you make your purchase.



MYTH – The best way to warm up your engine in the winter is to let it idle

When starting an automobile in cold temperatures, the vehicle's engine can burn up to 50 per cent more fuel while also releasing uncontrolled pollutants and emissions. These problems can be eased with the installation of a block heater – a device that warms the coolant in the engine and allows it to start warm and rise to an optimal operating temperature much faster. A block heater can increase the fuel efficiency of a car by 10 per cent in -20°C weather. It also means you'll have heat from the ventilation system as soon as you start your automobile. Try to use an automatic timer to turn on the block heater no more than two hours before you need to start your automobile; this is plenty of time to warm up the engine.

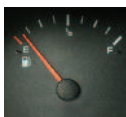


MYTH – Choosing a fuel efficient vehicle means sacrificing comfort and space

This myth also arises from the product offerings that immediately followed the implementation of new, stringent fuel efficiency regulations in the U.S. that emerged from the oil shocks of the early 1970s. Downsizing vehicles was a cost-effective technique that manufacturers used to meet compliance with the fuel economy standards of the day. However, with new materials and technologies, shrinking vehicle size is no longer the only option to achieve increased fuel efficiency.

Advanced materials, such as aluminum, lightweight steel and composites, make it possible to reduce vehicle weight – an effective means of increasing fuel efficiency – without reducing size. There are also other means of increasing fuel efficiency without downsizing vehicles. For example, using efficient engine technologies to boost the power output of smaller engines to power bigger vehicles; streamlining a vehicle's shape to reduce air-resistance; and using energy efficient electric motors to power accessories and the drivetrain. These can all generate significant fuel savings.

If you would like to learn more about fuel efficiency, please go to:



PRIMER on AUTOMOBILE FUEL EFFICIENCY and EMISSIONS



www.caa.ca/primer

