12 fuel-saving essentials every road warrior should know

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Oil prices are now at a 3.5 year high. How can we conserve fuel when driving? Here are 12 tips, and more.



1. Avoid jack rabbit starts.

When you are stopped at an intersection, and the light turns green, do not race off as if you were in a drag strip. It’s not only dangerous, it also wastes fuel.

That pedal under your right foot is the accelerator pedal, and is also known as the "gas pedal" for a very good reason.

The more you press down on it, the more gas you're feeding into the engine.

Your right foot has to be gentle on that gas pedal. But did you know that nursing your speed up to the limit too slowly also lowers kpl (kilometers per liter)? How can that be? Cars get poorer fuel economy in lower gears, and accelerating too slowly prevents upshifting at an efficient rate. It has to be just right.

The best acceleration rate varies with each vehicle, gear ratios, and weight. Take note that accelerating to 80 kph in 15 seconds uses less fuel than reaching the same speed in 30 seconds.

This is because the car en- ters its top, fuel-saving gear sooner.

Driving in the highest gear possible without laboring the engine is a fuel-efficient way of driving.

When driving at 60 km/h, a vehicle will use 25 per cent more fuel in third gear than it would in fifth.

Travelling at fast rates in low gears can consume up to 45 percent more fuel than is needed.

If you own a late model car, you would probably have an onboard trip computer with an "instant fuel economy" setting. Watch this gauge and keep the liters per 100 kilometers as low as you can.

Honda developed a less distractive way of showing you're a great fuel efficient driver. It turns a blue colored rainbowshaped LED display on the instrument panel to green every time you reach a fuel efficient stage.

Think ahead! Drive smoothly. Avoid the heavy foot for both accelerating and braking. You can reduce both fuel consumption, plus wear and tear.

Research suggests driving techniques can influence fuel efficiency by as much as 30 percent.

2. Early braking and engine braking

When you're driving down a street, and your about 100 me- ters from the intersection, suddenly the light turns red, should you let off the gas sooner, or at the last second?

Everyone knows that accelerating until the last moment, then braking hard to stop is less efficient than slowly coasting to a red light.

So, don't go barreling down to the light with your foot on the gas pedal and braking heavily at the last minute. Again, it is dangerous, it wastes fuel, and it won't make your brake pads last long.

Whenever possible, anticipate that a light will turn red and ease off the gas. Basically, the less you have to brake, the better your fuel economy.

Engine braking occurs when a driver takes their foot off the throttle. The throttle valve closes, a vacuum forms, and the engine slows the car down. This is the same case in a manual transmission.

It has been argued that engine braking is bad for your car, but it can actually prove beneficial.

It's efficient to engine-brake because once the throttle is no longer open, the car is using less fuel. Although it seems negligible, the amount of fuel saved can add up over long trips.

Also, when engine braking, the actual brakes on the car are being used less than they normally

would, which helps them last longer. Over long descents on mountains or hills, engine braking is good for the health of your brakes. They don't get overheated on a descent, which allows them to operate normally.

I recommend engine braking when descending, and even while coasting. Here's why: Most fuel-injected engines today are computer-controlled. When you release the gas pedal while leaving the car in gear, the fuel injectors shut off automatically, and the car's rotating wheels, which are connected to the engine via the transmission, keep the engine turning and the accessories running. So, the engine consumes no fuel at all while the vehicle is coasting downhill.

There are those who insist, and still practice coasting downhill in neutral to save gas. In neutral, you have no way to accelerate to avoid a hazard, and if the engine stalls, you have no power steering or vacuum boost for the brakes.

If the grade is too steep and you keep hitting the brakes to keep you from gaining speed, they're more likely to overheat. Overheated brakes lose effectiveness until they cool off.

Overheated brakes will cool—in the cold waters down the ravine, because that is where they likely will end up.

When you coast in neutral, your engine is idling and is using up fuel. But, when you coast in gear, your engine uses no fuel at all. Of course that only goes for today's computer-controlled fuel-injected engines.

3. Speeding

Speeding wastes gas. The faster you go, the more resistance your vehicle experiences. It's like moving your hand through water. The faster you try to move your hand, the harder the water pushes back.

In recent tests, driving at 100 kph instead of 80 kph reduced fuel economy by between 1 and 2 km/l, depending on the vehicle.

A car accelerating from 60 to 80 kph requires less fuel than a car accelerating from 80 to 100 kph. It's proven that going slower saves gas, but don't got too slow like below the minimum speed at the highway. It is not only dangerous but, but will also cause road rage when other motorists you share the road with experience delays.

4. Tailgating

Tailgating (in Pilpino: tutok) is a bad habit for many reasons. As a practice that majority of Filipino drivers are guilty of, tail-gating is very unsafe.

Your ability to react is lessened if the car in front of you suddenly slows or stops. It also means you have to super multitask, and scan for other hazards ahead of you and to the sides.

When you tailgate, every time the driver ahead taps his brakes, you have to slow down even more than he did. To continuing to tailgate means you have to accelerate again, therefore consuming more fuel.

I know it's irritating for someone to cut into your lane, and we all do at some time. Let's practice the "stay in your lane" rule. Remember it only takes one driver to start a traffic mess.

Take it easy, relax, and keep your distance; you'll be safer. More importantly, you'll be able to drive more smoothly and use less fuel.

A good rule of thumb is to allow two seconds of space between your car and the one ahead. You can figure that out by counting off two seconds after the car in front of you passes an obvious landmark like an overpass.

5. Avoid prolonged idles.

You've probably heard that it takes more gas to restart a car than to let it run. Maybe that used to be true, but it isn't anymore.

The modern engine will consume less fuel turning off and re-starting than idling for extended periods.

Also, to effectively warm up an engine, drive it, don't rev it. Engines only work hard under load, and will warm up much quicker if you simply start the engine, wait for 20 seconds (this builds the oil pressure), and drive away.

Now you don't want to shut your engine off for every little stop in your regular, nonhybrid car—it's not designed for that—but if you're waiting for someone to run in and out of a convenience store, turn off the engine.

Mazda has developed the idling-stop (i-stop) technology that shuts off the engine when stopped for a prolonged time.

Avoid the drive-through at fast food restaurants, if possible. You're already paying enough for the oil in those fried foods.

Some drivers at mall parking lots leave the engine of their vehicles running, and use the aircondition while waiting for their boss.

Some even do so with the “feeling at home” attitude with matching “feet-on-the-dash” sleeping position. That is totally illegal, and bad for everyone’s health.

6. Plan trips.

For really short trips, take advantage of the opportunity to get some exercise. Try walking to the store instead of driving. You can save gas and burn a few calories instead.

Go to your farthest destination first so your engine has a chance to reach its optimal operating temperature. Then make your other stops on the way back.

With the engine warmed up, the car will restart easily and run efficiently all the way home. Reduce the miles you drive by running all your errands in one trip.

Trip planning ensures that travelling is done when the engine is warmed up and efficient. A little bit of foresight will stretch your fuel economy.

9. Reduce wind resistance and drag.

I always recommend that all the windows of the vehicle remain closed with the air-condi- tioning running at all times.

But some would argue that the air-conditioning is energy intensive, thus it’s better to run with the windows open and the AC off.

There are several studies that prove otherwise, so I came up with a compromise. Since aerodynamic drag rises exponentially with speed, its best to open the windows with the AC off when travelling below 80 kph.

But, at 80 kph and up, close those air-dragging open windows and enjoy the cool freshness of one of man’s greatest inventions, the air conditioner. You will also burn less fuel.

AC experts say the most comfortable and economical temp to set your AC at is between 22 to 25 degrees Celsius, although this could be a little too warm for some thick skinned people like myself.

Inspect suspension and chassis parts for misalignment. Bent wheels, axles, worn shocks, and broken springs can contribute to drivetrain drag, not to mention the unsafe conditions they create.

Lighten your load. Think carefully about what you need on a journey. If you do not need something, do not pack it.

Remove roof racks if not needed, as they create wind drag. The lighter the load, the lower the fuel consumption and emissions.

An extra 100 pounds in the trunk reduces a typical car's fuel economy by 1 to 2 per cent. Carrying excess weight wastes gas.

10. Tire inflation

Keep your tires properly inflated, because low pressure increases rolling resistance. Few drivers check and adjust their tire pressure often, but it's a good idea to do it once a week.

Under-inflated tires burn more fuel. If tires are 8 pounds under inflated, (not an uncommon condition), rolling resistance of the tires increases by 5 per cent.

If you are planning on upgrading your rims by 3 to 4 sizes bigger...

Let’s say your car is originally equipped with a 15-inch rim, and you want to make it look flashier by putting in 19-inch rims with low-profile tires.

I would go for it if the new sleeker set of wheels would weigh close to the original set. Most often, though, they weigh twice the amount. That would make you use up more fuel because you will be adding more weight to the vehicle, thus adding more load to the engine, and drive-train.

I would recommend just upgrading 2 sizes up, max.

11. Proper car maintenance

Love your car and give it the regular scheduled tune up it deserves. Replace spark plugs, air and fuel filters, and get those regular oil changes.

Check your air filter more often than outlined in the owner’s manual, specially if you drive in dusty conditions.

12. Fuel type match

Choose the right octane gas for your car. Check the owner's manual to find out what octane your engine needs.

Octane ratings measure gasoline's ability to resist engine knock. Only about 6 per cent of cars sold need premium gas.

Resist the urge to buy higher octane gas for "premium" per- formance. Be wise!

Check the gas cap seal once a month. Why waste fuel to evaporation? Most late model cars have a sensor that monitors gas tank pressure. This will give out a code if a leak is detected, often by lighting up your "Check Engine" notice.

Some experts say it’s better to gas up in the morning when all the gas stations’ underground tanks are cooler.

They say that gasoline is denser when cold, and is gassier and expands when warm. There is no harm in trying, right?

You can improve your gas mileage by one to two per cent by using the manufacturer's recommended grade of motor oil.

For example, using a 10W-30 motor oil in an engine designed for a 5W-30 can lower your gas mileage by 1 to 2 percent. Thicker oil is harder to pump; this adds to parasitic horsepower losses.

Overall, the whole secret in saving gas is in the driver’s discipline, foresight, and proper car maintenance.

Enjoy the drive, road warriors! Save gas, and save lives.