

# Driving with respect for the environment

## Introduction

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This chapter contains information on the following subjects:

⇒ *An economic driving style*

⇒ *Driving in a fuel-efficient manner*

Fuel consumption, environmental impact and wear on the engine, brakes and tyres depend largely on three factors:

- Personal driving style.
- Conditions of use, such as weather and road surface.
- Technical conditions.

A few simple measures can help save fuel by up to 25%, depending on how you drive.



### WARNING

Adapt your speed and distance from the vehicles ahead to suit visibility, weather, road and traffic conditions.

## An economic driving style

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First read and observe the introductory information and safety warnings ⇒  *Introduction*

### Changing gear earlier

In principle, the highest gear is always the most economical gear. A rule of thumb for most vehicles: at a speed of 30 km/h (19 mph) drive in 3rd gear, at 40 km/h (25 mph) in 4th gear and at 50 km/h (31 mph) in 5th gear.

If the traffic and driving situation allows it, skipping gears when changing up a gear will also save fuel.

Do not drive gears to their upper limit. Use first gear only for pulling away then quickly change up to second gear. Avoid using the kickdown function in vehicles with an automatic gearbox.

Vehicles with a gear display help to improve fuel economy by indicating the optimum time to change gear.

### Rolling to a stop

Taking your foot off the accelerator will interrupt the supply of fuel to the engine and decrease fuel consumption.

Therefore, in situations such as approaching a red traffic light, let the vehicle roll without applying the accelerator. Only press on the clutch pedal to disengage if the vehicle becomes too slow or if the stopping distance is longer. The engine will then run at idling speed.

Switch off the engine in situations when the vehicle might be stationary for a long time, e.g. at a level crossing. In vehicles with an active start/stop system, the engine will switch off automatically when the vehicle is stationary.

## Thinking ahead when driving, and driving with the flow of traffic

Applying the brake and accelerator too often will significantly increase fuel consumption. By thinking ahead when driving and by maintaining a sufficient distance from the vehicle in front, simply keeping your foot off the accelerator will stop the speed from fluctuating. This means that active braking and accelerating is not always necessary.

## Driving smoothly and evenly

Smoothness is even more important than speed. The more evenly you drive, the lower your fuel consumption will be.

When driving on a motorway, it is much more effective to drive at a constant moderate speed than to drive with constant acceleration and braking. As a rule, driving with a constant style will get you to your destination just as quickly.

The cruise control system will help you to maintain a constant driving style.

## Active cylinder management (ACT<sup>®</sup>)

Depending on the vehicle equipment level, the vehicle may have active cylinder management (ACT<sup>®</sup>).

Active cylinder management (ACT<sup>®</sup>) can automatically deactivate individual engine cylinders in driving situations that require low power consumption. When a cylinder is deactivated, no fuel is injected into that cylinder, which can lead to an overall reduction in fuel consumption. The number of active cylinders can be shown on the instrument cluster display ⇒ [Instruments](#).

## Using additional equipment in moderation

It is always important to be comfortable in your vehicle, but it is also important to consider the environment.

Some equipment will increase fuel consumption when switched on:

- The cooling function of the air conditioning system: if the air conditioning system is set to a very high or low temperature it will require a lot of energy, which is generated by the engine. Therefore the temperature setting in the vehicle should not vary too much from the outside temperature. It may be a good idea to air the vehicle before setting off and then to travel a short distance with the windows open. The air conditioning system should then be switched on once the windows have been closed.
- Keep the windows closed when driving at high speeds. Having the windows open increases fuel consumption.
- Switch the seat heating off as soon as it has served its purpose.
- Switch the rear window heating off as soon as the rear window has defogged and is clear of ice.

## Other factors that increase fuel consumption (examples):

- Fault in engine management.
- Driving in hilly regions.
- Driving with a trailer.

## Driving in a fuel-efficient manner

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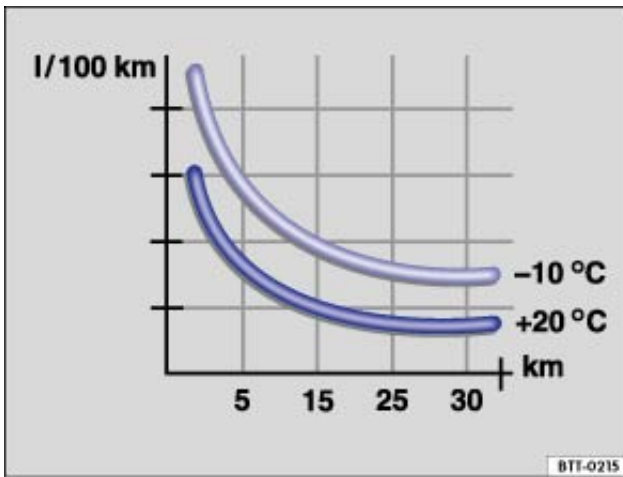


Fig. 126 Fuel consumption in litres per 100 km at two different outside temperatures



First read and observe the introductory information and safety warnings ⇒ ⚠ Introduction

By adopting an economical driving style and anticipating the traffic situation ahead, you can easily reduce fuel consumption by 10-15%.

Cars use most fuel when accelerating. If you think ahead when driving, you will need to brake less and thus accelerate less. Wherever possible, let the car roll slowly to a stop, for instance when you can see that the next traffic lights are red.

### Avoid short journeys

Directly after a cold start, the engine has a very high fuel consumption. The engine reaches its working temperature after a few kilometres, when fuel consumption will return to a normal level.

The engine and catalytic converter need to reach their proper **working temperature** in order to minimise fuel consumption and emissions. The **outside temperature** is a key factor.

The different rates of fuel consumption for the same distance at both +20°C (+68°F) and at -10°C (+14°F) are shown in ⇒ Fig. 126 .

Therefore, avoid making too many short journeys and car share whenever possible.

Under the same conditions, the vehicle will use more fuel in winter than in summer.

Not only is it illegal in some countries to warm up the cold engine by running it while the vehicle is stationary, it is also technically unnecessary and a waste of fuel.

### Adjust the tyre pressure

The correct tyre pressure reduces rolling resistance and therefore also fuel consumption.

Make sure that any new tyres purchased have optimum rolling resistance.

### Using low viscosity engine oils

Fully synthetic low viscosity engine oils reduce fuel consumption. Low viscosity engine oils decrease frictional resistance in the

engine and spread better and more quickly, especially for cold starts. They are especially effective in vehicles that make a lot of short journeys.

Always ensure that the engine oil level is correct and that you keep to the service intervals (oil change intervals).

When buying engine oil, always ensure that it complies with engine oil norms and has been approved by Volkswagen.

### **Avoid unnecessary loads**

Lighter vehicles are more economical and have lower environmental impact. An extra 100 kg, for example, can increase fuel consumption by up to 0.3 l/100km.

Remove all unnecessary objects and loads from the vehicle.

### **Remove any unnecessary special equipment and accessories**

The more aerodynamic a vehicle, the lower its fuel consumption. Special equipment and accessories, such as roof carriers or bicycle carriers, make the vehicle less aerodynamic.

You should therefore remove any special equipment and luggage carriers that are not in use, especially if you are going to be driving at high speeds.