

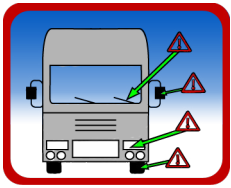
ECO-DRIVING SAFELY

FOR BUSES AND COACHES

Think economically and environmentally!

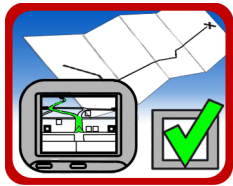
ECO-driving is not only an easy and cost-efficient way to reduce fuel consumption, greenhouse gases and accident rates, but also an attitude and respect for society as a whole. In order to help drivers adjust their driving behaviour according to different situations, the IRU has developed this checklist of smart, smooth and safe ECO-driving techniques.

BEFORE THE JOURNEY



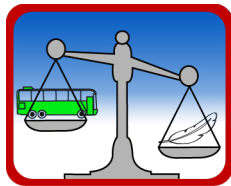
Maintain your vehicle

Maintain proper engine oil and air filters to keep vehicles running efficiently. Use the appropriate fuel as recommended by the manufacturer to keep the vehicle engine clean and performing efficiently. Always consult the vehicle's owner manual for proper maintenance.



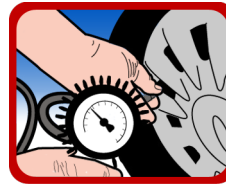
Consolidate trips and use on-board devices

Plan your trips ahead. This will enable you to bypass congested routes and mean less idling. An on-board computer may help to save time and take the right routes.



Travel "light"

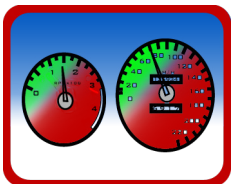
Remove unnecessary weight from the vehicle.



Check your tyres

Keep tyres properly inflated to the tyre pressure recommended by the manufacturer. This alone can reduce the average amount of fuel used by 3-4 %. Under-inflated tyres increase rolling resistance and increase fuel consumption. They also wear more rapidly. Check the vehicle's owner manual or the tyre pressure label for minimum cold tyre inflation pressure. On a voluntary basis Tyre Pressure Monitoring System enables the driver to easily check the tyre pressure directly from the dashboard. Axle alignment on all axles and toe in / toe out on the steering axles should also be checked and kept it as recommended by the manufacturer.

DURING THE JOURNEY



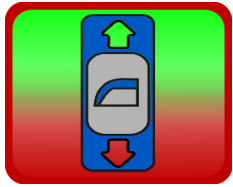
Drive at a steady speed

Try to maintain a steady speed by using the highest gear possible and by avoiding unnecessary acceleration and braking. The engine power to keep a steady speed is lower if you do not continuously brake and accelerate. Anticipate the traffic flow by looking ahead as far as possible. The cruise control on motorways helps smooth driving. Reduce speed in strong headwinds or heavy rain.



Accelerate and brake smoothly

Avoid fast starts and hard braking; they waste fuel and wear out some vehicle components more quickly, such as brakes and tyres. Maintain a safe distance between vehicles and anticipate traffic conditions to allow more time to brake and accelerate gradually. Accelerate smoothly from a stop and brake softly to save fuel.



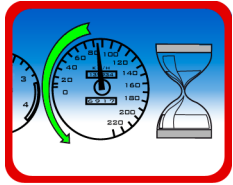
Close windows at high speeds

Do not drive with the windows open unless you keep your speed under 60 km/h. Driving with the windows open at highway speeds increases aerodynamic drag on the vehicle and increases fuel consumption. Remove any article that impairs the vehicles streamline effect.



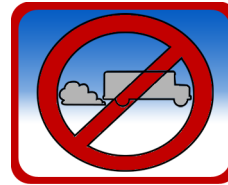
Minimise use of heating and air conditioning

Use heating and air conditioning selectively to reduce the load on the engine. Decrease your use of the air conditioner; it can help you save 10-15 % of fuel. Park your vehicle in the shade.



Decelerate smoothly

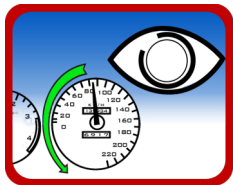
Every time you use the brakes, you waste energy. Try to use the vehicle's motion energy as much as possible. Use the retarder and the engine brake to reduce speed when approaching a traffic light. Close to the traffic light, operate the brakes for a final standstill. This will also reduce wear on the brakes, lower exhaust emissions, cut off fuel supply and make the ride comfortable for your passengers.



No idling

Today's engines do not need a warm up. Gently drive away immediately after starting the vehicle. Prolonged idling increases emissions and wastes fuel, therefore try to avoid engine idling. Necessary time intervals to obtain optimal working conditions of the vehicles after first engine start and after engine stop may be checked in the vehicle owner's manual.

Keep out of congested areas and find an alternative motorway solution rather than going through the city centre. This might take a few minutes longer, but will allow for saving on fuel consumption, less wear on brake linings, clutch plates and gearbox, all while minimising driver fatigue and reducing the risk of accidents.



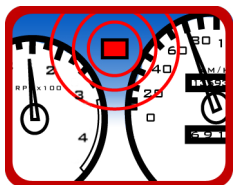
Slow down and watch speed

Drive at the maximum legal speed to save fuel and enable more free-flowing traffic, try not to overtake other vehicles at unnecessarily high speed. Environment authorities estimate a 10-15 % improvement in fuel economy by following this tip. Aim for a constant speed.



Drive off from standstill – but always try to avoid stopping

When the traffic lights turn green, accelerate quickly, but try not to press the acceleration pedal more than halfway. Sharp acceleration is very fuel-consuming. Shift up the gears as soon as possible. Diesel engines vary; almost all of them need to shift before 1,500 rpm and some at even lower rpms. It is very efficient to shift from a fast pace to the highest gear: modern engines work more efficiently when a high engine load is used. On modern vehicles, use only the minimum number of gear changes: usually only 4 to 6 changes required from standstill to cruising speed.



Check engine light

Today's vehicles have sophisticated on-board diagnostics (OBD) systems that continually monitor the operation of your vehicle. When the OBD alert light comes on, there is the possibility that your emissions are increased and your fuel economy is going down. Replacing a faulty sensor could result in a fuel economy improvement of as much as 40%. When the OBD light goes on, see your vehicle's maintenance expert for more information.

Drivers, don't hesitate to take special ECO-driving courses!