NEW FUEL CONSUMPTION LABEL

All new light vehicles sold in Australia are required to display a Fuel Consumption Label on the front windscreen. This includes all passenger cars, four wheel drives and light commercial vehicles up to 3.5 tonnes gross vehicle mass. The label indicates the vehicle’s fuel consumption in litres of fuel per 100 kilometres (L/100km) and its emissions of carbon dioxide (CO₂) in grams per kilometre (g/km). The results are based on a standard test procedure so consumers can reliably compare the performance of different models under the same test conditions.

The label is designed to help Australian motorists make informed choices about the environmental impact of their new car and the cost of running their vehicle. Raising awareness about the relative greenhouse impacts of different technologies and fuel types, and encouraging consumers to purchase vehicles with better fuel economy, can help reduce Australia’s greenhouse gas emissions. However, while the label enables you to compare vehicles with confidence, no single test can simulate all ‘real world’ driving conditions. Actual onroad fuel consumption will depend on factors such as traffic conditions, vehicle condition and load, and how you drive. The fuel consumption and CO₂ figures listed on the label are also displayed on the Green Vehicle Guide. The Guide also includes a calculator enabling consumers to calculate annual fuel consumption costs and CO₂ emissions.

Since April 2009, a new improved fuel consumption label has been required on showroom vehicles. The new label displays three fuel consumption numbers – ‘combined’, ‘urban’ and ‘extra-urban’ - as well as the combined CO₂ value. The new label highlights the higher fuel consumption of many vehicles operating in urban driving conditions (a factor that tends to be masked in the single ‘combined’ number displayed on the current label). Data from the UK indicates that urban fuel consumption values can be 20-50% higher than the combined value. Whilst the ‘extra urban’ component is not a traditional ‘highway’ cycle, it is a high speed test that may provide a better indication of freeway or highway driving. Of course, as noted above, no test can simulate all ‘real world’ conditions and the primary aim of the new label is still to provide a common basis for comparison of individual vehicle models. A more detailed explanation of the test cycle used by manufacturers to determine the values for the label is overleaf.
The figures displayed on the fuel consumption label are based on specific tests conducted by vehicle manufacturers to demonstrate a vehicle’s compliance with the Australian Design Rules (ADRs). All vehicles are tested under standardised, carefully controlled conditions in specialised vehicle emission laboratories. To ensure the quality and consistency of test results, laboratories and their facilities are subject to audit by the Australian Government.

The test standard for the current fuel consumption label is specified in ADR 81/01 Fuel Consumption Labelling for Light Vehicles. The label displays the fuel consumption and carbon dioxide (CO₂) values for the vehicle obtained from a standard dynamometer test conducted under laboratory conditions. This test is specified in United Nations Economic Commission for Europe (UNECE) Regulations which sets out the procedures for determining fuel consumption and CO₂ emissions from light vehicles. The same test is used for the new fuel consumption label (ADR81/02).

As illustrated in the figure below, the 20 minute test cycle is split into two parts (phases). Phase 1 is known as the ‘urban’ cycle (which represents conditions found in stop-start traffic) and Phase 2 is the ‘extra-urban’ cycle (which involves the vehicle accelerating to a high peak speed). The weighting of the urban and extra-urban figures to determine the full ‘combined’ test result is based on the distance travelled in each part of the cycle.

Most vehicles have much higher fuel consumption on the ‘urban’ part of the test cycle, which features a low average speed (19 km/h), substantial idle periods (30%) and frequent stop/start events. For drivers who spend a lot of time in city traffic conditions, this number will provide a more accurate indication of fuel consumption than the combined result. In contrast, the ‘extra urban’ component has a relatively high average speed (63 km/h) and a peak speed of 120 km/h. It is not a typical ‘highway’ cycle as it does not maintain a relatively constant speed over an extended period of time, but it is more likely to approximate fuel consumption in freeway or highway driving.