# Proposed new series of Australian Design Rule (ADR) 81 to implement the New Vehicle Efficiency Standard (NVES)

This document provides a short summary of the key policy issues in the proposed new series of ADR 81 to support the implementation of the NVES.

### Why is a new ADR needed?

A new series of Australian Design Rule 81 (ADR 81) is required to help implement the New Vehicle Efficiency Standard (NVES).

ADR 81 does two tasks:

- it sets out the laboratory test for measuring fuel consumption and carbon dioxide (CO<sub>2</sub>) emissions for new cars, SUVs and light commercial vehicles; and
- it requires a label to be put on the windscreen of a new car, SUV or light commercial vehicle before it is sold.
  - This label displays the vehicles fuel consumption and CO<sub>2</sub> emissions measured in the laboratory test for petrol, diesel and non-plug-in hybrid vehicles.
  - If the vehicle is an electric or plug-in hybrid vehicle, the label also shows the vehicle's energy consumption and battery range measured in the laboratory test.

The *New Vehicle Efficiency Standard Act 2024* (NVES Act) uses the CO<sub>2</sub> numbers entered for each vehicle on the Register of Approved Vehicles (RAV) to determine whether a manufacturer complies with the NVES. This CO<sub>2</sub> number is determined in accordance with ADR 81.

The current ADR for measuring  $CO_2$  emissions (ADR 81/02) applies to vehicles up to 3.5 tonnes GVM (Gross Vehicle Mass). As the NVES applies to vehicles up to 4.5 tonnes GVM, unless exempted, a new series of ADR 81 is required to mandate a  $CO_2$  test for vehicles over 3.5 tonnes GVM.

## What are the proposed key changes to ADR 81?

The new series of ADR 81 will support the implementation of the NVES by:

- 1. specifying a CO<sub>2</sub> test for certain vehicles with a GVM between 3.5 and 4.5 tonnes GVM; and
- 2. specifying a conversion procedure to enable vehicles complying with stricter 'Euro 6d' noxious emission standards adopted in ADR 79/05 to report an equivalent  $CO_2$  value for the NVES.

No changes to the information reported on the label are proposed at this time.



Figure 1: Examples of utes between 3.5 and 4.5 tonnes GVM.

# What vehicles will need to perform a $CO_2$ test to comply with the new series of ADR 81?

All new utes and SUVs between 3.5 and 4.5 tonnes GVM supplied from 1 December 2026 (Figure 1) will be required to complete a CO<sub>2</sub> emissions test and report a CO<sub>2</sub> number.

This date is proposed to provide sufficient time for manufacturers to arrange the necessary testing and submit the information required without stopping deliveries of vehicles to customers who ordered one before this change. These vehicles would then become subject to the NVES from the start of 2027.



Figure 2: Example of a light truck between 3.5 and 4.5 tonnes GVM

Light duty 'forward control' trucks between 3.5 and 4.5 tonnes GVM (Figure 2), will continue to not be required to complete a CO<sub>2</sub> emissions test. These vehicles are more akin to heavy vehicles than light commercial vehicles.

This means these vehicles will **not** be included in the NVES for the length of the current exemption instrument (31 December 2029). Emissions from light rigid trucks will be addressed through measures better suited to the needs of the heavy vehicle market.





Figure 3: Examples vans and cab chassis vehicles between 3.5 and 4.5 tonnes GVM

Large vans, and van based cab chassis vehicles between 3.5 and 4.5 tonnes GVM (Figure 3), will continue to not be required to complete a  $CO_2$  emissions test. These vehicles are not used in the same way as smaller vehicles, and are also used to supply emergency and other public interest services. Emissions from large vans will be addressed also through measures better suited to the needs of the heavy vehicle market.

This means these vehicles will also **not** be included in the NVES for the length of the exemptions instrument (31 December 2029).

#### How will these vehicle categories be distinguished?

The new series of ADR 81 will use objective, technical criteria to distinguish between vehicles over 3.5 tonnes GVM that will be included (SUVs and utes) and excluded (trucks and vans).

As trucks and vans have a longer area designed to carry goods, vehicles over 3.5 tonnes GVM will not need to comply with the ADR (and excluded from the NVES), if the vehicle:

- 1. Has an integrated and enclosed space designed for the carriage of passengers and goods (e.g. a van), and an area designed for the carriage of goods exceeds 50.0% of the vehicle's 'Total Length'; or
- 2. Is a 'chassis-cab' (e.g. a forward control truck or van designed to be fitted with a body) with one row of seats and is designed to be fitted with a load bearing body that exceeds 60.0% of the vehicle's 'Total Length'. Total length includes the maximum 'rear overhang' (distance of the body beyond the rear wheels) permitted under <u>ADR 43/04</u>.
- 3. Is a 'chassis-cab' with two or more row of seats and is designed to be fitted with a load bearing body that exceeds 50.0% of the vehicle's 'Total Length'. Total length includes the maximum 'rear overhang' (distance of the body beyond the rear wheels) permitted under <u>ADR 43/04</u>.

#### How will the new ADR measure CO<sub>2</sub> emissions?

The predominant emissions test used in Australia is called the 'New European Driving Cycle' or NEDC, which is a laboratory test based on an older international standard. As such, the NVES CO<sub>2</sub> targets for 2025 to 2029 are based on the current NEDC test. ADR 81/02 adopts the NEDC test.

However, new vehicle models must comply with a stricter laboratory test adopted by the new ADR for noxious emissions (ADR 79/05, also known 'Euro 6d') from 1 December 2025. The new test is called the 'Worldwide harmonized Light vehicles Test Procedure' or WLTP. This will mean some new vehicles sold from 2025 to 2028 will have NEDC figures, and some will have WLTP figures. As such, in the meantime, a method must be developed and included in an ADR to convert from WLTP to NEDC to ensure the NVES applies equally to new and existing models.

Under the proposed new series of ADR 81, new vehicle models that comply with ADR 79/05 will not need to be tested to the NEDC. Instead, the new series of ADR 81 will include a procedure to calculate an equivalent  $CO_2$  number for vehicles that comply with ADR 79/05. This procedure is being developed in consultation with a technical working group established by the department.

#### How will the proposed new series of ADR 81 affect the outcome of the NVES?

Based on 2024 vehicle sales, the proposed updates will reduce the vehicles covered by the NVES by less than 2.5% in 2025 and 2026, and by less than 1.26% from 2027. The department estimates this would reduce the abatement from the NVES by less than 1% over the period to 2050.

#### How can I have my say on the proposed new series of ADR 81?

Comments on the proposed ADR updates can be provided online via the department's '<u>Have Your</u> Say' page. You can give your feedback until 5 February 2025.

#### When will the text of the new series of ADR 81 be available?

An exposure draft of the ADR is on the department's '<u>Have Your Say</u>' page. The final text of the ADR will be published on the <u>Federal Register of Legislation</u>.