

Submitting correct carbon dioxide emissions values for NVES

Guidance for regulated entities

August 2026

About this guidance

This guidance explains how [regulated entities](#) (entities) can ensure carbon dioxide (CO₂) emissions data in Register of Approved Vehicle (RAV) submissions complies with requirements under the New Vehicle Efficiency Standard (NVES).

This guidance is intended to provide entities with an understanding of their legislative requirements (including relevant Australian Design Rules (ADRs) for CO₂ emissions testing). Entities should read it in conjunction with relevant legislation and ADRs. It is not a substitute for independent legal advice.

What requirements apply to CO₂ emissions values for NVES

Entities must submit an accurate CO₂ emissions value for each covered vehicle entered on the RAV. Entities must ensure that all submitted vehicle data, including CO₂ emissions data, is correct as required under section 8 of the [Road Vehicle Standards Rules 2019](#) (the Rules).

For NVES, the CO₂ value is the amount of carbon dioxide a vehicle emits per kilometre, determined under the applicable ADR test procedure or accepted calculation method. Applicable ADRs are listed in step 1 of this guidance.

By 'accurate' CO₂ values, we mean CO₂ values that are consistent with the applicable ADR test method, measurement definitions, calculation rules and NVES requirements – not a value intended to represent real-world emissions.

Entities should be up to date with the relevant ADR requirements and ensure each submission reflects the ADR in force at the time. Later sections in this guidance provide more information about current and future ADR requirements.

CO₂ values used for NVES may differ from those used for vehicle labelling or other approval material. Where this occurs, entities should submit the NVES-required value to the RAV and ensure it is supported by the relevant ADR or accepted calculation method.

Why accurate CO₂ emissions values matter

Accurate CO₂ emissions values are essential because they are used to calculate an entity's NVES performance. The values affect the number of NVES units issued and any liability that may accrue if the entity does not beat the target.

The NVES Regulator may undertake validation and assurance activities to identify potential inconsistencies or data quality issues. However, it is the entity's responsibility to submit accurate, complete and supportable CO₂ data.

Different types of CO₂ information may be included on the vehicle's energy consumption label and the [Green Vehicle Guide](#) (GVG). This differs slightly from NVES requirements. Refer to the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts' (the department) [Data requirements for ADR 81/03 – Energy Consumption Labelling for Light Vehicles](#) for more guidance on those requirements.

How to identify and submit the correct CO₂ value in RAV

Use the following 5 steps to identify and submit the correct CO₂ value for vehicles covered under NVES. Entities should still refer to the relevant legislation, ADRs and approval material when making compliance decisions.

The 5 steps are:

1. identify which ADR applies
2. determine the basis for the CO₂ value
3. apply the conversion procedure if CO₂ values are not NEDC-equivalent
4. keep records and maintain data quality
5. manage transitions between ADR requirements.

Step 1: Identify which ADR applies

The first step is to identify which ADR applies to the CO₂ emissions value for the vehicle. In broad terms, the relevant ADR depends on the vehicle, its mass, and when the relevant requirement applies.

The ADR that the vehicle's vehicle type approval (VTA) complies with is the ADR that applies for CO₂ values included in RAV submissions. This is determined at the time that an entity submits a VTA application and declares compliance with relevant ADRs, including evidence to substantiate that compliance.

The ADRs with a primary purpose of measuring vehicle CO₂ values used for NVES compliance are included in the following table.

Vehicle	Relevant ADR	Primary testing procedure
Light vehicles with GVM ≤ 3.5 tonnes (t) before 1 July 2026	ADR 81/02	New European Driving Cycle (NEDC)
Existing approved light vehicle models with GVM ≤ 3.5 t between 1 July 2026 and 30 June 2028	ADR 81/02 or ADR 81/03	NEDC for ADR 81/02 Worldwide Harmonised Light Vehicles Test Procedure (WLTP) or equivalent US standard (40 CFR Part 600) for ADR 81/03

Vehicle	Relevant ADR	Primary testing procedure
Newly approved light vehicle models with GVM $\leq$ 3.5 t from 1 July 2026	ADR 81/03	WLTP or equivalent US standard (40 CFR Part 600)
Light vehicle with GVM > 3.5 tonnes and $\leq$ 3.855 t after 30 June 2027	ADR 114/00 , subject to exclusions	NEDC

Notes:

- These are the primary testing procedures that are accepted under the applicable ADR, noting that certain alternative standards are also accepted. Refer to each specific ADR for more detail.
- For NVES, if you are using the primary testing procedure outlined in the relevant ADR, all CO₂ values that are not NEDC-equivalent must be converted (see Step 3).
- These ADRs often reference testing requirements contained in other ADRs that apply more broadly to regulation of noxious emissions. This includes ADR 81/02 that references practical testing elements of ADR 79/04, and ADR 81/03 that similarly relies on ADR 111/00 for interpolation.

Step 2: Determine the basis for the CO₂ value

Once the applicable ADR has been identified, the entity should determine the correct basis for the CO₂ value for a vehicle according to test procedure and specific requirements.

For example, an entity may extend CO₂ emissions values across multiple vehicles (within a vehicle type or an interpolation family), but the rules for doing so differ depending on the ADR:

- ADR 81/02 and ADR 114/00 both allow values to be extended to non-tested vehicles, but they require the entity to justify that approach by reference to the ADR and the characteristics of the vehicles concerned.
- ADR 81/03 applies the testing requirements of ADR 111/00, which sets out detailed technical criteria for interpolation.

The following table provides a high-level comparison of ADR provisions that govern CO₂ test values, and which one may be applied or extended to non-tested NVES covered vehicles. To ensure compliance, entities should use this table as a guide only and must refer directly to the relevant ADR when deriving the correct CO₂ values. We recommend you seek professional advice if you are unsure how to apply the ADR.

Feature	ADR 81/02	ADR 81/03	ADR 114/00
Application	Light vehicles $\leq$ 3.5 t GVM before 1 July 2026.	New light vehicle models $\leq$ 3.5 t GVM from 1 July 2026, and existing light vehicle models $\leq$ 3.5 t GVM between 1 July 2026 and 30 June 2028.	Vehicles >3.5 t and $\leq$ 3.855 t GVM, excluding work trucks and work vans.
Primary test basis	NEDC-based testing.	WLTP based testing as prescribed under ADR 111/00.	NEDC-based testing.
Tested values	CO ₂ value may be based on a tested vehicle.	Direct testing or interpolation within defined families.	CO ₂ value may be based on tested vehicles.
Non-tested vehicles	Permitted if comparable result can be	Permitted through formal interpolation within a valid family.	Permitted if the value is justified as representative.

Feature	ADR 81/02	ADR 81/03	ADR 114/00
	demonstrated, considering design and operation.		
Assessment method	Interpolation or another technically supported method.	Defined family criteria, ranges and linearity or monotonicity requirements.	Interpolation-style reasoning, comparison, or representative/conservative approach.
Vehicle differences	Assess characteristics including but not limited to mass, body style, gearing, engine equipment and accessories.	Key emissions characteristics are identical; differences are limited to specified parameters.	Assess relevant differences and effect on CO ₂ emissions.
Interpolation	May be used where technically supported and comparable.	Low/high vehicles must meet defined range and monotonicity limits.	May be used where a continuous monotonic relationship is demonstrated.
Conservative approach	May be used for light commercial vehicles where representative and technically justified.	Not supported.	May be used where representative and technically justified.
Compliance focus	Comparable tested and non-tested vehicles.	Valid interpolation family and technical limits.	Representative value for vehicle or group.

The following table provides examples of an ADR used for a potential scenario and the likely treatment. These examples do not cover all potential scenarios.

ADR	Example scenario	Likely treatment
ADR 81/02	A light vehicle variant that has a VTA approval prior to July 2026 is not directly tested but is materially similar to a tested variant, with only minor equipment or configuration differences.	The tested value may be applied if the entity can demonstrate the non-tested vehicle would achieve a comparable result, having regard to design and operation.
ADR 81/03	A light vehicle with an approval after June 2026 falls between the tested low and high vehicles in a valid interpolation family under the ADR 111/00 test framework.	The CO ₂ value should be determined using the formal interpolation method, provided the family criteria and technical limits are satisfied.
ADR 114/00	A vehicle over 3.5 t but below 3.855 t GVM, and submitted on RAV after 1 July 2027, is not directly tested but is closely related to tested vehicles in the same product line.	A tested, derived, representative or conservative value may be used where the entity can justify that it reasonably represents the vehicle's CO ₂ emissions.

Important: In all cases, the entity should be able to demonstrate that any extended CO₂ value is representative of the vehicles within that range, including any vehicle expected to produce higher CO₂ emissions.

Step 3: Apply the conversion procedure if CO₂ values are not NEDC-equivalent

The NVES currently uses NEDC values that are based on ADR 81/02 testing procedures. As newer test procedures are introduced, more vehicles will be tested to newer WLTP test procedures. To allow for this,

interim certification procedures have been made for WLTP tested vehicles that have been granted a type of approval with minor and inconsequential non-compliance to ADR 81/02.

For vehicles covered by ADR 81/03 or testing protocol other than NEDC, entities must submit an NEDC-equivalent CO₂ value to the RAV, even though vehicle label values are measured using WLTP or an equivalent US standard. The entity must calculate the NEDC-equivalent value using Appendix B of ADR 81/03. Plug-in hybrid electric vehicles require an additional adjustment to account for electric-only driving capability. Refer to the department's [Guidance note – Calculation of carbon dioxide emissions values for the Register of Approved Vehicles](#) for more information, including records that should be kept.

These conversion requirements will remain in place until the end of 2029. Future [NVES emissions targets](#) (for 2030 and beyond) will be based on the test procedures mandated by the ADRs at that time.

Step 4: Keep records and maintain data quality

Record-keeping and documentation

Where CO₂ values have been determined, entities need to document assumptions, conversions, interpolation steps or calculations that were used to derive CO₂ values.

Under the [Road Vehicle Standards Act 2018](#), regulated entities must ensure that information entered on the RAV, including NVES-specific data, is true and correct. Keeping up-to-date supporting information is also required under section 30 of the Rules.

Good record-keeping provides other benefits, including:

- Providing evidence to demonstrate compliance if the NVES Regulator asks questions about data assurance.
- Supporting data integrity and consistency when staff, systems or approval arrangements change.

Data quality checks

Before submitting vehicles to the RAV, entities should complete internal checks to confirm that the data is correct. This includes checking:

- model and variant identifiers
- consistency between the submitted CO₂ value and the supporting technical material.

Using the correct CO₂ value for approval material, labelling and RAV entry as appropriate helps maintain a clear, traceable and defensible data record.

Entities may also choose to engage an audit provider or conduct independent internal assurance to test data quality and identify areas for improvement. This is not mandatory, but it can improve confidence in the accuracy, completeness and traceability of the data that underpins NVES compliance.

Step 5: Manage transitions between ADRs

Entities should understand whether changing ADR requirements apply across their model lines and supply dates. During transitional periods, it is good practice to document:

- which ADR applies to each affected model line
- when a newer requirement is triggered
- where an equivalent value or conversion process has been used.

This helps demonstrate compliance, and it supports clear internal processes and defensible records.

Key transition dates

1 July 2026: ADR 81/03 applies to newly approved light vehicle models less than 3.5 t

ADR 81/03 applies to new vehicle models from 1 July 2026. While ADR 81/03 requires testing in accordance with ADR 111/00 (which specifies WLTP testing) or equivalent UN, EU or US standards, entities must submit NEDC-equivalent CO₂ values determined in accordance with Appendix B of ADR 81/03 for all vehicles entered onto the RAV.

30 June 2027: ADR 114/00 applies to specified light vehicles more than 3.5 t but under 3.855 t

For RAV entries from 30 June 2027, entities must submit CO₂ numbers that have been determined in accordance with ADR 114/00 for all NB1 category vehicles and MA, MB, MC, MD category vehicles with a gross vehicle mass (GVM) that is greater than 3.5 t and less than 3.855 t, unless the vehicle is a 'work van' or 'work truck'. This date applies to both newly released and existing models.

Note that 'Work trucks' and 'work vans' are NB1 vehicles that, as a percentage of total length, have more space for cargo than for passengers (see sections 4.1 and 4.2 of ADR 114/00).

1 July 2028: ADR 81/03 becomes mandatory for light vehicles up to 3.5 t GVM

For RAV entries from 1 July 2028, entities must adhere to ADR 81/03 for all of their light vehicles with a GVM of 3.5 t or less, regardless of the date of vehicle type approval.

When to contact the NVES Regulator

If you have questions or concerns about the correct basis for a CO₂ value, we encourage you to contact us before vehicles are entered on the RAV. Contacting us early can reduce delays and avoid the need to correct RAV entries later.

How to contact us:

- Email: NVESRegulator@infrastructure.gov.au
Please note we may take up to 3 business days to respond.
- Phone: 1800 248 610 (if outside Australia: +61 2 6136 9088)

Our phone line is open Monday to Friday 9:00 am to 5:00 pm (Australian Capital Territory time) and closed on public holidays Australia-wide or as observed in the Australian Capital Territory.

For more information about the NVES, you can visit our [website](#) or [YouTube playlist](#). You can also [subscribe to our newsletter](#) or follow us on [LinkedIn](#) to keep updated.