

15 January 2025

Submission on the New Vehicle Efficiency Standards; Australian Design Rule 81 (ADR 81/03 Vehicle Efficiency Labelling and Carbon Dioxide Emissions Measurement)

Farmers for Climate Action (FCA) appreciates the opportunity for continued consultation on the *New Vehicle Efficiency Standards*, and we are pleased to provide a submission on the proposed *New Vehicle Efficiency Standard: Australian Design Rule 81*.

Key Points

- FCA strongly supports the Government's commitment to introducing New Vehicle Efficiency Standards (NVES) for Australia as a critical component of a broader transport emissions reduction strategy. .
- On 31 January 2024, FCA submitted an open letter, signed by more than 800 farmers and supporters, to Minister Catherine King and Minister Bowen. The letter called on the Australian Government to establish strong fuel efficiency standards in order to bring more choice and affordability of electric vehicles (including farm utes) to our market.
- We refer to our previous submission on the *New Vehicle Efficiency Standards - Cleaner, Cheaper to run Cars for Australia*, and reiterate that strong fuel efficiency standards will deliver Australian farmers a better range of fuel-efficient cars, including electric vehicles, at lower prices. We strongly affirm that the lower running costs of EVs will help regional Australians to save money.
- FCA considers that the Australian Design Rule 81 is essential to ensure the timely implementation and operation of vehicle efficiency standards.
- The government should consider policy treatments such as financial compensation for primary producers where the cost of vehicles they have access to increases due to NVES.

About Farmers for Climate Action

Representing over 8,400 farmers and backed by 80,000 supporters nationwide, FCA seeks deep emissions reductions this decade to protect our farmers and our food supply. FCA is made up of farmers, agricultural leaders, and rural Australians who are advocating for strong economy-wide climate policies.

Australian Design Rule 81

FCA considers the enhanced quality of vehicle choice an important benefit for regional Australians. The vehicle efficiency standards will enable farmers and regional Australians to access the same variety of utes, 4WDs, and family cars as those living in the US, New Zealand and other countries, whether these are diesel, petrol, or electric vehicles. In our submission on the New Vehicle Efficiency Standard, FCA strongly endorsed the 'Option B' pathway proposed by the government for implementing the NVES. We welcomed this approach, as it does not affect any vehicles currently on Australian roads. This pathway aligns with the roadmap implemented by other developed economies and provides a phased lead-in time which will allow manufacturers, consumers, and operators to adapt to changing standards. The proposed introduction of Australian Design Rule 81/03 to specify requirements of testing of vehicles and proper labelling will ensure that vehicle efficiency standards can be implemented in a timely manner. FCA also notes that improved emissions testing will provide consumers with better information about the emissions profile of their vehicles. The introduction timeframe is reasonable, and should not unduly burden manufacturers who already have to comply with existing labelling requirements in Australia and testing in other jurisdictions, such as the European Union.

FCA is aware of concerns that the introduction of fuel efficiency standards may impact primary producers by reducing the range of commercial vehicles they have access to, and potentially increase the cost of vehicles for farmers. While FCA does not consider that these challenges will arise, we continue to encourage the government to consider policy treatments such as financial recompense. This, alongside implementation timeframes, will protect primary producers from undue transition costs in the event that the sector observes a cost burden on farmers occurring from the NVES, as well as advance the positive future of Australian agriculture in the context of the Net Zero Agriculture and Land Sector Plan.

To further mitigate concerns, the experience of other markets that have introduced vehicle efficiency standards indicate that the cost of Australian cars will not increase. Manufacturers are already producing efficient low and zero-emission vehicles overseas. Requiring these vehicles to also be exported to Australia with the proper labelling and testing should not represent a significant change or burden on manufacturer costs and business models.

Farmers see the introduction of vehicle efficiency standards as a powerful instrument to motivate global vehicle manufacturers to introduce cleaner and more affordable cars to the Australian market. The design rules under consultation are in line with these goals and will ensure the timely introduction of vehicle emissions testing and standards in Australia.

Please do not hesitate to contact myself or Paul Stark, Policy and Farmer Engagement Officer, on the contact details below should you have any questions regarding this submission.

Yours sincerely,
Natalie Collard

s22(1)(a)(ii)

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Tesla Motors Australia, Pty. Ltd.
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Australia

The Hon Catherine King MP
Minister for Infrastructure, Transport, Regional Development and Local Government

5 February 2025

RE: New Australian Design Rules 81 to implement New Vehicle Efficiency Standards: Tesla Submission

Dear Minister King,

Tesla commends the Federal Government for progressing the design and implementation of the New Vehicle Efficiency Standard (NVES). Strong vehicle emissions standards are essential to tackle climate change. They will also save lives by reducing deadly vehicle pollution and save Australian motorists hundreds of dollars a year by replacing expensive imported fuel with renewable electricity.

NVES is an elegant, robust, and well-designed standard that will save the average Australian family thousands of dollars in petrol and finally put Australia on a trajectory to achieve its climate targets for transport.

In many other countries, petrol lobbyists have succeeded in pushing legislators to include direct loopholes like multiplier credits, off-cycle credits, and non-penalty years, whilst also more subtly advocating for indirect exemptions via ongoing delays. These tactics should be recognised for what they are – attempts to undermine the intent and objectives of the NVES scheme.

We commend the Government's commitment to avoid such loopholes. However, calls continue to attempt to gain broad-based exemptions and indirect delays from participating in the NVES scheme. For example, some stakeholders continue to lobby for delays and re-consultations under ADR consultation guidelines - even though the policy intent and objectives of NVES has been agreed following many years of engagement with industry.

We encourage the Government to resist these calls to ensure that Australia maintains its ambition and rewards vehicle manufacturers for sending their most efficient vehicles to Australia to meet the strong standards and avoid penalties.

In particular, we note Government states only a minor (less than 2.5%) impact to emissions outcomes will come from the new ADR81 and timeframes as proposed. More transparency on these figures would help clarify what exemptions are assumed and how they are enforced.

To mitigate risk of further slippage or worse emissions impacts, Tesla recommends Government re-consider its deadline for the new ADR81 to come into force, with penalties for non-compliance as with any other ADR regime. The current proposal for ADR81 applying to utes/SUVs between 3.5-4.5 tonnes GVM from end of 2026 is still 2 years away, which now effectively gives relevant OEMs almost 4 years (from design to implementation) to adjust their processes to test CO2 emissions for reporting

purposes. This is unnecessarily generous and undermines the intent of a scheme that basis is built on curbing upfront emissions given the cumulative impacts, as well as creating the right incentives for ZEVs to enter Australia early, before technology developments and customer adoption drives further uptake in later years. Accordingly, **Tesla recommends revising the start of the new ADR81 for utes/SUVs between 3.5-4.5 tonnes GVM to commence from the end of 2025 to better align with the wider NVES scheme, noting there are testing processes and facilities for this class of vehicles today.**

It is also worth noting that these vehicles already receive significant tax concessions (e.g. luxury vehicle tax emptions), and other tax benefits (e.g. exemptions from car depreciation limit). Meanwhile, they are some of the least efficient vehicles on our market and therefore fall squarely within the scope of the NVES to encourage more efficient, and ideally low and zero emission models – already available overseas – to be supplied to Australia.

Tesla fully supports the NVES exemption principles as approved by Minister King – i.e. to minimise the scope of vehicles affected and timing of any exemption; ensure competitive neutrality; and minimise the administrative burden on all (not just select parties seeking model / brand exemptions due to volume or vehicle type). This requires fast and full implementation, not staggered integration over more than 4 years from design to enforcement for the 3.5–4.5t class of vehicles. Not only does this violate competitive neutrality, it increases administrative burden – as many importers seek to understand carve-outs and navigate multiple timeframes for implementation based on different vehicle chassis configurations.

On an issue related to this consult, Tesla reiterates the Electric Vehicle Council concerns around timelines to appoint an independent expert to support the development of the CO2 conversion protocol, and now that the International Council of Clean Transportation (ICCT) has been appointed, **recommend an expedited and transparent timeline to finalise the CO2 conversion protocol**, to ensure it will not delay any element of the NVES implementation, or be used as justification as to why ADR 81/03 cannot be effective from 1 December 2025.

For decades, sections of the petroleum and vehicle industries have resisted real emissions reduction in the light vehicle sector. They have done so first by opposing fuel efficiency standards outright, and then by attacking standards proposed by government, instead arguing for trajectories so weak they would actually allow increases in pollution. Now they are attempting to weaken the credibility of the scheme implementation by creating new and unnecessary exemption classes. If they get their way, new vehicles on offer to Australians will continue to be among the most inefficient and polluting in the world. This will continue to add pressure to household budgets, with the average household spending over \$5000 a year on petrol and diesel.

It is important to remember that Australia is starting behind comparable countries when it comes to decarbonising light vehicles. Some argue that it would be acceptable to adopt the rate of improvement in other markets, thereby remaining perpetually behind by several years.

Sincerely,

s22(1)(a)(ii)

Country Director, Australia & New Zealand



Ram Trucks Australia Submission – Vehicle Standard (Australian Design Rule 81/03 – Vehicle Efficiency Labelling and Carbon Dioxide Emissions Measurement) 2025

Ram Trucks Australia is the official factory-backed distributor of Ram vehicles and has been the biggest seller of US pick-ups locally since 2015, with more than 30,000 sold in that time.

We import left-hand-drive vehicles from the US, remanufacture them locally in right-hand-drive to factory quality standards in a large-scale facility in the south-eastern suburbs of Melbourne where we employ 350 workers, and distribute the vehicles to a national network of dealerships.

Ram Trucks Australia appreciates the opportunity to put forward a submission in response to the draft Vehicle Standard (Australian Design Rule 81/03 – Vehicle Efficiency Labelling and Carbon Dioxide Emissions Measurement) 2025.

We note this upcoming ADR change is still in draft format and will not be complete before the close date of these submissions.

Ram Trucks Australia wishes to raise concerns about filing this submission based on an incomplete draft ADR change.

As it stands, we will be required to make significant business decisions based on limited information about the upcoming ADR change.

This could lead to a significant financial loss – and impact human resources – if we were to pre-empt regulations not yet in place, or which may not be put in place.

As a manufacturer of US designed, built and certified vehicles, Ram Trucks Australia is concerned that a conversion or interpretation of US EPA test results has not been listed in this exposure draft.

It was our understanding that NVES would ensure no vehicle manufacturers or regulatory regions would be excluded.

As the US EPA 'Pathway Test' requirement has not been listed in the draft ADR change, it is unclear to Ram Trucks Australia which US emissions tests will be adapted to Australian regulations.

Given there are no accredited third-party testing facilities within Australia, Ram Trucks Australia will need to look outside Australia to have these tests done, which will add considerable cost.

Despite an exhaustive search, for now it is unclear whether there is an emissions testing facility globally that can fit and test our full-sized US pick-ups according to the NEDC test cycle.

We note that one of the key selling points of NVES was to not force additional costs on vehicle manufacturers (and, by extension, new car buyers).



The proposed ADR change aims to accept NEDC test results – or convert WLTP or US EPA test results (for ‘light duty’ vehicles) to come up with an equivalent NEDC figure.

However, as it stands, there is no detail on the conversion or interpretation of US EPA results for certain vehicles sold by Ram Trucks Australia.

With all of the above factors in mind, Ram Trucks Australia has significant concerns about the proposed upcoming changes to ADRs to accommodate NVES requirements – unless significantly more detail is forthcoming.

It appears that the impact of this change on an important segment of the Australian new-car market – which employs hundreds of factory workers and engineers – has been overlooked.

The current proposal puts the Ram Trucks Australia business – and the employment of more than 350 workers – at risk at a time when the Federal Government is trying to boost manufacturing jobs locally.

Full-size pick-ups such as the Ram 1500 (and competitors such as the Ford F-150, Chevrolet Silverado and Toyota Tundra) meet an important customer need and deliver safer, more stable and more capable vehicles than smaller utes such as the top-selling Ford Ranger, Toyota HiLux and Isuzu D-Max that are so popular with Australian motorists.

But the current NVES proposal to enforce stricter emissions standards for US pick-ups from the year 2027 threaten to kill this vehicle category and impact thousands of blue-collar workers and hundreds of engineering jobs.

By coincidence, all four brands (Ram, Chevrolet, Ford and Toyota) have remanufacturing operations on the outskirts of Melbourne, where the vehicles are completed before being delivered to a national network of showrooms where hundreds more workers are employed.

Ours is an industry that is trying to keep manufacturing skills alive (at a time the Federal Government is trying to revive local manufacturing).

With that in mind, this submission outlines why an end to the NVES exemption for US pick-ups in 2027 would kill-off an entire vehicle category, and why thousands of critical skills and jobs would be lost forever

Furthermore, Ram Trucks Australia would like to flag its concern over the unfairness of asking the automotive industry (including our business which is helping to keep local manufacturing alive) to submit a proposal about an ADR change that is not yet complete – and which we must agree to once it is complete, because there is no further consultation process.



JAPAN AUTOMOBILE MANUFACTURERS ASSOCIATION, INC.

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Tokyo, 4 February 2025

JAMA response to the Australian Government's

"Proposed new series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard"

Clause 2.14, 2.15

- We would like to see the UF for PHEVs stated at the same timing as the NEDC conversion formula. Also, we would like to confirm whether the values required for PHEVs will be calculated using comb.

Clause 5.5, 5.6

- If there are no issues on the vehicle manufacturer side, is it correct to understand that there is no problem with conducting WLTP measurements for emission regulations and NEDC measurements for fuel consumption and CO2 regulations?

Clause 6.3

- We request that CO2 emission values for the electric driving range of PHEVs be counted as zero grams.
- UNR101 applies to vehicles weighing 3.5t or less. On the other hand, ADR81/03 applies to vehicles weighing 4.5t or less.
- In this case, will the load set value for 3.5-4.5t (UNR101-6.2.2.3-Table 2/Upper limit of test mass-RW 2610<Mhp) be the set value of RW 2610<Mhp:2270 in R101?
- Or will it be determined as a requirement unique to Australia in the future?

Clause 7.1

- The fuel consumption label has three contents as "comb", "urban", "ex-urban", and we understand that urban refers to the low and mid values in WLTP, and ex-urban refers to the high values. Is it correct to understand that WLTP ex-high is not required? If it is not required, we would like this to be clearly stated.
- We would also like to receive comments on your understanding of how to respond to the

fuel efficiency label support from 12/1/26, including possible duplication of applications and preparation time until then.

Appendix A

- How do we calculate the WLTP low and mid values to determine the "urban" in fuel consumption label?
- Regarding the conversion factors from FTP/WLTP, the WG documents state that they are scheduled to be decided by the first half of 2025. We hope that the conversion factors will be decided as planned.

Appendix C

- We understand that European "CO2MPAS" is the candidate for conversion method from WLTP to NEDC. On the other hand, EU2017/1152 and EU2017/1153, which specified the use of CO2MPAS, will eliminate by the end of 2024. Assuming that CO2MPAS laws will eliminate, we would like to request clarification of conversion method from WLTP to NEDC.

Additional comments and questions

- If the UF for PHEVs and the provisions required for notification (such as credit regulations) are not determined in time for the enforcement date of the NVES, we request that the system be implemented so that past notification data can be retroactively calculated as soon as the regulations are determined.
- Regarding penalty provisions, we request that application be postponed if the necessary provisions cannot be decided in time for the enforcement date of NVES."
- Is it correct to understand that there are no COP regulations in the fuel consumption and CO2 related regulations?



February 4, 2025

American Automotive Policy Council's comments on Proposed new series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard

Introduction

The American Automotive Policy Council (AAPC) represents the common public policy interests of its member companies – Ford Motor Company, General Motors Company and Stellantis. We sincerely appreciate the opportunity to provide our views, comments, and recommendations regarding Australia's proposed new series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard (NVES) from the Australian government's Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

Since our first public submission, the Australian Parliament passed new legislation to introduce the NVES, which became law on May 31, 2024, when Royal Assent was received to the New Vehicle Efficiency Standard Act 2024 (NVES Act). We appreciate the changes made by the Government since the first draft proposal, including Exemption Determination 2024 which was published on December 6, 2024.

However, the AAPC and our member companies remain concerned that the NVES Act, with its aggressive implementation lead time and stringency, and lack of supporting mechanisms such as technology credits, will have a significant impact on the business and product mix from 2025 onwards, as well as unintended consequences, such as lowering consumer choice by severely curtailing the types and numbers of vehicle models offered in the market, particularly the higher utility vehicles, the assessment of significant penalties and the possibility that manufacturers will need to increase prices for consumers to cover the additional costs of specific engineering and testing required solely for the Australian market. We believe that it would be in the best interest of Australia's consumers and support important segments of the Australian economy, if the NVES continues to align with international standards and practices.

Proposed New Series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard

The proposed ADR 81/03 defines fuel consumption, carbon dioxide emissions, energy consumption, testing and reporting requirements for all NB category vehicles with a Gross Vehicle Mass (GVM) over 3,500kg from December 1, 2026, for inclusion in the New Vehicle Efficiency Standard from January 1, 2027.

Scope of Regulation

Currently, Fuel Consumption and CO2 test standards based on UNECE Regulation 101 (R101), are widely used globally for light-duty vehicles. Well established over decades, these standards offer consumers insights into ownership costs, CO2 emissions, and energy consumption and range of electrified powertrains. Conversely, the Department's proposal to introduce ADR 81/03, extending the technical requirements of UNECE Regulation No. 101 designed for light-duty vehicles, to include medium-duty NB1 commercial vehicles, is unprecedented and will undoubtedly reduce alignment with global regulations and increase regulatory barriers to the importation of impacted vehicles into the Australian market.

We strongly request that the proposed ADR 81/03 remains consistent with the UNECE R101 Emissions of CO2 and Fuel Consumption standard to ensure it continues to apply to NA category vehicles (equivalent to N1 UNECE Vehicle Category) with reference mass¹ limit up to 2,840kg. Likewise, we request that the NB1 vehicles with reference mass above 2,840kg should also be exempted, as they fall outside the scope of UNECE R101 and subject only to UNECE R49 heavy-duty emissions. Testing beyond the scope of the UNECE R101 is unprecedented in other jurisdictions and could lead to non-representative CO2 emissions being communicated to consumers.

In summary, NB1 vehicles with reference mass over 2,840kg, which have been designed to comply with the heavy-duty emissions standard (UNECE R49), should be exempted from ADR81/03, in line with the exemption granted to the heavier NB1 trucks and vans under the proposed ADR81/03 Section 3.3. Since their reference mass is over 2,840kg, these heavier NB1 vehicles are very much more akin to heavy-duty vehicles and should not be covered under the NVES scheme, which is a light-duty fleet CO2 scheme.

Currently, Australia has several unique vehicle standards that limit the ability to sell models from other markets without modifications. The introduction of a new standard like ADR 81/03 with an increased vehicle scope unique to Australia only could post challenges for the automotive industry in terms of cost, time and market competitiveness. For example, manufacturers may face higher costs to modify their existing vehicle models to

¹ Reference Mass means the mass of the vehicle in running order with a full fuel tank and including the set of tools and spare wheel, plus 100kg but does not include the mass or weight of the passengers and driver.

meet the new standard, as these requirements are not aligned with those in other markets. This could discourage some manufacturers from introducing certain models in Australia, leading to a reduced selection of models being made available for customers. The effect on vehicle manufacturers to redesign existing models to comply with new ADRs (unique to the Australian market) would present a burden and be a costly and onerous exercise.

The proposed ADR 81/03 targets medium-duty Utes and SUVs that make up just over 1% of total vehicle sales (VFACTS 2024). Implementing a new standard specifically for these vehicles is unlikely to have a significant impact on reported transportation greenhouse gas emissions and will have almost no effect on actual real-world emissions. This approach contradicts the goal of achieving Australia's greenhouse gas emissions reduction targets. Additionally, it unfairly penalizes vehicles that are not well-suited for low CO2 emissions technologies, like electrification, due to their capability to handle more demanding tasks than light-duty vehicles. Furthermore, the Consultation Summary states that Forward Control Truck and Van NB1 vehicles will not be subject to the standard because they are used differently or resemble heavy-duty vehicles more closely. This reasoning overlooks the fact that NB1 Utes and SUVs have similar payload, towing, and passenger capacities, allowing them to be used interchangeably for the same work applications.

Therefore, ensuring global regulatory alignment and minimizing regulatory barriers will allow vehicle manufacturers to focus their efforts on ensuring new models introduced to the market continue to comply, without curtailing the lower volume, high work functionality vehicles offered in the market.

Implementation Timeframe

The proposed ADR 81/03 is set to take effect from December 1, 2026, for all NB category vehicles and all MA, MB and MC category New and Existing vehicles with a GVM exceeding 3,500kg. A "New Model" is a vehicle model first produced with a "Date of Manufacture" on or after December 1, 2026.

This new ADR extends the Fuel Consumption and CO2 testing to a new category of vehicles (NB) that have not previously been regulated under the UNECE standards. This represents a significant addition to the set of regulations that these vehicles must comply to achieve vehicle approval within two years.

The ADR 81/03 Consultation Summary states that the effective date of December 1, 2026, 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". This statement indicates that the Department believes the main obstacle to complying with the new ADR 81/03 is merely the testing and submission of required data. However, this overlooks the reality that adequate lead time

before implementing new vehicle rules is crucial for several reasons. Developing new vehicles requires billions of dollars in investment before a single unit is sold. Vehicle performance attributes must be studied, developed, and validated through numerous iterations before reaching the market. Vehicles must first be designed to comply with the regulation, long before their readiness to be tested and certified. In addition, manufacturers also need to adjust their manufacturing processes and supply chains to prevent unexpected costs or delays. All these activities take time and effort, and insufficient lead time can hinder manufacturers' ability to plan effectively, remain competitive, and continue innovating to ensure compliance throughout the product lifecycle.

In summary, the best practices and principles for rulemaking in the automotive sector include sufficient time for meaningful consultation with key stakeholders and sufficient lead times between the final rule and implementation of major changes to automotive regulations and requirements to allow for implementation. Therefore, we strongly request that a transition provision of two years for New Types and four years for Existing Types is required to avoid the disruption of urgently retesting vehicle models already approved and sold in the market.

Thank you for your consideration of our comments. Please let us know if you have any questions or need any further information, do not hesitate to contact s22(1)(a)(ii)
s22(1)(a)(ii)

Regards,

s22(1)(a)(ii)

Matt Blunt
President

INEOS GRENADIER

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The Hon. Catherine King MP
Minister for Infrastructure, Transport, Regional Development and Local Government
PO Box 6022, House of Representatives
Parliament House
Canberra ACT 2600

Subject: NVES exemption based on vehicle design and characteristics for the INEOS Grenadier

Dear Minister King,

INEOS Automotive would like to take this opportunity to express our appreciation for your ongoing commitment to engaging with industry stakeholders throughout the consultation process. Your openness to feedback is vital, and we are thankful for the chance to address recent updates to the exemption criteria and timing for NB1 category vehicles.

The NB1 classification includes pick-ups, vans, buses, platform-cabs and a small number of commercial SUV body types. It's essential to recognise that is not an easy upgrade for passenger vehicles to achieve medium goods-carrying category status, which involves substantial mechanical and structural modifications to comply with a multitude of regulatory requirements.

Focusing on our specialised vehicle, the INEOS Grenadier (including the Quartermaster, its pick-up version) is not just another NB1 vehicle: It is a heavy-duty utility vehicle, meticulously engineered with core features to carry and tow loads while climbing through tough terrain that zero or low emission vehicles (ZLEV) today simply cannot address with the current electrification technologies.

Current BEV technology and charging infrastructure is either inappropriate or insufficient for customers who need their vehicles for accessing rural or remote areas or towing large or difficult loads (such as caravans, trailers for motorcycles, horses, generators, to move cattle and other animals, forestry, etc). For such people, being able to go where they want, when they want, with whatever load they want is not just a "nice to have" - it is a necessity which cannot be met by BEVs.

Based on Grenadier's very unique use cases and capabilities, including the growing interest in our vehicle from hero fleet operators (emergency services, search and rescue operations, etc), we would suggest introducing an exemption from NEVS based on vehicle characteristics.

A technical attribute-based exemption should be considered for vehicles possessing various combinations of the following features:



- *Distinct Vehicle Characteristics:* The Grenadier is designed as a robust utility vehicle, purpose-built for heavy load carrying while navigating challenging terrains and arduous conditions in remote areas (such as Australian outback): GVM up to 3.55t and towing up to 3.5t, front and rear solid axles, low gears and up to three locking differentials. Its engineering sets it apart from mainstream passenger vehicles and should not be subject to regulations intended for such vehicles. Factory equipped with all-terrain tyres chosen for our specialised vehicle to effectively navigate harsh terrains. By providing these tyres as standard, we help minimise waste, as many other models do not offer them, requiring customers to purchase aftermarket options and subsequently dispose of their original tyres. An exemption should be granted for specialised vehicles with such characteristics.
- *Towing & Payload Capacity:* The Grenadier significantly surpasses the payload limits typical of passenger vehicles, while simultaneously providing up to 3.5t towing capacity, making it an essential tool for users. The INEOS Grenadier has a gross combined mass of 7 tonnes, including the possibility to tow trailers with up to 350 kg nose weight – this provides true payload and towing. By contrast, many other models available in the market can only tow 3.5t if the vehicle itself is unloaded/minimal load – limiting significantly their actual load carrying capacity. An exemption should be granted for vehicles with GCM of 7 tonnes.
- *Height Limitations:* Another detail that emphasise commercial characteristics of the Grenadier models is their height: it exceeds 2 meters. This has been optimised for off-roading and to carry loads in rural areas, but poses significant challenges when accessing standard car parks, especially in shopping centres (the typical passenger destination). The Grenadier is not the typical mainstream SUV. An exemption should be granted for vehicles higher than 2m.
- *Robust Vehicle Platform:* The Grenadier's ladder frame chassis, constructed from galvanised steel, delivering strength and durability. Paired with both front and rear solid axles and 5-link mechanical suspensions, this body-on-frame configuration enhances its off-road capabilities and vehicle modification adaptation – no passenger vehicle platform is comparable. An exemption should be granted for vehicles with such characteristics.
- *Outstanding Off-Road Credentials:* The Grenadier is built for serious off-road performance, featuring live axles, optimised angles for departure, approach and breakover, ensuring it can tackle the most challenging environments that currently no ZLEV vehicle in the market can address. An exemption should be granted based on the geometry of vehicles.

Moreover, we would like to highlight how the CO2 emissions figures tested during an homologation test cycle do not accurately represent real-world conditions for NB1 vehicles due to the impact of carrying loads. The scope of a commercial vehicle (NB1) is, by definition, to carry loads – and must have payload capability doubling the number of passengers. Our vehicles can be loaded up to 3.55t and tow up to 3.5t: the cargo weight,



INEOS GRENADIER

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its size, its position (inside, on the roof or on a trailer) greatly influence the real CO2 emissions.

INEOS Automotive believes that the rationale for exempting cab chassis vehicles based on having a min 50% length dedicated to cargo is misguided, as the core purpose of a remains consistent across different designs and lengths: having an incomplete vehicle that can be easily adapted for a multitude of end user use cases.

Given the presented attributes, we strongly urge you to grant an exemption for the INEOS Grenadier model from the NVES scheme under “technical attribute-based exemption”. The current mixed NB1 approach disproportionately penalises vehicles that are fundamentally designed for utilitarian purposes and not for daily errands in urban areas.

Such an exemption would allow our continued supply of vehicle to Australia a vehicle that fulfils a crucial role in the market at an acceptable price point.

INEOS Automotive is the only scale-OEM born in Europe in this century and currently relies on a number of local business in Australia to adapt its vehicles for the unique conditions and challenges that the territory and geography poses; it is essential for the continued viability of these businesses that provide specialised vehicles designed for real-world applications.

INEOS Group, not only the Automotive business, remains committed to decarbonising all of its operations and reaching net-zero by 2050. In terms of the Automotive division, we believe that the best and quickest way to decarbonise the transport sector is a mix of technologies: BEVs do not fit all customers and their use cases, and its important that customers have the possibility to choose from different technologies that allows them to reduce their emissions today. We have been investing in different technologies to explore which one could fit best our unique use cases: battery electric, battery electric with range extender and hydrogen fuel cell and last year we have shown for the first time the Fusilier, our next vehicle line. Today, with our Grenadier and Quartermaster equipped with modern and efficient BMW engines, our vehicles are still significantly more efficient and safer than older vehicles currently on Australian roads.

Thank you for your attention on this pressing matter. We would be pleased to discuss this topic further with you, including the implications on business such as ours if an exemption was not granted. However, we look forward to your favourable response.

Sincerely,

s22(1)(a)(ii)

INEOS Automotive Australia



5th February 2025

**Department of Infrastructure, Transport,
Regional Development, Communications and the Arts**
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CANBERRA ACT 2601

Via email: CleanerCars@infrastructure.gov.au

Response to the Proposed new series of Australian Design Rule 81 (ADR 81/03) to implement the New Vehicle Efficiency Standard (NVES)

The Electric Vehicle Council welcomes the opportunity to respond to the Australian Government's consultation on the proposed ADR 81/03, supporting the implementation of NVES. The EVC is the national peak body for the electric vehicle industry in Australia. We represent members across the EV value chain, including car, bus and truck manufacturers, importers, electricity network operators, charging infrastructure suppliers, recyclers, fleets, financiers, retailers, service providers, property owners and charging networks. Our mission is to accelerate the electrification of transport for a sustainable and prosperous future.

We congratulate the Australian Government for its leadership in developing a well-overdue, technology-neutral NVES. Australia finally has a globally competitive standard that is already delivering increased vehicle choice for consumers and the EVC anticipates it will also deliver significant reductions in transport costs and emissions in the years ahead.

The NVES is a key policy lever for delivering a future where all Australians have access to a wide range of low and zero emission vehicles, many of which will be powered by Australian-made energy and built using Australian-mined materials. The NVES will also be a critical tool for supporting the transport sector in doing its fair share to achieve our national climate targets. It is critical the original design of the NVES is preserved, and that none of the vehicles intended to be included in the standard – as per the May 2024 legislation – are provided any excessive exemption. Adhering to the current NVES implementation per the legislated design (and the March 2024 impact analysis) will support the industry's long-term investment certainty.

Proposed ADR 81/03 to support the implementation of the NVES

Fundamentally, **the EVC supports** the government's intention to include all new light vehicles under the NVES, including so-called light NB1-complied vehicles e.g. full-size utes. These vehicles already receive significant tax concessions, being exempt from the luxury vehicle tax (as are many NA-complied utes), and gain access to other tax benefits – such as being exempt from the car depreciation limit. Light NB1 vehicles are some of the least efficient vehicles on our market and therefore fall squarely within the scope of the NVES to encourage more efficient, and ideally low and zero emission models – already available overseas – to be supplied to Australia.

The EVC recognises that the proposed ADR 81/03 is required to mandate a CO₂ test for certain vehicles (primarily utes and SUVs) between 3.5 and 4.5 tonnes gross vehicle mass, so they can be included in the NVES – as per the government's original proposal and the government's NVES modelling. This is because the current ADR 81/02 is capped at 3.5 tonnes so heavier vehicles are therefore not yet mandated to provide a CO₂ figure.

In general, the EVC supports the proposed design of ADR 81/03, including the intention to cover all new 3.5-4.5 tonne utes and SUVs, but to not cover light duty 'forward control' trucks and/or large vans between 3.5 and 4.5 tonnes. The proposed technical criteria to distinguish between covered and non-covered vehicles also appears appropriate.

Concerns regarding proposed implementation timing for ADR 81/03

The EVC holds concerns about the potential consequences of the proposed implementation timing for ADR 81/03. Specifically, the government is proposing that covered 3.5-4.5 tonne vehicles will continue to be exempt from the NVES until 2027 and will have until 1 December 2026 to comply with the proposed ADR 81/03. The EVC supports an implementation date of **1 December 2025**.

As per the EVC's previous submission on the proposed exemption, the vehicles covered by proposed ADR 81/03 will have more than sufficient time to obtain a CO₂ number by 1 December 2025 (in line with the introduction of WLTP for new model vehicles under ADR 79/05), irrespective of whether this be in NEDC or converted WLTP. To provide a further 12-month exemption for the heaviest and generally least efficient new vehicles included in the NVES is overly generous and unjustified. Moreover, the EVC considers the proposed delay risks undermining the legislated objectives of the NVES Act, including creating "economic incentives" for vehicles that emit less CO₂ and "meeting the environmental expectations of the community", among others.

The government's consultation paper states that the proposed ADR 81/03 should not take effect until 1 December 2026 – and the affected vehicles be exempt from NVES until 2027 – to avoid a situation where *"OEMs need to stop deliveries of vehicles to customers who ordered a vehicle before this change"*. The claim that customers may have ordered vehicles before May 2024 (which may not be delivered until at least 1 December 2026) has not been demonstrated.

At present there are very few supply delays for new vehicles sold to Australian consumers. In fact, we are not aware of any relevant vehicle that could have been ordered before May 2024, that will not be delivered to a customer by 1 December 2025 (or at least imported by then, since NVES applies at the point of import).

To be clear, the government's impact analysis for the NVES was published in March 2024, and the final design of the standard was legislated in May 2024. From this date, all OEMs with affected vehicles up to 4.5 tonnes have been aware of the government's intended NVES settings and have been making commercial decisions in response to this.

Any claims otherwise deserve greater scrutiny and should not be accepted on face value. The government is proposing to provide a generous 12-month advantage to makers of vehicles that were always planned to be included in NVES, meanwhile every OEM supplying a vehicle to market up to 3.5 tonnes does not receive the same benefit.

Despite the government's claim that these changes will reduce emission abatement by less than 1%, the proposed timeline may have broader economic impacts by encouraging more sales of large, emissions-intensive vehicles outside the NVES until 2027.

Development of CO₂ conversion protocol as part of ADR 81/03

The EVC supports the development of a CO₂ test cycle conversion protocol as part of the proposed ADR 81/03, given many new vehicles will comply with ADR 79/05 from 1 December 2025 and should not be required to also test against the less strict NEDC test cycle under ADR 81/02. The EVC is a member of the government's NVES emissions testing working group currently working on this test cycle protocol.

The EVC welcomes the government's appointment of the International Council of Clean Transportation (ICCT) to advise on this work and **the EVC urges faster action** on finalising this conversion protocol, and confirmation this will not delay any element of the NVES implementation, or be used as justification as to why ADR 81/03 cannot be effective from 1 December 2025.

Next Steps

As outlined in our previous submission, the EVC supports the temporary exemption of light NB1 vehicles from the NVES until 1 January 2026. We strongly encourage the government to revisit the proposed implementation date for ADR 81/03 and to revise this back to 1 December 2025. We maintain that proceeding with the current date is likely to materially damage the impact of the NVES and its legislated objectives.

We look forward to continuing to work with the government, our members and other stakeholders to support the implementation and operation of Australia's first new vehicle efficiency standard – a major achievement for our country, and we again thank the government for its leadership on this critical transport policy.

If you have any questions on this submission, please contact s22(1)(a)(ii) s22(1) , at: office@evc.org.au

Thank you for your consideration of our submission.

Yours sincerely,

Julie Delvecchio

Chief Executive Officer
Electric Vehicle Council



Submission to the proposed new series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard

5 February 2025

About Greenpeace

Greenpeace is a global environmental network dedicated to the mission of securing a world capable of nurturing life in all of its magnificent diversity. We are fully independent, accepting no funding from any government, business or political party anywhere in the world. Greenpeace Australia Pacific is an autonomous entity headquartered in Sydney. More than 1.2 million people participate within the Greenpeace Australia Pacific network across all platforms, showing their support for ambitious climate action. Greenpeace considers the current trajectory of global warming to be the single greatest threat to human health, security, and well-being, as well as to global biodiversity. For these reasons we urge the Federal Government to take the strongest possible action on climate change, in line with credible pathways to limiting global heating to 1.5 degrees.

Greenpeace has engaged with the government throughout the development and passing of the New Vehicle Efficiency Standard Act 2024 and now welcomes the opportunity to further comment on implementation matters, such as the proposed changes to Australian Design Rule 81.

Summary of recommendations

Greenpeace applauds the government's efforts to introduce the critical and much overdue New Vehicle Efficiency Standard (NVES) legislation from January 2025.

The NVES has the potential to deliver significant cost savings for Australian households, healthier communities, quieter streets, new economic opportunities, and a critical reduction in harmful carbon emissions.

However, in reviewing the proposed new series of ADR81 to support the implementation of the NVES, Greenpeace urges the government to remain steadfast in its commitment to reaching net zero emissions by 2050.

Without a rapid change in course, the transport sector could soon be Australia's largest source of emissions¹. At this stage, delaying the implementation time or narrowing the scope of vehicles included in the NVES will threaten our ability to reduce transport emissions at the speed and scale required.

Greenpeace therefore submits the following recommendations in response to the government's proposed changes to ADR81.

1. Revise the proposed implementation date for ADR81/03 so that new utes and SUVs between 3.5 and 4.5 tonnes supplied from **1 December 2025** must complete a CO₂ emissions test, and become subject to the NVES from the **start of 2026**.
2. Maintain the integrity of the NVES by providing no further exemptions or extensions for additional vehicle classes, particularly the heaviest and most polluting vehicles.
3. Develop a process for the conversion procedure that closes any loopholes around over-declaration, and make all data provided by car manufacturers publicly available so it can be independently verified and audited by the relevant department.
4. Replace the outdated NEDC test protocol for all vehicles with a more accurate, world class CO₂ test, such as the WLTP.

Key Points

Recommendation 1 : Revise the proposed implementation date for ADR81/03 so that new utes and SUVs supplied from 1 December 2025 must complete a CO₂ emissions test, and become subject to the NVES from the start of 2026.

As we stated in previous submissions, we have supported the government's previous consideration of environmental parameters for any possible exemptions from the NVES, emphasising that any exemptions must minimise the number of vehicles affected and the length of time of any exemption.

We were therefore extremely concerned to read that the government is now proposing that all new utes and SUVs between 3.5-4.5 tonnes will continue to be exempt from the NVES until 2027, and will have until 1 December 2026 to comply with the proposed ADR 81/03. These vehicles are some of the heaviest and least efficient in Australia's car market and excluding them from the NVES for any longer will weaken the NVES and its legislated objective of emissions reduction. Our strong recommendation is that this timeline be brought forward

¹ Department of Climate Change, Energy, the Environment and Water, Reducing transport emissions.
<https://www.dcceew.gov.au/energy/transport>

to 1 December 2025, providing more than sufficient time to obtain a CO₂ number.

Let's be clear – vehicle manufacturers have been aware of the government's planned NVES settings since March 2024, and the legislation was passed in May 2024. This is ample time for manufacturers to have been preparing to comply, rather than putting further pressure on the government for additional delays.

Throughout the consultation process around this legislation, Greenpeace has emphasised the urgency of implementing the NVES swiftly to begin rapid emissions cuts. By not starting until 1 January 2025, and with penalties not coming into effect until 1 July 2025, the NVES is *already* significantly delayed.

To re-cap, in February 2024, the Australian government chose a middle-of-the-road “Option B - fast start and flexible” approach for the policy settings of the NVES. In March 2024, after sustained pressure from the auto-industry, updated changes to Option B saw a transfer of certain large SUVs under the more lenient light commercial vehicle category. Associated provisions also became less stringent. The estimated net effect of these leniencies is that, instead of saving 103 million tonnes under the original “Option B” version between 2025 and 2029, only 87 million tonnes of real-world CO₂ emissions will be saved².

This incremental diluting of the NVES policy settings through further delays and exemptions should be assessed collectively and viewed as a pattern. It is a further reason why an additional year-long delay is completely unacceptable and does not stand up to scrutiny.

Recommendation 2: Maintain the integrity of the NVES by providing no further exemptions or extensions for the heaviest and most polluting vehicles.

There has been a sustained and increasing proportion of large and heavy passenger vehicles in Australia. This is termed “car obesity” and such vehicles generally impact negatively on energy efficiency and greenhouse gas emissions.

A Transport Energy/Emission research study of 2019 estimated that on-road fleet-average CO₂ emissions rates (g/km) for Australian new passenger vehicles have not decreased as reported officially, but have actually increased by a few

² Transport Energy/Emission Research, New Vehicle Efficiency Standard (NVES) Design Options and Estimated Impacts on Lifetime CO₂ Exhaust Emissions from New Australian Light-Duty Vehicles, 22 April 2024: https://www.transport-e-research.com/_files/ugd/d0bd25_7e310d6216fd4f99965edf0b5b2ffdd7.pdf

percent each year since 2015³. A sustained increase in vehicle weight and a shift to the sale of more four-wheel-drive cars (in other words, SUVs and large utes) were found to be the main factors contributing to this undesirable outcome⁴.

When the current NVES design is analysed more closely, as was recently done by Robin Smit and Jake Whitehead, it appears there is a significant risk that car obesity will be promoted⁵. In particular, the relatively steep slope of the NVES suggests that it may be beneficial for suppliers to sell more heavy vehicles, as it would significantly increase their average emission targets, reduce their emission debits and/or increase their emission credits, with potentially additional monetary gains.

Their study simulation suggests that current NVES design allows for an increase in total real-world emissions of almost 6 million tonnes (9%) if 66% of suppliers would only sell their heaviest vehicle that was on sale in model year 2022 in 2025, while keeping the sales of zero and low emission vehicles the same. Moreover the compliance gap would be reduced for about one third of suppliers, simply by selling heavier vehicles. Fourteen percent even can make a profit, instead of buying credits or paying a penalty, and would not have to reduce the emissions performance of the 2022 models in their fleet⁶.

So in spite of the government's claim that the currently proposed ADR81/03 will only have a small impact on emissions abatement, excluding some of the heaviest and most polluting vehicles until 2027 would encourage more of these to be sold outside the NVES for longer. This could result in higher transport pollution, not accounted for in the government's figures.

This is one more reason why we do not approve of the government's proposed implementation timeline and reiterate that it must be brought forward to 1 December 2025.

Recommendation 3: Develop a process for the conversion procedure that closes any loopholes around over declaration, and make all data provided by car manufacturers publicly available so it can be independently verified and audited.

³ TER 2019. *Real-World CO2 Emissions Performance of the Australian New Passenger Vehicle Fleet 2008-2018 – Impacts of Trends in Vehicle/Engine Design*, Transport Energy/Emission Research(TER), 14 September 2019, <https://www.transport-e-research.com/publications> (Publication 2019a)

⁴ TER 2019. *Real-World CO2 Emissions Performance of the Australian New Passenger Vehicle Fleet 2008-2018 – Impacts of Trends in Vehicle/Engine Design*, Transport Energy/Emission Research(TER), 14 September 2019, <https://www.transport-e-research.com/publications> (Publication 2019a)

⁵ Smit, R., & Whitehead, J. THE IMPACT OF CURRENT AUSTRALIAN NEW VEHICLE EFFICIENCY STANDARD (NVES) DESIGN ON CAR OBESITY.

https://www.transport-e-research.com/_files/ugd/d0bd25_a6eb2a8ba5a5415aacdc23af85600cc6.pdf

⁶ Smit, R., & Whitehead, J. THE IMPACT OF CURRENT AUSTRALIAN NEW VEHICLE EFFICIENCY STANDARD (NVES) DESIGN ON CAR OBESITY.

https://www.transport-e-research.com/_files/ugd/d0bd25_a6eb2a8ba5a5415aacdc23af85600cc6.pdf

Greenpeace supports the proposal to develop a CO₂ test cycle conversion protocol, so that new vehicles complying with the more stringent ADR 79/05 do not need to do a second test against the weaker NEDC.

We are concerned that the development of this conversion protocol has taken too long, and are seeking clarity on when it will be finalised. Under no circumstances should there be further delays to the implementation of the NVES overall or the implementation date of ADR 81/03.

Australia should also learn from the issues of over declaration that arose when converting NEDC to Worldwide Harmonised Light Vehicles Test Procedure (WLTP) in the EU⁷, as a result of car manufacturers inflating their emissions at the point of initial testing. Car manufacturers like Toyota⁸, VW⁹, and many others have historically lied about their emissions repeatedly, and the Government needs to be confident that the figures it is using can be trusted.

As we've previously stated in NVES consultations, accurate data is essential to the success of the standard. The Australian automotive import industry currently controls data about vehicle sales and emissions as proprietary information, which it sells to the Government regulators and other stakeholders as a revenue generating measure.¹⁰

All relevant data regarding vehicle emissions, sales and registrations should be managed and published by Government bodies. This data should be made publicly available, to allow for scrutiny of progress being made on the reduction in emissions from cars - similar to the model used in New Zealand.¹¹

Recommendation 4: Replace the outdated NEDC test protocol with a more accurate, world class CO₂ test, such as the WLTP

Analysis of the current NVES settings published by Robin Smit and Jake Whitehead in August 2024 has shown not only that implementation timelines for emissions abatement are too long, but also that abatement outcomes are being over-estimated significantly due to delays in shifting from the archaic

⁷ Suarez, J., Komnos, D., Ktistakis, M.A., Fontaras, G., 2025 and 2030 CO₂ emission targets for Light Duty Vehicles, Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/901734, JRC133502.

⁸ AP News, *Toyota chief apologizes for cheating on testing at group company — again*, January 2024, <https://apnews.com/article/toyota-cheating-tests-diesel-daihatsu-apology-02680eb9bab1a555ea43208d69a0c86e>

⁹ BBC News, Volkswagen: The scandal explained, December 2015 <https://www.bbc.com/news/business-34324772>

¹⁰ Climate Works, *National Electric Vehicle Strategy: Climate Works' Submission*, 2022, <https://consult.dccew.gov.au/national-electric-vehicle-strategy/submission/view/389>

¹¹ Government of New Zealand, <https://www.transport.govt.nz/statistics-and-insights/fleet-statistics/light-motor-vehicle-registrations-2/>

NEDC to the international best practice WLTP for quantifying vehicle emissions and fuel economy¹².

While most of the world has long discarded the 1970s NEDC, and despite the NEDC's known problems and loopholes, the Australian government has still not aligned with international best practice.

In a 2024 study by Transport Energy/Emission Research (TER), Robin Smit et al. compared the emissions gap of Australia's NEDC with that of the EU's WLTP test protocol in 2021. The study revealed, for example, that the average emissions gap for petrol and diesel cars in Europe was 15–20%, whereas in Australia it was a much larger 30–35%. Smit et al. found that, if Australia were to be using a WLTP-based certification, vehicles would have more realistic certified values, lowering the gap to 18%¹³.

Conclusion

In reviewing the proposed changes to ADR81/03, Greenpeace urges the Government to remain steadfast in its commitment to reaching net zero emissions by 2050, which according to the International Energy Agency requires all new vehicle sales to be electric by 2035.¹⁴ That target is the bare minimum and takes a conservative approach. Research from Greenpeace Germany and the Institute for Sustainable Futures shows that in order to decarbonise road transport and limit global warming to 1.5 degrees with a 67% likelihood of success, no new ICE light duty vehicles can be sold globally beyond 2030.¹⁵ It will also require significant investment in mode shift away from passenger vehicles altogether and towards public and active transport, and from road to rail.

With this in mind, we thank you for your consideration of the following recommendations to your proposed changes to ADR81 and look forward to continuing to engage with you to ensure the effectiveness of the NVES.

1. Revise the proposed implementation date for ADR81/03 so that new utes and SUVs between 3.5 and 4.5 tonnes supplied from 1 December 2025

¹² Smit, R., & Whitehead, J. THE IMPACT OF CURRENT AUSTRALIAN NEW VEHICLE EFFICIENCY STANDARD (NVES) DESIGN ON CAR OBESITY.

https://www.transport-e-research.com/_files/ugd/d0bd25_a6eb2a8ba5a5415aacdc23af85600cc6.pdf

¹³ Dimitrios Komnos, Robin Smit, Leonidas Ntziachristos, Georgios Fontaras, "A comparative analysis of car fleet efficiency evolution in Europe and Australia insights on policy influence" January 2025, <https://www.sciencedirect.com/science/article/pii/S0301479724032997>

¹⁴ International Energy Agency, *An updated roadmap to Net Zero Emissions by 2050*, 2022,

<https://www.iea.org/reports/world-energy-outlook-2022/an-updated-roadmap-to-net-zero-emissions-by-2050>

¹⁵ Teske, S; Bratzel, S; Tellermann, R; Stephan, B & Vargas, M (forthcoming), The Internal Combustion Engine Bubble. https://www.greenpeace.de/publikationen/ICE-Bubble_2.pdf

most complete a CO₂ emissions test, and become subject to the NVES from the start of 2026.

2. Maintain the integrity of the NVES by providing no further exemptions or extensions for additional vehicle classes, particularly the heaviest and most polluting vehicles.
3. Replace the outdated NEDC test protocol for all vehicles with a more accurate, world class CO₂ test, such as the WLTP
4. Develop a process for the conversion procedure that closes any loopholes around over-declaration, and that all data provided by car manufacturers be publicly available so it can be independently verified and audited by the department.



Submission by
Toyota Motor Corporation Australia on
Proposed New Rule ADR 81/03
February 2025

Toyota Motor Corporation Australia (Toyota) welcomes the opportunity to provide feedback on the proposed new series of Australian Design Rule 81.

Toyota supports the introduction of the proposed new standard, with consideration for implementation timing and finalisation of ADR prior to commencement of New Vehicle Efficiency Standard Act 2024 (NVES) reporting for certainty. Toyota endorses the

submission of the industry's peak body, the Federal Chamber of Automotive Industries (FCAI), which is based on key policy considerations.

Please see below for comments and recommendations.

- **Reported Values**

The fuel / energy consumption label mandated within the proposed ADR 81/03 requires the “combined”, “urban” and “extra-urban” fuel consumption values to be reported. These values should be determined from the Type I test, determined in accordance with Annex 6 or Annex 8 of Appendix B.

The proposed CO₂ conversion factors to be included in the Appendix C of ADR 81/03 should outline detailed calculation steps for determining the mandated “combined”, “urban” and “extra-urban” fuel consumption values.

When converting WLTP test results, the standard should explicitly state whether the results of “extra-high” phase should be excluded from calculations.

- **Utility factors for PHEVs**

Currently, PHEVs certified under different standards are assessed using varied utility factors which leads to inconsistent CO₂ emissions reporting. Different standards (e.g., FMVSS, ADR 79/04, ADR 111/00, and UN R 154/02 S01) represent different regulatory priorities, test cycles and calculation methods.

- CO₂ conversion factors for PHEVs should be aligned with the utility factors specified in the ADR. These factors, crucial for CO₂ reporting under the NVES, must account for variations in reported CO₂ values to ensure equity across different certification methodologies.
- The proposed CO₂ conversion factors in the Appendix C of ADR 81/03 should not only identify the applicable test cycle but also reflect the utility factor applied. To ensure consistency in reported CO₂ values regardless of certification pathways chosen, the conversion factors should vary between vehicles certified under:
 - The UN R154 00 series and
 - The UN R 154 Supplement 1 of the 02/03 series or subsequent amendments

These recommendations ensure the reporting framework remains consistent with regulatory objectives while addressing variations in certification standards.

Additional recommendations

1. All light vehicles within the scope of the proposed ADR 81/03 will need to comply with ADR 79/05 (Emission Control for Light Vehicles) from 1 July 2028. As the

proposed NVES targets are based on NEDC test cycle, the ability to certify models to UN R 101 or ADR 81/03 should continue to apply. Alternatively, to avoid additional NEDC testing, WLTP based CO₂ targets should be established within the NVES

2. If the provisions for PHEV CO₂ conversion factors are not finalized before the commencement of NVES from 1 July 2025, we recommend that the NVES reporting system allow manufacturers to revise the RAV upload data once the regulation requirements are established.



FEDERAL CHAMBER OF AUTOMOTIVE INDUSTRIES

FCAI submission in response to:

Australian Design Rule (ADR) 81/03 Vehicle Efficiency Labelling and Carbon Dioxide Emissions Measurement 2025

5 FEBRUARY 2025



EXECUTIVE SUMMARY

The Federal Chamber of Automotive Industries (FCAI) welcomes the opportunity to provide this submission to the consultation draft of *Vehicle Standard (Australian Design Rule 81/03 – Vehicle Efficiency Labelling and Carbon Dioxide Emissions Measurement) 2025* being undertaken by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA).

The FCAI is the peak industry body for Australian importers and distributors of light duty passenger vehicles, light commercial vehicles, motorcycles and off highway vehicles. FCAI members supplied more than 1.2 million new vehicles into the Australian market in 2024.

The FCAI is pleased to provide commentary in relation to the following issues associated with the proposed Australian Design Rule (ADR) 81/03:

- the purpose of ADR 81/0x;
- the extent to which the draft ADR is harmonised with international best practice;
- the extent to which the draft ADR allows suppliers/manufacturers practical time to comply with its requirements;
- the regulatory certainty required by suppliers/manufacturers providing product to the Australian market; and
- the practicality of exempting vehicles using the ADR rather than the appropriate legislative instrument provided in the *New Vehicle Efficiency Standard Act 2024* (Cth) (NVES Act).

In considering the matters raised in the review, the FCAI has applied a number of principles, including the need to improve effectiveness, equity, transparency and credibility in the draft ADR 81/03.

A list of FCAI recommended actions is provided at section 6 of this submission (FCAI Recommendations).

1. REGULATORY PROCESS

Issue: *The purpose of ADR 81/0x is directed at Fuel Consumption Labelling for Light Vehicles.*

ADR 81 was first approved as a national standard by the Minister for Transport and Regional Services on 9 June 2000 in *Motor Vehicle Standards Determination No. 1 of 2000*. The determination was published in Commonwealth of Australia Special Gazette No. S 322 of 20 June 2000. The sole purpose of ADR 81/00 and all subsequent series of ADR 81 through to the current 02 series has been the “*Fuel Consumption Labelling for Light Vehicles*”. Each iteration of ADR 81 has been specifically in respect of M₁ and N₁ category vehicles with a gross vehicle mass (GVM) not exceeding 3.5 tonnes.

The FCAI notes that the draft new series of ADR 81/03 that has been provided for consultation has an increased scope to include vehicles with GVM between 3.5 and 4.5 tonnes and to change the title of the ADR to *Vehicle Efficiency Labelling and Carbon Dioxide Emissions Measurement*. The FCAI submits that these significant changes exceed the allowable reach of a new series of an existing ADR and so should be encompassed in an entirely new ADR.

It is clear from the APPLICABILITY clause in the consultation draft ADR 81/03, which allows existing models of MA, MB and MC category vehicles with a GVM of less than 3.5 tonnes to continue to apply ADR 81/02, that the sole effective purpose of ADR 81/03 is to capture vehicles with a GVM in the range between 3.5 and 4.5 tonnes.

According to the Government’s Impact Analysis Framework¹, policy makers are required to develop an evidence base for well informed decision making with a key criteria in the process being whether the impacts of the proposal are more than minor. Where they are, an Impact Analysis is required.

The FCAI believes that the proposed measurement of carbon dioxide (CO₂) emissions and the widening of scope to capture vehicles never previously contemplated for this measurement as outlined in the draft ADR clearly has major impacts. The FCAI is not aware of any evidence that would suggest that the impact analysis for the NVES contemplated the inclusion of vehicles with a GVM of between 3.5 and 4.5 tonnes within the scope of ADR 81.

The FCAI recommends that an entirely new ADR is developed for the measurement of CO₂ emissions of vehicles with a GVM between 3.5 and 4.5 tonnes. The new ADR must be subject to the normal regulatory scrutiny required by the Office of Impact Assessment.

¹ <https://oia.pmc.gov.au/impact-analysis-process>
ADR 81/03 CONSULTATION REVIEW

2. HARMONISATION

Issue: *The draft ADR 81/03 is not harmonised with international regulation.*

As a longstanding signatory to the 1958 and 1998 UNECE Agreements on Harmonised Technical Regulations, Australia has a policy of harmonisation of ADRs with regulation developed under the UN World Forum for the Harmonisation of Vehicle Regulations – WP 29.

Australia has adopted a foundational policy of “applying” new regulations which are developed by WP.29. The FCAI endorses this policy as a sensible, logical and appropriate regulatory approach for a market in which no light vehicles are manufactured for domestic or export consumption.

The FCAI submits that if Australia is to adopt a policy of measuring CO₂ emissions from vehicles with a GVM of between 3.5 and 4.5 tonnes, that it should regulate on the basis of a UN Regulation published by WP.29 or a technically equivalent regulation. ADRs that differ from equivalent UN Regulations run counter to the Government’s stated objective of harmonisation and require considerable additional work outside of the WP.29 analysis and work stream.

FCAI is not aware of any technically equivalent regulation which provides for the measurement and reporting of CO₂ emissions from vehicles with a GVM between 3.5 and 4.5 tonnes.

The FCAI notes that Australia (as a contracting party) has increased its participation in work undertaken by the UN through WP.29 to ensure that Australian requirements are considered within the UN Regulations as they are developed and prior to their initial publication. This has been beneficial as it reduces the need for unique Australian modifications to UN Regulations to be effected through ADRs.

The FCAI recommends that Australia propose development of a new UN Regulation to measure CO₂ emissions of vehicles with a GVM between 3.5 and 4.5 tonnes under WP.29. The FCAI recommends that the regulation subsequently developed be used as the basis for the reporting of CO₂ emissions under a new ADR which applies the UN Regulation.

3. LEAD TIME

Issue: *Draft ADR 81/03 does not allow sufficient lead time.*

3.	APPLICABILITY
3.1.	This vehicle standard applies to MA, MB, MC, MD, NA and NB category vehicles with a gross vehicle mass not exceeding 4,500kg from the dates set out in clauses 3.1.1 to 3.1.3 and the table in clause 3.4.
3.1.1	1 December 2026 for new model MA, MB, MC, NA and NB category vehicles.
3.1.2	1 December 2026 for all NB category vehicles and all MA, MB and MC category vehicles with a gross vehicle mass exceeding 3,500kg.
3.1.3.	There is no mandatory application date for all other vehicles. They may comply with this vehicle standard, or continue to comply with ADR 81/02, as applicable for the particular vehicle category.

Source: Consultation draft ADR 81/03

The FCAI has a long-held view on the requirement for reasonable lead times to be provided to manufacturers before the introduction of new regulatory obligations. On multiple occasions the FCAI has submitted information which demonstrates the vehicle development timeframes and production preparation schedules which are required to introduce new models, variants and technologies to market.

A summary of implementation lead time requirements is provided as Appendix A to this submission. In addition, a summary of actions required to introduce a new model to market is provided as Appendix B.

The consultation draft ADR 81/03 proposes that all new utes and SUVs between 3.5 and 4.5 tonnes GVM supplied from 1 December 2026 will be required to complete a CO₂ emissions test and report a CO₂ number. This is on the basis that the proposed 1 December 2026 date will 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. The vehicles would then become subject to the NVES from the start of 2027.

The FCAI believes that the 1 December 2026 date is unreasonable and designed to capture vehicles in the NVES from January 2027 for purely policy considerations and without due consideration of the impact on manufacturers and the process for bringing vehicles to market.

Even if no further development work was required for an existing model that was designed and developed without contemplation of a CO₂ regulation (and that is highly unlikely), the imposition of the 1 December 2026 date clearly provides insufficient time to allow for:

- the preparatory work for preparing a homologation programme;
- building test vehicles;
- accumulating vehicle kilometres;
- conducting testing; and
- receiving approvals

all before commencing the Australian domestic certification process. It should be noted that manufacturers' quality processes required under the *Road Vehicle Standards Act 2018* (RVSA) typically do not permit production to commence until a Vehicle Type Approval is received, and subsequently vehicle stocks must be built before shipping. This can take upward of 3~4 months from some source countries.

These multiple factors make the suggested timing practically impossible to meet.

The FCAI recommends that the Commonwealth Government provide practical, realistic implementation lead times of at least 24 months for new models and 48 months for all models for any regulation implemented for the measurement and reporting of CO₂ emissions for the NVES.

4. REGULATORY CERTAINTY

Issue: *The draft ADR 81/03 has sections which are incomplete which may affect published sections.*

APPENDIX C (forthcoming)

This appendix will specify a procedure to calculate NEDC equivalent values for fuel consumption and carbon dioxide emissions for vehicles that comply with the new ADRs 79/05, 80/04 and 111/00. This procedure is currently under development through the Emissions Testing Technical Working Group established by the department.

The fact that the Commonwealth Government is suggesting publication of a new ADR which is incomplete and so lacks significant technical content is profound and concerning. The FCAI cannot recall any previous example where an incomplete ADR has been imposed upon industry. The FCAI notes the incomplete ADR will have significant implications under the NVES for models that have already been provided to the market or have had their design, development and production preparation substantially completed.

The FCAI recommends that any regulation for the measurement and provision of CO₂ emissions values must be complete prior to its publication.

With the introduction of ADRs 79/05, 111/00 and 112/00 to implement the Euro 6d suite of emissions regulations, Government stated an intention to review ADR 81/02 to reflect the WLTP. It seems illogical that, with the implementation of the NVES, the basis of that legislation is the NEDC drive cycle throughout the entire duration of the Act. This necessitates the conversion of what will be the majority of CO₂ results through an imperfect mathematical formula currently proposed to be included in Appendix C of ADR 81/03.

FCAI suggests that a much more practical, robust and elegant solution to this problem would be to use the existing tool developed for the European industry to convert NEDC values to WLTP to establish WLTP-based target values for the legislation and then have suppliers furnish only WLTP values to the NVES. This would effectively future-proof the legislation whilst catering for the majority of reported CO₂ values in their certification condition without any need for conversion or inefficient and expensive multiple testing.

The FCAI recommends that the NVES Act is modified to report WLTP-based CO₂ values instead of NEDC-based values.

5. EXEMPTIONS

Issue: *The draft ADR 81/03 effectively exempts some commercial vehicles from the NVES.*

3.	APPLICABILITY
3.3.	NB1 category vehicles need not comply with this vehicle standard, if the vehicle:
3.3.1	has an integrated and enclosed space designed for the carriage of passengers and goods, and the area designed for the carriage of goods exceeds 50.0 per cent of the vehicle's 'Total Length'; or
3.3.2	is a 'chassis-cab' with one row of seats, and is designed to be fitted with a load bearing body exceeding 60.0 per cent of the vehicle's 'Total Length', including the maximum 'Rear Overhang' permitted under Clause 6.1.2.1 of the Vehicle Standard (Australian Design Rule 43/04 – Vehicle Configuration and Dimensions) 2006; or
3.3.3	is a 'chassis-cab' with two or more row of seats, and is designed to be fitted with a load bearing body exceeding 50.0 per cent of the vehicle's 'Total Length', including the maximum 'Rear Overhang' permitted under Clause 6.1.2.1 of the Vehicle Standard (Australian Design Rule 43/04 – Vehicle Configuration and Dimensions) 2006.

The draft ADR 81/03 exempts certain NB1 category vehicles from this regulation and consequently effectively exempts those same vehicles from the NVES subject to their practical capacity for carrying goods.

The FCAI supports such an exemption and acknowledges the actual methodology, based broadly on the Truck Industry Council's suggestion to the NVES consultation as practical and reasonable.

However, the FCAI believes that exemptions from the NVES should be dealt with in a formal EXEMPTIONS instrument which undergoes the due process required for the development of such an instrument, including the public scrutiny required under the NVES Act.

The FCAI recommends that exemption of goods carrying vehicles practically enabled in clause 3.3 of the consultation draft are not formalised in the ADR but in a legislative instrument to provide exempt vehicle status to that specific class of road vehicle under section 29 of the NVES Act.

FCAI RECOMMENDATIONS

The FCAI makes the following recommendations to the draft ADR 81/03 consultation:

- an entirely new ADR be developed for the measurement of CO₂ emissions of vehicles with a GVM between 3.5 and 4.5 tonnes. This new ADR should be separate from the ADR which (currently) covers vehicles with a GVM of up to 3.5 tonnes. The new ADR must be subject to the normal regulatory scrutiny required by the Office of Impact Assessment;
- Australia propose development as a new UN Regulation to measure CO₂ emissions of vehicles with a GVM between 3.5 and 4.5 tonnes under WP.29. The regulation subsequently developed should be used as the basis for the reporting of CO₂ emissions under a new ADR which applies the UN Regulation;
- the Commonwealth Government provide practical, realistic implementation lead times of at least 24 months for new models and 48 months for all models for any regulation implemented for the measurement and reporting of CO₂ emissions for the NVES;
- any regulation for the measurement and provision of CO₂ emissions values must be complete prior to its publication;
- the NVES legislation be modified to report WLTP-based CO₂ values instead of NEDC-based values; and
- that exemption of goods carrying vehicles practically enabled in clause 3.3 of the consultation draft are not formalised in the ADR but in a legislative instrument to provide exempt vehicle status to that specific class of road vehicle under section 29 of the NVES Act.



APPENDIX A: IMPLEMENTATION LEAD TIME

It is essential that the Government provide adequate implementation lead time for any regulatory change.

The FCAI has consistently advocated that a minimum of 24 months lead time from the publication of an ADR, its supporting regulations and administrative arrangements is essential to allow suppliers to prepare for the introduction of compliant 'New Model' product to the Australian market. A further 24 months is required to allow for the development, testing, validation, compliance and production preparation for the introduction of 'All models' for any existing product already supplied into the Australian market.

The FCAI has previously provided a detailed account of the actions required to introduce a new model to market as Appendix B of its response to the *Light Vehicle Emissions Standards for Cleaner Air* Regulatory Impact Statement and as Appendix A to the response to the *Euro 6d Exposure Drafts*. For convenience, the detailed account of the required actions is replicated as Appendix B to this submission.

The final year of preparation includes:

- | | |
|-----------------|--|
| Launch - 1 year | <ul style="list-style-type: none"> • Confirm production preparation with system and parts suppliers. • Build certification pre-production vehicles. • Undertake certification testing.¹ • Undertake certification processes and obtain certification approval from authorities. • Obtain Australian VTA through ROVER. • Quality process confirmation. • Authorise start of production. • Production build. • Logistics to bring to market. • Sales launch. |
|-----------------|--|

The process of attaining an Australian domestic VTA is a critical consideration since the introduction of the *Road Vehicle Standards Act 2018* (Cth) (RVSA) and the ROVER IT system.

The RVSA and ROVER have increased the time required to obtain a VTA. In addition, the restrictive nature of the legislation and ROVER does not allow for multiple submissions to exist concurrently, effectively limiting the number of VTA applications that can be made in any calendar year. The implementation of multiple new and revised ADRs in a short time frame forces suppliers to consolidate VTA submissions and incorporate additional lead time into production preparation plans, further restricting design, development and validation time available.

The FCAI reiterates its request that the Government provide a minimum of 24 months lead time from the date of the publication to the implementation of any 'New Models' date, and a further 24 months prior to the implementation of any 'All Models' date for the new or amended mandatory requirement that is implemented.



APPENDIX B:

ACTIONS REQUIRED TO INTRODUCE A NEW MODEL TO MARKET

Time to market	Actions
5 to 7 years	- Design of vehicle structure, architecture. - Work with Tier 1 suppliers to specify, design and develop sub-systems.
4+ years	- Design and development of the major sub-systems that are not part of the vehicle structure, e.g. brake systems. - Build of prototypes and installation of new systems in model prototype. - Initial calibration and laboratory testing.
3 years	- Undertake on-road vehicle calibration. - Undertake initial seasonal variation testing (i.e. summer/winter).
2 years	- Finalise on-road vehicle calibration. - Additional seasonal variation testing. - Supply preparation, contracts, advanced orders. - Commence production preparation including tooling, parts approval including PPAP.
1 year	- Confirm production preparation with system and parts suppliers. - Build certification pre-production vehicles. - Undertake certification testing.² - Undertake certification processes and obtain certification approval from authorities. - Quality process confirmation. - Australian domestic certification. - Production build. - Logistics to bring to market. - Sales launch.

¹ Typical sequence for obtaining a UN Regulatory approval

n -12 (months)	Compile specification information for selection.
n -11	Selection of Test vehicle(s) from specification.
	Negotiate test program with Technical Service.
n -9	Procurement of test part(s) and vehicle(s).
n -6	Build Test vehicle(s).
n -3	Type Approval Testing.
n (months)	Approval issued.



CONTACT

For more information contact:

s22(1)(a)(ii)

FCAI.COM.AU



February 5, 2025

SUBMISSION FROM FORD MOTOR COMPANY OF AUSTRALIA: PROPOSED NEW SERIES OF ADR 81

Ford Motor Company of Australia Pty. Limited (Ford Australia) appreciates the opportunity to make a submission to the Department of Infrastructure, Transport, Regional Development, Communications, and the Arts consultation regarding the “Proposed new series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard” (ADR 81/03). This submission builds on Ford Australia’s input to earlier consultations on the development of the Commonwealth Government’s New Vehicle Efficiency Standard (NVES), and Ministerial NVES Exemption Determinations submitted in 2024. In our comments, we have also considered the New Vehicle Efficiency Standard Exemption Principles published in August 2024 and how these may be applied to align with the proposed ADR.

Ford Australia supports the principles of the NVES legislation and the surety that the right fleet CO2 regulations can provide to the automotive industry. Ford Motor Company operates successfully in many markets where such standards exist but are concerned by the proposed use of ADR 81/03 to arbitrarily apply regulations designed for passenger cars and light commercial vehicles to heavier medium duty Utes and SUVs. We believe this approach, that will mandate a new and unique standard enforced only in Australia, will restrict the availability of the types of work vehicles that are critical for the operation of Australia’s emergency services, mining, forestry, construction, agriculture, and utilities providers. Such a standard will add complexity, delays, and costs for Australians who require these highly capable vehicles for their work.

Ford Australia’s Operations

Ford is a long-term leader in the local automotive industry, and in 2025 we will be celebrating our 100th year of operations in Australia. Australian-based engineers and designers lead the development of the award-winning Ford Ranger pickup truck, sold in around 180 markets globally, and the Ford Everest Sports Utility Vehicle (SUV).

Ford Australia is the country’s largest automotive employer, with a passionate and talented team of approximately 1,500 engineers, designers, technical and other automotive specialists working at multiple locations across Victoria. These are highly skilled jobs reflecting our focus on attracting and developing talented team members and providing graduates from Australian tertiary institutions a valuable employment pathway to a career in the automotive field.

Australia is a top product development hub and source of innovation for Ford, with investment and spend in local research and development totalling more than \$2.5 billion over the past five years, including approximately \$400 million in 2023.

Our Australian facilities include a Design Centre with studio in Broadmeadows, a Research and Development Centre in Geelong, and a Proving Ground at Little River for vehicle testing and development activities. This is in addition to our prototype vehicle build centre, also located in Broadmeadows, that has manufactured over 1,000 vehicles for Engineering evaluation and testing purposes. Our Broadmeadows campus also serves as home to the Product Development Centre for the Ford Motor Company’s International Markets Group.

We welcome the opportunity to discuss our submission with Department and Government representatives, and we authorise its publication to the consultation’s website. We may be contacted through the channels that have been provided separately to the consultation team within the Department of Infrastructure and Transport.

Sincerely,

[SIGNED]

Andrew Birkic

President and CEO

Attachment: *FordAustralia-ADR8103Submission-05Feb2025.pdf*

FORD MOTOR COMPANY OF AUSTRALIA PTY LTD – ACN 004 116 223 – Registered Office: Lvl 1, 600 Victoria St, Richmond, VIC 3121

Summary

The proposed revisions to ADR 81 will result in a new and unprecedented standard that seeks to apply ECE-based CO2 test requirements to heavier vehicles (NB1) for the first time anywhere in the world. It has the potential to restrict the availability in Australia of highly capable work vehicles that are critical for serving key sectors such as emergency services, mining, forestry, construction, agriculture, and utilities providers by adding further unique vehicle regulatory requirements. It will add delays and costs to supplying Australians with the latest vehicles that fulfill critical roles such as load carrying, towing, and the ability to operate off-road.

Ford does not support the proposed ADR 81/03 standard in its current form on the following basis:

- This will be a unique standard that is mandated only in Australia. It will make introducing the latest vehicles to Australia more complex, time consuming, and expensive. This will impact the costs to businesses dependant on the affected vehicles, and ultimately consumers.
- It is based on ECE-101 which was not designed nor implemented for assessing vehicles above 3,500kg GVM. Its use in the manner proposed will result in confusing and irrelevant fuel economy and CO2 emissions information being given to consumers.
- The vehicles affected have powertrains designed to do work and operate in heavily laden conditions. They have been designed and calibrated for this real-world task, not to perform in a government mandated CO2 lab test.
- It will rely on CO2 data conversion algorithms that have never been used in regulations for vehicles over 3,500kg GVM in any jurisdiction. This approach is unique in the world and the tools are yet to be developed.
- It will capture only a small fraction incremental fleet CO2 (affecting 1.3% of sales) for a huge jump in regulatory complexity and economic impact.
- Importers have had no opportunity to design for this untried and newly applicable condition. If mandated, they will need at least two years for New Types and four years for Existing Types to comply.

Comments on Scope of Proposed ADR 81/03.

Fuel Economy and CO2 Test standards based on ECE-101 currently apply in many markets around the globe. They affect Light Duty vehicles only and provide consumers with cost of ownership, CO2 emissions, and electrified powertrain range information. These standards, the test procedures used, and the ability of manufacturers to design and test to them for Light Duty vehicles is well understood as they have been in place for many decades. The vehicle types affected are typically designed to operate at payloads below 1,000kg and the unladen mass of these vehicles is typically much higher than their payload capacity. This means that a standard such as ECE-101 can be useful in providing consumers with relevant information.

The proposal from DITRDCA to create a new standard, ADR 81/03, that will extend the scope of these kinds of tests to certain Medium Duty Commercial vehicles has never been attempted in any jurisdiction. ECE-101 fuel economy testing has never been required for vehicles over 3,500kg GVM. It will provide customers with irrelevant information as these Commercial vehicles are specifically designed for working conditions that entail high cargo or towing loads. The testing conditions for ECE-101 mean the ADR 81/03 label information will be of no use in determining the on-road fuel consumption or CO2 emissions of the vehicle. It will also not permit comparison between vehicles as Commercial vehicles in this class each have unique capabilities. NVES itself is unprecedented in subjecting these kinds of vehicles to CO2 fleet targets that are calculated for regulating Light Duty vehicles, and the proposed ADR merely adds further complexity and uniqueness to the Australian regulatory landscape.

Light vehicles typically operate at the lower end of their payload and passenger carrying limits and have much narrower bands of performance. Medium Duty vehicles are designed for substantially higher work capabilities, such as increased payload, towing, passenger carrying, and offroad performance. Every vehicle combines these work capabilities in a different way. To deliver these higher capacities, Medium Duty vehicles use different engine and drivetrain designs and calibrations to ensure that performance is acceptable across a much wider range of vehicle weights than Light vehicles. Merely taking a standard designed to test Light Duty vehicles at unladen weights and

applying it to Medium Duty vehicles is an overly simplistic approach to regulation. The proposed ADR is an ill-considered response to the ambition to trying to regulate NB1 vehicles under NVES.

Australia already has several unique vehicle standards that restrict models offered in other markets from being sold here unmodified. Given Australia's small size and unique market conditions this means that developing vehicles to comply with Australian requirement is more burdensome than for other countries. Unless planned for upfront, complying with these unique standards limits an Importer's ability to introduce these vehicles once they are in production. Adding even more unique standards such as ADR 81/03 will further restrict the ability of manufacturers to import the newest models. This merely exacerbates the existing difficulty of introducing the latest and most effective technologies to Australians that can improve environmental and safety outcomes.

This increase in scope to include Medium Duty vehicles would also, for the first time in the world, subject them to CO2 and Fuel economy data conversion processes that elsewhere are applied exclusively to Light Duty vehicles. From a technical perspective such data conversion has never been implemented and would force importers to use unique and unauthenticated processes when developing vehicles for Australia.

In 2024, the Medium Duty Utes & SUVs that are proposed to be regulated under ADR 81/03 accounted for a mere 1.3% of all vehicles sold in Australia. Developing a Fuel Economy and CO2 standard that applies to only these vehicles will make minimal difference to reported transportation Greenhouse Gas (GHG) emissions and near zero difference to real-world transportation GHG. This is contrary to the NVES Exemptions principle of *"achievement of Australia's greenhouse gas emissions reduction targets"*^[1]. It also seeks to penalise vehicles that are unsuited for foreseeable lower CO2 emissions powertrain technologies, such as electrification, due to their ability to do higher levels of work than Light vehicles.

The ADR 81/03 Consultation Summary issued by DITRDCA states that Forward Control Truck and Van NB1 vehicles will not be subject to the standard as they are not used in the same way as, or are more akin to, heavy vehicles. This reasoning is subjective and discretionary. It ignores the reality that the payload, towing, and passenger carrying capacities of NB1 Utes & SUVs means they are used interchangeably for many of the same work applications as other NB1 vehicles. This is a de facto NVES Exemption for two-thirds of NB1 category vehicle sales, and is based solely on them have a certain cargo area design. It ignores the cargo carrying capacity and other working attributes of NB1 Utes and SUVs to penalise these highly capable Commercial vehicles. This bias is counter to NVES Guiding Principles. Two of the Guiding Principles are that exemptions should be *"Equitable"*^[1] & *"Simple and transparent"*^[1]. The discretionary split of NB1 vehicles based on their cargo area will result in an NVES standard that does not meet the Guiding Principle of ensuring:

"All Australians can access the vehicles they need for work and leisure. Intervention needs to be equitable, and not unduly negatively impact any particular group of people or part of Australia"^[1].

During the NVES consultation and legislative process DITRDCA have highlighted concerns that importers may reclassify commercial vehicles into higher mass categories to skirt the NVES legislation. This has been a key justification for regulating NB1 vehicles over 3,500kg GVM into the scheme. The proposed ADR 81/03 will formalise the inclusion of Pickup and SUV style NB1 vehicles into NVES. In reality, long-standing fleet CO2 regulations in Europe, South Korea, and more recently in New Zealand only include vehicles up to 3,500kg GVM. These schemes have all achieved the kind of fleet CO2 reductions in their markets that the NVES regulation seeks to enable. Concerns about importers potentially reclassifying vehicles to avoid NVES can be more effectively addressed by other means within ADR 81/03.

For example, the scope of ADR 81/03 can be written to apply only to NB1 vehicles that are marginally above the 3,500kg GVM limit. Similarly, it can be written to include vehicles that have towing and payload limits more like lighter NA category vehicles. As written, ADR 81/03 will penalise highly capable Ute or SUV style vehicles that have greater work capabilities than many Vans and Forward Control trucks. It has the potential to eliminate from the market vehicles that are critical for serving key sectors such as emergency services, mining, forestry, construction, agriculture, and utilities providers. Ford urges DITRDCA to rethink their approach to how vehicles are selected for inclusion in ADR 81/03. NB1 vehicles that are supplied to the market with more than 1,000kg payload and over

3,500kg towing capabilities should be out of scope for ADR 81/03 to ensure that these key work capabilities are encouraged by NVES, as in other CO2 reduction schemes, rather than penalised out of the market.

Comments on Data Conversion Planning.

The data conversion protocols that DITRDCA have under development are not scoped to handle all key information needed for ADR 81 Labels. Important performance figures for vehicles in all categories (MA, NA, NB1) such as the Energy Consumption and Range of electrified powertrains are out of scope for the conversion project. These are critical figures that Australians need to allow different electrified vehicles to be compared and to make informed decisions. The current proposal from DITRDCA to allow data obtained from different testing setups to be used on the ADR 81 Label means that consumers can be presented with very confusing information. Mixed data obtained from older NEDC drive cycles and newer WLTP cycles can appear on the same label and will likely be different from what is shown on other vehicles consumers are considering. This will impact consumers ability to make sound decisions.

Ford urges DITRDCA to re-examine the scope of the data conversion project to include development of a tool for handling all mandated Label information. This will ensure consumers receive the best possible information to compare while still allowing importers flexibility in whether they test or use data conversion to obtain mandated information.

Comments on Implementation Timing within Proposed ADR 81/03.

ADR 81/03 proposes to extend the scope of Fuel Economy and CO2 testing to a new category of vehicles that have never been regulated for this under ECE-based standards. As such, it is a substantial addition to the already complex regulatory landscape affecting vehicles imported into Australia. It also adds new methods for the conversion of fuel consumption, CO2 emissions, and other label information into vehicle standards.

The ADR 81/03 Consultation Summary states that the suggested effective date of late 2026 would “*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*”^[2]. This assumption ignores the realities of vehicle design and manufacturing that importers must contend with, and the complexity of the proposed ADR 81/03.

Under ADR 81/03, NB1 Utes and SUVs that will be required to test for tailpipe CO2 levels on a Chassis Dynamometer for the first time in any jurisdiction will also now be subject to substantial financial penalties depending on the test outcome. Time needs to be given to allow manufacturers to undertake powertrain development activities to incorporate this new requirement, as these vehicles will have been designed to perform within the constraints of Engine Dynamometer testing and On-road performance demands.

The data conversion methodology proposed has never been required for use with NB1 category vehicles before anywhere in the world. Consequently, until this data conversion project is completed and finalised the implications cannot be understood. This means that it is not possible to start developing vehicles that can comply until the proposed ADR is finalised by the Minister. Following development, laboratory testing will be needed. These labs typically need to be booked at least 12 months ahead of time as the vehicles that are undergoing testing today have already been in development for 1-2 years. This testing itself can take up to three months, after which certification needs to be completed, production vehicles built, and then shipped into the intended markets.

In summary, to physically test, certify, manufacture, and supply to market NB1 vehicles that comply with a new ADR 81/03 Fuel Economy & CO2 regulation by late 2026 for New and Existing Types is unfeasible. Any increase in scope for ADR 81 needs to be appropriately scheduled in line with industry-typical lead times to prevent vehicles being locked out of the Australian market. This means ensuring that importers have two years lead time for New Types and four years for Existing Types from the time ADR 81/03 is finalised until compliance is mandated.

Consequently, Ford strongly advocates that this standard not become effective before July 2027 (New Types) & July 2029 (Existing Types) at the earliest. This recognises the complexity of the proposed ADR 81 changes and the time it will take to finalise the regulation.

References:

[1]: DITRDCA (2024). NVES - Exemptions Principles. August 2024.

[2]: DITRDCA (2024). Consultation Paper - Proposed new series of Australian Design Rule (ADR) 81 to implement the New Vehicle Efficiency Standard (NVES). December 2024.

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MEMBER OF



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Reducing Surface Transport Emissions Branch
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7 February 2025

Dear Mr Kathage,

The AAA thanks the Department of Infrastructure, Transport, Regional Development, Communications and the Arts for the opportunity to provide a submission on the proposed new series of Australian Design Rule 81 to implement the New Vehicle Efficiency Standard (NVES).

The AAA is a strong supporter of a fuel efficiency standard for light vehicles to incentivise the supply of cleaner cars to our market and reduce Australia's transport emissions. The AAA acknowledges the proposed changes to Australian Design Rule 81 are necessary for the implementation of the legislated NVES – in particular, the inclusion of large utility vehicles with a gross vehicle mass of 3.5t-4.5t.

The AAA notes that the proposed rule also includes an appendix that aims to cater for a forthcoming regulatory change in noxious emission laboratory test procedure from the NEDC test to the "Euro 6d" WLTP test. The NVES headline targets are based on NEDC values. Hence, Appendix C in ADR 81/03 is anticipated to specify a procedure to calculate equivalent NEDC fuel consumption and CO2 emissions values in situations when the new WLTP test is conducted. We note the conversion procedure is yet to be developed.

These changes add an additional level of regulatory complexity which have the potential to create confusion for consumers seeking to use the ADR 81 windscreen label to guide purchase decisions. Allowing vehicle brands to conduct only the WLTP test will have the benefit of reducing regulatory burden for vehicle brands when demonstrating compliance for vehicles offered to the Australian market. The vehicle and its performance characteristics will remain unchanged but the reported figures may vary, depending on how a vehicle is tested, and how the conversion factor is applied and the final results determined.

The AAA believes that this increased complexity for consumers highlights the important ongoing role of the Commonwealth-funded AAA Real World Testing Program (RWTP). The RWTP, which uses a consistent test of vehicles when driven on public roads, complements both ADR 81 and the NVES by delivering information on the real-world fuel/energy consumption, CO2 emissions and noxious emissions of vehicles and the deviation from mandatory laboratory test results. Consumers and fleets are empowered with real-world information to support purchasing decisions, maximising their opportunity to save money through reduced fuel consumption and to reduce CO2 emissions.



The RWTP also supports the NVES to achieve its emissions reduction objective by discouraging consumer demand for vehicles that achieve low laboratory fuel consumption and CO2 for compliance with the NVES, that is not replicated in real world driving conditions. Over time, this is expected to encourage vehicle manufacturers to offer vehicles to the Australian market that deliver reduced fuel consumption and emissions not only in the laboratory, but also in real world conditions. The AAA looks forward to continuing to partner with the Australian Government on the delivery of this important program.

Should you wish to further discuss this matter, my office can be contacted on 02 6247 7311.

Yours sincerely,

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