

4 March 2024

**Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts**  
GPO Box 594  
Canberra ACT 2601

Via email: [CleanerCars@infrastructure.gov.au](mailto:CleanerCars@infrastructure.gov.au)

### **The Electric Vehicle Council's Response to the Australian Government's New Vehicle Efficiency Standard Impact Analysis**

The Electric Vehicle Council (EVC) welcomes the opportunity to respond to the Australian Government's New Vehicle Efficiency Standard Impact Analysis.

The EVC is the national peak body for the electric vehicle (EV) 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 committing to develop a well-overdue New Vehicle Efficiency Standard for Australia. After a decade of inaction, Australia finally has the opportunity to introduce a globally competitive NVES that will deliver significant reductions in transport costs and emissions for Australian households and businesses, and foster the growth of local industry across the EV value chain, supporting jobs across the mining, manufacturing, and energy sectors.

A globally competitive standard will support a shift away from our current dependency on foreign oil, to 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.

A transparent, credible and globally competitive NVES will reward those car makers that supply greater volumes of low and zero-emission vehicles to Australia and penalise those that do not – exactly as it is intended to do. Those car makers that increase supply sooner will also be able to capture the financial benefits enabled via a globally competitive NVES.

An Australian NVES must also ensure that the transport sector does its fair share in contributing to the achievement of the government's legislated emission reduction targets. Transport is currently the laggard of emissions reduction in Australia and without a globally competitive NVES, transport emissions are unlikely to fall.

A weak standard will ultimately shift the burden of harder and faster emissions reduction from global car makers to Australian farmers, manufacturers, energy suppliers, households and other local businesses. The Electric Vehicle Council supports the Australian Government's emission reduction targets, and we support the transport sector in doing its fair share to achieve these targets.

With the majority of Australians purchasing second-hand vehicles, our country needs a strong NVES to ensure the most efficient new vehicles are entering our market, as soon as possible, and are then soon available for purchase as affordable, used vehicles. This is a major co-benefit of the government's proposed standard.

In addition to responding to the six consultation questions, we have developed this attachment with additional information for consideration as the government finalises the design of the standard. In summary:

- The Electric Vehicle Council commends the government for taking this critical action that several previous governments have failed to introduce. The inaction of former governments has left Australians paying thousands of dollars more in fuel bills than they should be. The current government will be widely supported for righting this wrong, and setting up a standard that will drive down costs, while providing certainty to industry over the remainder of the 2020s.
- The EVC supports the government's preferred standard design – Option B.
- Option B is feasible, technology-neutral, can be achieved under a range of powertrain uptake scenarios over the second half of this decade, delivers the highest benefit-cost ratio under the impact analysis, will drive down fuel costs, and importantly, will be critical in ensuring the transport sector starts to do its fair share in contributing to achieve our emission reduction targets.
- While the EVC supports Option B as proposed, we recognise that other stakeholders may seek adjustments through this consultation process. We have provided our views on these potential requests – noting, in general, the EVC views Option B as a floor, rather than a ceiling, both in terms of the initial design, and future reviews.
- We look forward to supporting the government in legislating this standard as soon as possible, in line with a start date of 1 January, 2025.
- In addition to introducing an Australian NVES in line with Option B, we recommend the government take further policy action outside of the standard, including:
  - o Allowing the direct acceptance of type-approved electric and hybrid vehicles from major global markets in full volume supply to eliminate another supply and cost barrier to accelerating the supply of low and zero-emission vehicles.
  - o Work with states to address the premature withdrawal of consumer incentives for EVs, and collectively agree on targeted policy that can support Australians in adopting EVs.
  - o Explore opportunities to support mechanics, car dealers and service providers as Australia transitions to a zero-emission vehicle fleet over the coming 25 years. This could include skills & training support, investment in infrastructure, etc.

### **The EVC's views on anticipated requests for changes to the standard**

As noted above, the EVC is supportive of the government's preferred standard design (Option B) as designed, without any changes. However, understanding that some stakeholders may propose changes to Option B – or to the final design in general, below we outline specific factors for the government to consider if contemplating adjustments.

<b>Concession/Change</b>	<b>Consideration</b>	<b>Comments</b>
<b>Off-Cycle Credits</b>	<b>Not Recommended:</b> Important to maintain standard integrity by not diluting emission reduction efforts.	The government should maintain its position on <b>not accepting off-cycle credits</b> as part of the standard. These features are already built into most new vehicles and are no longer relevant for a standard operating in the 2020s – as demonstrated by jurisdictions like the EU and US phasing out these types of credits.
<b>Air-Conditioning Credits</b>	<b>Not Recommended:</b> Would impair additionality of the standard.	Similarly, the government should maintain its position on <b>not accepting air-conditioning credits</b> , given the use of high global warming potential air-conditioning systems will be addressed through separate regulation.
<b>Technology Super-Credits</b>	<b>Not Recommended:</b> Need to ensure no reduction in the overall carbon abatement.	Based on Option B as proposed, <b>we see no reason why the government should include technology super-credits for passenger cars.</b>  There may be merit in considering how minor concessions could be applied to LCVs during the first 1-2 years of the standard to assist with introduction of this new regulation. Given the additional administrative burden of including super-credits, and their weakening impact on the transparency of the scheme, we would caution the government to carefully <b>consider whether super-credits are the most appropriate mechanism</b> for providing this concession.  If any super-credits are to be included, they should be short-term, targeted, and overall, <b>must not result in a lower carbon abatement rate</b> than forecast under the originally presented Option B proposed by the government. These super-credits should also be limited to battery electric and plug-in hybrid electric vehicles, with low multiplier rates (<2.0).

<p><b>Mass Limit Curve Adjustments</b></p>	<p><b>Not Recommended:</b></p> <p>Ensures a robust standard and avoids incentive to push towards making vehicles heavier</p>	<p>Settings for the Mass Limit Curve under Option B align with the EVC's 2023 recommendations. The EVC remains of the view that <b>mass limit breakpoints should be part of the final standard design</b> and set at levels that do not actively incentivise the sale of heavier vehicles (similar to New Zealand).</p> <p>The mass limits and vehicle categorisation, below, are smart measures that deliver a robust standard. While some stakeholders have expressed concerns with these moves, it should be considered that the robustness of the standard allows for greater consideration of market impacts in specific vehicle classes, e.g. Utes.</p> <p>If these two elements are altered, the resulting degradation of the standard will make it much harder to allow for changes for instance to headline targets, where that may be deemed appropriate.</p>
<p><b>MC-Vehicles Category Shift</b></p>	<p><b>Not Recommended:</b></p> <p>Maintains a robust standard where higher targets are considered exclusively for commercial application vehicles</p>	<p>The Government's placement of MC vehicles in the passenger segment has the indirect effect of creating a niche, robust LCV classification segment of utes and vans.</p> <p>This classification provides an opportunity for the government to more closely consider impacts on LCVs and make appropriate changes. The greater vehicle spread included in this segment, the less robust it becomes, limiting the government's ability to respond.</p> <p>If MC vehicles are shifted into LCV, the government will need to take on a significant compliance burden to ensure safeguards are in place.</p> <p>Tighter restrictions would need to be introduced for vehicles complied under the MC category to ensure this category remains limited to genuine off-road vehicles, consistent with a market share of no more than 12-15% of all new vehicles sold in Australia. LCV targets would also need to be adjusted to ensure the overall carbon abatement delivered remains unchanged as compared to Option B as proposed in the impact analysis.</p>

<p><b>Penalty Rate Adjustments</b></p>	<p><b>Not Recommended:</b> Need to maintain standard effectiveness and provide market certainty.</p>	<p>The EVC recommends the penalty rate of <b>\$100 remains unchanged</b>. This is an appropriate middle-ground across international schemes, while ensuring Australia’s standard is globally-competitive.</p> <p>While some stakeholders may seek an initial grace period, this would weaken the value of credits across the time horizon of the standard. A penalty rate needs to apply from the start date for the standard to be effective.</p> <p>It is important to note from international evidence that penalties are rarely paid, and credits are traded at approximately 40-50% of the penalty value. This means that the effective penalty rate is expected to be closer to \$40-\$50, where credits are available.</p> <p>Direct adjustment of the headline targets would be a simpler, more transparent approach for providing a concession to LCVs initially – if desired.</p>
<p><b>Headline Targets</b></p>	<p><b>Limited Consideration:</b> Must not reduce the overall carbon abatement.</p>	<p>The EVC recommends <b>the headline targets set for passenger cars under Option B remain unchanged</b>.</p> <p>If the government considers a slower trajectory for LCVs in the first years of the standard, the endpoint in 2029 should remain the same, and a steeper trajectory will be required in 2027-2029 to achieve the same level of overall carbon abatement as estimated under the unchanged Option B design.</p>

In summary, the EVC supports the government’s preferred design, Option B, without any changes. When considering changes requested by other stakeholders, including initial flexibilities for the LCV category, the underlying principle for the government should be to ensure that the overall carbon abatement over all time horizons is not reduced. This is consistent with the EVC’s position that Option B should be seen as a floor, rather than a ceiling.

**What else can be done to support an increase in the supply of efficient LCVs?**

With the market rapidly changing, we are confident there will be a range of mild-hybrid, hybrid, PHEV and BEV light commercial vehicle options available for Australia over the second-half of the 2020s. That said, there are additional measures the government can take to support an increase in supply for this segment:

- Consider opportunities to support local businesses in remanufacturing and/or converting LCVs to battery-electric and/or plug-in hybrid vehicles. This could include

the expansion of the NVES to allow these entities to earn credits and sell these into the trading market. To be clear, this should be limited to businesses that support local manufacturing related to the vehicles being imported e.g. converting a petrol LCV to electric, converting a left-hand drive electric LCV to right-hand drive; this would not include parallel imports that have no local manufacturing component.

- Targeted incentive programs to support farmers/tradies to purchase efficient LCVs.
- Support local R&D to capture the economic opportunities of a local EV value chain, including the potential for local manufacturing of low and zero-emission vehicles.

### **Option B is feasible and technology-neutral**

We support the government's approach to developing a technology-neutral standard in line with Option B. Here we have developed four hypothetical scenarios to show how the market share of battery electric vehicles (BEVs), plug-in hybrid electric vehicles (PHEVs) and conventional hybrid/mild-hybrid vehicles could vary significantly, yet, the Australian new car market still achieve the overall carbon abatement forecast under Option B.

In reality, there are an infinite number of scenarios that could be simulated under which the targets and/or carbon abatement set under Option B are achieved. The four scenarios included here are not intended to be interpreted as the EVC's projections but rather as an exercise to illustrate how the government's proposed standard is technology-neutral, and how it will ultimately allow car makers to determine what is the right mix of vehicles to import into the country - with an overall emphasis on more efficient petrol, diesel, hybrid and electric vehicle models.

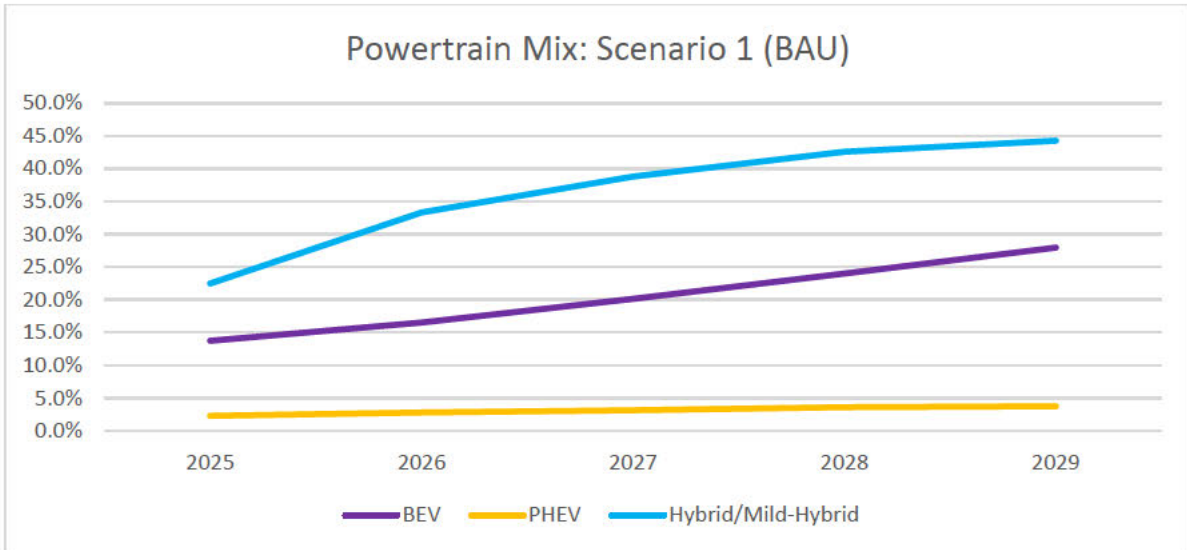
The exercise is also intended to demonstrate that Option B is feasible, the market is already expected to beat targets during the first years of the standard without any major changes. Surplus credits accrued in these early years will be important for meeting later year targets if higher uptake of BEVs, PHEVs and/or Hybrids – beyond business-as-usual – does not eventuate. Therefore, the introduction of the standard must not be delayed.

We have made conservative assumptions in constructing these scenarios to produce a realistic new car market model. We have not made mass adjustments which, if designed perfectly, should have a negligible impact on the overall carbon abatement, but in reality, will tend to weaken the standard compared to what we have modelled. The 3-year credit expiry included in Option B has also been accounted for as part of this modelling. The assumed tailpipe emissions rates by powertrain are included in Appendix A (Table 1).

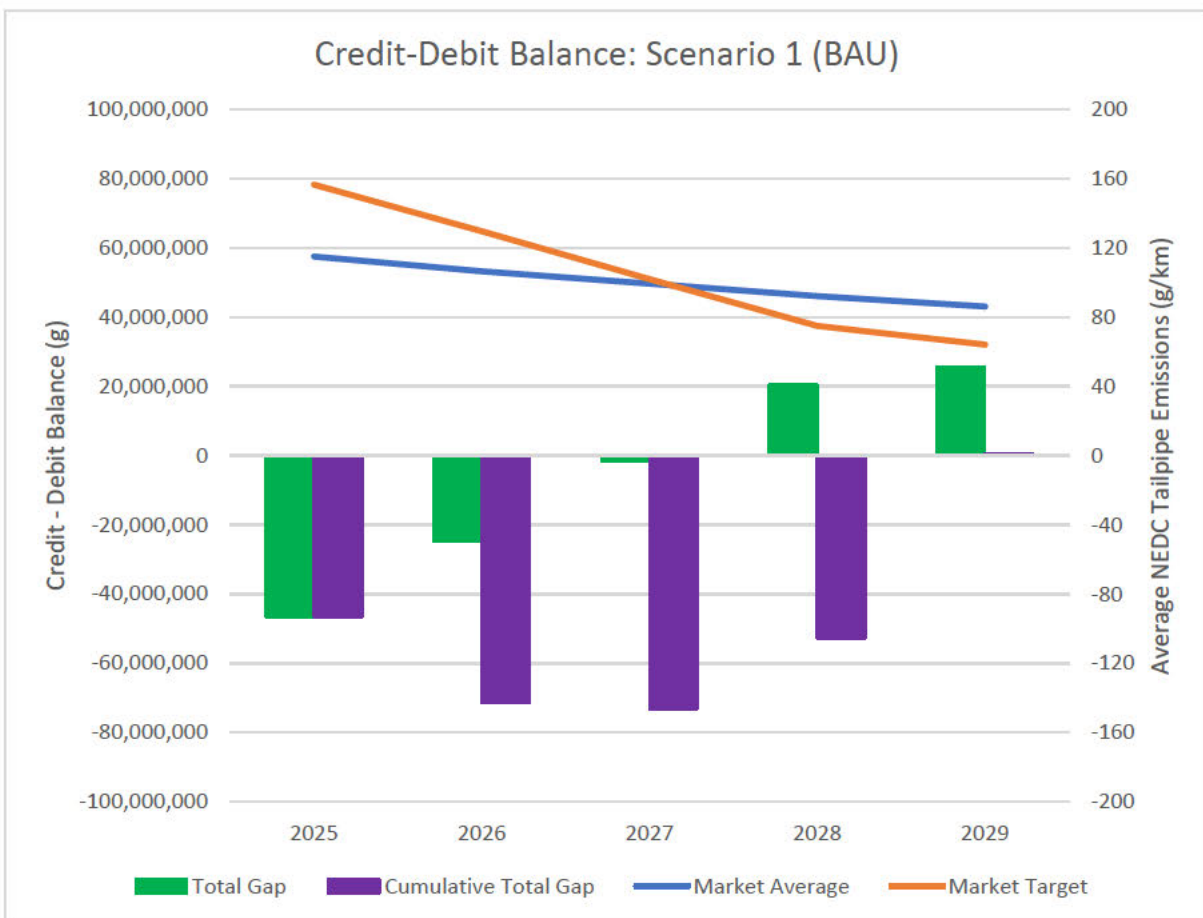
#### **Scenario 1 – Business-as-usual**

We have constructed Scenario 1 as an aggregate of different market forecasts looking at what the powertrain mix in Australia may look like over the coming decade without a standard and/or with a weak standard. This forecast is approximately aligned with other industry and government forecasts under business-as-usual. It could also be seen as a scenario with low-to-medium BEV uptake – compared to the EV targets set by Australian state and territory governments, which would align closer with 45-50% of new car sales being EVs by 2029/2030.

Under this scenario, it is assumed that by 2029 ~45% of new vehicles would be hybrid or mild-hybrids, ~28% would be BEVs, and only around 4% would be PHEVs. This is the aggregate powertrain mix across the entire market, including passenger cars (PCs) and light commercial vehicles (LCVs).



Using this powertrain forecast, we have calculated the credit-debit balance for the market that would occur if Option B was implemented. In the figure below we plot the average market-wide tailpipe emissions (market average) against the average NVES market target. Below this shows how the gap between the target and the average emissions rate translates to an overall credit – debit balance for the market as a whole. Bars below zero represent a credit i.e. the market is beating the NVES target, while bars above zero represent a debit i.e. the market is falling short of the NVES target. The cumulative credit-debit balance (gap), accounts for surplus credits being banked for future years.



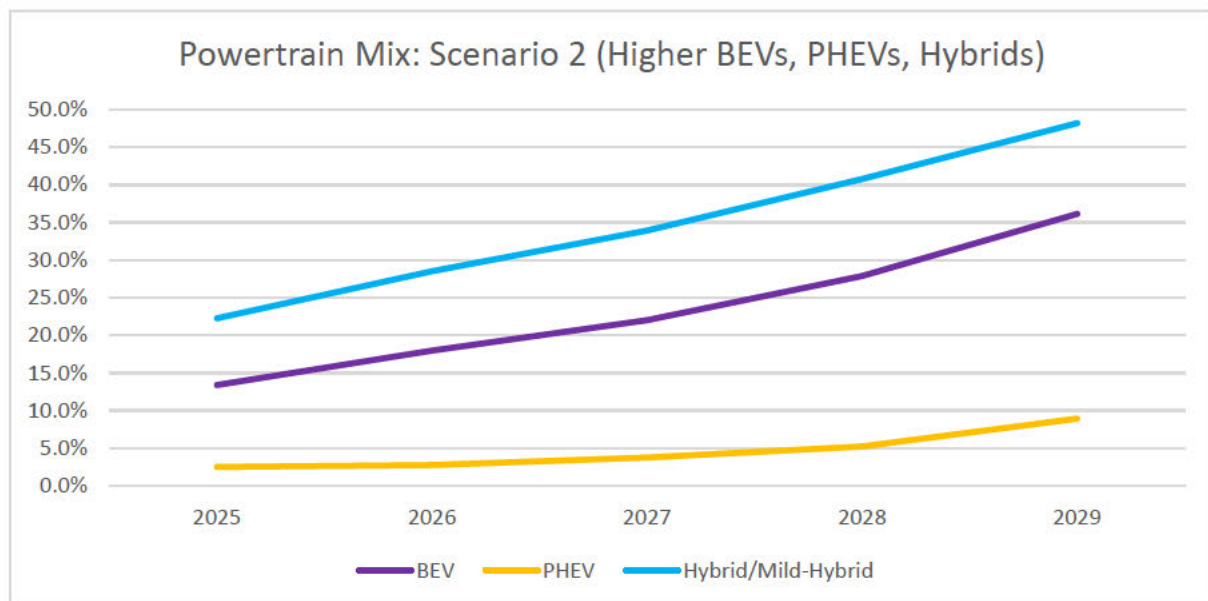
As shown, under this business-as-usual scenario, the market beats the 2025, 2026 and 2027 targets. Surplus credits are earned in these years, which are then able to be used to offset the market missing the 2028 and 2029 NVES targets. This means that, under business-as-usual conditions, with even low-to-medium uptake of BEVs, the market will relatively easily achieve the level of carbon abatement forecast under Option B.

Clearly, claims to delay implementation, reduce penalty rates, and/or provide grace periods, do not stack up against this modelling.

Some may argue that, despite credits enabling the market to achieve all targets between 2025 and 2029 under this business-as-usual scenario, because the market misses the 2029 target, this would require a significant drop in vehicle emissions in 2030 to presumably achieve a target stronger than 2029. To answer the question of what are the different ways in which the market could achieve the 2029 target - independent of surplus credits accrued - we have constructed Scenarios 2, 3 and 4.

### Scenario 2 – Marginal increases in BEVs, PHEVs and Hybrids

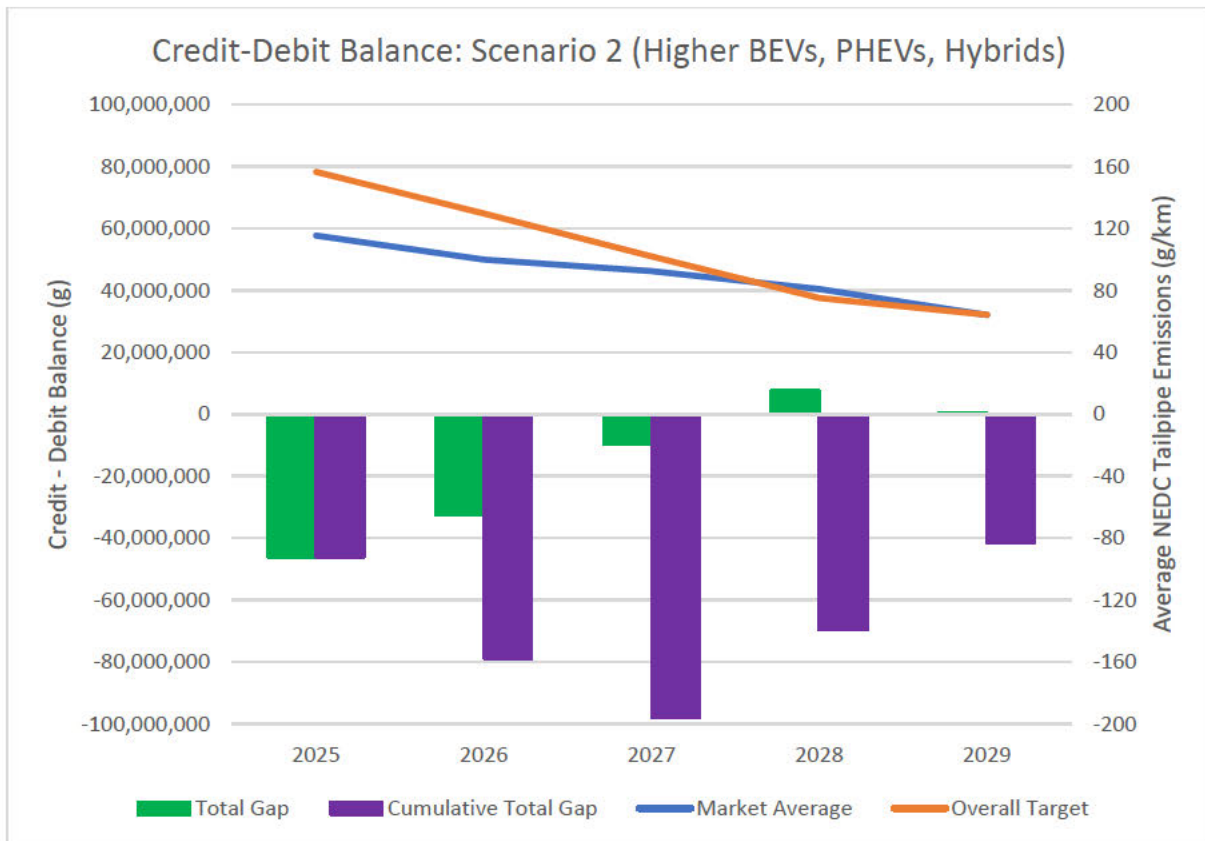
Scenario 2 involves increasing BEV market share in 2029 by ~8%, PHEV market share by ~5% and Hybrid/Mild-Hybrid market share by ~4% above Scenario 1 (business-as-usual). We would consider these to be relatively marginal increases in response to the introduction of the NVES proposed under Option B.



As shown below, the modest increase in BEV, PHEV and hybrid market share (compared to business-as-usual) results in the market achieving targets in 2025, 2026 and 2027. The market narrowly misses the target in 2028, but there are sufficient surplus credits from earlier years to offset this gap.

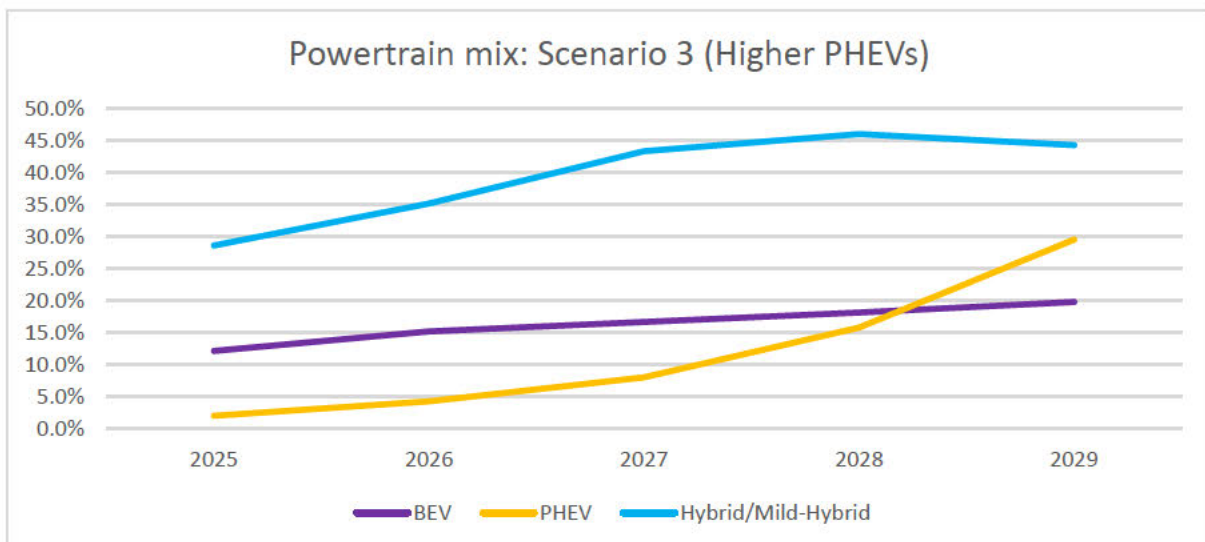
Finally, due to the market following a stronger trajectory, the 2029 target is achieved without the need for banked credits, with surplus credits remaining to support the market if it misses subsequent targets in 2030 onwards. As a reminder, this analysis accounts for surplus credits expiring 3 years after accrual, as per the Option B design.



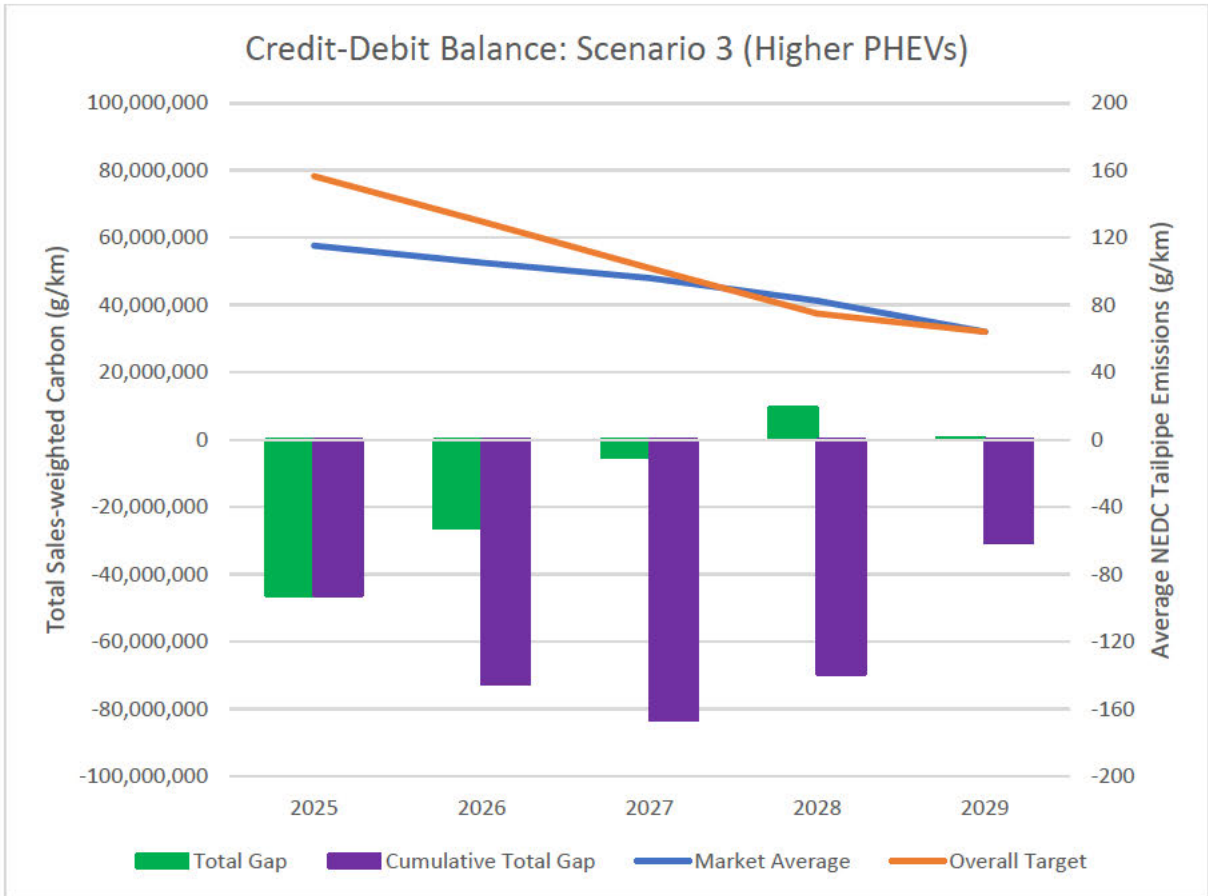


### Scenario 3 – Higher PHEVs

For Scenario 3 we have constructed a powertrain mix with a lower uptake of BEVs compared to business-as-usual (8% below). This scenario assumes a significant increase in PHEVs (26% above business-as-usual), across both passenger cars and commercial vehicles, with a similar number of hybrids compared to business-as-usual in Scenario 1.

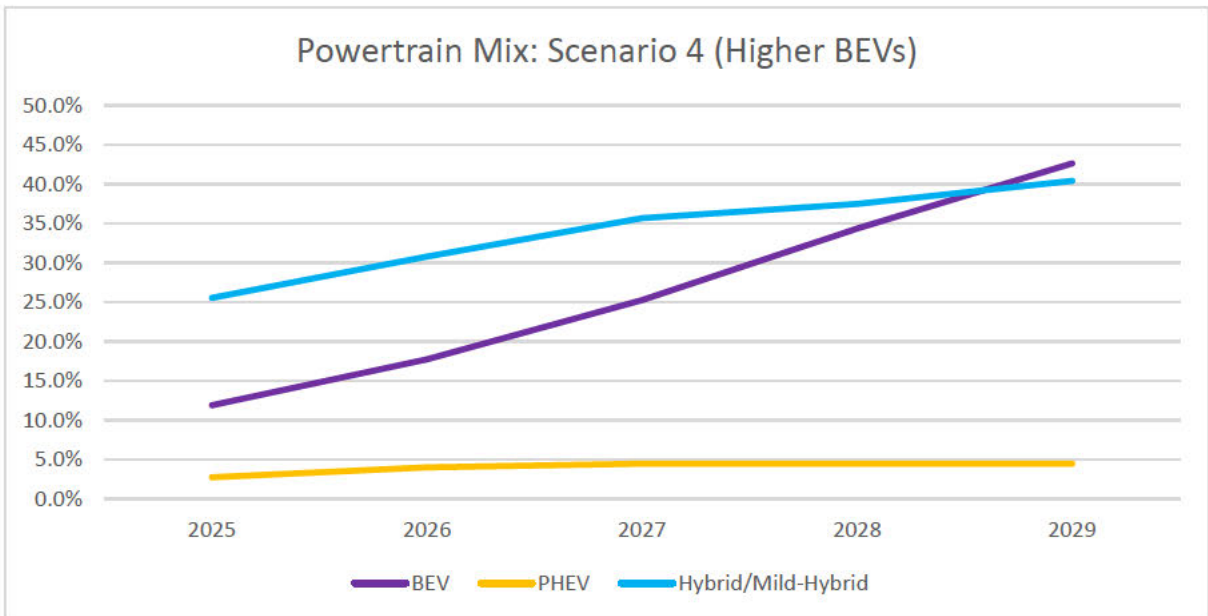


Like Scenario 2, as shown below, targets in 2025, 2026 and 2027 are achieved by the market. The 2028 target is missed by the market, but surplus credits are available to fully offset this gap. The 2029 target is then independently met by the market without the need for credits from previous years. Again, surplus credits remain available in 2029 for use to support the market in achieving future targets in 2030 onwards.

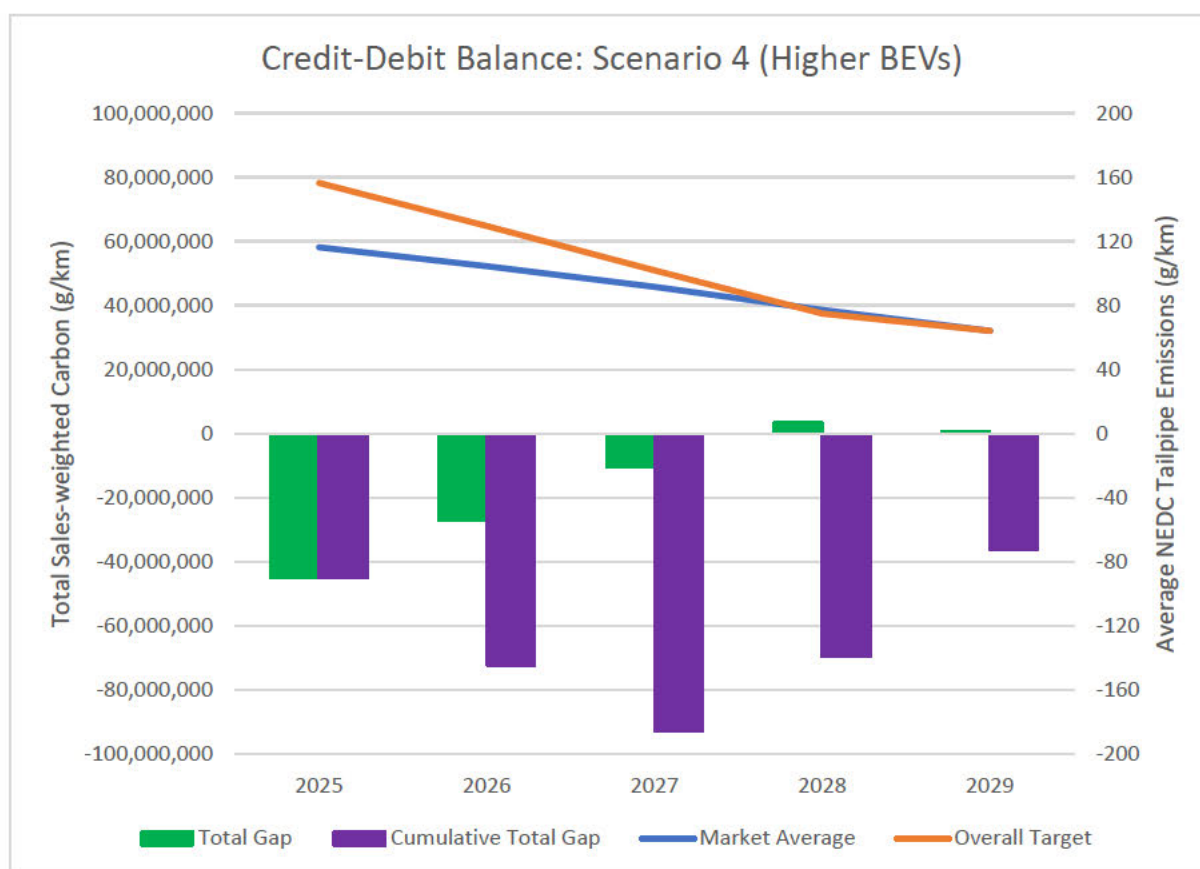


### Scenario 4 – Higher BEVs

Finally, Scenario 4 explores a powertrain mix closer in alignment to the EV targets set by Australian state and territory governments. BEV market share is ~43% (15% above business-as-usual), PHEV market share is ~5% (1% above business-as-usual), while hybrids and mild-hybrids make up about 38% combined (4% below business-as-usual).



Again, similar to Scenarios 2 and 3, the market beats the Option B targets in 2025, 2026 and 2027. The market just misses the target in 2027, however, this is offset by surplus credits from earlier years. The market then hits the 2029 target, with a strong surplus of credits available to support the market in achieving targets in 2030 onwards.



### Summary of Scenario Analysis

The forecast 2029 powertrain mix for the four scenarios has been summarised below.

Powertrain Mix Forecasts in 2029	Scenario 1 (BAU)	Scenario 2 (Higher BEVs, PHEVs, Hybrids)	Scenario 3 (Higher PHEVs)	Scenario 4 (Higher BEVs)
<b>BEV</b>	28.0%	36.1%	19.8%	42.6%
<b>PHEV</b>	3.8%	8.9%	29.5%	4.5%
<b>Hybrid</b>	27.1%	35.0%	41.0%	25.5%
<b>Mild-Hybrid</b>	17.1%	13.2%	3.2%	12.5%

Contrary to the misinformation and scare campaigns claiming Option B is not feasible, and that it represents a radical design, here we demonstrate how the standard can be met with BEV market share being less than 20% in 2029. More likely, we expect BEV market share to be above 40% by that time, however, this still means that the 2029 target can easily be achieved with the majority of new vehicles sold in Australia that year not being BEVs.

While we do not know exactly what the market will look like in 2029, the above exercise demonstrates that there is a large range of feasible powertrain scenarios that could be followed by the Australian new car market to achieve the government's Option B targets,

without any changes to the design of the standard – even after accounting for the 3-year expiry limit on banking credits.

Clearly, claims that the Option B standard design is unrealistic or not feasible, are not based in evidence, and speak to the concerns of specific vested interests, as opposed to the market as a whole.

Proponents of changes must explain how their proposed design will achieve a level of carbon abatement consistent with the government's climate targets, otherwise, their positions are not credible and should be viewed as global companies seeking to shift the burden of additional emissions cuts onto other sectors of the economy e.g. Australian farmers, manufacturers, energy suppliers, households and other local businesses.

It will ultimately be up to the market to determine what the optimum powertrain mix is to achieve the NVES targets, since the standard is technology-neutral. Regardless, there a plenty of pathways the market can follow where the Option B targets are met.

### **Next Steps**

The EVC supports the government in legislating the proposed standard as soon as possible, and we will work with our light vehicle OEM members to help enable integration with the new regulatory framework, and related systems.

To reiterate, Option B is feasible, technology-neutral, can be achieved under a range of powertrain mixes over the second half of this decade, delivers the higher cost-benefit ratio, will drive down fuel costs, and importantly, will be critical in ensuring the transport sector starts to do its fair share in contributing to achieve Australia's emission reduction targets.

We look forward to continuing to work with the government, our members and other stakeholders to support the implementation of Australia's first new vehicle efficiency standard – a major achievement for our country.

If you have any questions on this submission or would like to receive a more detailed briefing on the modelling included in this submission, please contact [REDACTED] at [REDACTED]

Thank you for your consideration of our submission.

Yours sincerely,

[REDACTED]

Behyad Jafari  
Chief Executive Officer  
Electric Vehicle Council

## Appendix A:

Table 1:

<u>Assumed NEDC tailpipe emissions</u>	<u>2025-2029 Average (g/km)</u>
BEV-PC	0
PHEV-PC	35
Hybrid/Mild-Hybrid PC	105
ICE-PC	132
BEV-CV	0
PHEV-CV	43
Hybrid/Mild-Hybrid CV	135
ICE-CV	172

RESPONSES  
TO  
GOVERNMENT'S  
CONSULTATION  
FORM

## Responses to Consultation Questions

### 1. Please rank the proposed options in order of preference (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>)

Option B – 1<sup>st</sup>

Option C – 2<sup>nd</sup>

Option A – 3<sup>rd</sup>

### 2. Briefly what are your reasons for your choice (500 words)?

The Electric Vehicle Council commends the Federal Government for taking this critical step towards driving down fuel bills and vehicle emissions.

Only Options B and C are consistent with the government's climate targets. We do not support the 'do little-to-nothing' Option A.

Option B has the highest benefit-cost ratio, and in our view, the highest feasibility of implementation, while remaining aligned with our climate targets.

The substantive design and overall carbon abatement delivered by Option B should be viewed as a minimum floor concerning any future reviews and/or changes to the standard's design.

Additional reasons the EVC supports Option B include:

- It is **technology-neutral**, enabling car makers to choose a mix of powertrains to achieve the targets, including battery electric vehicles ranging from 20 - 45% market share by 2029.
- It includes **feasible efficiency improvement pathways** for both passenger cars and light commercial vehicles, that will **increase vehicle choice, lower fuel costs and reduce emissions**.
- It **minimises loopholes** through the exclusion of technology credits.
- It **recognises diversity in vehicle sizes** through the inclusion of a mass limit curve while adding breakpoints to minimise the incentive to sell heavier vehicles, and the disincentive to sell lighter vehicles.
- It includes banking and **trading of credits** over an appropriate 3-year period.
- It includes a **globally-competitive penalty rate** of \$100, noting that credits are generally traded at 40-50% of the penalty rate, translating to \$40-50 under Option B.

The EVC views a start date of 1 January 2025 as appropriate and feasible.

We understand that most of the Australian new car market is supportive of a New Vehicle Efficiency Standard. Some that have made public statements are supportive of Option B, with changes. Attached to this submission are our views on how the government should respond to any changes being requested.

From the EVC's perspective there are three additional key actions the federal government should take, in addition to Option B, to further accelerate the supply of efficient vehicles:

1. Immediately commit to allowing the direct acceptance of type-approved low/zero-emission vehicles from major global markets in full volume supply. This reform is critical for ensuring car makers can bring global models to Australia as quickly as possible. Unique Australian standards that are not consistent with similar international markets (EU, US, Japan), increase the regulatory burden and cost of importing new models and will slow our transition to a more efficient vehicle fleet for no demonstrable increase in safety.
2. Work with states to address the premature withdrawal of consumer incentives for EVs. Collectively, Australian governments need to continue to actively support EV adoption until sales approach 30% of new vehicles – in line with international experience. These incentives should be targeted and could be means-tested - similar to the Queensland ZEV rebate.
3. Explore opportunities to support mechanics, car dealers and other service providers as Australia transitions to a zero-emission vehicle fleet over the coming 25 years. This could include skills & training support, investment in infrastructure, etc.

**3. Do you support the Government's preferred option (Option B)?**

Yes

**4. Do you have any feedback on the analysis approach and key assumptions used (500 words)?**

The EVC is supportive of the overall analysis approach documented in the government's impact analysis, including the key assumptions.

In reviewing the assumptions, some could be considered conservative, however, this is appropriate given future uncertainties. Any future improvements to these assumptions that may materialise, in our view, would ultimately lead to an even higher benefit-cost ratio under Option B.

The government should form a technical committee to advise on an appropriate methodology for converting NEDC targets to WLTP in order to prevent weakening of the standard through this process.

It would not be appropriate for the government to speculate on the future cost of credits traded in this scheme as that would be an interference with the market mechanism proposed. Once established, the technology-neutral standard provides an efficient, market mechanism for car makers to trade credits, which will help to increase competitive tension in the supply of more efficient vehicles to Australia, and ultimately deliver the policy's intended outcome of lower fuel bills for Australian households and businesses, while reducing emissions from the transport sector.



We know from international experiences that credits are generally traded at around 40-50% of the penalty rate, and that car makers very rarely pay the penalty. As a result, some of the scare-mongering by organisations like the FCAI, using the full penalty rate, and cherry-picking the most emissions-intensive variants of vehicle models to calculate a so-called 'tax', is not only blatant misinformation but misrepresents how these standards operate around the world.

There is no evidence to show that standards lead to an increase in average vehicle prices. High-emitting vehicles either can be equipped with more efficient powertrains, have their emissions offset by more efficient vehicles sold by the car maker, or have credits purchased from other carmakers to offset their emissions. If any so-called cost arises through this process, car makers globally have proven to absorb any marginal costs to preserve market share. In the highly-profitable but competitive car market like Australia, there will be limited ability to pass on any cost to the consumer without jeopardising the market position of their brand. Many new market entrants with low and zero emission vehicle options are also likely over the coming years, thanks to the certainty provided by a NVES.

Global car makers have a responsibility to do their fair share in reducing emissions in Australia, and Option B reflects what this fair share looks like. Any claims that this is unexpected are false given Australia has been discussing a standard for the past decade, the government announced its intention to introduce a standard soon after its election in 2022, and a significant number of the submissions it received in early 2023 advocated for a standard design as stronger, or stronger than Option B.

**5. Briefly, describe how the NVES might impact your organisation (500 words)?**

The introduction of the NVES will provide significant benefits including lower fuel costs, reduced emissions, improved air quality, and increased energy independence.

For the car market, we note that many OEMs are well-positioned, and publicly-committed to achieving NVES targets.

We have calculated that under business-as-usual conditions, the Australian new car market is likely to meet Option B targets set for 2025, 2026 and 2027, with surplus credits earned in these early years sufficient to offset the gaps from missing the 2028 and 2029 targets. This also provides a significant lead time for the market to shift and start to introduce greater volumes of low and zero emission vehicles in 2028 onwards.

We have also calculated that a ~8% increase in BEV market share, ~5% increase in PHEV market share, and a 4% increase in Hybrid market share, above business-as-usual, would see the market achieve targets out to 2029, without the need to use surplus credits from previous years to meet the 2029 target.

BEV market share could also be as low as 20% and the Option B target achieved – given the standard has been designed to be technology-neutral. That said, in

our view, a more realistic scenario would see BEVs market share over 40%, PHEV market share around 5-10% and Mild Hybrid & Hybrid market share around 40%. Regardless, the Option B targets can be achieved under all of these scenarios, delivering carbon abatement consistent with the government's forecasts.

These results demonstrate why Option B is feasible and achievable. We provide further insight into a range of powertrain uptake scenarios that would achieve the Option B market-wide target as part of our attachment to this submission.

To support the implementation of the NVES, as previously mentioned, we recommend the government take further policy action to allow direct acceptance of type-approved electric and hybrid vehicles from major global markets in full volume supply, work with state and territory governments to accelerate uptake of EVs through targeted incentives and other policy measures and support the broader automotive industry workforce transition over the coming decades.

Importantly, although the direct impacts of the NVES regulation will be on car manufacturers and suppliers, the NVES acts as a strong global policy signal that makes Australia a more attractive destination for investment in the local EV industry and associated value chain. While it is technology neutral, by aligning with international approaches to decarbonise transport, the NVES plays a crucial role in providing investment certainty on the need for further EV charging infrastructure and expected demand for upskilling within specific industries, by providing clarity on the future trajectory of the transport sector.

#### **6. Who should the regulated entity be (500 words)?**

The EVC agrees with the government's proposed approach for the regulated entity to be the type approval holder who first enters a particular vehicle onto the Register of Approved Vehicles (RAV). This will assist with aligning regulation of the standard with the existing regulatory system.

The government should also consider how the NVES could be expanded to include concessional approval holders, where there is a significant local manufacturing component e.g. conversion from petrol vehicle to EV, conversion from left hand drive to right hand drive, etc. A minimum annual volume of 500 vehicles would ensure this incentive was targeted at businesses looking to invest in local manufacturing and significantly expand the supply of efficient vehicles that aren't currently available in Australia. This could be particularly useful for supporting an increase in the supply of efficient LCVs.

The EVC supports the government's proposal for the Cleaner Car Regulator to be established within the department. This is consistent with international experience, and will be important for accelerating the implementation of the standard.

It is critical that the regulatory components of the standard are established as soon as possible, including related IT systems. Ideally these systems would be ready for testing by Q3, 2024. We agree with the government's approach to engage with industry ASAP to support the development of these systems.

It is not acceptable for the start of the standard to be delayed beyond 1 January 2025. The regulation must be in place as soon as possible to start driving down new vehicle emissions, given this is one of the primary levers being used to reduce transport emissions, in line with our climate targets – while in tandem, addressing Australia’s current cost of driving crisis where households and businesses are using significantly more fuel than consumers in overseas markets with strong efficiency standards.

Additionally, as shown in our attached analysis, the market is expected to beat the Option B targets during the initial years of the standard. This will generate surplus credits that could be important for supporting the achievement of targets in later years as the stringency of the standard increases. Therefore, there is no justification for delaying the introduction of the standard, and in fact, any delay could make it more difficult for the market as a whole to meet later, more stringent targets.

Finally, the EVC recommends the government publish the full results of the standard each year to provide transparency on how different car makers, and the market as a whole is performing.

Given government will be collecting volume data on new vehicles, careful consideration should be made to how this data could be leveraged more broadly to support policy and planning, as well as industry development.

Further development of a publicly-available vehicle sales dashboard – similar to what New Zealand currently has – would be highly beneficial: <https://www.nzta.govt.nz/vehicles/how-the-motor-vehicle-register-affects-you/motor-vehicle-registrations-dashboard-and-open-data/>.

The lack of publicly available vehicle sales data in Australia significantly inhibits policy, planning and industry development, and can be rectified as a co-benefit of introducing the standard.



# Organisation questionnaire response

**Privacy Setting:** I agree for my response to be published with my name and position.

<b>What organisation do you represent?</b>  (required)	Australian Electric Vehicle Association
<b>What is your name?</b>  (required)	Dr Chris Jones
<b>What is your position at the organisation?</b>  (required)	President
<b>Please rank the proposed options in order of preference.</b>  (optional)	Option A - 3rd, Option B - 2nd, Option C - 1st
<b>Briefly, what are your reasons for your choice?</b>  (optional, 3000 character limit)	<p>The Australian Electric Vehicle Association prefers Option C over Option B as the benefit-to-cost ratios (BCRs) are virtually indistinguishable from each other and equal to 3.0 within uncertainties. The benefits of Option C are greater and it can't be said that Option B is any more optimal than Option C (see question 8 for more discussion on the assumptions). The more stringent targets of Option C will lead to greater adoption of electric vehicles and bring a wider range of models to Australian consumers more quickly. Furthermore, the impact analysis projects that by 2050, Option C leads to an additional reduction of 74 million tonnes of CO2 in the relatively easy-to-abate land transport sector.</p>
<b>Do you support the Government's preferred option (Option B)?</b>  (optional)	Yes
<b>Do you have any feedback on the analysis approach and key assumptions used?</b>  (optional, 3000 character limit)	<p>A shortcoming of all the options is that targets are only set to 2029. For what is a significant transformation of the light vehicle fleet in Australia, more certainty should be given to industry and consumers by setting longer term targets to 2035 as AEVA recommended in its submission. Regular reviews are proposed starting in 2026. These could be opportunities to tighten the targets for subsequent years but there is a risk that they could also be used to weaken the targets. The reviews could be improved by including a requirement that reviews can only tighten subsequent years' targets.</p> <p>All of the options propose starting with 2025 targets that are approximately at the level of 2023's new vehicle fleet (the 2025 targets being 141 g/km for PVs and 199 g/km for LCVs). AEVA recommends that the targets should all be advanced by one year.</p>



	<p>Setting a 2025 target that is no more stringent than 2023 means making no progress for two years. Starting to reduce emissions a year earlier would have substantial benefits in reduced cumulative emissions and costs.</p> <p>Any claim from importers that they did not plan for an efficiency standard or that they can't do better than the 2023 fleet average emissions result in 2025 should be rejected. A fuel efficiency standard was announced as Government policy in early 2023, giving importers approximately one year to prepare for the introduction of a standard. They also have known for over 15 years that an efficiency standard was very likely, if not inevitable (see Fig. 1 of the impact analysis). Moreover, the FCAI has been running its own voluntary scheme since 2020. The manufacturers of vehicles sold in Australia have been supplying compliant vehicles into 85% of the world market for many years. Starting with the proposed 2026 target in 2025 still gives importers a year to make adjustments to their offerings.</p> <p>The analysis uses a 7% discount rate as recommended by the Office of Impact Analysis with 3% and 10% used for sensitivity testing. This is an inappropriately high discount rate for what is effectively climate change policy. Had a more appropriate discount rate of 3% been used, Option C would likely have achieved the largest benefit-to-cost ratio, although this result was not included in the analysis.</p> <p>The assumption of battery replacement after 12 years is unduly pessimistic. Even if a vehicle with 450 km of range were to lose as much as 25% of its battery capacity after 1,000 charge cycles, that would occur at 400,000 km after 20 years of driving 20,000 km/year (above average). This vehicle would still have over 300 km range, which is as good as many new EVs. Without a battery replacement, such a vehicle would remain a useful second-hand car with adequate range for many buyers. The approximate 3:1 ratio for avoided fuel cost vs electricity cost seems about right.</p>
<p><b>Briefly, describe how the NVES might impact your organisation</b>  (optional, 3000 character limit)</p>	<p>The AEVA is a volunteer-run, not-for-profit organisation dedicated to the cause of switching Australia's transport networks to electric drive as quickly as possible. A well designed and ambitious efficiency standard will drive the transition to electric vehicles faster than a weak or non-existent standard and lead to better outcomes for Australia's emissions reductions and cost saving efforts. More stringent targets will help to bring more electric vehicles to the Australian market sooner than would otherwise occur.</p>
<p><b>Who should the regulated entity be?</b>  (optional, 3000 character limit)</p>	<p>NULL</p>