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Mr Tristan Kathage  
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Department of Infrastructure, Transport, Regional Development, Communications and  
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31 May 2023


Dear Mr Kathage,

Please find attached a submission from the Australian Automobile Association (AAA) in response to the Consultation Paper: *The Fuel Efficiency Standard - Cleaner, Cheaper to Run Cars for Australia*.

The AAA thanks the Department of Infrastructure, Transport, Regional Development, Communications and the Arts for the opportunity to provide a submission. The AAA would welcome the opportunity to be involved in future consultations and be kept informed of progress.

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

Yours sincerely

  
**Michael Bradley**  
Managing Director

## AAA Submission on Fuel Efficiency Standards for Light Vehicles

### Introduction

The Australian Automobile Association (AAA) is pleased to provide a submission to the consultation on Fuel Efficiency Standards for light vehicles. The AAA is the peak organisation for Australia's motoring clubs and their 8.9 million members. Its constituent clubs are the NRMA, RACV, RACQ, RAA, RAC, RACT and the AANT. The AAA regularly commissions research and develops in-depth analysis of issues affecting transport systems, including affordability, road safety and vehicle emissions.

The AAA thanks the Department of Infrastructure, Transport, Regional Development, Communications and the Arts for the opportunity to provide a submission. The *National Electric Vehicle Strategy* included a commitment to developing Australia's first Fuel Efficiency Standard for new light vehicles. The *National Electric Vehicle Strategy* noted that the Government will consult with stakeholders to design a Fuel Efficiency Standard for passenger and light commercial vehicles that are broadly consistent with standards in place in major advanced markets (Commonwealth of Australia 2023, p. 21).

The AAA believes strongly that Australians should have access to the best safe new car technology available, and that this should be as affordable as possible for all Australians. As such, the AAA supports the introduction of fuel efficiency standards. The AAA sees a fuel efficiency standard as a technology-agnostic means of improving the supply of latest technology vehicles to the Australian market. New vehicle models with improved fuel consumption, lower tailpipe emissions, and those utilising alternative energy sources are not currently being prioritised for the Australian market.

The design of a fuel efficiency standard should be carefully considered to ensure its suitability and applicability to the Australian new vehicle market, noting that it is not possible to suggest a target for the standard until the design elements of the standard, as outlined in the Consultation Paper, have been determined.

Australia's alignment with any international emissions standard must take into consideration the Australian vehicle fleet and how and why it differs from those found in other markets. The AAA does not support adopting a specific target that has been set in another jurisdiction as a starting point in Australia as those targets are based on that jurisdiction's fleet characteristics and the design and structure of its fuel efficiency standard. Until the design and structure of an Australian fuel efficiency standard are determined, it is not possible to comment on the feasibility or suitability of a particular target. Hence, the AAA does not propose a target at this time, but expects to support one in the future following due consideration.

## Overview of Fuel Efficiency Standards

Fuel efficiency standards seek to target the direction of vehicle purchase patterns (or technical change in vehicles), to achieve lower emissions intensity (or greater fuel economy) than would otherwise be the case without standards (CIE 2023, p. 13)<sup>1</sup>. Having a fuel efficiency standard for new light vehicles will result in Australians having access to a greater range of Electric Vehicles (EVs). These new vehicles will eventually move into the second-hand car market. This is crucial, as about 70 per cent of Australia's annual car sales are in the second-hand car market. More than 85 per cent of all vehicles sold across the world are covered by some form of fuel efficiency standard, including those sold in the European Union, the US, China, Japan, Brazil, India, Canada, South Korea, and Mexico (Commonwealth of Australia 2023a, p. 7).

The average emissions per kilometre of new vehicles have been falling with an overall reduction of 28 per cent between 2002 and 2018 (NTC 2022, p. 12). Historically the reduction in average emissions across new car sales has been driven by improved efficiency of internal combustion engine (ICE) vehicles, while more recently and into the future this is expected to be driven by the adoption of low and zero emission vehicles (Battery Electric Vehicles (BEVs) and hybrid electric vehicles (HEVs) including plug in hybrid electric vehicles (PHEVs)) (CIE 2023, p. 5). Average emissions are expected to continue to fall steadily (CIE 2023, p. 5).

Emission standards only target vehicle efficiency of new vehicles, which are a small share of vehicles in the fleet (at least in the short term) (CIE 2023, p. 24). In any year, new vehicles make up around 5 per cent of the vehicles on the road, therefore, emission reductions achieved by emission standards are relatively modest (though they grow over time) (CIE 2023, p. 24). Any emission standard will bring forward lower emissions, as opposed to setting emissions on an entirely different trajectory (CIE 2023, p. 5).

Fuel efficiency standards are only one component of vehicles emissions. Vehicle emissions are a function of:

- fuel efficiency - energy density of fuel per unit of emissions
- vehicle efficiency - the characteristics of the vehicle which affect fuel consumption. This includes the powertrain (i.e. ICE, BEV, HEV), fuel type, technology, vehicle weight, vehicle aerodynamics and tyres. These aspects of vehicle efficiency are affected by technical choices in design and construction which are shaped by consumer preferences.
- driving efficiency - the impact of driving habits, knowledge of good driving techniques, driving speed and style (including accelerating and braking), tyre pressure, vehicle loading. This is also affected by congestion, the design of road networks and road surface materials.
- distance travelled - the impact of trip making decisions including, whether to undertake a trip, route choice and mode choice. This will be affected by design of road network and availability of public transport (CIE 2023, p. 15).

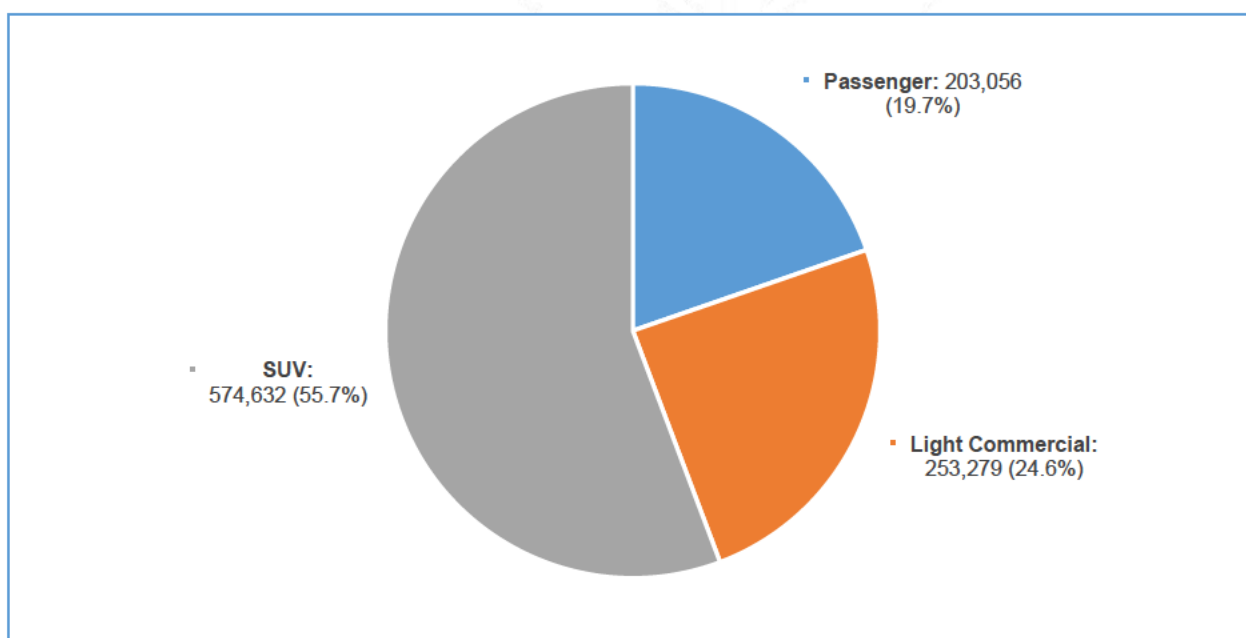
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<sup>1</sup> The AAA commissioned The Centre for International Economics to prepare a report on the impact of a fuel efficiency standard on consumers, vehicle markets, emissions and fuel excise.

## Australia's Vehicle Fleet Composition

Australia's vehicle fleet composition reflects our geography, lifestyle, and road safety profile, as well as tax treatment on certain vehicles. Australians like driving larger light vehicles – the Toyota Hilux was Australia's most popular-selling new vehicle in 2022. As stated in the Consultation Paper, Australia is highly dependent on the type of cars, including utes and 4-wheel drives that are driven in day-to-day lives, and, in many cases used to earn a living (Commonwealth of Australia 2023a, p. 7). SUVs make up 56 per cent of Australia's new light vehicles sales and light commercials make up 25 per cent (Figure 1). To maximise vehicle choice, the Government must consider the composition of Australia's fleet when designing a fuel efficiency standard.

**Figure 1 - Australia's New Light Vehicles Sales (2022)**



Source: AAA's EV Index, based on VFACTS data.

The notion that Australia must 'catch up' or match the targets in European or US fuel efficiency standards is problematic. Average levels of carbon dioxide emitted from Europe's fleet are different to Australia's for several reasons other than Australia not having a specified target. Europe has several measures that have reduced carbon dioxide emissions from motor vehicles, including:

- Low diesel taxes compared to petrol taxes (encourages consumers to purchase diesel vehicles to reduce running costs)
- Vehicle excise duties (encourages consumers to purchase low carbon dioxide-emitting vehicles)
- Consumer information on vehicles (provides information to consumers about relative carbon dioxide efficiency and the annual running costs of new vehicles)

- Consumer information in printed advertisements (provides information to consumers about relative carbon dioxide efficiency and the annual running costs of new vehicles) (NTC 2022, p. 38).

In addition, the European market is dominated by smaller cars, higher fuel prices and wider availability of public transport.

As stated in the Consultation Paper, immediately adopting an annual emissions ceiling from another market would likely disrupt the Australian vehicle market by not providing sufficient time for suppliers to establish a pipeline to Australia of vehicles fitted with more efficient ICE technologies and Low and Zero Emission Vehicles (LZEVs) (Commonwealth of Australia 2023a, p. 15). Furthermore, it is premature to consider the target for a fuel efficiency standard until the design elements of the standard, as outlined in the Consultation Paper, have been settled. Overseas experience can offer valuable lessons about designing fuel efficiency standards, as well as useful features than Australia can copy or adapt. However, an Australian CO<sub>2</sub> target must be designed for the Australian light vehicle fleet to encourage uptake of low CO<sub>2</sub> emitting cars whilst maintaining affordability and vehicle choice.

The AAA supports introducing a fuel efficiency standard for light vehicles and has consistently called on the Australian Government to introduce a standard to increase the supply of new technology and cleaner vehicles and to reduce Australia's carbon footprint. As stated earlier, over 85 per cent of the global car market already has vehicle fuel efficiency standards in place. The AAA welcomes the consultation and looks forward to participating in bilateral and roundtable discussions. The AAA notes that the Department will be undertaking detailed analysis on the potential outcomes of a fuel efficiency standard and believes this should be made publicly available at the earliest opportunity.

The AAA is strongly committed to ensuring that any regulatory measure is properly considered and introduced in a way that minimises cost to motorists and maintains choice. The speed of the transition to lower vehicle emissions must consider the total costs for consumers including changes to operating costs, maintenance costs and safety impacts including the rate of vehicle turnover and average age of fleet. The AAA accepts that the intervention of a standard in the market will increase costs and these need to be balanced against anticipated benefits. Care also needs to be taken to avoid perverse outcomes, such as an increase in cost of new vehicles that deters consumer purchase, resulting in them keeping their existing vehicles longer, resulting in worse environmental and road safety outcomes. The standard's impacts on different socio-economic groups should be assessed to ensure that the costs of the policy are not disproportionately borne by disadvantaged groups. The AAA is committed to working with Government to ensure new legislation and regulations are implemented on an appropriate timeline and do not unduly increase transport costs.

Australia is a technology-taker for new vehicle technology and the introduction of a mandatory fuel efficiency standard is expected to increase the supply of new technology vehicles to the Australian market. Australia is approximately one per cent of the global vehicle market and an Australian fuel efficiency standard cannot be expected to have any significant impact on the development of

global new vehicle technology. Whilst the Australian market is a larger proportion of the right hand drive market than the global market, the introduction of an Australian fuel efficiency standard is not expected to influence vehicle technology development. Technology suppliers are not developing technology only for the right hand drive market and will be leveraging technology development regardless of left or right hand drive, driven by the larger global markets.

The AAA is a technology-agnostic advocate committed to ensuring Australia's light vehicle fleet meaningfully contributes to Australia's decarbonisation. The AAA and its members want Australians in the best possible position to adopt these new technologies and choose the transport technology options that best suit their lifestyle, household budget, and commuting needs. Owning and operating a car in Australia with its unique driving conditions should also remain affordable.

### AAA Transport Affordability Index

The AAA wishes to minimise the impact of a fuel efficiency standard on the cost and affordability of transport. The AAA Transport Affordability Index (the Index) tracks the cost of transport and the impact on household budgets. Since 2016 the Index has been updated quarterly to show how transport costs change over time relative to incomes. The Index continues to show that transport costs are placing a significant strain on household budgets across both regional and metropolitan Australia. Since the March quarter of 2016, typical weekly transport costs for metropolitan households have increased by nearly \$90 from \$327.58 to \$417.39 (in the December quarter of 2022), representing a 27 per cent increase. Similarly, since the June quarter of 2017 typical weekly transport costs for regional households have increased by nearly \$80 from \$266.59 to \$347.68 (in the December quarter of 2022), representing a 30 per cent increase.

The December 2022 quarter findings show the typical household now spends 15.1 per cent of its income on transport costs – 15.6 per cent in the capital cities and 14.4 per cent in regional centres. Hobart (17.7%), followed by Brisbane (17.3%) and Melbourne (16.7%) had the highest transport costs as a proportion of household income in capital cities. Launceston (18.1%) had the highest cost of transport as a percentage of income in regional centres, followed by Alice Springs (16.5%) and Mount Gambier (14.7%).

Compared with the September 2022 quarter, in the December 2022 quarter, the typical Australian city household's average annualised cost of transport increased by \$200 to \$21,704. The average annual cost of transport for the typical regional household increased by \$195 to \$18,080. Of this, transport taxes cost regional families \$2,796 – an increase of \$632 overall due to the reintroduction of the full fuel excise rate from 29 September 2022.

## AAA Real-World Testing Program

The AAA wishes to ensure that vehicle technologies for improved fuel efficiency deliver benefits to consumers. The Australian Government has provided the AAA \$14 million over four years to test and report the real-world emissions and fuel consumption for select new vehicles in Australia. The Real-World Testing Program will dramatically improve consumer information provided to Australian motorists and subsequently help reduce vehicle running costs and vehicle emissions.

The AAA's Real-World Testing Program will:

- enable consumers to make more informed purchasing decisions
- make choosing a more fuel-efficient car easier
- drive down consumers' costs
- help deliver environmental benefits
- ensure emissions regulations are having a 'real-world' impact.

Motorists motivated by reduced fuel consumption and fuel costs will be able to get better information than that currently provided by mandatory laboratory testing. This will enable motorists to have more accurate information on how much the vehicle will cost to run in real-world conditions, which could save some drivers hundreds of dollars every year.

Many Australian households are paying hundreds of dollars a year more for fuel than advertised. This is because laboratory testing for fuel use and vehicle emissions doesn't reflect the actual results of driving on Australian roads. Often the cost differences are substantial. A pilot test of 30 vehicles commissioned by the AAA in 2017 found the vehicles tested in the real world used on average 23 per cent more fuel than indicated by their laboratory tests. The vehicle that produced the worst result was 59 per cent above the laboratory test findings. Only three of the 30 vehicles tested used the same amount of fuel on the road as they did in the laboratory.

The Real-World Testing Program will assess about 60 new vehicle models available in Australia each year, initially targeting models and variants in the most popular vehicle segments to maximise the program's coverage of new vehicle sales. Testing will commence from July 2023 and results will be available in late 2023. Buying and running a car is a major expense, and motorists are entitled to expect reliable information. The Real-World Testing Program will help drive fuel savings and improved environmental performance through informed consumer choice.

## AAA Electric Vehicle Index

The AAA launched its EV Index in March 2023. This online dashboard brings together seven different data sets describing the technology transition of Australia's vehicle fleet. The AAA has designed the EV Index as a tool to provide unbiased, credible and up-to-date data on EV options and patterns of take-up.

The EV Index shows:

- how many EVs are being sold
- which brands and types of vehicles are being purchased
- geographic distribution of EV registrations
- vehicle specifications
- international list prices of 26 representative EV models.

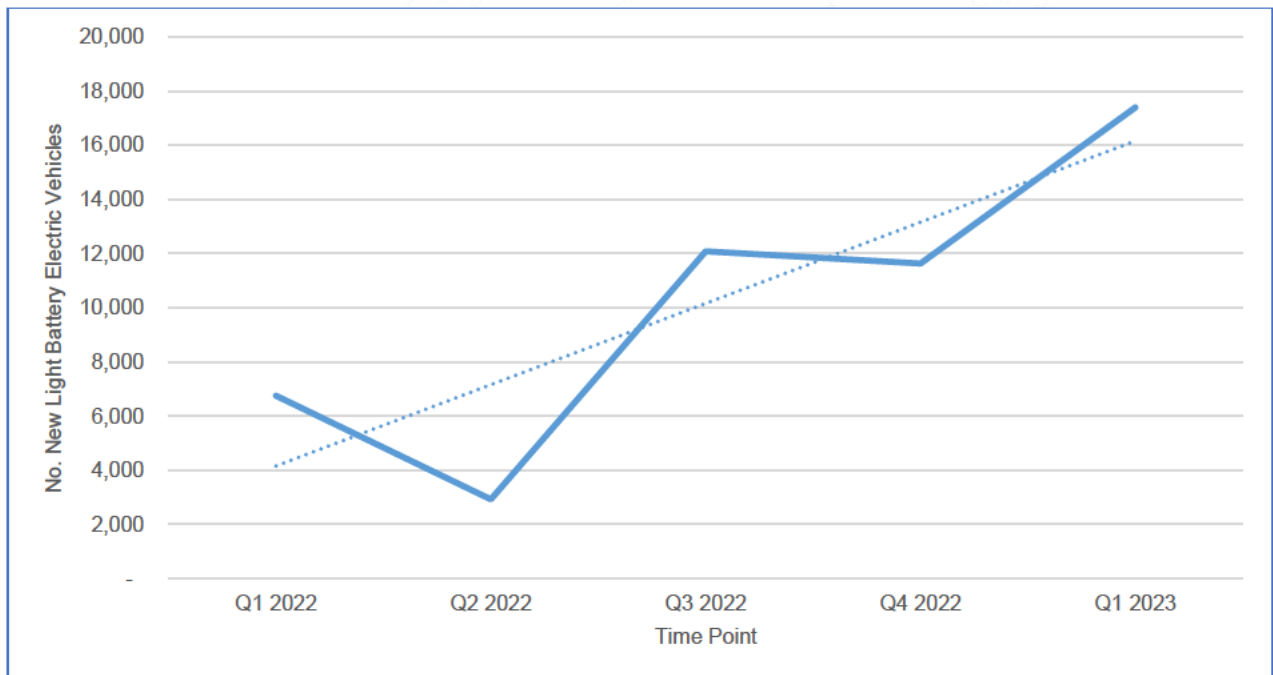
The EV Index is designed to be a resource for businesses, policymakers, motoring enthusiasts and anyone wanting more information about the transition of Australia's vehicle fleet.

### Sales of Electric Vehicles

Despite Australia not having a fuel efficiency standard, BEVs accounted for 6.77 per cent of new light vehicle sales in the first quarter of 2023 (AAA 2023). This is an increase on the 4.54 per cent of new light vehicle sales that were BEVs in the fourth quarter of 2022 (AAA 2023). BEV sales in the first quarter of 2023 overtook those of ICE cars in the medium-sized car category for the first time on record.

Figure 2 shows the quarterly sales of BEVs since the first quarter of 2022. Figure 3 shows Australia's sales of new light BEVs by vehicle type as a percentage of new light vehicle sales for the first quarter of 2023.

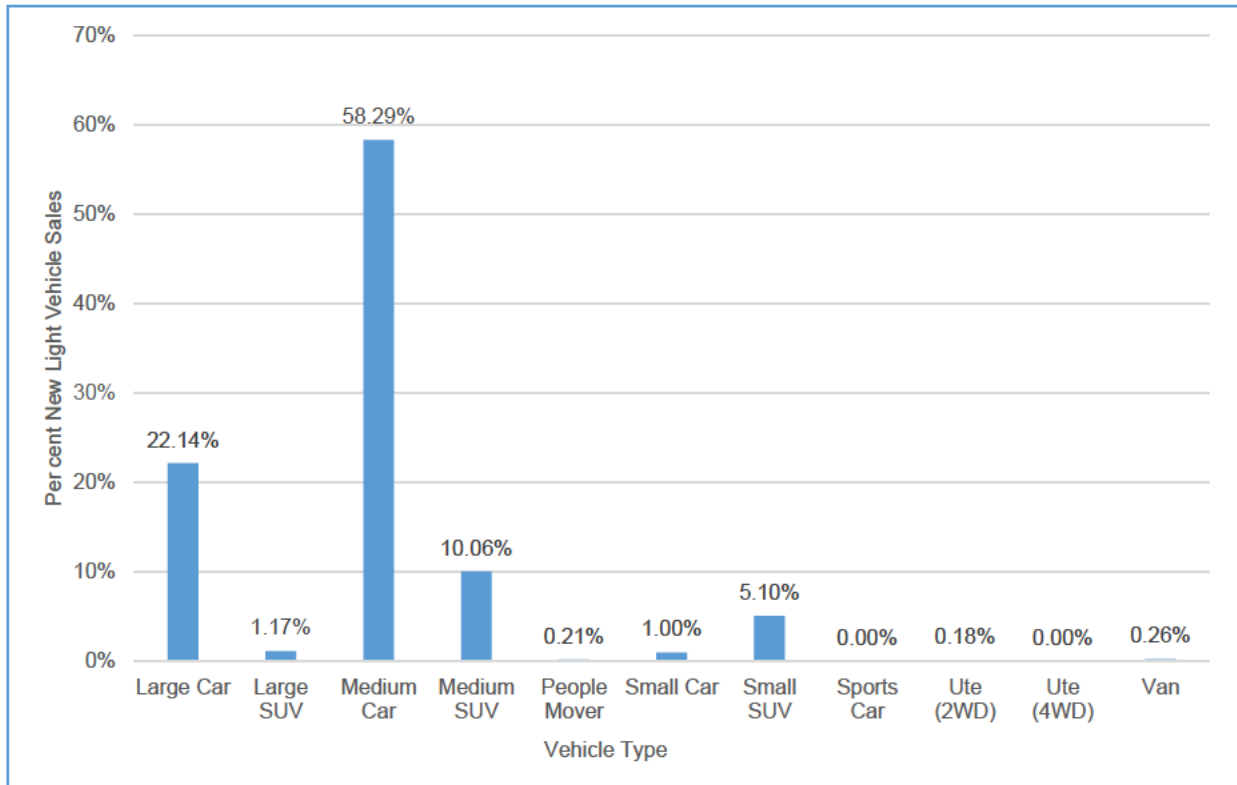
**Figure 2 - Australia's Quarterly Sales of New Light Battery Electric Vehicles (Q1 2022 - Q1 2023)**



Source: AAA's EV Index, based on VFACTS data.

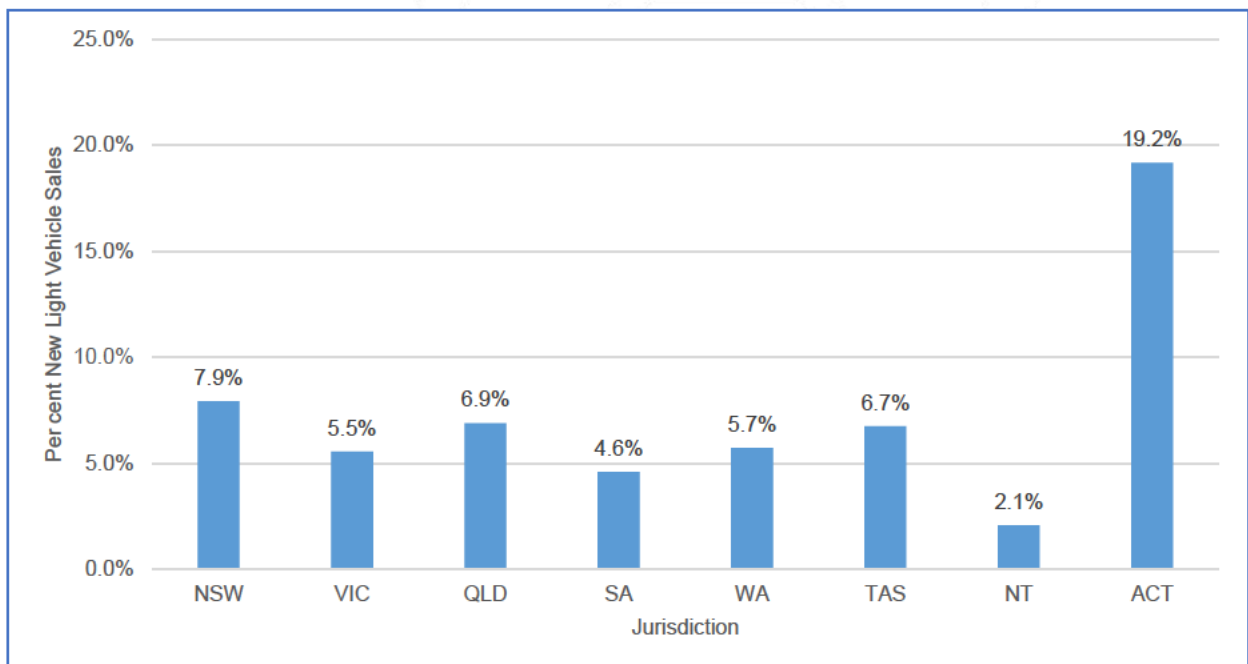


**Figure 3 - Australia's Sales of New Light Battery Electric Vehicles by Vehicle Type (Q1 2023)**



Source: AAA's EV Index, based on VFACTS data.

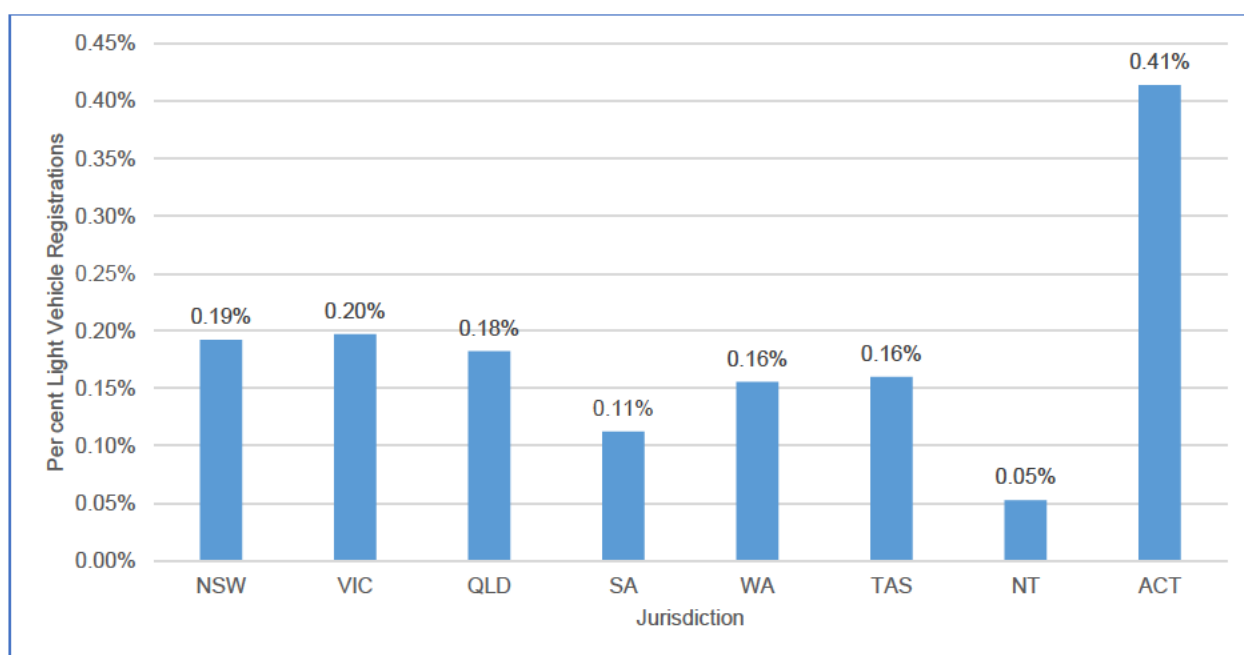
**Figure 4 - Australia's New Light Battery Electric Vehicle Sales by Jurisdiction (Q1 2023)**



Source: AAA's EV Index, based on VFACTS data.

Figure 4 shows for the first three months of 2023 the ACT had the highest proportion of new light BEV sales at 19.2 per cent of all new light vehicle sales. A similar pattern can be seen in Figure 5 showing new light BEV sales since inception until the end of January 2022. As at 31 January 2022, there were 34,536 registered light BEVs across Australia – or about 0.18 per cent of light vehicle registrations (BITRE 2022). The highest penetration of BEV registration is in the ACT at 0.41 per cent and the lowest is the NT at 0.05 per cent (BITRE 2022) (Figure 5).

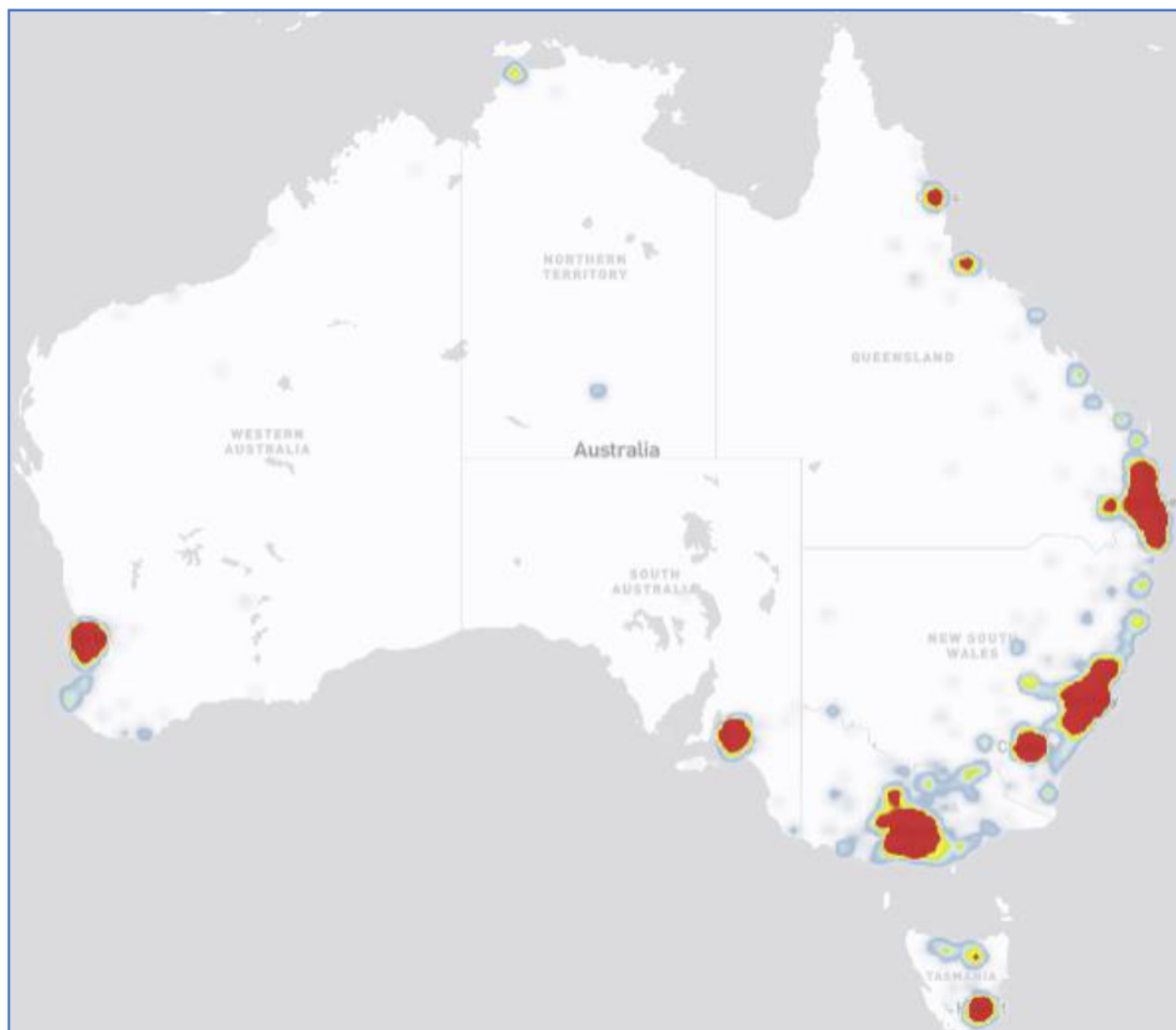
**Figure 5 – Australian Light Battery Electric Vehicle Registrations by Jurisdiction (31 January 2022)**



Source: AAA's EV Index, based on BITRE (2022) *Motor Vehicles, Australia, January 2022, Customised Data Extract*.

As stated in the *National Electric Vehicle Strategy*, regional areas face unique barriers to EV uptake due to large distances and limited access to necessary infrastructure (Commonwealth of Australia 2023, p. 33). BEVs represent 0.23 per cent of light vehicle registrations in Australia's major cities, but only 0.1 per cent of light vehicle registrations in Inner Regional Australia (BITRE 2022). In Outer Regional, Remote and Very Remote Australia, BEVs represented less than 0.06 per cent of light vehicle registrations (BITRE 2022). The heatmap below (Figure 6) illustrates the concentration of BEVs in urban areas as at January 2022.

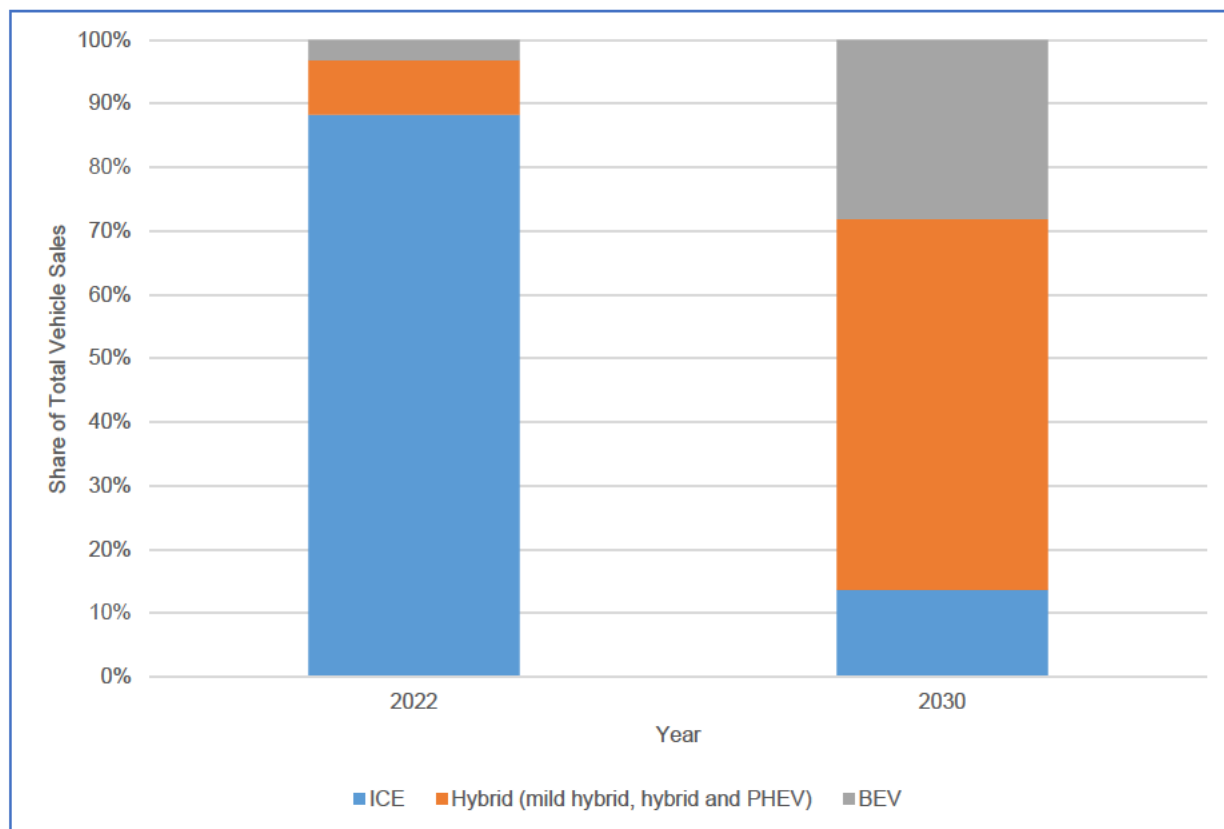
**Figure 6 - Postcode Heatmap of Light Battery Electric Vehicle Registrations (31 January 2022)**



Source: AAA's EV Index, based on BITRE (2022) *Motor Vehicles, Australia, January 2022, Customised Data Extract*.

Many Australian and global projections anticipate a rapid increase in EV sales. In the absence of a fuel efficiency standard, the share of BEVs is expected to increase from 3 per cent of new vehicle sales in 2022 to around 28 per cent in 2030, while hybrids are expected to account for almost 60 per cent of new vehicle sales in 2030 (CIE 2023, p. 42) as illustrated in Figure 7 below. The transition away from ICE vehicles to HEVs and BEVs is expected to be replicated across vehicle types, albeit to varying degrees. By 2030, in the absence of a fuel efficiency standard, passenger vehicles are expected to have the highest share of BEVs, accounting for around 40 per cent of sales against 54 per cent for hybrid and 6 per cent for ICE vehicles (CIE 2023, p. 42).

**Figure 7 - New Car Sales by Powertrain**



Source: CIE (2023) *Vehicle emission standards: Impacts on consumers, vehicle markets, emissions and fuel excise*, report prepared for the Australian Automobile Association, p. 43.

For BEVs, the purchase price premium is the key determinant of incremental ownership costs. BEVs are expected to result in a fuel cost saving of around \$11 000, \$15 000 and \$22 500 for passenger, SUVs and LCVs respectively over a 20 year time period (CIE 2023, p. 60). When price premiums are greater than these savings, owning a BEV would be a net cost for households (CIE 2023, p. 60). The break-even threshold is higher for LCVs and SUVs due to the higher fuel consumption of these ICE vehicles (CIE 2023, p. 60).

Fuel cost savings are often cited as a rationale for implementing an emission standard, which assumes at least some households do not factor these costs into decision making (CIE 2023, p. 16). When consumers purchase a vehicle, they are purchasing a bundle of characteristics for a given price, including range, acceleration, towing capacity and running costs (CIE 2023, p. 18). As vehicle attributes improve, the amount consumers are willing to pay for vehicles increases. Consumers will purchase an EV rather than their preferred conventional fuel vehicle once the vehicle attributes are good enough and/or once the price is low enough (CIE 2023, p. 19). Choosing a vehicle with poor fuel efficiency can be efficient when:

- Consumers are aware of the difference in operating costs, and
- The value of a vehicle's other characteristics to consumers exceeds the additional fuel cost of operating the vehicle (CIE 2023, p. 17).

At 13 April 2023, 37 light BEV models were available in Australia. The AAA EV Index includes the following list of BEVs available (Table 1).

**Table 1 - Available Electric Vehicles by Model, ANCAP Rating, Listed Price and Range (13 April 2023)**

Model	Variant	ANCAP Rating	Listed Price - \$AUD (Redbook)	Range - km (Green Vehicle Guide)
Audi e-tron	2022 Audi e-tron 55 quattro	5 star, 2019	NA	459
Audi e-tron GT	2023 Audi e-tron GT Auto quattro MY23	Unrated	\$180,200	540
BMW i4	2023 BMW i4 eDrive40 M Sport G26 Auto	4 star, 2022	\$99,900	520
BMW i7	2023 BMW i7 xDrive60 M Sport G70 Auto AWD	Unrated	\$306,900	625
BMW iX	2023 BMW iX xDrive40 I20 Auto AWD	5 star, 2021	\$135,900	420
BMW iX3	2023 BMW iX3 G08 Auto	5 star, 2017	\$104,900	440
BYD Atto 3 (Standard)	2023 BYD ATTO 3 Standard Auto	5 star, 2022	\$48,011	345
Genesis G80 BEV	2022 Genesis G80 Auto AWD MY22	Unrated	\$145,000	520
Genesis GV60	2022 Genesis GV60 AWD Auto AWD MY22	5 star, 2022	\$103,700	470
Genesis GV70 BEV	2023 Genesis GV70 Performance Auto AWD MY23	Unrated	\$127,800	445
Hyundai Ioniq 5 (MY23)	2023 Hyundai IONIQ 5 DYNAMIQ Auto 2WD MY23	5 star, 2021	\$72,000	451
Hyundai Ioniq 6	2023 Hyundai IONIQ 6 DYNAMIQ Auto 2WD MY23	5 star, 2022	\$74,000	614
Hyundai Kona BEV	2023 Hyundai Kona Electric Elite Auto	5 star, 2017	\$54,500	305
Jaguar I-Pace	2023 Jaguar I-PACE EV400 SE Auto AWD MY23	5 star, 2018	\$146,857	446
Kia EV6	2023 Kia EV6 Air Auto MY23	5 star, 2022	\$72,590	528
Kia Niro BEV (Plus EV S)	2023 Kia Niro Plus EV S Auto MY23	5 star, 2022	\$64,450	427
LDV eT60	2023 LDV eT60 Auto Dual Cab	Unrated	\$92,990	NA
LDV Mifa9	2023 LDV MIFA 9 Mode Auto	5 star, 2022	\$106,000	NA
Lexus UX BEV	2022 Lexus UX 300e Hatch Auto	5 star, 2019	NA	360
Mazda MX-30 BEV	2022 Mazda MX-30 E35 Astina DR Series Auto	5 star, 2020	\$65,490	224
Mercedes-Benz EQA	2023 Mercedes-Benz EQA EQA250 Auto	5 star, 2019	\$81,700	524
Mercedes-Benz EQB	2023 Mercedes-Benz EQB EQB250 Auto	5 star, 2019	\$87,800	507
Mercedes-Benz EQC	2023 Mercedes-Benz EQC EQC400 Auto 4MATIC	5 star, 2019	\$128,000	430
Mercedes-Benz EQE	2023 Mercedes-Benz EQE EQE300 Auto	5 star, 2022*	\$134,900	626
Mercedes-Benz EQS	2023 Mercedes-Benz EQS EQS53 AMG Auto 4MATIC+	Unrated	\$328,400	587

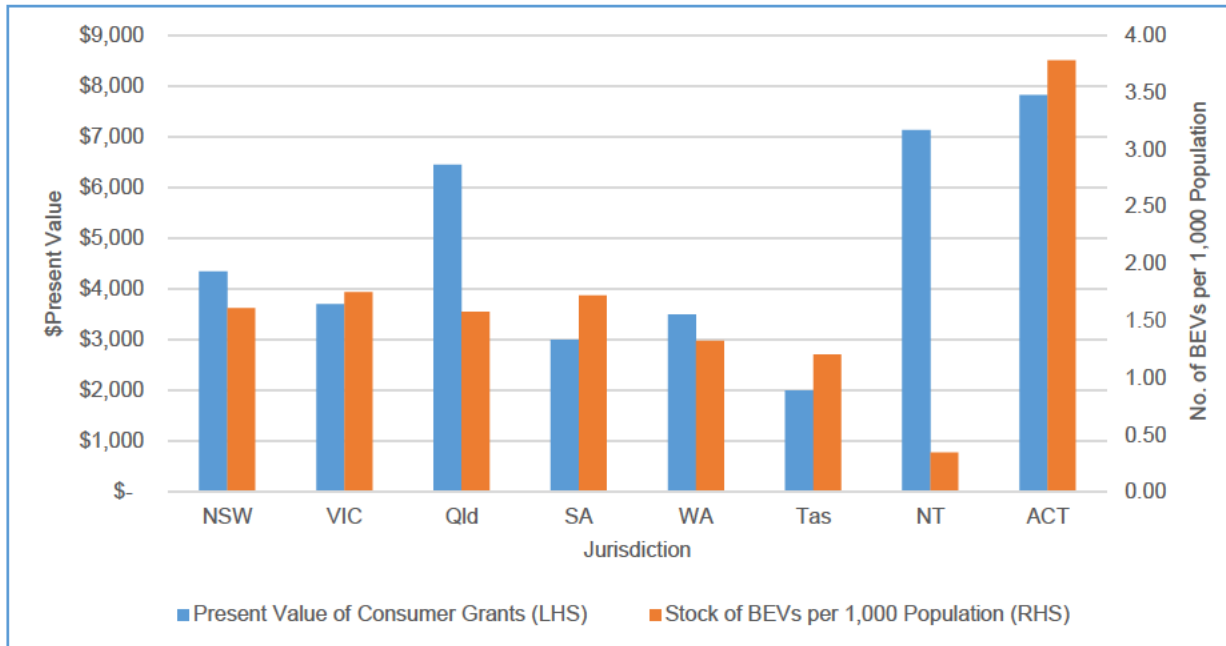
Model	Variant	ANCAP Rating	Listed Price - \$AUD (Redbook)	Range - km (Green Vehicle Guide)
Mercedes-Benz eVito Tourer	2023 Mercedes-Benz eVito Tourer 129 Medium Wheelbase Auto	Unrated	\$116,115	421
Mercedes-Benz eVito Van	2023 Mercedes-Benz eVito 112 Medium Wheelbase Auto	Unrated	\$89,353	NA
MG ZS BEV	2023 MG ZS EV Excite Auto MY22	Unrated	\$43,990	360
MINI Hatch BEV	2023 MINI Hatch Cooper SE Classic Auto	Unrated	\$55,650	222
Nissan Leaf	2023 Nissan LEAF ZE1 Auto MY23	5 star, 2018	\$50,990	311
Polestar 2 (MY23)	2023 Polestar 2 Standard range Single motor Auto MY23	5 star, 2021	\$63,900	625
Porsche Taycan	2023 Porsche Taycan Y1A Auto RWD MY23	Unrated	\$158,100	405
Renault Kangoo BEV	2022 Renault Kangoo ZE Van	Unrated	NA	264
Tesla Model 3	2023 Tesla Model 3 Rear-Wheel Drive Auto	5 star, 2019	\$60,900	559
Tesla Model Y (Standard)	2023 Tesla Model Y Rear-Wheel Drive Auto	5 star, 2022	\$68,900	510
Volvo C40	2023 Volvo C40 Recharge Auto MY23	5 star, 2022	\$75,990	540
Volvo XC40 BEV	2022 Volvo XC40 Recharge Pure Electric Auto MY23	5 star, 2018	\$73,990	510

\*Mercedes-Benz EQE received a 5 star, 2022 rating in May 2023, prior to this date it was unrated.

Source: AAA's EV Index, based on data from Redbook, the Green Vehicle Guide and ANCAP.

EV prices are expected to decrease over time, which will make them more affordable for more Australians. According to FCAI analysis of 2021 sales, the listed price of approximately 51 per cent of new light vehicle purchases from January to September 2021 was less than \$40,000. As set out in the *National Electric Vehicle Strategy*, there are several Australian Government initiatives to increase the supply and demand for EVs. In addition, States and Territories also have initiatives and incentives to encourage more Australians to purchase EVs. The AAA EV Index includes an up-to-date list of the incentives in place for each jurisdiction. Figure 8 below shows the range of financial incentives available to consumers. These appear to have had some impact on uptake as jurisdictions with larger incentives tend to have higher EV uptake (CIE 2023).

**Figure 8 - Current Value of Consumer Financial Incentives for Battery Electric Vehicles and Uptake by Jurisdiction**



Note: The stock of electric vehicles is based on reporting by NTC for 2021. Ongoing incentives, such as reduced or waived vehicle registration and interest free loans are measured over 10 years and converted to present value terms using a discount rate of 7 per cent. Queensland doubled its Queensland Zero Emission Vehicle Rebate Scheme from \$3 000 to \$6 000 in April 2023 – the impact of which is not reflected in the stock of electric vehicles which is based on 2021.

Source: CIE (2023) based on NTC and <https://www.mynrma.com.au/cars-and-driving/electric-vehicles/buying/ev-incentives>

As stated in the *National Electric Vehicle Strategy*, making EVs more affordable and reducing their running costs is crucial to increasing demand for these vehicles (Commonwealth of Australia 2023, p. 30). The *National Electric Vehicle Strategy* notes several factors tempering demand for EVs – including cost, perceived limited travelling distance of EVs, lack of charging infrastructure, and lengthy charging time (Commonwealth of Australia 2023, p. 30). The AAA welcomed the announcement of a national mapping tool to support optimal investment in and deployment of EV charging infrastructure in the *National Electric Vehicle Strategy*. This is expected to facilitate efficient and effective roll-out of public chargers, which should help build consumer confidence and alleviate many drivers' concerns about infrastructure availability, driving ranges and viable route options.

## Australian Vehicle Fleet

The average age of a passenger vehicle in Australia is 10.8 years (BITRE 2022, p.10). The average age of passenger vehicles varies across Australia – the average age of passenger vehicles in the ACT is 9.8 years and in Tasmania is 12.4 years (Table 2).

**Table 2 - Average Age of Passenger Vehicles in Years (2022)**

Jurisdiction	Average age
ACT	9.8
NSW	10.0
NT	10.1
VIC	10.6
QLD	11.0
WA	11.4
SA	12.4
TAS	12.4
<b>National Average</b>	<b>10.8</b>

Source: BITRE (2022) *Motor Vehicles, Australia, January 2022 (First Issue)*, p. 10.

The AAA notes that the *National Road Safety Strategy 2021-30* sets an expectation that the average age of the light vehicle fleet will be under 9 years by 2030 (Commonwealth of Australia 2021). In addition, the *National Road Safety Action Plan 2023-25* includes an action to investigate opportunities to reduce the average fleet age in regional communities (Commonwealth of Australia 2023b).

Light vehicles have a lifetime of 15 to 20 years, so fleet turnover can take decades to achieve. If a fuel efficiency standard increases the cost of new vehicles this will not only affect the affordability of new cars, but this could also result in consumers keeping older, less fuel-efficient, and less-safe cars for longer.

Australia's light vehicle fleet has about 15.1 million passenger vehicles and 3.8 million light commercial vehicles (BITRE 2022). New light vehicles account for about 1.1 million sales each year and about 600,000 vehicles are retired from the fleet (CIE 2023, p. 76), meaning roughly six per cent of the light vehicle fleet turns over each year. Under a fuel efficiency standard for new light vehicles, it would take around a decade for more than half of the fleet to be covered by a standard after its implementation.



## Feedback on General Questions

### **Are these the right guiding principles? Are there other principles that you think we should keep in mind?**

The AAA agrees with the guiding principles. The principles are the right ones from an environmental perspective. An additional principle should be affordability. Although the purpose of a fuel efficiency standard is to reduce the average amount of CO<sub>2</sub> emitted, the impact on consumers must also be acknowledged. The AAA accepts that the intervention of a standard in the market will increase costs and these need to be balanced against anticipated benefits. Care also needs to be taken to avoid perverse outcomes, such as an increase in cost of new vehicles that deters consumer purchase, or incentivises the purchase of a less fuel efficient vehicle resulting in worse environmental and/or road safety outcomes.

### **Are there any design assumptions that you think will put at risk the implementation of a good FES for Australia?**

The AAA believes that the design principles outlined in the *Consultation Paper* are unlikely to put the implementation of a fuel efficiency standard at risk. The AAA recommends two additional design assumptions to ensure successful implementation of a fuel efficiency standard:

- regular reviews to ensure the fuel efficiency standard is working and there are no unintended consequences or barriers for consumers.
- consider the development and evolution of new technologies when designing the standard and when conducting regular reviews. For example, alternative fuels (including biofuels and biofuels range extenders) and synthetic fuels (also known as e-fuels) that can use green electricity, hydrogen from water and CO<sub>2</sub> from the atmosphere to produce fuels for ICE vehicles that are net-zero CO<sub>2</sub> emissions. The AAA notes that the EU approved legislation in March 2023 ending sales of new ICE vehicles by 2035 except for those that run exclusively on e-fuels. The use of e-fuels also offers the opportunity to reduce emissions from the existing ICE light vehicle fleet.

### **Are the exclusions for military, law enforcement, emergency services, agricultural equipment and motorcycles the right ones?**

The envisaged fuel efficiency standard is for light vehicles and imposes an obligation on light vehicle suppliers to ensure that new vehicles entering the market meet the standard. Agricultural equipment and motorcycles would therefore not be subject to a fuel efficiency standard. The AAA considers that any new light vehicles first registered for road use should be subject to the standard, including those for military, law enforcement and emergency services. The AAA notes that the New Zealand Clean Car Standard excludes vehicles such as motorsport vehicles, scratch-built vehicles and special interest vehicles (Waka Kotahi NZ Transport Agency 2023). The AAA suggests the government considers ways to facilitate other technology such as advanced biofuel/electric options to decarbonise specialist and hard-to-electrify applications.

**Are there any particular FES features that you think we need to take particular care with?**

There are many features that need to be taken into consideration when determining a fuel efficiency standard for Australia. These features need to be fully explored, considered and settled before a target can be determined or its impact assessed. As noted in Minister King and Minister Bowen’s foreword to the *Consultation Paper*: “There is considerable complexity to designing a fuel efficiency standard and we are committed to getting it right” (Commonwealth of Australia 2023a, p. 3).

**What principles should we consider when setting the targets?**

The design elements of the fuel efficiency standard, as outlined in the *Consultation Paper* must be determined before considering the target. The principles for setting a fuel efficiency standard outlined in the *Consultation Paper* (Commonwealth of Australia 2023a, p. 12) should be considered when setting the targets, but affordability should also be included as a principle. The standard’s impacts on different socio-economic groups should be assessed to ensure that the costs of the policy are not disproportionately borne by disadvantaged groups, including low-income households as well as regional and remote motorists.

The AAA understands that the release of the fuel efficiency standard, expected at the end of 2023, will be subject to a Policy Impact Analysis (previously known as a Regulation Impact Statement). The Policy Impact Analysis should ensure that the standard’s impacts are fully explored and evaluated. The AAA recommends, as a minimum, the benefits and costs outlined in Table 3 below are included in the Policy Impact Analysis.

**Table 3 - Benefits and Costs for Inclusion in a Policy Impact Analysis of Emission Standards**

Factor	Description - Benefit/Cost
Private value of fuel savings	The treatment of these benefits in the cost benefit analysis underlying the Policy Impact Analysis depends crucially on the understanding of the original rationale for the standard. In the absence of clearly identified fuel efficiency market failures, it is not appropriate to include private benefits. In the presence of market failures, at least some of the private benefits should be included.
Value of emissions reduction	This needs to be understood in the wider context of emissions policy and includes both CO <sub>2</sub> and other emissions. Emissions reductions should be valued at the economy wide cost of emissions reductions, accounting for the fact that there may be other low cost abatement options available.
Technology cost or cost of fleet mix change	There is a wide range of technology cost estimates available. The analysis should allow for sensitivity around estimates. As Australia is a technology-taker (technological options are likely to be driven by other markets), the standard may also involve costs (from the Australian import perspective) in terms of upgrading the efficiency of the fleet, compared with what would otherwise have been the case.
Opportunity cost	This factor is often excluded from explicit consideration. However, focus on fuel efficiency characteristics of vehicles must involve some opportunity cost in terms of other characteristics that consumers value.
Rebound effect	It is widely understood that energy efficiency measures involve a 'rebound effect'. In the case of a vehicle efficiency standard, this is an increase in kilometres travelled due to the effective reduction in the cost of vehicle travel brought about by increased fuel efficiency.
Other implications of the rebound effect	Increased kilometres travelled will have other implications, including increased congestion and other environmental impacts.
Indirect implications for fuel prices	Fuel efficiency from standards may require improvements in fuel quality. This will have indirect implications for fuel prices that need to be included in the analysis. Note that changes in fuel prices will affect all vehicles, not just new vehicles.
Compliance costs	Complying with the standard will involve compliance costs for vehicle brands.
Administrative costs	Administering the standard will involve government administration costs
Cost of taxation (to cover administration costs)	Administration costs will involve the use of tax revenue, which has an opportunity cost.

Source: CIE (2023) *Vehicle emission standards: Impacts on consumers, vehicle markets, emissions and fuel excise*, report prepared for the Australian Automobile Association, pp. 30-31.

**How many years ahead should the Government set emissions targets, and with what review mechanism to set limits for the following period?**

The AAA supports emission targets being set with the earliest timing capable of providing enough time for a considered rather than rushed transition. This will provide certainty for industry as well as consumers. Targets should be set for a decade ahead to provide direction for industry.

As stated in the *Consultation Paper*, setting emissions targets in the future requires a trade-off between certainty and flexibility. It is worth noting that in both the US and the EU, car manufacturers were given sufficient time to comply with their respective targets. In the case of the US, regulation for the 2025 target passed into formal regulation in 2012, giving manufacturers 14 years notice to reduce emissions by an estimated 43 per cent (Environmental Protection Agency 2012). In the EU, 2021 targets were foreshadowed in 2009 legislation, giving manufacturers 12 years notice to reduce emissions by an estimated 35 per cent (European Parliament and of the Council 2009). In both instances, an existing fuel efficiency standard was operating.

The AAA recommends that the Australian fuel efficiency standard also includes a mechanism to enable adjustments. The AAA recommends undertaking reviews every three to five years to enable any necessary adjustments to the standard.

Given the uncertainty of setting targets far into the future, the AAA considers it may be appropriate to set a 10-year target to indicate broad direction and that may be subject to revision as a result of progress reviews, and targets with a 5-year time horizon may be able to be set with a greater degree of confidence.

**How should the Government address the risks of the standard being found to be too weak or too strong while it is operating?**

The regulator of the fuel efficiency standard should be required to report annually on the standard's operation and effectiveness. As stated earlier, the legislation for the fuel efficiency standard must establish a mechanism to enable the Government to review and adjust the standard subject to consultation. This would provide an avenue to address the standard being too weak or too strong and would also enable adaptive responses to technological advances. The AAA recommends that the Australian fuel efficiency standard also includes a mechanism to enable adjustments.

## Feedback on Technical questions

### What should Australia's CO<sub>2</sub> FES targets be?

The design elements of the fuel efficiency standard, as outlined in the *Consultation Paper* must be determined before considering the target. Rather than contemplating a particular target, it may be more appropriate to align the trajectory of Australia's rate of reduction of new vehicle emissions with that of standards in the US or Europe. This recognises that Australia is starting from a different position at a different point in time with a different new vehicle fleet, and the trajectory of the rates of reduction reflect the rate of penetration of new technology vehicles into the fleet.

The AAA agrees that *"failure to set globally competitive FES emission ceilings risks providing insufficient incentive to global vehicle manufacturers to supply in-demand LZEVs to Australia"* (Commonwealth of Australia 2023, p. 15). However, as the *Consultation Paper* notes, *"immediately adopting an annual emissions ceiling from another market would likely disrupt the Australian vehicle market by not providing sufficient time for suppliers to establish a pipeline to Australia of vehicles fitted with more efficient ICE technologies and LZEVs"* (Commonwealth of Australia 2023, p. 15).

The AAA favours adopting an achievable CO<sub>2</sub> target that rewards vehicle manufacturers that surpass the set targets, as opposed to setting a stringent target that imposes penalties on manufacturers that fail to comply. The fuel efficiency standard for new light vehicles must deliver the maximum environmental benefits while ensuring Australians can purchase vehicles that suit their needs and are affordable and safe.

### How quickly should emissions reduce over what timeframe?

The AAA believes that until the design features and the associated issues of the fuel efficiency standard are fully explored, considered, and settled, the target and timeframe for emissions reductions cannot be properly assessed. The AAA recommends aligning Australia's rate of reduction of new vehicle emissions with that of standards in the US or Europe. This recognises that Australia is starting from a different position at a different point in time with a different new vehicle fleet, and rates of reduction reflect the rate of penetration of new technology vehicles into the fleet.

### Should the Australian FES start slow with a strong finish, start strong, or be a straight line or take a different approach?

The AAA supports the cautious start – finish strong option and the straight line option, noting that the straight line option may be overly simplistic and may become non-linear if reviews adjust the target.

As stated in the *Consultation Paper*, the cautious start – finish strong option would give suppliers more time to adapt to the system, while achieving more modest emission reductions early. While access to EVs might not increase initially, it would provide some time for suppliers to adapt the technology they import to Australia and would allow more time for Australians to adapt to technologies normally supplied to advanced markets with fuel efficiency standards. This option will also provide time to ensure consumers are fully informed and aware of the impacts of a fuel efficiency standard. A review process would allow any necessary adjustment to the standard.

### **Should an Australian FES adopt a mass-based or footprint-based limit curve?**

The AAA recommends a mass-based limit curve. Vehicle mass (the attribute used in the EU, UK and New Zealand), rather than vehicle footprint (the attribute used in the US), has been previously found to have a much stronger correlation with CO<sub>2</sub> emissions for vehicles sold in Australia (ABMARC 2016). As stated in the *Consultation Paper*, a mass-based limit curve most closely reflects vehicle markets similar to Australia and the industry voluntary fuel efficiency standard, providing a framework for compliance that is familiar to suppliers (Commonwealth of Australia 2023a, p. 19). Furthermore, a mass-based attribute caters for the addition of new safety features and other vehicle technologies that add weight to vehicles and therefore increase the energy consumption and emissions of vehicles. When using a footprint-based standard, for a given footprint, the energy consumption and emissions is restricted by the limit value curve, regardless of mass.

### **If Australia adopts a mass-based limit curve, should it be based on mass in running order, kerb mass, or another measure?**

The AAA recommends that if Australia adopts a mass-based limit curve it should be based on mass in running order which is used in the EU.

### **Should Australia consider a variant of the New Zealand approach to address incentives for very light and very heavy vehicles? If so, noting that new vehicles that weigh under 1,200 kg are rare, where should the weight thresholds be set?**

The AAA has no objection to consideration of this approach but does not have specific threshold values to suggest at this time.

### **Should an Australian FES adopt two emissions targets for different classes of vehicles?**

The AAA recommends applying different limit value curves to MA (passenger cars) and NA+MC (four-wheel drive and light commercials) categories as defined under the Australian Design Rules.

Placing passenger cars and four-wheel drive/light commercials in separate categories provides flexibility to introduce different rates of CO<sub>2</sub> reductions for each group in the future. Passenger cars are markedly different to four-wheel drive and light commercial vehicles; their use is different and importantly, their ability to adopt technologies capable of reducing CO<sub>2</sub> emissions, is currently very different. In addition, in other markets different targets have been set for passenger and light commercial vehicles, which recognises that LZEV technology is currently more widely available in passenger vehicles (Commonwealth of Australia 2023a, p. 21). The AAA notes that the US and the EU have separate targets for passenger cars and light commercials, or light trucks in the case of the US. This adds flexibility for car makers, allowing them to sell a wider range of vehicles to ensure more consumer choice.

**Is there a way to manage the risk that adopting two targets erodes the effectiveness of an Australian FES by creating an incentive to shift vehicle sales to the higher emission LCV category**

The AAA considers that, if designed properly, the targets for each category will reflect their respective rates of technology adoption, and therefore in real terms, their effective stringency will be equal. Hence, if the targets properly reflect each segments' capacity to adopt/deploy technology, there should be no incentive to "shift" vehicle sales.

**Is there anything else we should bear in mind as we consider this design feature?**

The AAA does not have a view on this question.

**Are there other policy interventions that might encourage more efficient vehicle choices?**

The AAA believes the introduction of a market-based, technology agnostic regulatory mechanism, such as a fuel efficiency standard, will deliver least cost abatement across Australia's fleet and best serve consumers.

The AAA notes that other jurisdictions have introduced high taxes, restrictions, and penalties on ICE vehicles and their fuels to incentivise the adoption of more efficient vehicles and the AAA does not support such an approach in Australia due to the associated impact on transport affordability.

The AAA recommends that consideration be given to an information campaign aimed at educating drivers on how to reduce fuel consumption through their driving style (ecodriving, e.g. [racq.com/ecodrive](http://racq.com/ecodrive)). Improved information to drivers across the full fleet about driving behaviour and the financial savings that can be achieved would help meet the government's emission reduction targets.

Consumers must also be made aware of the benefits and costs of fuel efficiency. The AAA recommends a communications campaign to ensure consumers are fully informed. The AAA's constituent clubs NRMA, RACV, RACQ, RAA, RAC, RACT and the AANT have 8.9 million members. These clubs continue to support improved information to consumers by providing information supporting EV charging infrastructure, engaging directly with consumers at dedicated EV drive days, and providing ongoing and detailed advice via multiple communication channels. The AAA's member clubs are well-placed to engage consumers and deliver information.

As outlined earlier in the submission, the Australian Government provided the AAA \$14 million over four years to test and report the real-world emissions and fuel consumption for selected new vehicles in Australia. The Real-World Testing Program will dramatically improve consumer information provided to Australian motorists and subsequently help reduce vehicle running costs and vehicle emissions. The Real-World Test Program will assess about 60 new vehicle models available in Australia each year and will initially target models and variants in the most popular vehicle segments to maximise the proportion of new vehicle sales covered by the program. Testing will commence from July 2023 and results will be available in late 2023. Buying and running a car is a major expense, and motorists are entitled to expect reliable information. The Real-World Testing

Program will help drive fuel savings and improved environmental performance through informed consumer choice.

The AAA also recommends that all governments ensure the transport system is as efficient as possible. The efficiency of our transport system has a significant effect on the emissions of the transport sector. Allowing growing congestion in our cities would erode gains made in vehicle efficiency. The AAA continues to call on the Government to ensure adequate funding is invested in land transport infrastructure, and to pursue initiatives that ensure our current transport system achieves maximum efficiency.

The AAA also recommends removing the luxury car tax to encourage more efficient vehicle choices. This is an inefficient tax that targets vehicles that are often the leaders in providing safety and environmental benefits. Removing the luxury car tax would contribute to downward pressure on new vehicle prices and allow more high-technology vehicles to enter the Australian vehicle fleet. This would contribute to the Government's road safety, air quality and greenhouse objectives.

Developing technologies such as e-fuels (synthetic fuels produced using zero emission electricity) should be monitored for commercial viability and cost effectiveness as these have the potential to provide existing and future ICE vehicles with the possibility to operate with net zero emissions.

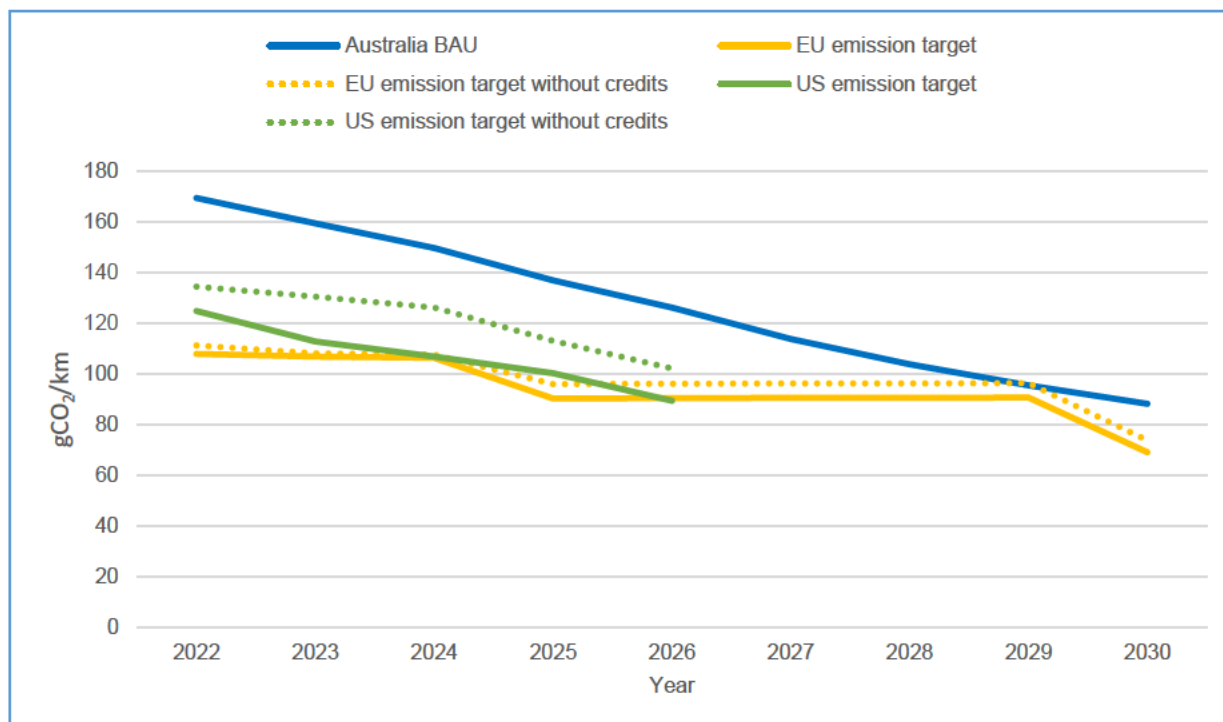
#### **To what extent should the Australian FES allow credit banking, transferring and/or pooling?**

The AAA supports credit and debit banking, transferring and/or pooling as these provide individual vehicle brands with flexible options to meet emissions targets over time, providing a least-cost mechanism for achieving the overall objective of the entire new vehicle fleet meeting the target. The flexible options minimise financial penalties on individual vehicle brands, which would be expected to be passed on to consumers.

Key features of emission standards established and implemented in numerous countries include systems of credits or super credits. These credits can generally be traded between brands, so that brands who do not reach their target through vehicle sales, may fulfil their obligations by purchasing credits from other brands. (CIE 2023, p. 32). It is worth noting that targets set by jurisdictions do not reflect tailpipe emission reductions as the schemes allow a range of credits and adjustments (CIE 2023). Figure 9 below illustrates an estimate of targets for the US and EU removing these credits.



**Figure 9 - Emissions Targets Adjusting for the Impacts of Credits**



Source: CIE (2023) *Vehicle emission standards: Impacts on consumers, vehicle markets, emissions and fuel excise*, report in preparation for the Australian Automobile Association, p. 33.

Given that credits are key features in other jurisdictions, an Australian fuel efficiency standard should allow credit banking, transferring and pooling. This will also meet the government’s objective of designing a fuel efficiency standard that is broadly consistent with standards in place in major advanced markets (Commonwealth of Australia 2023, p. 21).

Investment in accredited carbon offsets such as Australian Carbon Credit Units (ACCUs) to address greenhouse gas emissions that cannot be abated is strongly supported by the AAA.

**Should credits expire? In what timeframe?**

The AAA recommends that vehicle manufacturers should be permitted to use credits between the two limit value curves as well as bank, transfer and/or pool credits. Vehicle manufacturers should be permitted to carry forward credits and debits for up to three years.

### **Should an Australian FES include multiplier credits for LZEVs?**

Super credits (also known as multiplier incentives) apply a multiplier to the sales volume for vehicles meeting particular criteria (usually low and zero emissions vehicles) and hence reduce the calculated average emissions across sales. The AAA notes that the reduced average emissions calculated in this manner are not real emissions abatement. However, super credits can be used as a policy tool to further incentivise the supply of particular types of vehicles into the market and these incentives can be phased down and/or out over time.

There may be a case to consider super credits for particular classes or types of vehicle, for example zero emissions utility vehicles or zero emissions passenger vehicles with a purchase price of less than \$30,000. This would provide suppliers with an additional incentive to deliver these specific vehicle types to Australia. The AAA notes that reductions in purchase price for vehicles should not come at the expense of safety.

### **If so, what level should the multipliers be, should they apply equally to both classes of vehicle (if adopted) and for how long should they apply?**

The AAA does not have a view on this question.

### **Should the total benefit available from these credits be capped?**

The AAA does not have a view on this question.

### **If not, should the Government consider another approach to incentivising the supply and uptake of LZEVs?**

The AAA does not have a view on this question.

### **Should an Australian FES include off-cycle credits for specified technologies?**

Credits for emissions reduction technologies that are not assessed in the laboratory test ("off cycle" technologies) are an included element of fuel efficiency standards in other jurisdictions. As stated in the *Consultation Paper*, the purpose of these measures is to encourage the development and supply of new and innovative technologies to reduce CO<sub>2</sub> emissions from vehicles or to acknowledge CO<sub>2</sub> benefits not recognised by the standardised laboratory emissions test (Commonwealth of Australia 2023a, p. 22).

The AAA supports the use of off-cycle credits (eco-innovations) for ICE vehicles, consistent with those issued in the EU (e.g. LED headlamps, photovoltaic sunroofs, high efficiency alternators) up to a maximum of 7g CO<sub>2</sub>/km per manufacturer per year.

**If so, should the per-vehicle benefit be capped and how should an Australian FES ensure that off-cycle credits deliver real emissions reduction?**

The AAA supports the use of credits for off-cycle credits (eco-innovations) for ICE vehicles, consistent with those issued in the EU (e.g. LED headlamps, photovoltaic sunroofs, high efficiency alternators) up to a maximum of 7g CO<sub>2</sub>/km per manufacturer per year.

**Should the Government consider any other form of off-cycle credits for an Australian FES?**

The AAA does not have a view on this question.

**Should an Australian FES include credits for using low global warming potential air conditioning refrigerants, and if so, for how long should this credit be available?**

The AAA does not have a view on this question.

**Could the issue of high global warming potential refrigerants be better dealt with by another policy or legislative framework?**

The AAA does not have a view on this question.

**If such a credit is permitted, should the emissions target be lowered to ensure consumers realise the fuel cost savings and EV availability benefits of a FES?**

The AAA does not have a view on this question.

**When do you think a FES should start?**

The need for a fuel efficiency standard must be balanced with the required transition times for industry and consumers. Industry will be best placed to advise what is a feasible and achievable period. An understanding of vehicle manufacturers' Australian market plans is essential to inform implementation timeframes, ambition levels, compliance and enforcement. This would minimise regulatory costs, which are ultimately passed on to consumers. As stated in the *Consultation Paper*, government best practice requires a period of time for business to implement new policies and for government to undertake any targeted education on how to comply with new legislation (Commonwealth of Australia 2023a, p. 25). A compliance system needs to be in place, along with a way of effectively regulating a new fuel efficiency standard (Commonwealth of Australia 2023a, p. 25).

Consumers must also be made aware of the benefits and costs of a fuel efficiency standard. The AAA recommends a communications campaign to ensure consumers are fully informed. The AAA's constituent clubs NRMA, RACV, RACQ, RAA, RAC, RACT and the AANT have 8.9 million members. These clubs continue to support improved information to consumers by providing information supporting EV charging infrastructure, engaging directly with consumers at dedicated EV drive

days, and providing ongoing and detailed advice via multiple communication channels. The AAA's member clubs are well-placed to engage consumers and deliver information.

The AAA is committed to reducing the environmental impact of transport and supports a standard designed specifically for the Australian light vehicle fleet, introduced over a reasonable timeframe, that does not unduly restrict vehicle choice or increase costs to the consumer. There must be reasonable lead times and compliance periods to avoid adverse impacts and unintended consequences on consumers' vehicle choice and costs.

All other things equal, a more rapid transition may imply a more limited set of vehicle options (at a higher price) than may occur under a slower transition (CIE 2023, p. 10). This will also have implications for new and used car markets, as consumers faced by high prices may choose to:

- purchase a new car regardless of higher prices
- retain their existing vehicle for longer, or
- purchase a used car (CIE 2023, p. 10).

#### **How should the start date interact with the average annual emissions ceiling?**

The AAA does not have a view on this question.

#### **Should the Government provide incentives for the supply of EVs ahead of a FES commencing? If so, how?**

The AAA notes that many state and Commonwealth incentives already exist, and that they primarily boost demand for LZEVs, without making Australia a more attractive market for OEMs to supply.

The AAA is concerned that there are a range of barriers to increased supply of LZEVs to the Australian market. As stated in the *Consultation Paper*, Australia represents only one per cent of the global car market and is already in the minority right-hand drive market, which can affect supply for vehicles with limited global reach (Commonwealth of Australia 2023a, p. 10). In the absence of a fuel efficiency standard, this means Australia is a relatively low-priority market for vehicle suppliers when introducing new technologies they could otherwise sell into other markets with fuel efficiency standards.

Therefore, the AAA believes a fuel efficiency standard is the most effective (and cost-effective) way of incentivising supply of LZEVs.

#### **What should the penalties per gram be? Would penalties of A\$100 per gram provide a good balance between objectives? What is the case for higher penalties?**

The AAA believes that penalties must be aligned with those in fuel efficiency standards in other markets. Penalties that are too low will not incentivise suppliers to provide Australia with the most fuel-efficient and safe vehicles. Penalties too high may mean suppliers avoid providing vehicles to Australia because they prefer to focus on larger markets elsewhere with lower penalties.

The design of a penalty system must be well-balanced to provide sufficient incentives to suppliers to comply. The AAA supports penalties in the order of \$100 per gram of CO<sub>2</sub>. In addition, the government should disclose whether revenue from penalties will be hypothecated to be reinvested in initiatives to help reduce light vehicle emissions or returned to consolidated revenue. The AAA has consistently called on the Australian Government to prioritise public transport and active transport infrastructure in its future funding programs to improve both metropolitan and regional services.

**What if any concessional arrangements should be offered to low volume manufacturers and why? If so, how should a low volume manufacturer be defined?**

The administrative efficiency of such an exclusion needs to be balanced with its potential socio-economic impact. The AAA supports efforts to reduce administrative burden and align with other markets' regulatory models. However, the AAA would be concerned if equity issues arose from exclusions of high-emission, low-volume brands.

Of the 52 manufacturers reporting sales data to VFACTs, 17 sold less than 1,000 light vehicles in 2022, accounting for only 3,500 light vehicle sales in total. While the EU standard provides an exemption for manufacturers responsible for less than 1,000 vehicles a year, the US EPA provides concessional arrangements for small volume manufacturers producing less than 5,000 vehicles per year and has proposed to require compliance with the primary standard by 2032.

**The Government is keen to ensure any regulatory administrative costs are kept to a minimum while ensuring that outcomes are robust. What should the department keep in mind in designing the system for suppliers to provide information and in relation to record keeping obligations?**

The AAA does not have a view on this question.

**What should the reporting obligations be? What information should be published and how regularly?**

The regulator of the fuel efficiency standard should be required to report annually on the standard's operation and effectiveness.

**How long should suppliers keep required information?**

The AAA does not have a view on this question.

**Is a penalty of 60 penalty units appropriate for this purpose?**

The AAA notes that the penalty for vehicle suppliers failing to keep appropriate records under the fuel efficiency standard will need to be sufficient to deter suppliers from weighing up the cost of penalties for record keeping with those for non-compliance with the limit value curve.

**Should the regulator be the department? What other options are there?**

The AAA supports the Department being the regulator. As stated in the *Consultation Paper*, the Department already has a range of regulatory functions across the transport sector, covering land transport, aviation and maritime.

**How should the regulated entity be defined in an Australian FES?**

The AAA does not have a view on this question.

**What reasons are there to depart from the standard regulatory tool kit for an Australian FES?**

The AAA does not have a view on this question.

**Should an Australian FES use WLTP test results in anticipation of the adoption of Euro 6 and if so, what conversion should be applied to existing NEDC test results, or how might such a factor be determined?**

The AAA believes that an Australian fuel efficiency standard should use the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) test results in anticipation of the adoption of Euro 6. The AAA has long advocated for the introduction of a fuel efficiency standard designed for the Australian market alongside the introduction of improved fuel quality and noxious emissions standards (Euro 6). This would provide an incentive for vehicle manufacturers to offer models with the latest engine technologies that consume less fuel and produce lower tailpipe emissions.

**Conclusion**

A well-designed fuel efficiency standard will increase the supply of new technology vehicles, including EVs, to Australia. This will provide consumers with greater choice of latest technology vehicles and improve road safety. The AAA is committed to reducing the environmental impact of transport and supports a fuel efficiency standard designed specifically for the Australian light vehicle fleet, introduced over a reasonable timeframe without unduly restricting choice or increasing costs to consumers.

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