Submission No 74

# INFRASTRUCTURE FOR ELECTRIC AND ALTERNATIVE ENERGY SOURCE VEHICLES IN NSW

**Organisation:** Federal Chamber of Automotive Industries

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# FEDERAL CHAMBER OF AUTOMOTIVE INDUSTRIES

FCAI submission in response to:

Infrastructure for electric and alternative energy source vehicles in NSW

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FEDERAL CHAMBER OF AUTOMOTIVE INDUSTRIES Level 1, 59 Wentworth Avenue KINGSTON ACT 2604



# 1. INTRODUCTION

# As the Australian and global economies move towards net zero emissions from the transport sector, the importance of thorough debate and consultation across sectors is critical.

The Federal Chamber of Automotive Industries (FCAI) welcomes the opportunity to provide this submission on the Transport and Infrastructure Net Zero Consultation Roadmap (Consultation Paper).

The FCAI is the peak Australian industry organisation representing over 60 global automotive brands that design, manufacture, import, distribute and sell light duty passenger vehicles, light commercial vehicles, and motorcycles in Australia across more than 380 models supported by almost 4,000 dealers. Our members are listed on our <u>website</u>.

We bring together our members to consider changes to our operating environment, develop industry-wide positions or perspectives, and drive collective initiatives for the benefits of members, consumers and the broader industry.

FCAI members currently deliver more than one million vehicles annually to Australian private, business, government and rental consumers with power sources including petrol, diesel, hybrid (HEV), plug-in hybrid (PHEV), battery electric (BEV) and fuel cell electric vehicles (FCEV).

The industry is on a pathway to decarbonising the light duty transport sector and supports efforts by governments at all levels to introduce ambitious and achievable policies that support these efforts.

Although FCAI and its members operate outside of the infrastructure sector, it is important that there is an understanding of the current vehicle market and the expectation of the demand for electric vehicles in Australia and NSW. Application of this data will assist in the development of appropriate infrastructure to support the continuing uptake of zero and low emission vehicles.

Data in this paper is derived from the VFACTS reports prepared for FCAI. These reports are published monthly and detail new vehicles in Australia across multiple areas including segment types, model types and vehicle power source.



# 2. THE AUSTRALIAN AUTOMOTIVE MARKET AND NSW EXPEREINCE

## 2.1 Sales Performance

The annual 2024 new vehicle sales result for 2024 showed that 1,220,607 new vehicles were sold in Australia. In NSW, that number was 369,035 or 30.2 per cent of the total market. As the largest State, the national results are mirrored in the results for NSW in terms of consumer choice and vehicle power source.

For the past 12 years – and coinciding with the end of local vehicle manufacturing in 2017 – Australians have shown a clear preference for SUV and Light Commercial vehicles. In December 2024, the Passenger segment accounted for 17 per cent of new vehicle sales while SUV and Light Commercial made up almost 80 per cent of sales. Large SUVs and Light Commercials account for around one third of new vehicle sales.



This level of consumer choice in these categories is important when considering the uptake of zero and low emission vehicles. The transition to a market which includes a majority of BEV sales will take time given the size and complexity of the existing car parc and, while segments of the vehicle market currently have a large availability of electrified options, there remain challenges particularly in the heavier segments such as large SUV and light commercial vehicles which will take longer given the use case of vehicles and consumers needs for off-road capability, towing/payload capacity and range.





Within the electrified segment of the light duty fleet, policies will need to focus on the affordability of vehicles, availability of public charging infrastructure, robust nature of the grid which supports it, and broader revenue solutions to ensure that consumers have confidence in transiting while maintaining a robust sector.



For segments of the light duty fleet which will be harder to decarbonise at a cost which is acceptable to consumers, there should remain a focus on looking at other solutions and how alternative energy sources, such as low carbon liquid fuels, can play a role in reducing economy wide emissions from the broader transport sector.



However, while the pace of change is accelerating, Australia is still a market with a large car parc of more than 21 million registered vehicles which will take time to transition.

The transition will also occur at different paces within market segments as advancements in technology across electrification, battery chemistry and other powertrains continues.

As an example, in the medium passenger segment we see a high rate of EV sales, at 42.58 per cent, however as a segment medium passenger only makes up 2.24 per cent of new vehicles sold. In contrast, the Light Commercial segment has an EV penetration of 0.01 per cent but makes up 19.35 per cent of new vehicles sold<sup>4</sup>.

The growth in EV sales across certain segments, such as medium passenger, is occurring at a more rapid pace where electrified options are more widely available, compared with the Light Commercial segments where electrified technologies are still emerging to meet the high capability and different performance attributes consumers demand of these types of vehicles.

It is important that due consideration is taken in addressing the challenge as a whole, rather than focusing on singular policy initiatives in isolation without considering the broader inputs and implications from other elements of the economy.

# EV ADOPTION IN AUSTRALIA (YTD MARCH 2025)



Market not consistent across all segments

Segment	EV segment share	Segment Share of Total Market	
Passenger - Medium	42.58%	2.24%	
SUV - Medium	10.92%	24.34%	
SUV - Small	6.78%	16.77%	
SUV - Large	2.16%	13.38%	
Light Commercial – (4x2 & 4x4)	0.01%	19.35%	
EVs as % of Total Sales	6.29%		

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## **EV Uptake in Australia**

In 2024, Australian consumers were increasingly making choices regarding environmental outcomes and the associated total cost of ownership of moving to low emissions technologies. However, VFACTS sales results reflecting new vehicle sales showed that for the calendar year of 2024, EVs accounted for 7.4 per cent of new vehicle sales. This number is lower than expected, with FCAI anticipating EV sales to achieve about 11 per cent of all new vehicle sales.

While the sales of battery electric vehicles were lower than expected, this was offset to a degree by an increasing number of buyers turning to hybrid and plug-in hybrid models which made up 14.1 per cent and 1.9 per cent of the total market respectively.

In NSW sales of battery electric vehicles in 2024 were at 6.1 per cent (excluding Polestar from April 2024 and Tesla from July 2024) of all new vehicle sales.

NSW EV Sales 2019-2024	as a percentage	of total sales	(VFACTS)
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% sales	2019	2020	2021	2022	2023	2024
BEV	0.1	0.2	0.5	3.2	7.7	6.1

The sales performance shows that while sales has been increasing, sales are currently relatively flat. This is a trend that has continued in 2025.

As at March 2025, there are around 89 EV models available in Australia. On a national level, sales of EVs during the first quarter of 2024 made up 8.4 per cent of national sales. During the first quarter of 2025, they made up 6.2 per cent.

The trend is significant in the context of the NSW Government Electric Vehicle Strategy which maintains an aspirational target of 50 per cent of new vehicle sales being EV by 2030. Based on current trends, it is unlikely that a target of 50 per cent is achievable by 2030.

### **Challenges for Consumers Moving to EVs**

FCAI believes that in spite of the supply of EVs continuing to increase, consumer demand has plateaued or potentially falling. This is a major concern for FCAI and its members who are increasingly delivering zero and low emissions vehicles in the Australian market.

The primary challenges facing consumers considering a move to make an EV purchase include:

- Total cost of ownership.
  - Purchase price Although in some of the smaller vehicle segments EV pricing can be comparable to an internal combustion engine (ICE) vehicle, the price of vehicles in the categoris Australians currently prefer (SUV and Light Commercial is either high or the vehicle is not yet available. In many



cases, the initial purchase price of a vehicle can still be positioned well about an ICE vehicle.

- Insurance cost may be greater than a comparable ICE vehicle.
- Residual /resale price resale values remain subdued as consumers consider the value of purchasing a second-hand EV, in spite of the vehicle capability and useful life.
- $\circ$  Maintenance although potentially lower than an ICE vehicle, costs remain
- Fuel cost This may vary considerably depending on the ability of a consumer to recharge. For example, a vehicle housed in a garage where solar is available against the cost of using public charging infrastructure.
- Consumer Vehicle Preference
  - An EV option may not be available for the type of vehicle a consumer is seeking. For example, the availability of EV models in the large SUV and Light Commercial markets is limited and/or at a relatively high price.

### 2.2 Infrastructure

The continued investment in public charging infrastructure to support the uptake of electric vehicles is a pivotal requirement going forward to ensure consumer confidence, particularly in regions and to consumers with limited, or no, off street parking options.

As market penetration grows there will be a continual need for renewed development in public and private charging infrastructure to ensure that consumers are still able to access the same quality of service, and supply, when required.

International experience indicates that a majority of charging will occur at the home, which is an attractive proposition for Australian consumers given the availability of offstreet parking and high penetration of rooftop solar investment.

Revised building codes across the country that support the installation of recharging infrastructure in new builds is a positive step. However, issues are emerging regarding the supply of infrastructure to existing high density dwellings such as apartments and body corporates concerns over battery fires, even if the risk of occurrence is extremely low.

At times this can exacerbated through cost of insurance as well while the industry grapples with the rate at which developments occur, and the limited historic data on which to base decisions for insurance premiums.

It will be public charging infrastructure in metropolitan and regional/remote areas which requires critical investment and coordination from both Government and other participants to continue to provide the public with confidence to embrace the new technology.

Market assessments on the quantum vary, however a recent Deloitte assessment suggested that by 2033 there would need to be a minimum of 31,500 public chargers available to support the national fleet<sup>5</sup>.



Work undertaken for FCAI by S&P Global during 2025 provides an outlook for re-charging infrastructure needs for Australia through to 2035 and suggests a higher number of charging points will be required. The S&P Global analysis is predicated on the projected outlook for EV penetration into the Australian market based on current policy settings and the current outlook for OEMs.

The analysis suggests EV share of new vehicle sales will be at 10 per cent in 2025, increasing to 26 per cent in 2030. It is worth noting that actual market share to date in 2025 is around 7 per cent.

The analysis also considers the total car parc of EVs on Australian roads as new sales are added annually.



#### Charging Infrastructure Assessment | BEV & PHEV Car Parc

The key finding from this work is that while demand for public charging may be adequate today based on the current update of EV, this will change significantly especially in areas of low density living and remote areas.



#### Charging Infrastructure Assessment | Public & Highway Charging



Given the large-scale investment which will be required from both existing, and new infrastructure providers we recommend that the NSW Government should play a greater role in the identification, and coordination, of charging priorities to ensure the efficient allocation of capital towards infrastructure.

This would need to be focussed towards not only the physical charging equipment role out, but also through the distribution and generation assets, given the large amount which will be required in coming decades.

FCAI supports the NSW Electric Vehicle Strategy and specifically the ambitions and actions relating to 'building a world-class electric vehicle charging network' and the plans to increase the number of electric vehicles in the government fleet. Therse are important steps in building consumer confidence and assisting to build a secondary market for electric vehicles.

#### **Ministerial Council**

The Energy and Climate Change Ministerial Council communique issued on 24 November 2023 stated:

'Ministers agree new Minimum Operating Standards for Government-Funded Electric Vehicle (EV) Charging Infrastructure. Once implemented, these standards will help ensure that Australian EV drivers will have access to a convenient, reliable, affordable and equitable national charging network'.



FCAI believes that the ability to provide consumers with certainty regarding the availability and cost of recharging infrastructure will be a significant step in building consumer confidence in making the shift to electric vehicles.

# 3. CONCLUSION

FCAI supports the NSW Government in the implementation of the Electric Vehicle Strategy. The planning and development of recharging infrastructure is a critical element in building consumer confidence in this technology as a reliable, affordable and enjoyable mobility choice for business, recreation and families.

Currently, the target of 50 per cent of new vehicle sales being EV by 2030 must be considered as an aspirational target. In 2024, sales of battery electric vehicles in Australia were about 7.4 per cent of total sales and this number has not increased during the first quarter of 2025.

The supply of electric vehicles into the Australian market with about 89 models available for consumers. However, as supply of vehicles increases, the market is not experiencing an increase in the demand from consumers. This presents a challenge to planners with respect to recharging infrastructure development in the short to medium term.

The challenge for OEMs remains significant. The introduction of the NVES means that they will be penalised for vehicles sold that exceed prescribed emissions targets. However with recharging infrastructure forming an important barrier to purchasing an EV, consumers may choose not to purchase and EV and continue to buy other forms of powertrain – ICE, hybrid – resulting in potentially penalties for a longer period of time.

The issue of consumer demand for EVs is critical as we move towards a path of decarbonisation into the future.

FCAI looks forward to the opportunity to work alongside the NSW Government to support the continuing uptake of zero and low emission vehicles into NSW and to reduce emissions from the light vehicle segment.