Deloitte.

Electric Vehicle Uptake

Ausgrid

November 2023

Deloitte
Access Economics

Contents

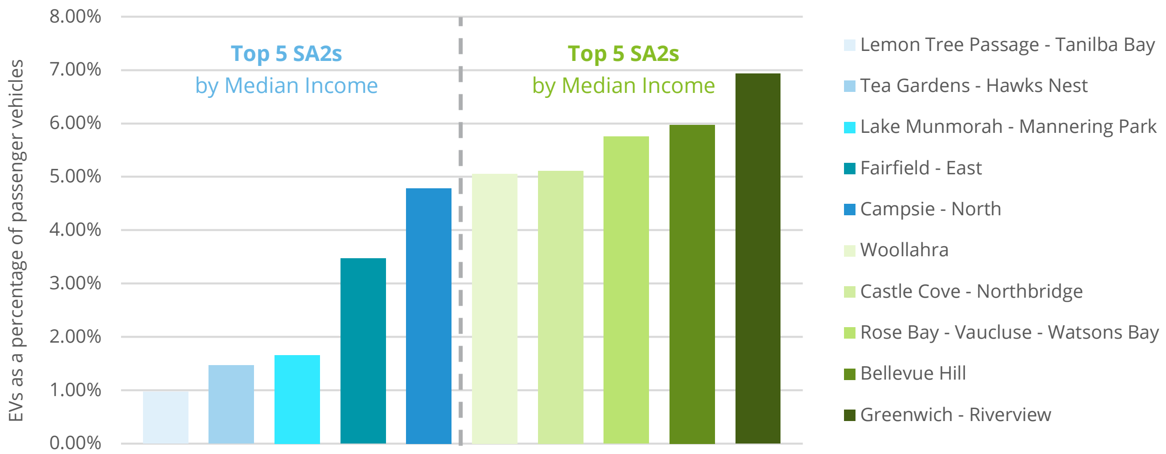
Executive summary

Electric Vehicle (EV) adoption across Ausgrid's network footprint is set to significantly increase over the next 50 years, with all three regions covered by the network (Sydney, Newcastle and Central Coast, and Upper Hunter) projected to reach approximately 80-100% EVs by 2053.[1,2]

EVs, and, in particular, the increase in EVs, will impact on Ausgrid's network. Impacts include an overall heightened demand on the network, the implementation of vehicle-to-grid technology, and the requirement for additional supporting infrastructure. It is important to understand the factors and influences on EV uptake, including income.

Recent data shows a spike in EV uptake in 2023, distinctly led by SA2s with higher median incomes (refer **Chart i**).

Chart i: EVs as a proportion of passenger cars, Ausgrid network (top and bottom 5 SA2s by median income)

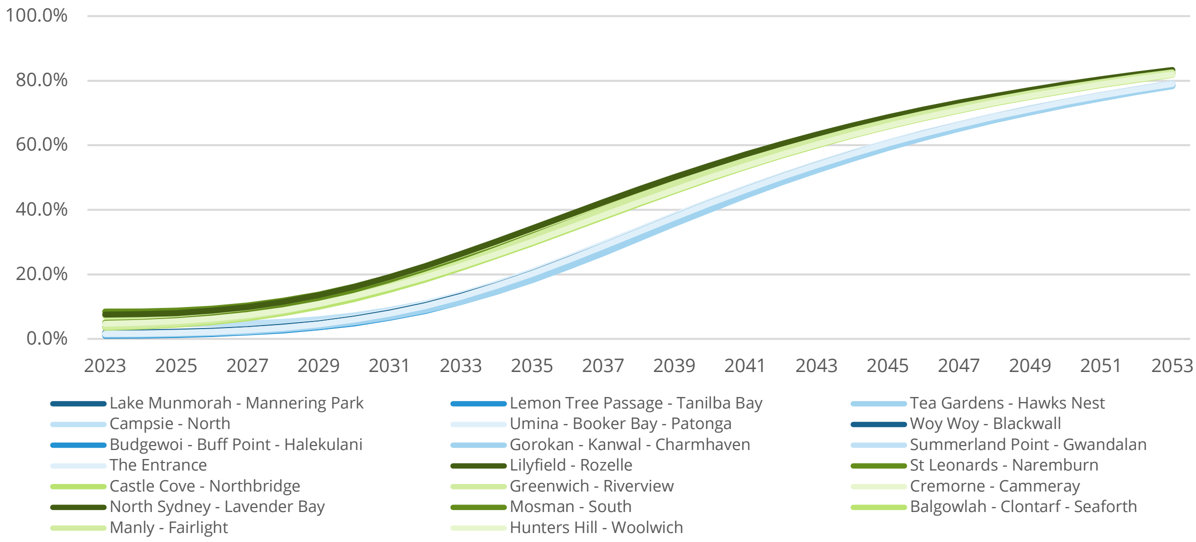


Although the adoption of EVs is still in its nascent stage, it is evident that income and the purchase of EVs are strongly correlated. This correlation between income and EV uptake is statistically significant and is anticipated to persist over an extended period.

If current trends continue, it is likely that there will be a prolonged period of differing levels of EV uptake across income groups (refer **Chart ii**).

[1] Deloitte Access Economics, internal modelling.
[2] Australian Energy Market Operator (2023) *Integrated System Plan (ISP).* Accessed at https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/integrated-system-plan-isp#:~:text=The%20Integrated%20System%20Plan%20(ISP,next%2020%20years%20and%20beyond.

Chart ii: Projected EVs as a Proportion of All Passenger Cars, Ausgrid network (Top and Bottom 10 SA2s by Median Income)



It is important to note that other factors, such as affordability and expanded production of vehicle types (medium and large SUVs, utilities, and 4WDs), are likely to impact EV adoption across income groups which may lead to changes in this pattern over time.

1 Background

The transport sector is evolving and is being led by a combination of technological developments and the broader objectives of policy makers, governments, corporations and communities, to reduce greenhouse gas (GHG) emissions. In New South Wales (NSW), the transport sector is the fastest growing producer of GHG emissions. In 2021, it was the state's second largest GHG producer accounting for 20% of GHG emissions, and it's expected to become the largest (33-36%) by 2030.[3]

Electric vehicles (EVs) are set to play a crucial role in reducing the state's GHG emissions. EVs emit no tailpipe emissions or harmful particulates; lowering air and noise pollution, leading to improved public health and urban amenity. However, the adoption of EVs represents a major step change from Internal Combustion Engine (ICE) vehicles and therefore has further implications on travel behaviour, electricity networks and road network operations.

In January 2023, there were 4.55 million total passenger vehicles registered across NSW, with approximately 4.40 million (96.7%) ICEs and 150,000 (3.3%) EVs. As the anticipated level of uptake of EVs in Australia to 2030 and beyond is uncertain, an understanding of the potential impacts to travel behaviour and energy use will be essential for future planning.

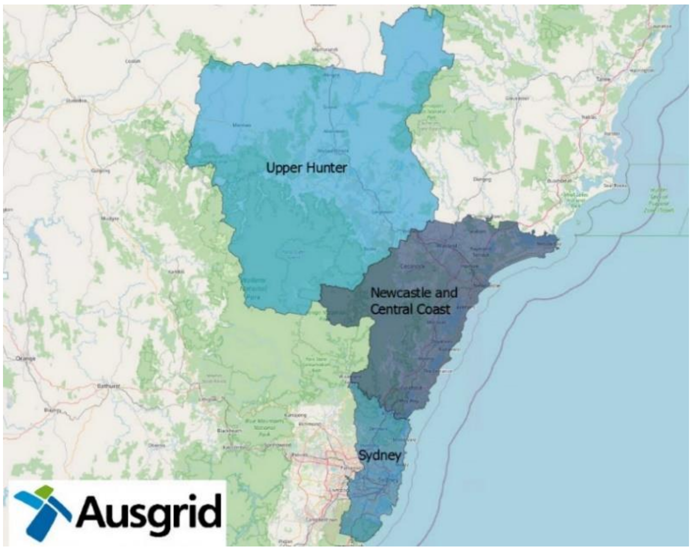
1.1 Purpose of this report

The purpose of this report is to provide modelling insights from across the Ausgrid network relating to the uptake of EVs and the key factors and influences on EV uptake, including but not limited to, income and geographic location.

1.2 The Ausgrid network

EVs, and, in particular, the increase in EVs, will impact on Ausgrid's network. Impacts an overall heightened on the network, the implementation of vehicle-to-grid technology, and the requirement for additional supporting infrastructure. Ausgrid's network spans 22,275 square kilometres throughout Sydney, the Central Coast and the Hunter Valley. The boundaries used for each region can be seen in **Figure 1.1**.

Figure 1.1: Ausgrid NSW regions



Source: Ausgrid (2023).

[3] NSW Environment Protection Authority, 'NSW State of Environment' (2021) < *https://www.soe.epa.nsw.gov.au/all-themes/climate-and-air/greenhouse-gas-emissions*>

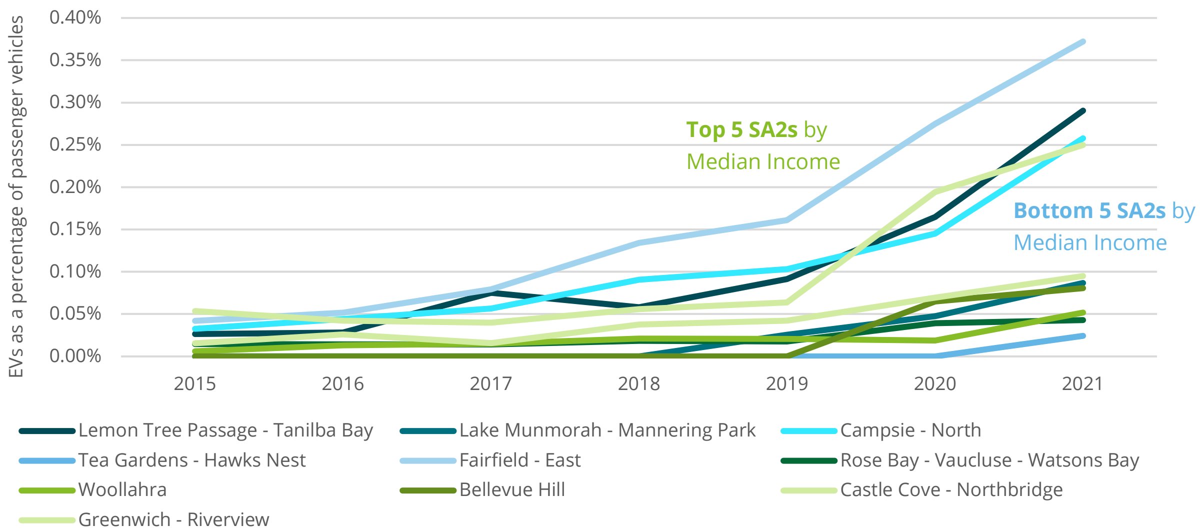
2 Current state of EV uptake across the Ausgrid network

The historical numbers of EV and ICE passenger vehicles has been analysed for each SA2 across the Ausgrid network from January 2015 through to January 2023. This has been mapped against both median income and the Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socioeconomic Advantage and Disadvantage (IRSAD), to determine if these variables are correlated with EV uptake.

2.1 EV uptake and income

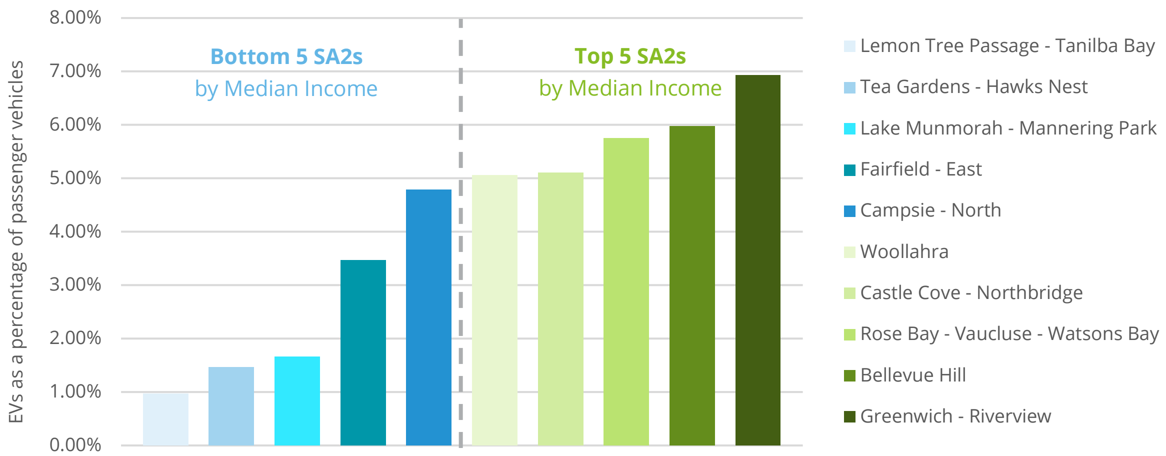
Historical EV uptake across Ausgrid's network by median income is provided in **Chart 2.1**. Over the period to 2019 it is difficult to discern any pattern between median income and EV uptake given the low adoption rates. While there is a broad spectrum of EV uptake in high median income areas, all SA2s see some level of EV uptake. However, more recent data, shows a spike in EV uptake in 2023, with SA2s with higher median incomes clearly pulling ahead of those with lower median incomes in their purchase of EVs (refer **Chart 2.2**).

Chart 2.1: EVs as a proportion of passenger cars, Ausgrid network (top and bottom 5 SA2s by median income)



Source: ABS Motor Vehicle Census Data

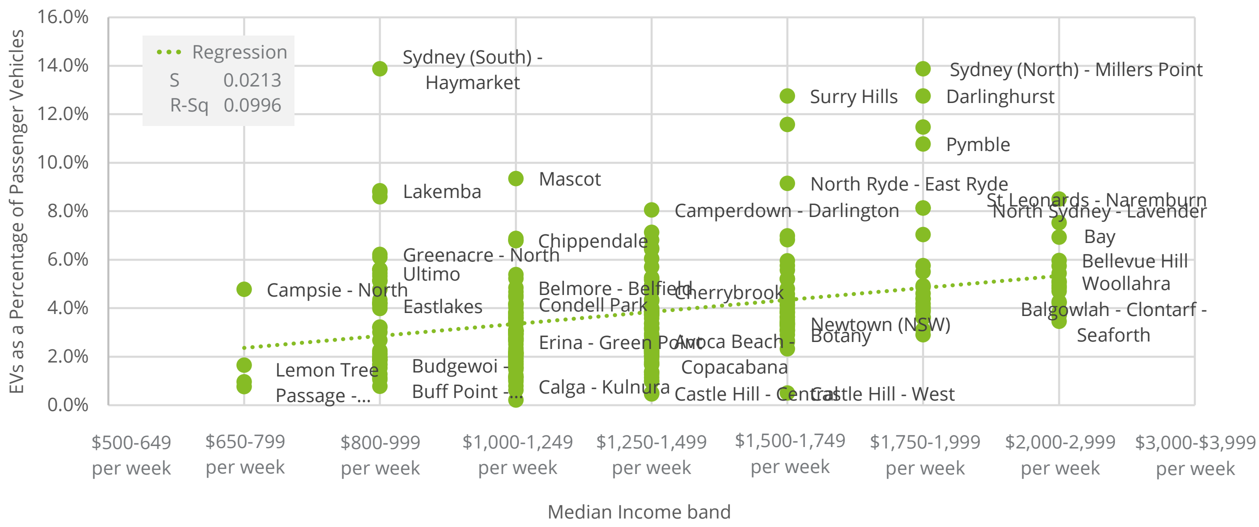
Chart 2.2: EVs as a proportion of passenger cars, Ausgrid network (top and bottom 5 SA2s by median income)



Source: BITRE Road Vehicles, Australia, January 2023

The distribution of SA2s by EV uptake is broader within the middle income bands than for high and low income bands (refer **Chart 2.3**).

Chart 2.3: EVs as a Proportion of Passenger Vehicles (2023) against Median Income



Source: Deloitte Access Economics

A statistical regression of the data presented in **Chart 2.3** above indicates that, for every income band increase, the expected adoption of EVs increases by 0.497 percentage points. This relationship is statistically significant at the 1% level of significance.[4]

It should be noted that the regression results are limited by the lack of granularity offered by ABS income bands, with any variation in median incomes within each band not reflected in the data.

While the relationship is followed for the majority of SA2s, the greatest proportion of EVs is not necessarily found in SA2s with the highest median incomes. Of the top 20 SA2s with the greatest EV adoption, only 13

[4] This implies that there is a very low probability that the observed increase in EV adoption correlation with increasing income, is attributable to chance or sampling issues, supporting the conclusion that median income has a positive impact on EV adoption.

locations are in the top quartile of median income. Additionally, 4 of the top 20 SA2s by proportion of EVs are found in SA2s that are in the bottom quartile of median income.

While the adoption of EVs is still in its nascent stage, it is evident that income and the purchase of EVs are strongly correlated. This correlation between income and EV uptake is statistically significant and is anticipated to persist over an extended period.

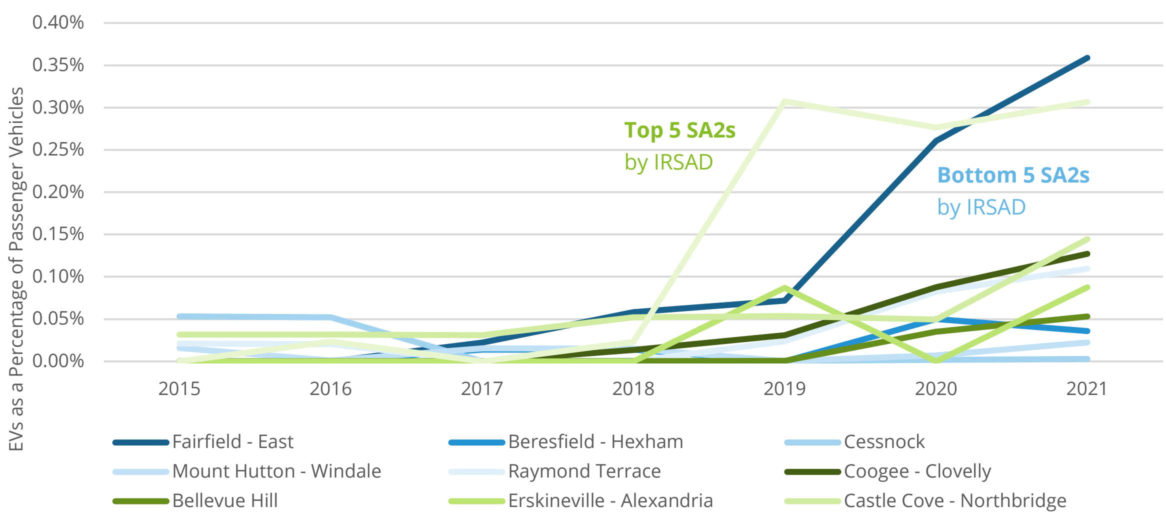
If current trends continue, it is likely that there will be a prolonged period of differing levels of EV uptake across income groups.

It is important to note that other factors, such as affordability and expanded production of vehicle makes, are likely to impact EV adoption across income groups. To date, EV sales have largely comprised Tesla's which are perceived as high-end vehicles, and commonly bought by consumers switching from other luxury car brands[5]. As more affordable EVs enter the market, there is likely to be an uplift in EV adoption across low- and middle-income groups. Furthermore, the introduction of popular vehicle makes such as utes (utilities) and SUVs are likely to boost the adoption of EVs among medium-income earners, where these vehicle types are popular. Current and future EV availability is outlined in more detailed in Appendix A**.**

2.2 EV uptake and socio-economic advantage

Historical EV uptake across Ausgrid's network by Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) is provided in **Chart 2.4**. Similar to the median income findings, over the period to 2019 it is difficult to discern any pattern between socio-economic advantage and EV uptake given the low adoption rates. While there is a broad spectrum of EV uptake in socioeconomic advantaged areas, all SA2s see some level of EV uptake. However, more recent data shows a spike in EV uptake in 2023, with SA2s with higher levels of socio-economic advantage clearly pulling ahead in their purchase of EVs (refer **Chart 2.5**).

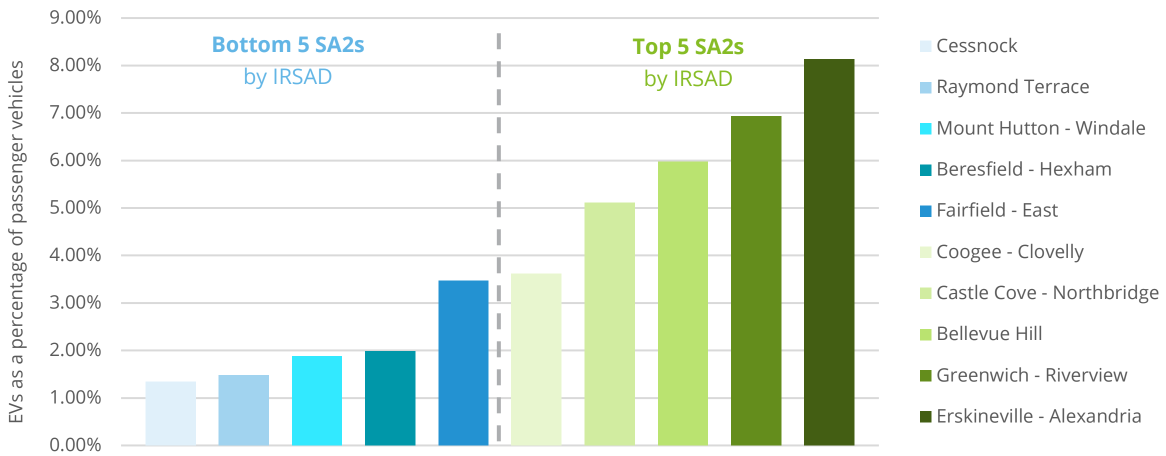
Chart 2.4: EVs as a proportion of passenger cars, Ausgrid network (top and bottom 5 SA2s by IRSAD)



Source: ABS Motor Vehicle Census Data

[5] Electric Vehicle Council (2022), Insights into electric vehicle ownership. Accessed at https://electricvehiclecouncil.com.au/wp-content/uploads/2022/09/EVownerinsights.pdf

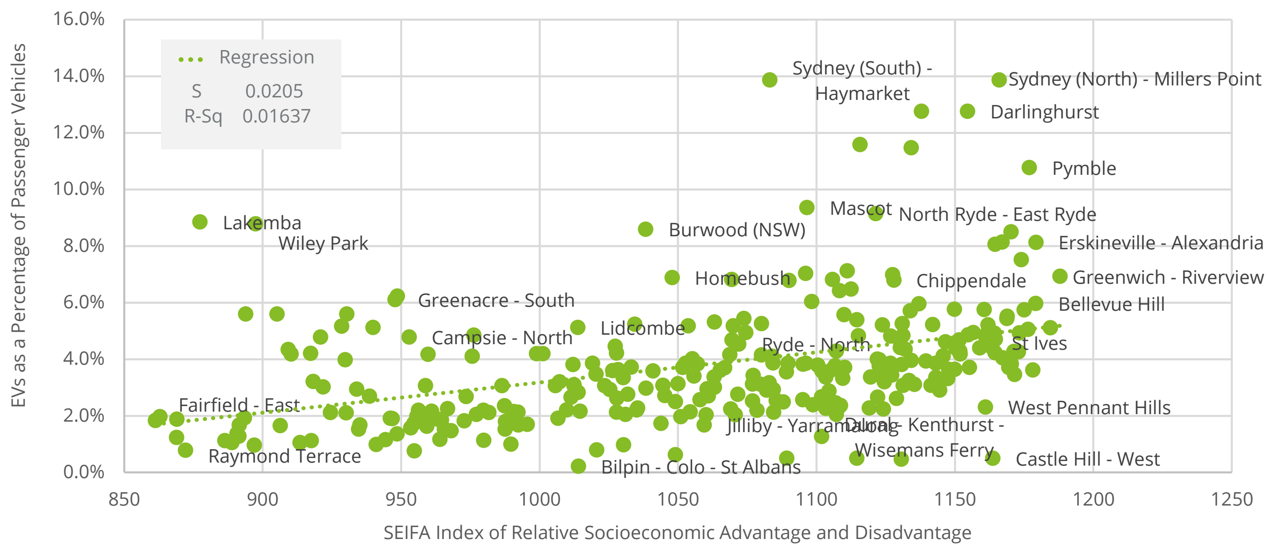
Chart 2.5: EVs as a proportion of passenger cars, Ausgrid network (top and bottom 5 SA2s by IRSAD)



Source: BITRE Road Vehicles, Australia, January 2023

The distribution of SA2s by EV uptake is broader with increasing IRSAD, while SA2s with a lower IRSAD consistently have lower EV uptake (refer **Chart 2.6**).

Chart 2.6: EVs as a Proportion of Passenger Vehicles (2023) against SEIFA IRSAD



A statistical regression of the data presented in **Chart 2.6** above indicates that, for every IRSAD unit increase, the expected adoption of EVs increases by an approximate 0.011 percentage points. This relationship is statistically significant at the 1% level of significance.[6]

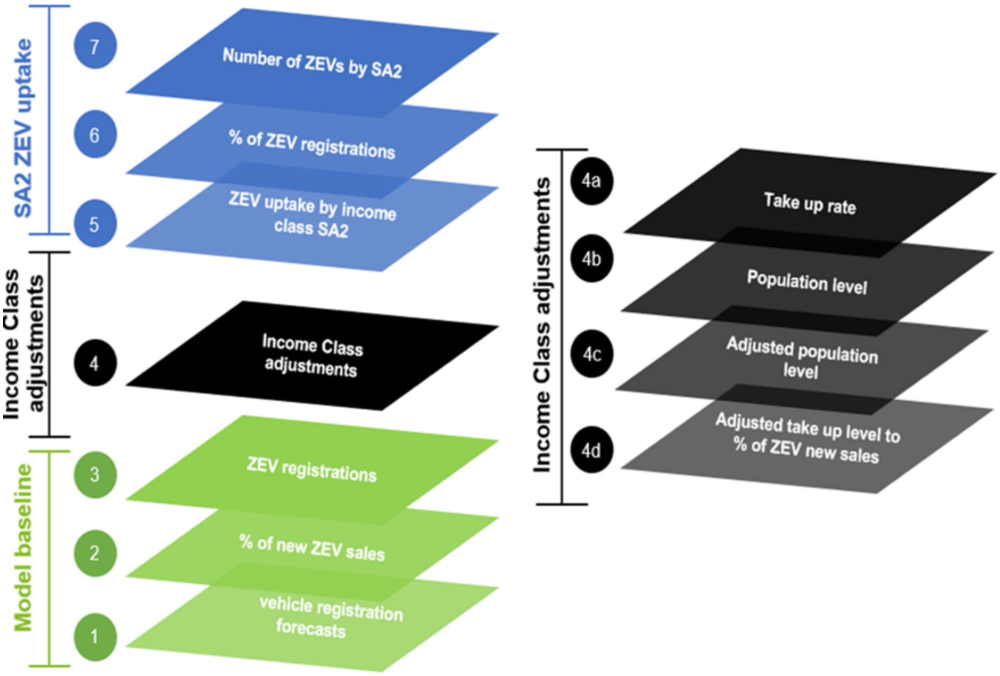
While the relationship is followed for the majority of SA2s, the greatest proportion of EVs is not necessarily found in SA2s with the highest IRSAD. Of the top 20 SA2s with the greatest EV adoption, only 11 locations are in the top quartile of IRSAD scores. Additionally, 2 of the top 20 SA2s by proportion of EVs are found in SA2s that are in the bottom quartile of the IRSAD scores (Wiley Park and Lakemba). This is similar to the observed relationship between EV ownership and median income band presented in Section 2.1 above.

[6] This implies that there is a very low probability that the observed increase in EV adoption with increasing IRSAD is attributable to chance or sampling issues, supporting the conclusion that IRSAD has a positive impact on EV adoption.

3 Future state of EV uptake across the Ausgrid network

The projected numbers of EV and ICE passenger vehicles has been modelled for each SA2 across the Ausgrid network from 2023 through to 2053. An outline of the EV uptake model is provided in **Figure 3.1** below. The baseline of current vehicle registrations (step 1) and projected composition of new passenger vehicle sales split by EV and ICE (steps 2-3) is adjusted for SA2 income class (step 4), yielding EV uptake rates and vehicle counts for each SA2 (steps 5-7).

Figure 3.1: Outline of EV Uptake Model

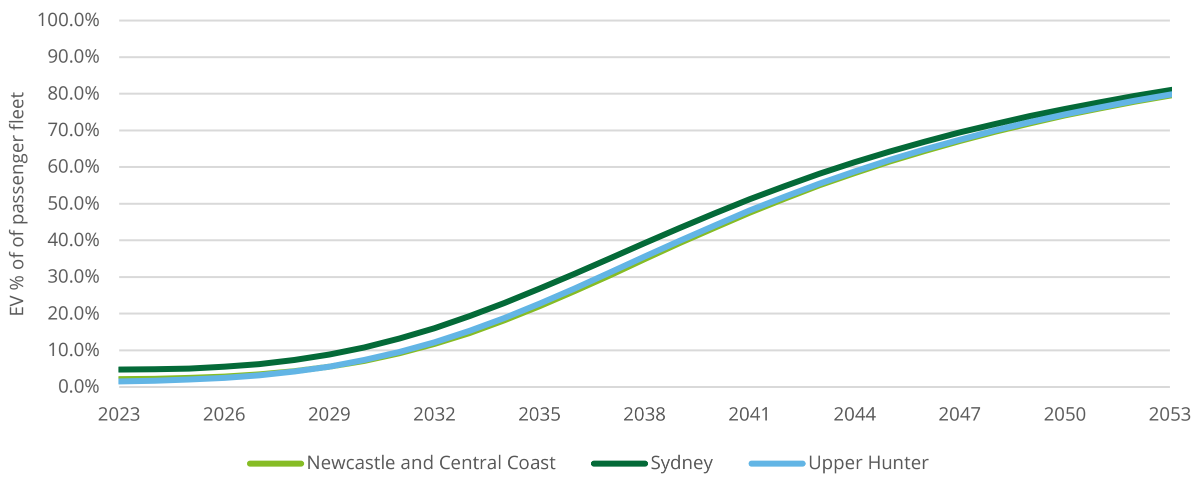


Source: Deloitte Access Economics

3.1 EV uptake in Ausgrid network regions

Assuming that EVs make up 80% of the passenger vehicle fleet in the Ausgrid network by 2053, varied growth in EV adoption is expected across Ausgrid network regions (refer **Chart 3.1**). The Sydney region is projected to experience the strongest growth initially, followed by the Upper Hunter and Newcastle and Central Coast regions. All three regions are projected to converge to approximately 80% EVs by 2053.

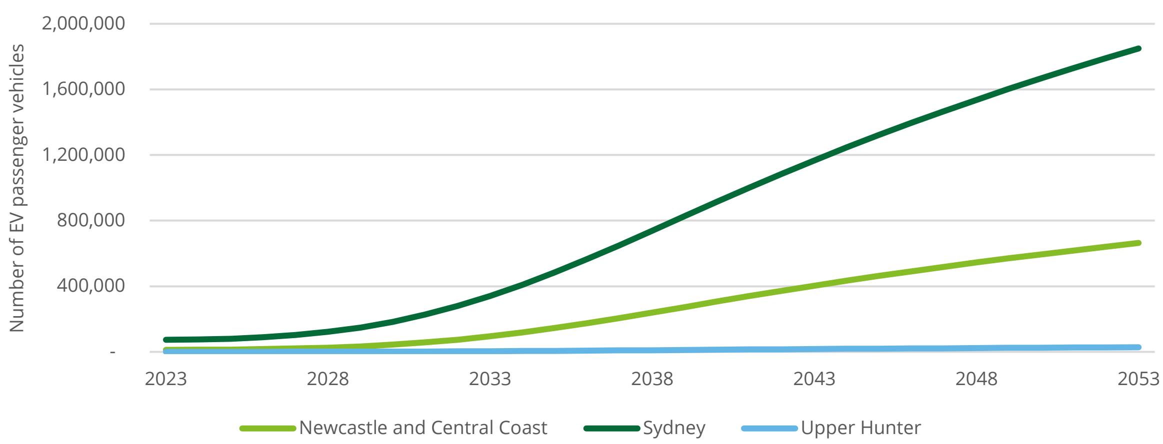
Chart 3.1: EVs as a proportion of passenger fleet, Ausgrid network



Source: Deloitte Access Economics

EVs across the Ausgrid network are projected to surge from 86,000 in 2023 to over 2.5 million by 2053 (refer **Chart 3.2**). The vast majority of this growth is expected to concentrate across the Sydney region, which is forecast to account for 73% of the total EVs by 2053.

Chart 3.2: Total number of EV passenger vehicles, Ausgrid network

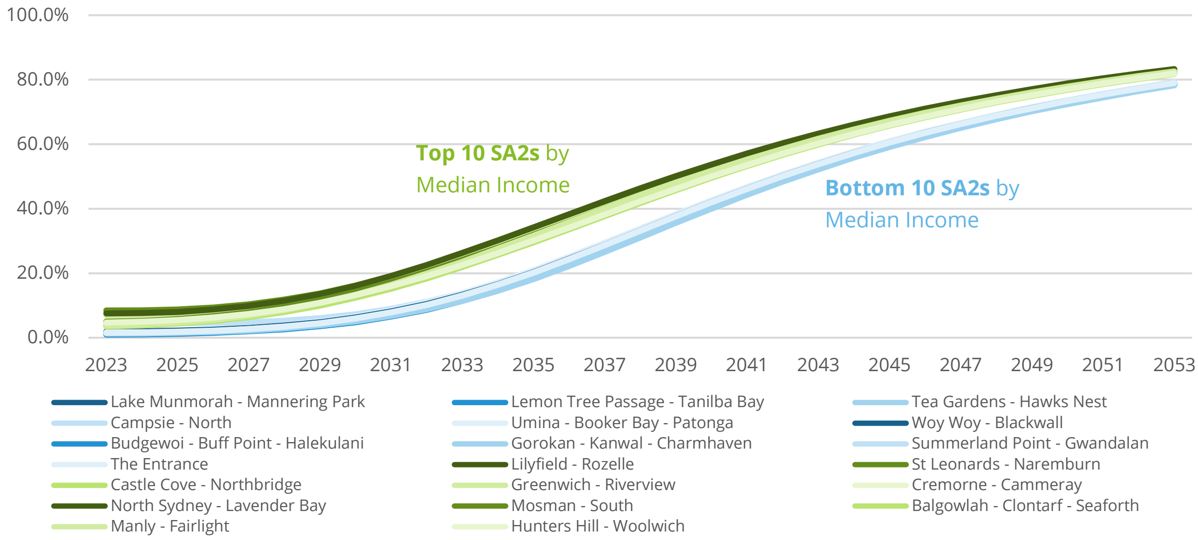


Source: Deloitte Access Economics

3.2 EV uptake and income

Across the Ausgrid network, SA2s with higher median incomes are expected to experience greater EV adoption over the next 50 years compared to SA2s with lower median incomes (refer **Chart 3.3**).

Chart 3.3: Projected EVs as a Proportion of All Passenger Cars, Ausgrid network (Top and Bottom 10 SA2s by Median Income)

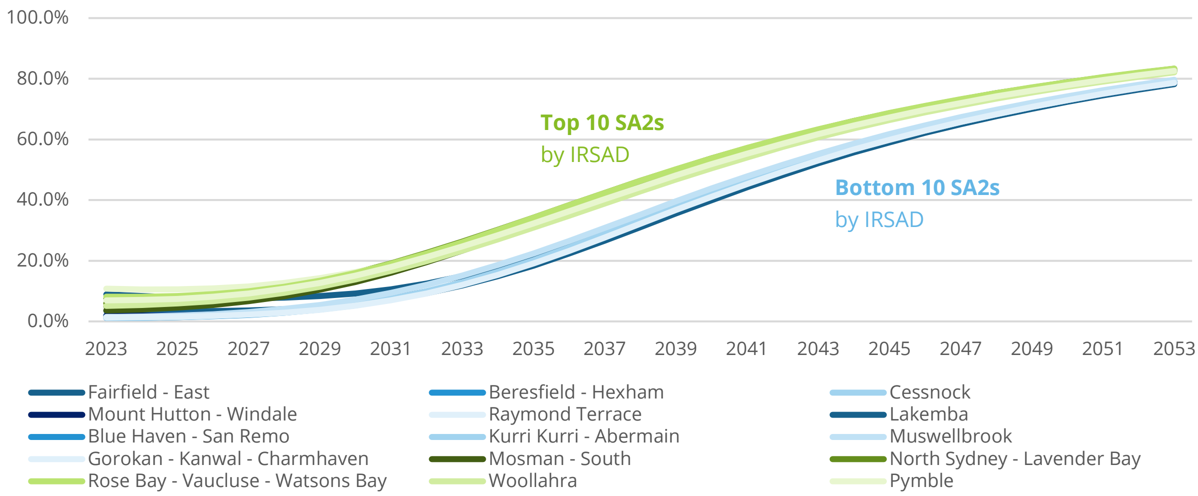


The projection highlights the impact of both the current and ongoing gap in EV uptake between high and low income SA2s. With the existing gap in EV uptake expected to widen further over the next 10-15 years, it will be beyond 2053 before the proportion of passenger vehicles that are EVs, in high- and low-income areas, converge.

3.3 EV uptake and socioeconomic advantage and disadvantage

Across the Ausgrid network, SA2s with higher levels of socio-economic advantage are expected to experience greater EV adoption over the next 50 years compared to SA2s with lower levels of socio-economic advantage (refer **Chart 3.4**).

Chart 3.4: Projected EVs as a Proportion of All Passenger Cars, Ausgrid network (Top and Bottom 10 SA2s by IRSAD)



The projection highlights the impact of both the current and ongoing gap in EV uptake between SA2s with higher and lower IRSADs. Similar to the relationship between EV uptake and median income presented in

Section 0, with the existing gap in EV uptake expected to widen further over the next 10-15 years, it will be beyond 2053 before the proportion passenger cars that are EVs converge across all SA2s in the Ausgrid network.

4 Additional EV uptake considerations

4.1 Further drivers of EV uptake

There are many factors involved in the decision to purchase an EV or to upgrade a (business of government) fleet to EVs, and the nature of these factors has changed since the introduction of EVs to Australia in the early 2000s. Price and affordability remain a key decision factor. However, there are further factors and barriers to uptake. Historically, Australia has lagged behind most advanced countries in policy, regulation and uptake. Australian states and territories now commonly offer incentives and subsidies. The Federal Government has recently begun implementing measures including the introduction of the National Electric Vehicle Strategy, a fringe benefits tax (FBT) exemption for EVs priced under $89,332 (2024 FY), consultations on a fuel efficiency standard (or vehicle CO_2 emissions standard) and providing funding and grants for public electric vehicle charging infrastructure across the country.

4.1.1 Additional drivers of EV uptake

It is commonly cited that price and affordability are still the biggest barriers to consumers adopting EVs. As prices of EVs continue to decline and, over time, reach price parity with ICEs. There are still other factors that impact EV adoption. In a recent survey undertaken by Deloitte[7], driving range and charging featured when respondents were asked about concerns regarding EVs. Previously lack of choice ranked higher as a barrier, however there is now a greater range of EVs available, and the consumer preferences of Australians for bigger vehicles including SUVs and light commercial vehicles (utilities and vans) are becoming more available[8,9].

Of the top concerns of Australian consumers regarding EVs (refer to **Table 4.1**), some factors will see more meaningful variation in concern on a geographic basis. Across the Ausgrid network, the top concerns which will differ meaningfully on a geographic basis are likely to be those relating to dominant dwelling type and infrastructure availability in a given area, namely lack of public EV charging infrastructure and lack of a charger at home. These concerns will likely contribute to geographic variation in EV uptake within the Ausgrid network.

---

[7] Deloitte (2023), 2023 Global automotive consumer study, May 2023. Accessed at https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/industries/consumer/2023/deloitte-au-cip-global-automotive-consumer-study-2023-australian-edition-050523.pdf

[8] RAC (2023), Electric SUVs available in Australia in 2023, 14 August 2023. Accessed at https://rac.com.au/car-motoring/info/electric-suvs-australia

[9] Electric Vehicle Council (2023) State of Electric Vehicles, July 2023. Accessed at https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf

Table 4.1: Concerns of Australian consumers regarding EVs

Concern	Australia
Cost/price premium	**53%**
Driving range	49%
Time required to charge	52%
Lack of public electric vehicle charging infrastructure	51%
Lack of a charger at home	44%
Cold weather performance	26%
On going charging and running costs	34%
Safety concerns with battery technology	28%
Lack of sustainability (i.e., battery manufacturing/recycling)	29%
Increased need to plan trips	29%
Lack of alternate power source (e.g., solar) at home	27%
Lack of knowledge about EVs/EV technology	29%
Potential for extra taxes/levies associated with BEVs	25%
Uncertain resale value	21%
Lack of choice	21%

Most commonly cited

Source: Deloitte[10]

While prices of new EVs are decreasing and the number of EVs in the Australian vehicle fleet increases, second-hand EV purchases will become more commonplace. This will be caused by greater availability from the corporate fleet market turnover, as well as the private vehicle market. Greater adoption of business and fleet vehicles will contribute to a growing second-hand EV market, increasing affordability for consumers. There is also expected to be an increase in second-hand privately-owned vehicles as a flow on effect of the FBT exemption imposed on vehicles owned under novated leasing arrangements. The FBT exemption is applicable to vehicles priced under $89,332 (2024 FY), a price category where there is an increasing number of EVs. Novated leases have a higher turnover in ownership, than privately purchased new vehicles, due to the end of lease arrangements.

In a global survey recently undertaken by Deloitte (

Table 4.2 below), the current high cost of fuel – or conversely, the lower 'fuel' costs of powering an EV, is the leading reason to choose an EV for respondents when asked what would influence their next motor vehicle purchase. S&P forecast continued price increases in global oil prices, fuelling further fuel prices increase – in the short-term, demand is forecast to outpace supply until at least the end of 2024[11]. Further, even when factoring in the high upfront purchase cost with ongoing vehicle operating costs, the total cost of ownership for EVs is now almost on par with traditional ICE vehicle operating costs[12].

---

[10] Deloitte (2023), 2023 Global automotive consumer study, May 2023. Accessed at https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/industries/consumer/2023/deloitte-au-cip-global-automotive-consumer-study-2023-australian-edition-050523.pdf

[11] S&P (2023), Oil, gasoline prices set to rise in 2024 as OPEC+ production cuts take their toll: EIA, 11 October 2023. Accessed at https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/oil/101123-oil-gasoline-prices-set-to-rise-in-2024-as-opec-production-cuts-take-their-toll-eia#:~:text=In%20its%20October%20Short%2DTerm,month's%20estimate%20for%20the%20year.

[12] RAC (2023), Car running costs guide 2023. Accessed at https://www-cdn.rac.com.au/-/media/files/rac-website/car-and-motoring/running-costs/car-running-costs-2023-ebook.pdf?modified=20230914033736&_gl=1*1fcy2qa*_ga*MTg5MjEzNjA2OC4xNjU3Nzg0Nzg2*_ga_RFX6466VWJ*MTY5ODczMDA1Mi4yMi4xLjE2OTg3MzAwNjAuNTIuMC4w&_ga=2.240535937.34025394.1698645553-1892136068.1657784786

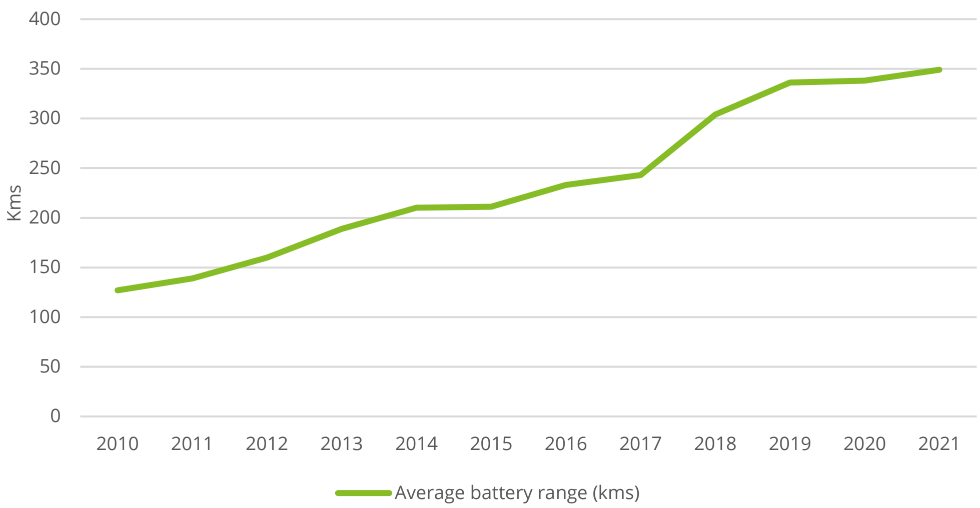
Table 4.2: Top reasons to choose an EV as next vehicle, global

Factors	Australia	China	Germany	India	Japan	Rep. of Korea	Southeast Asia	US
Lower fuel costs	1	2	1	1	1	1	1	1
Better driving experience	4	1	4	2	3	3	2	2
Concern about climate change	2	8	2	5	7	7	6	3
Less maintenance	3	7	5	3	6	4	3	4
Government incentives/subsidies/ stimulus programs	5	6	3	7	2	2	5	5
Potential for extra taxes/levies applied to internal combustion vehicles	7	5	6	8	5	5	8	6
Concern about personal health	8	4	7	6	8	8	7	7
Ability to use the vehicle as a backup battery/power source (e.g., for home)	6	3	8	4	4	6	4	8
Peer pressure	9	9	9	9	9	9	9	9

Source: Deloitte[13]

Driving range and charger availability is another commonly cited reason, albeit a lesser factor than price. Over the ten years from 2010, global average battery size more than doubled and the size of the average battery has continued to increase (**Chart 3.1** below). In the US, average battery size has tracked well above the global average increase, tripling in size across the same period[14]. Average US battery range reached all-time highs in 2023 of 290 miles (or 466 kms), demonstrating countries with a penchant for larger vehicle size and range have been able to command a higher standard than what is globally available. Australians still have a high expectation for range expectancy[15], likely due to current ICE fuel tank ranges.

Chart 4.1: Global average battery range



[13] Deloitte (2023), 2023 Global automotive consumer study, May 2023. Accessed at https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/industries/consumer/2023/deloitte-au-cip-global-automotive-consumer-study-2023-australian-edition-050523.pdf
[14] Bloomberg (2023), US Electric Cars Set Record With Almost 300-Mile Average Range. Accessed at: https://www.bloomberg.com/news/articles/2023-03-09/average-range-for-us-electric-cars-reached-a-record-291-miles
[15] Deloitte (2023), 2023 Global automotive consumer study, May 2023. Accessed at https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/industries/consumer/2023/deloitte-au-cip-global-automotive-consumer-study-2023-australian-edition-050523.pdf

Source: Bloomberg; Deloitte[16]

While battery size and range has been increasing, the availability of public chargers has also been increasing. However, access to charging is still a barrier for many consumers to purchasing an EV. Lack of off-street parking, living in a rental or strata complex can provide a barrier to at home charging. 84% of respondents to a Deloitte survey indicated they anticipate charging a future electric vehicle at home or at work, the remaining 16% intent on using public stations or on-street chargers[17].

EV supply, has in recent years been another barrier to uptake. However, as outlined in Appendix A current and future vehicle available is increasing. As global supply chains have begun returning to normal Deloitte Motor Industry Services has been reporting a greater availability of 'on-hand' EVs from a number of vehicle dealers across Australia[18]. As more vehicles are supplied to Australia, this will further ease supply. The impacts of a future fuel efficiency standard will also further shape and likely, increase, the vehicles, and specifically EVs that come to Australia.

[16] Bloomberg (2023), US Electric Cars Set Record With Almost 300-Mile Average Range. Accessed at: https://www.bloomberg.com/news/articles/2023-03-09/average-range-for-us-electric-cars-reached-a-record-291-miles
[17] Deloitte (2023), 2023 Global automotive consumer study, May 2023. Accessed at https://www.deloitte.com/content/dam/assets-zone1/au/en/docs/industries/consumer/2023/deloitte-au-cip-global-automotive-consumer-study-2023-australian-edition-050523.pdf
[18] Deloitte Motor Industry Services internal communications.

Appendix A EV availability

A.1. Future reported EV models

Table A.1: EV cars expected to be available in Australia in the future (as at July 2023)

Make	Model	Variant	BEV/PHEV	Body Type	Estimated RRP excl. on-roads	Battery capacity (kWh)	Electric driving range (km)
Audi	Q8	TFSI e	PHEV	SUV	TBC		
Kia	EV9	RWD Standard Range	BEV	SUV	TBC	76.1	
		RWD Long Range	BEV	SUV	TBC	99.8	541
		AWD Long Range	BEV	SUV	TBC	99.8	
Lotus	Eletre		BEV	SUV	TBC	107	490
Maserati	Grecale Folgore		BEV	SUV	TBC	105	500
Peugeot	408		PHEV	Sedan	TBC	12.4	59
	e-2008		BEV	SUV	TBC	45	250
	e-208		BEV	Hatch	TBC	45	275
Polestar	3	Long Range Dual Motor	BEV	Sedan	$132,900	111	610
	3	Long range Dual Motor with Performance pack	BEV	Sedan	$131,900	111	560
	4	Long Range Dual Motor	BEV	SUV Coupe	TBC	75	480
Renault	Megane E-Tech		BEV	SUV	TBC	60	450
Rolls Royce	Spectre		BEV	Saloon	$770,000+	100	520
Skoda	Enyak iV		BEV	SUV	TBC	77	500
	Enyaq Coupe iV		BEV	SUV Coupe	TBC	77	544
	Fabia iV		BEV	Hatch	TBC	55	340
Subaru	Solterra		BEV	SUV	TBC	65	460
Toyota	bZ4X		BEV	SUV	TBC	64	315
Volkswagen	ID.3		BEV	Hatch	TBC	58	420

	ID.4		BEV	SUV	TBC	77	522
	ID.5	GTX	BEV	SUV	TBC	77	500
	Golf	GTE	PHEV	Hatch	TBC	10.4	60
	Touareg R		PHEV	SUV	TBC	14.3	47
	Tiguan	eHybrid	PHEV	SUV	TBC	13	50
Volvo	EX30		BEV	SUV	TBC	69	480
	EX90		BEV	SUV	TBC	107	600

Source: Deloitte adapted from Electric Vehicle Council State of EVs[19]

A.2. EV utes and vans (available now and coming soon)

Table A.2: Electric light commercial vehicles (current and future)

Make	Model	Segment	Battery size (kWh)	WLTP Range (km)	Availability
ACE	Ace Cargo	Van	30-50	200	Coming soon
	ACE Yewt	Utility	30-50	200	Coming soon
	V1 Transformer	Van	54.5	215-258	Coming soon
AUSEV	Atlis XT	Utility	200	645	Coming soon
BYD	T3	Van	45	300	Available
EV Automotive	EC11 E-Cargo	Van	73.6	200	Available
Ford	E-transit	Van	68	317	Available
Foton	Eurise D11	Van	105.7	300	Available now
GB Auto	TEMBO 4x4 E-LV	Utility Conversion	72	50-100	Available
LDV	eT60	Utility	75	330	Available now
	eDeliver 9	Van	88.55	280	Available
Mercedes-Benz	eVito Panel Van	Van	60	341	Available
	eVito Tourer	Van	90	420	Available now
	eSprinter	Van	47.6	350	Coming soon
	EQV	Van	90	418	Available
Peugeot	e-PARTNER	Van	50	245	Coming soon
Renault	Kangoo Z.E.	Van	33	200	Available
Renault	Kangoo E-Tech	Van	45	285	Coming soon

[19] Electric Vehicle Council (2023) State of Electric Vehicles, July 2023. Accessed at https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf

Safescape	Bortana EV	Utility	52	120	Available
SEA Electric	E4V	Van	88	250	Available now
Volkswagen	ID.Buzz	Van			Coming soon
Voltra	e-cruiser	Utility Conversion	42.24	100	Available
Zero automotive	ZED70	Utility Conversion	88	330	Available now
	ZED70 Ti	Utility Conversion	60	250	Available
ROEV	Hilux / Ranger conversion	Utility Conversion	64-96	240-360	Available

Source: Deloitte adapted from Electric Vehicle Council State of EVs[20]

A.3. EV cars available to order

Table A.3: Current model availability

Make	Model	Variant	BEV/ PHEV	Body Type	Approximate MLP excl. on-roads ($AUD)	Battery capacity (kWh)	WLTP Electric Driving Range (km)
Audi	e-tron	55 quattro	BEV	SUV	$132,980	95	436
		55 quattro Sportback	BEV	SUV	$141,442	95	444
		S	BEV	SUV	$147,980	95	413
		S Sportback	BEV	SUV	$153,400	95	418
	e-tron GT	e-tron GT	BEV	Sedan	$158,300	93	448
		RS e-tron GT	BEV	Sedan	$210,500	93	433
	Q5	55 TFSI e	PHEV	SUV	$98,750	14.4	55
		55 Sportback TFSI e	PHEV	SUV	$104,365	14.4	53
BMW	i4	eDrive40	BEV	Gran Coupé	$99,900	80	520
		M50	BEV	Gran Coupé	$143,900	80	520
	i5	eDrive40	BEV	Sedan	$124,900	84	582
		M60 xDrive	BEV	Sedan	$130,000	84	516
	i7	M70	BEV	Sedan	$344,900	106	560

[20] Electric Vehicle Council (2023) State of Electric Vehicles, July 2023. Accessed at https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf

		xDrive60	BEV	Sedan	$232,430	106	625
	iX	xDrive40 Sport	BEV	SUV	$141,900	77	425
		xDrive50 Sport	BEV	SUV	$169,900	112	620
		M60	BEV	SUV	$177,500	112	566
	iX1	xDrive30	BEV	SUV	$82,900	66.5	440
	iX3		BEV	SUV	$104,900	80	460
	3 Series	330e	PHEV	Sedan	$97,400	12	62
	5 Series	530e	PHEV	Sedan	$127,400	12	54
	XM		PHEV	SUV	$229,143	25.7	82
	X5	xDrive50e	PHEV	SUV	$143,900	24	110
	X3	xDrive30e	PHEV	SUV	$105,000	12	43
BYD	Atto 3	Standard	BEV	SUV	$44,400	50	
		Extended Range	BEV	SUV	$47,400	60	420
	Dolphin	Dynamic	BEV	Hatch	$38,890	44.9	340
		Premium	BEV	Hatch	$44,890	60.5	427
		Sport (Limited Edition)	BEV	Hatch	$49,990	60.5	TBC
CUPRA	Born		BEV	Hatch	$59,990	77	511
	Leon	VZe	PHEV	Hatch	$66,200	11.5	60
	Formentor	VZe	PHEV	SUV	$60,990	12.8	55
Ferrari	SF90	Stradale	PHEV	Sports	$1,200,000	8	25
Fiat	500e		BEV	Hatch	$52,500	42	311
Ford	Mustang Mach-E	Select RWD	BEV	SUV	$79,990	71	
		Premium RWD	BEV	SUV	$92,990	91	600
		GT AWD	BEV	SUV	$108,990	91	490
	Escape	ST-Line	PHEV	SUV	$54,400	10.7	56
Genesis	GV60	Sport	BEV	SUV	$103,700	74	470
	GV70 Electrified	Sport	BEV	SUV	$127,800	77.4	455
	G80 Electrified	Premium	BEV	Sedan	$145,000	82.5	440
GWM	Ora	Standard Range	BEV	Hatch	$44,500	48	310
		Extended Range	BEV	Hatch	$48,000	63	
Hyundai	Ioniq 5	Dynamiq RWD	BEV	SUV	$79,300	77.4	420
		Techniq AWD	BEV	SUV	$88,000	77.4	507

		Epiq AWD	BEV	SUV	$89,600	77.4	430
	Ioniq 6	Dynamiq RWD	BEV	Sedan	$74,000	77.4	454
		Techniq AWD	BEV	Sedan	$83,500	77.4	614
		Epiq AWD	BEV	Sedan	$87,288	77.4	519
	Kona	Highlander SR	BEV	SUV	$60,500	39	519
		Highlander LR	BEV	SUV	$66,000	64	305
		EV400 SE AWD	BEV	SUV	$146,857	90	557
Jaguar	I-PACE	I-PACE EV400 HSE AWD	BEV	SUV	$160,217	90	446
Jeep	Grand Cherokee	Summit	PHEV	SUV	$129,950	17.3	52
		Reserve 4xe					
Land Rover	Range Rover	P460e AWD Standard Wheelbase	PHEV	SUV	$254,515	38.2	
		P460e AWD Long Wheelbase	PHEV	SUV	$263,100	38.2	120
	Range Rover Sport	P460e AWD	PHEV	SUV	$178,650	38.2	123
	Range Rover Evoque	P300e AWD	PHEV	SUV	$104,310	15	62
	Range Rover Velar	P400e AWD	PHEV	SUV	$132,800	17.1	64
	Defender 110	P400e AWD	PHEV	SUV	$127,600	19.2	51
Kia	Niro	S	BEV	SUV	$72,300	64.8	460
		GT-Line	BEV	SUV	$78,400	64.8	460
	EV6	Air RWD	BEV	SUV	$72,590	77.4	528
		GT-Line RWD	BEV	SUV	$79,590	77.4	504
		GT-Line AWD	BEV	SUV	$87,590	77.4	484
		GT AWD	BEV	SUV	$99,590	77.4	424
	Sorento		PHEV	SUV	$81,080	14	68
LDV	Mifa 9		BEV	People Mover	$106,000	90	440
Lexus	ux300e		BEV	SUV	$82,515	54	360
	RZ450e		BEV	SUV	$116,000	71.4	450
	NX450h+		PHEV	SUV	$90,923	18.1	69
Mazda	MX-30 Electric		BEV	SUV	$65,490	30	170

	CX-60		PHEV	SUV	$79,990	17.8	76
Mercedes-Benz	EQA	250	BEV	SUV	$78,513	66.5	524
		350 4MATIC	BEV	SUV	$96,900	66.5	475
	EQB	350 4MATIC	BEV	SUV	$106,700	66.5	445
		250	BEV	SUV	$87,800	66.5	507
	EQC	400	BEV	SUV	$128,000	80	370
	EQE	300	BEV	Sedan	$134,900	89	626
		350 4MATIC	BEV	Sedan	$154,900	90.5	590
		AMG 53 4MATIC+	BEV	Sedan	$214,900	90.5	500
	EQS	AMG 53 4MATIC	BEV	Gran Coupe	$328,400	120	610
	E-Class	E300e	PHEV	Sedan	$126,200	14	50
	GLC300e	GLC300e	PHEV	SUV	$95,700	14	46
MG	4	51 Excite	BEV	Hatch	$38,990	51	350
		64 Excite	BEV	Hatch	$44,990	64	450
		64 Essence	BEV	Hatch	$47,990	64	435
		77 Essence Long Range	BEV	Hatch	$55,990	77	530
	ZS EV	Excite	BEV	Hatch	$46,709	51.1	320
		Essence	BEV	Hatch	$49,709	51.1	320
		Long Range	BEV	Hatch	$55,990	72.6	440
	HS PLUS	Essence	PHEV	SUV	$47,990	16.6	52
		Excite	PHEV	SUV	$49,690	16.6	52
Mini	Cooper SE		BEV	Hatch	$69,800	74	460
	Electric Hatch						
	Countryman		PHEV	Hatch	$64,000	7.6	51
	Cooper SE						
Mitsubishi	Eclipse Cross		PHEV	SUV	$51,390	13.8	54
	Outlander		PHEV	SUV	$61,440	20	85
Nissan	Leaf	Standard	BEV	Hatch	$53,551	39	270
		e+	BEV	Hatch	$64,051	59	385
Peugeot	308	GT SPORT PHEV	PHEV	Hatch	$64,990	12.4	60
	508	GT HYBRID FASTBACK	PHEV	Sedan	$81,610	11.8	55
	3008	GT SPORT HYBRID AWD	PHEV	SUV	$84,790	13.2	60

Polestar	2	Standard Range Single motor	BEV	Sedan	$71,600	69	440
		Long Range Single Motor	BEV	Sedan	$74,800	78	515
		Long Range	BEV	Sedan	$79,900	61	480
		Dual Motor					
Porsche	Taycan	Taycan	BEV	Sedan	$182,100	71	403
		4S	BEV	Sedan	$227,600	71	413
		4 Cross Turismo	BEV	Sedan	$206,600	83.7	469
		4S Cross Turismo	BEV	Sedan	$106,900	83.7	469
		GTS	BEV	Sedan	$269,800	93.4	485
		Turbo S	BEV	Sedan	$338,000	93.4	440
		Turbo Cross Turismo	BEV	Sedan	$348,000	93	472
	Cayenne	E-Hybrid	PHEV	SUV	$155,900	18	44
	Panamera	4 E-Hybrid	PHEV	SUV	$252,700	18	56
		4 E-Hybrid Platinum Edition	PHEV	SUV	$270,900	18	56
		4 E-Hybrid Executive	PHEV	SUV	$280,400	17.9	55
		Turbo S E-Hybrid	PHEV	Sedan	$307,200	18	47
		Turbo S E-Hybrid Coupe	PHEV	SUV Coupe	$311,100	18	47
		4S E-Hybrid	PHEV	Sedan	$244,400	17.9	54
Tesla	Model 3	Rear-Wheel Drive	BEV	Sedan	$59,900	60	491
		Long Range	BEV	Sedan	$74,300	82	602
		Performance	BEV	Sedan	$87,300	82	547
	Model Y	Rear-Wheel drive	BEV	SUV	$72,300	60	455
		Long Range	BEV	SUV	$82,300	76	533
		Performance	BEV	SUV	$96,700	76	514
Volvo	C40	Recharge Pure Electric	BEV	SUV	$74,990	70	507
		Recharge Twin Pure Electric	BEV	SUV	$82,490	78	467
	XC40	Recharge	BEV	SUV	$72,990	78	460
		Recharge Twin Motor	BEV	SUV	$79,990	78	500
	XC90	Recharge	PHEV	SUV	$118,990	19	77

	XC60	Recharge Plug-in Hybrid	PHEV	SUV	$97,990	19	77

Source: Deloitte adapted from Electric Vehicle Council State of EVs[21]

[21] Electric Vehicle Council (2023) State of Electric Vehicles, July 2023. Accessed at https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf

Limitation of our work

General use restriction

This report is prepared solely for the internal use of Ausgrid. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purpose the Statement of Works dated 17 October 2023. You should not refer to or use our name or the advice for any other purpose.

Deloitte Access Economics Pty Ltd
ACN: 149 633 116
Quay Quarter Tower
50 Bridge Street
Sydney, NSW 2000
Australia
Phone: +61 2 9322 7000