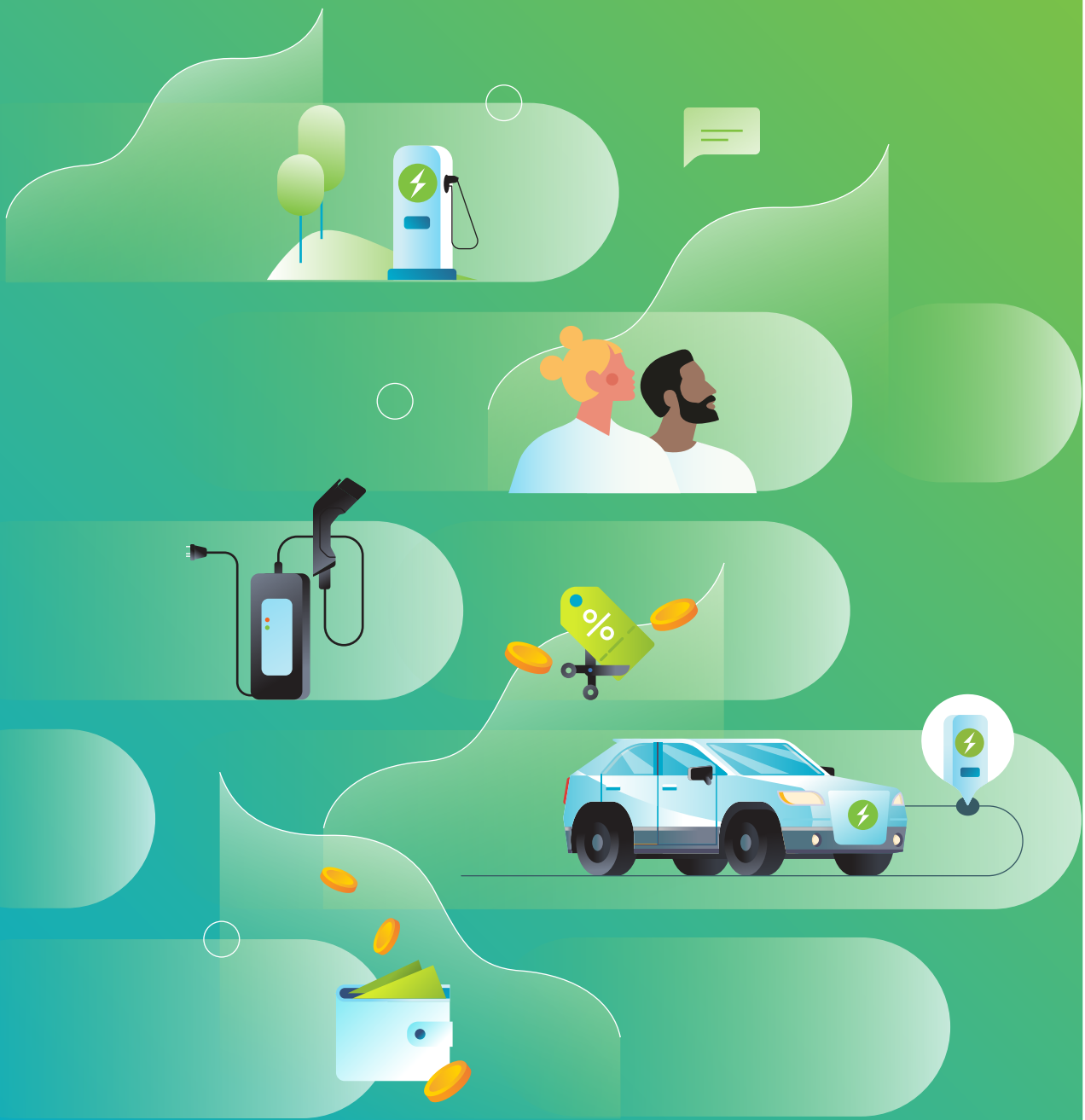
ELECTRIC VEHICLE COUNCIL

THE UNIVERSITY OF SYDNEY

ITLS

EV Ownership Survey

2nd Edition



Executive Summary

EV Ownership Survey, 2nd Edition: Understanding the EV Journey in Australia

Australians have had a private passenger EV option since 2012 — marking more than a decade of EV ownership in this country. While products and market conditions continue to evolve, one constant remains: the need to hear directly from EV drivers about their experiences, preferences and needs.

This report shares key findings from the second edition of the EV Ownership Survey, delivered by the Institute of Transport and Logistics Studies (ITLS) at the University of Sydney and the Electric Vehicle Council (EVC). Drawing on responses from more than 1,800 EV owners across Australia, it explores what drives people to go electric, how ownership experiences change over time, and how Australians charge and use their EVs.

The results are clear: EV ownership is increasingly practical and mainstream.Most owners report substantial running-cost savings, home charging (often with solar) is the dominant pattern, and many early concerns—especially about range, charging access and value—ease once people have real-world experience.

As the second edition of this national survey, it builds on the insights from 2024 while also including new questions to give a more complete picture of EV ownership in Australia.

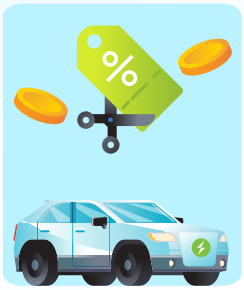
The survey aims to:

- Raise awareness and help consumers understand EVs better
- Provide useful data to support the growing EV industry
- Inform policies that support cleaner, more sustainable transport

These findings offer valuable insights into how Australians are experiencing EV ownership and where the future of electric transport may be heading.

Key Findings

1 **Cost savings are real—and incentives still shift the market.**

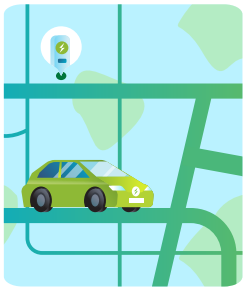


Owners report major reductions in fuel costs and generally low ongoing maintenance and insurance costs. Incentives remain influential for many purchasers, meaning policy settings continue to shape adoption. See page 7

2 **Leasing will shape used-EV affordability—and incentives influence the pipeline.**

A majority of leased EVs are expected to be replaced within six years, strengthening the flow of EVs into the second-hand market. See page 8

3 **Range anxiety fades with lived experience.**



After purchase, range concerns fall sharply, reinforcing that real-world driving needs are typically well within modern EV capability.

4 **Driver confidence rises as perceived barriers fall.**

Concerns about charging access and upfront price/value soften noticeably after ownership, while battery fire safety remains a relatively minor concern throughout. Go to page 10

Background/Methodology

The EVC, ITLS and other industry partners have collaborated again to conduct the EV Ownership Survey for 2025. This year, the goal was to develop a deeper understanding of the various aspects of EV ownership and their evolution as EV adoption progressively becomes more mainstream in Australia. The 2nd edition expands the scope of previous surveys, examining home charging behaviour, public charging experiences, ownership profiles, travel patterns and vehicle usage, as well as purchasing considerations compared with last year. This survey looks to support data-driven policy and industry decisions to accelerate the shift to sustainable transport.

- This year a total of 1,839 EV owners participated in the survey, building on the previous year's sample size of 1,506. Respondents included both Battery Electric Vehicle (BEV) and Plug-in Hybrid Electric Vehicle (PHEV) owners. The survey sample was distributed across Australia's states and territories, with approximately 75% of respondents residing in Queensland, New South Wales and Victoria.
- The survey was conducted using the Qualtrics platform between May and July 2025. The questionnaire was structured to measure key indicators across several themes, including vehicle attributes, financial factors, home, workplace and public charging behaviours, as well as housing and demographic characteristics. Customised branching logic was applied so that participants were only shown questions relevant to their circumstances, with the survey focusing on up to two primary vehicles per respondent.
- In addition to the primary group of EV owners, the survey included targeted questions for non-EV owners, capturing an additional 174 respondents, indicating that they owned one or more internal combustion engine (ICE) vehicles. Although these responses are not represented in this report, they may be considered in future reports examining trends and perceptions to EV adoption of non-EV owners.

This survey closely reflects Australia's current EV-owning population, sitting just over 1% above overall passenger vehicle market share. However, it is not the full picture.

As the market moves beyond early adoption, we expect the profile of EV owners to broaden and diversify. Early adopters of new technologies are typically first movers: more willing to embrace risk and often with the financial capacity to do so.

Over time, EV ownership characteristics, preferences and behaviours will evolve. That is why annual surveys like this are critical - they track how the market matures and provide insight into the changing shape and breadth of EV usership in Australia.

EV Ownership Profiles

Demographics

Respondents

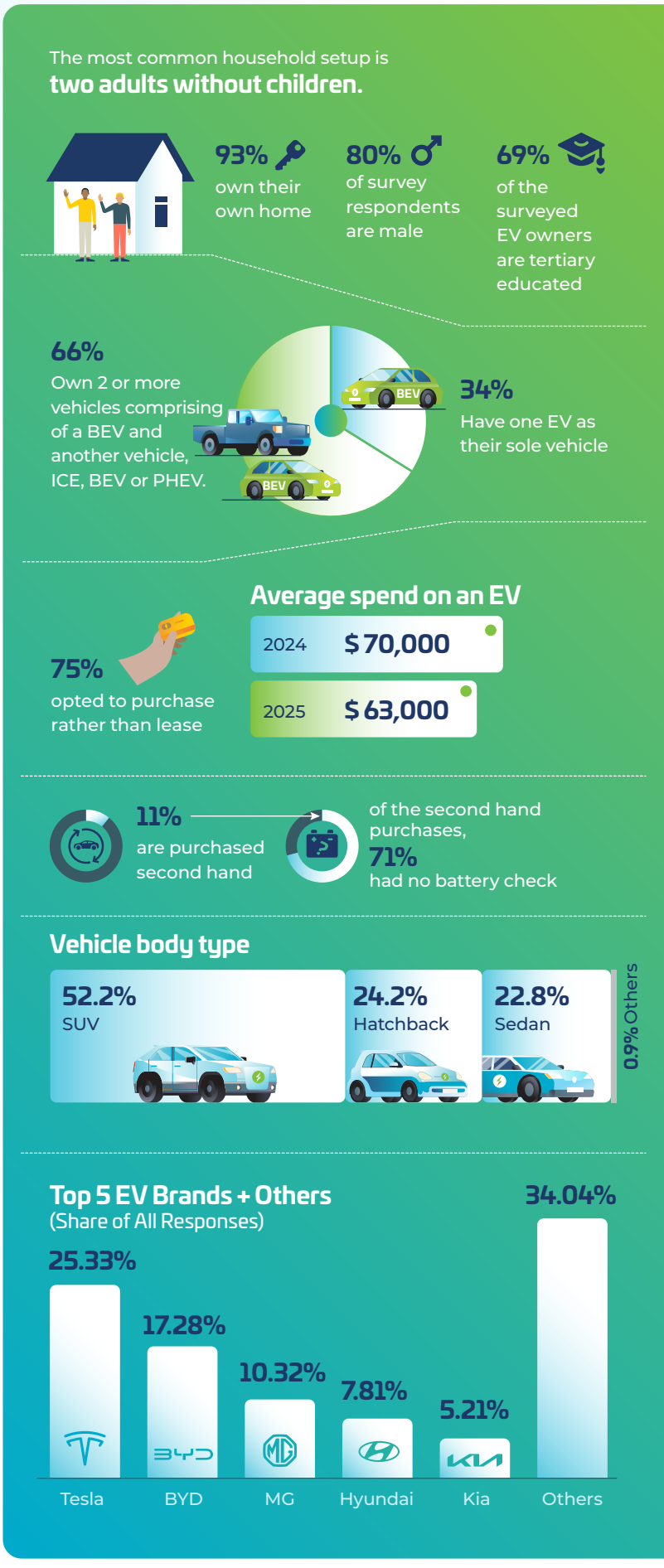
Two-thirds of the respondents reside in a major city, with 67% of them are between the ages of 40 to 69 years. The majority of those who responded to the survey are tertiary educated and employed individuals, with 69% holding at least a bachelor degree and 62% are employed. Also, 93% of the respondents owned their own home.

Household Composition

The typical household surveyed comprised of two adults with 73% of them being childless. Of this typical household composition, 79% have access to solar panels. The households surveyed that own a single vehicle that is an EV comprises of 34%, where the majority of those EVs are battery electric vehicles (97%). Whereas 66% own two or more vehicles, commonly made up of an EV with another vehicle with an internal combustion engine.

Vehicle Ownership

The most common EVs are SUVs (52%) and Hatchbacks (24%), and the vast majority were acquired as a new vehicle since 2021 (95%). Approximately 11% of the EVs are second hand, of which 71% had no battery check prior to acquiring it. 75% of the EVs were purchased with an average purchasing price of $63,500, which is lower compared to the average purchase price of $70,000 as identified in the 2024 EV Ownership survey.



Distance Travelled

EV drivers from Major Cities travelled an average annual distance of 13,950km, where as EV drivers from regional and rural areas travelled an average of 17,620km. These average annual travel distances are less by approximately 8% compared to what was reported in last year's survey.

Purchase Considerations

This survey asked EV owners if they purchased or leased their EV, their perceived maintenance and insurance costs, and fuel savings compared to a previously owned internal combustion engine vehicle.

Government Incentives

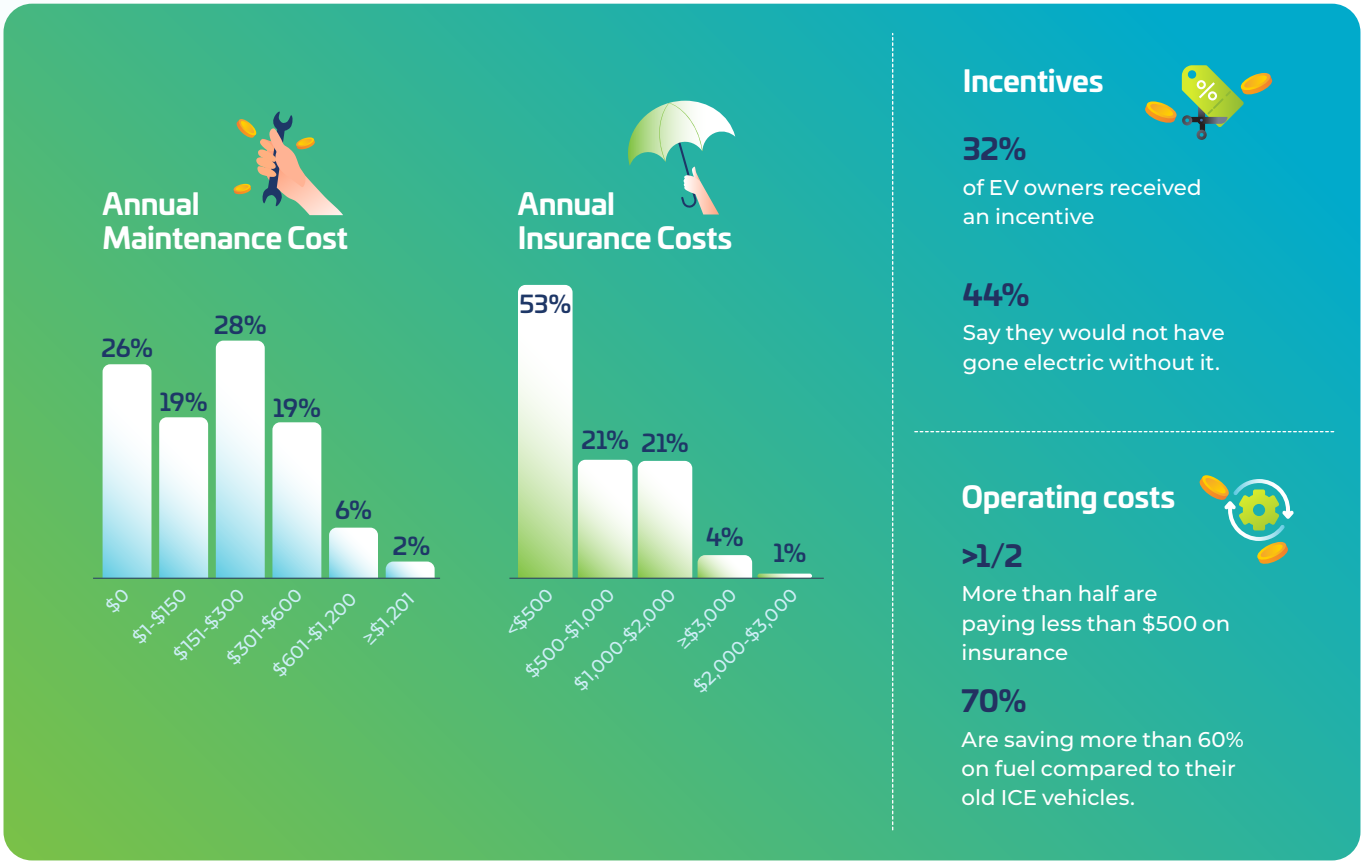
Of the 75% of respondents that purchased their EV, 32% received a government incentive. Of those, 44% indicated that the incentive was decisive in their their decision to purchase the vehicle. The other 25% of EV owners lease their vehicle, either via a traditional leasing or a novated leasing arrangement.

Maintenance and Insurance Costs

73% of respondents that owned an EV indicated that they spend less than $300 dollars per year on maintenance costs, while 95% of EV owners reported spending less than $2000 per year to insure their car. Below shows the reported distribution of responses for car maintenance and Insurance costs for EV ownership.

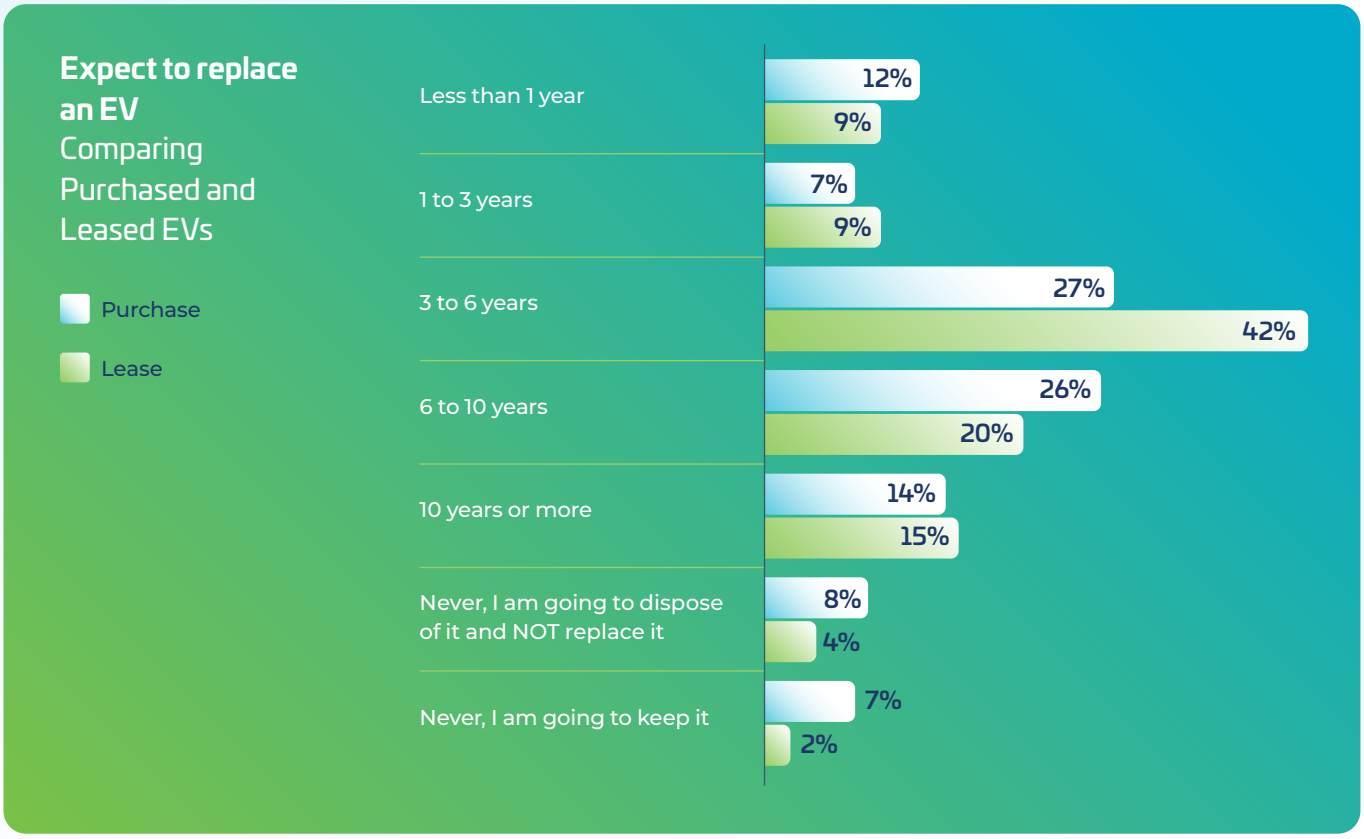
Fuel costs

70% of respondents indicated that they have made significant savings on fuel costs with their primary EV compared to their previous vehicle, reducing their expenses by more than 60%.



EVs for the second-hand market

Respondents were asked when they expect to replace their current EV. This covers the full sample—including single-vehicle households and those with multiple vehicles—and compares expectations between EV owners who purchased their vehicle and those who leased it.



The responses suggest that up to 59% of leased EVs are expected to be replaced—and therefore likely to enter the second-hand market—within six years, compared with 45% of purchased vehicles, indicating leasing will play a major role in building near-term used-EV supply and improving affordability for mainstream buyers.

Electric Car Discount and Fringe Benefit Tax Exemption

The Government's Electric Car Discount is a federal policy that makes Battery Electric Vehicles cheaper by providing a Fringe Benefits Tax (and related concessions) exemption, most commonly through a novated leasing arrangement. Employees can salary-package an eligible EV (and many running costs) using pre-tax income, thereby avoiding FBT. It has been successful in reducing the up-front and ownership costs of electric cars, addressing a significant purchasing barrier in Australia. It is estimated to have put 105,000 additional EVs on the road between 2022 and 2024. However, most Australians still buy used, rather than new, vehicles overall. The survey shows leased EVs are replaced more often than purchased vehicles which means the Discount plays a major role in building near-term second-hand EV supply and improves affordability for mainstream buyers. If the exemption is tightened or removed in the current statutory review, fewer new EVs may be leased now—reducing the flow of 3–6-year-old EVs into the second-hand market later and potentially slowing broader EV adoption.

Considering two vehicle households

Two vehicle households are the biggest segment represented in the survey, with a proportion of 46%, compared to single vehicle households (34%), three vehicle households (13%) and four or more vehicle households (7%).

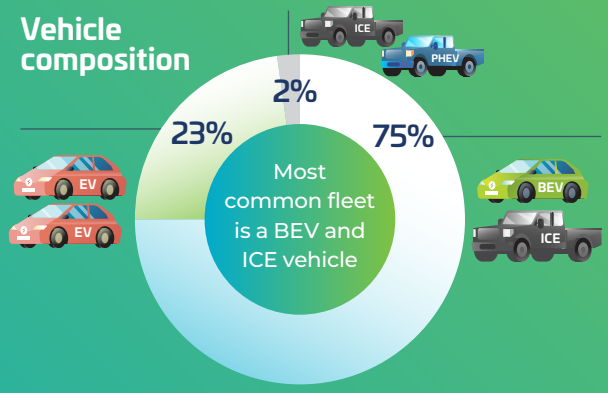
Battery electric vehicle

Battery electric vehicle or Plug-in hybrid electric vehicle

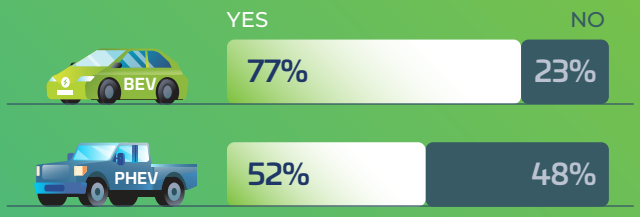
Plug-in Hybrid Electric Vehicle

Internal Combustion Engine Vehicle

Vehicle composition

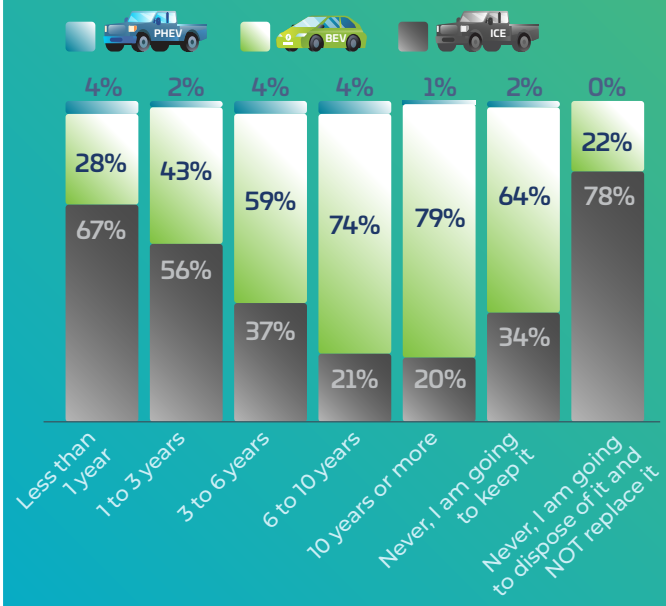


Primary Vehicle



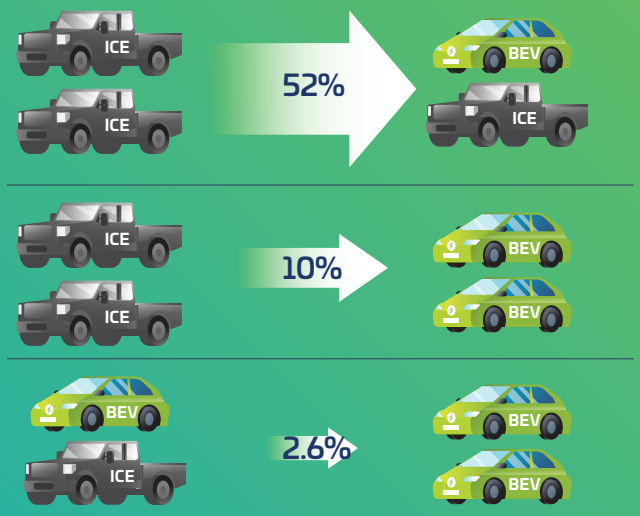
Expect to Replace the Vehicle

Those that own an EV, replacing another vehicle that is an ICE vehicle is highly likely within 3 years.



Vehicle Transactions

Replacing an ICE vehicle with a BEV occurs the most in a two-vehicle household

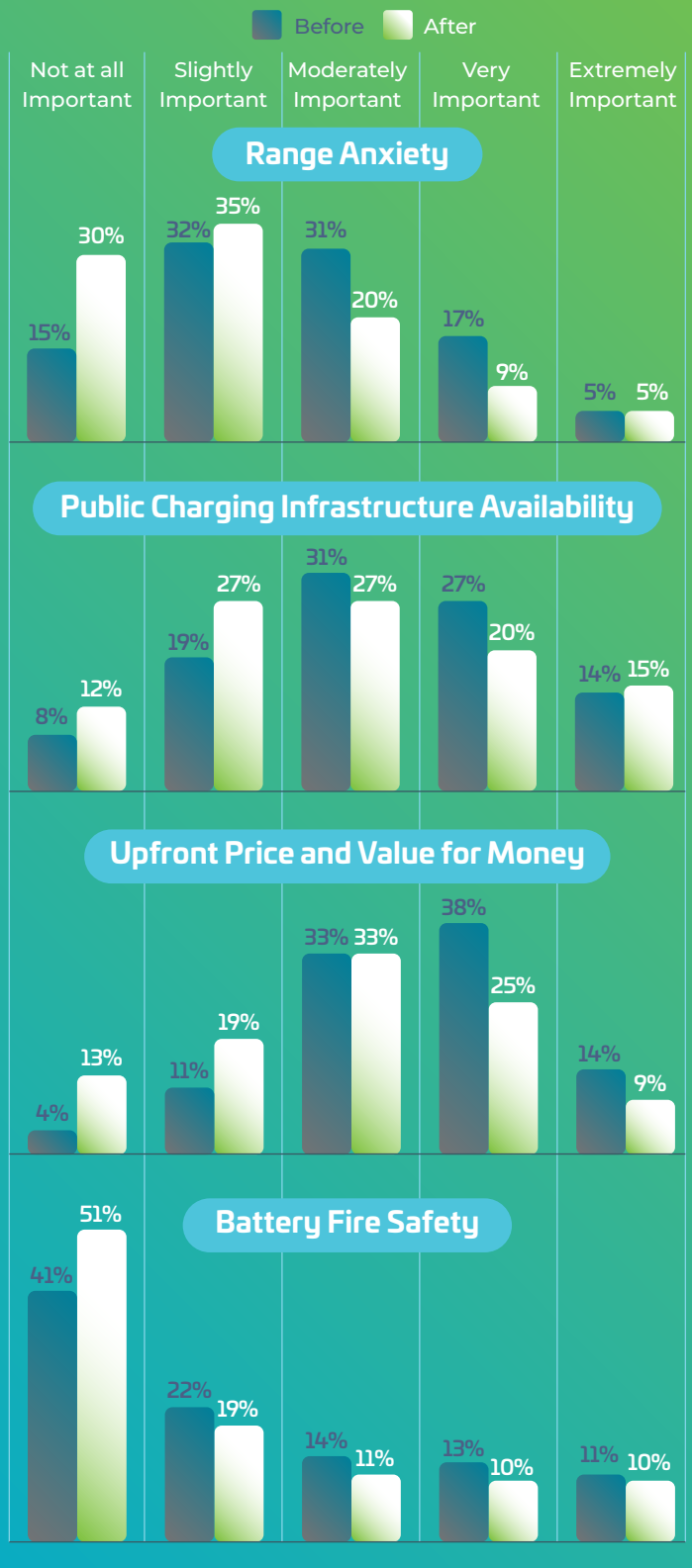


Other combinations
36%

EV Adoption

Perceptions of EV Adoption

The survey examined the relative importance of key issues associated with EV ownership, both before and after purchase.



For issues likerange anxiety, public charging availability, and upfront purchase cost—concerns ease noticeably once people own and drive an EV. After purchase, many more owners rate these issues as “not at all important”, and far fewer see them as major barriers, suggesting that lived experience helps recalibrate expectations about range, charging access and value for money. Battery fire safety, by contrast, is already a relatively minor concern before purchase, with about 40% of respondents saying it is “not at all important”, rising to around 50% afterward. This makes battery fire safety the issue with the highest share of respondents reporting no concern, both before and after purchase.

Drivers of EV Adoption

Charging an EV

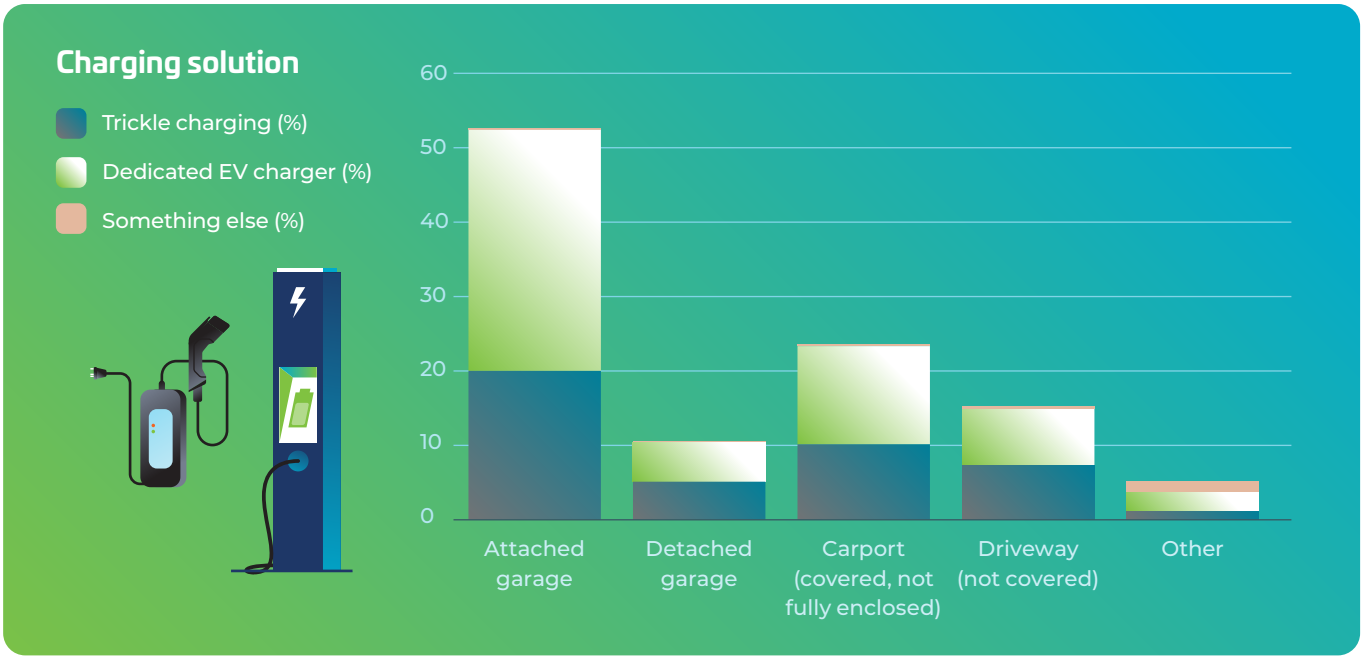
This section explores charging behaviours across different settings, including home, workplace, and public charging facilities.

Home Charging

The vast majority (93%) of EV owners can charge at home, with 80% of these households using solar panels. More than half of home-charging households have an attached garage, while approximate 1-in-3 have a detached garage or open carport. More than half of this segment has dedicated EV chargers installed, while others rely on slower trickle charging.[1]

The breakdown of parking situation and home charging solution is as follows:

Home Charging Arrangements



1 In this survey, trickle charging refers to Level 1 (L1) charging via a standard general purpose outlet (GPO) at home.

Other parking situations consist of street-side parking and assigned and unassigned parking in a lot or garage. 92% of EV owners who can charge at home believe that their charging solution adequately meets their needs.

89%
of EV owners consider the ability to charge at home very or extremely important.

93% of respondents that are EV owners can charge at home

80%
have installed solar

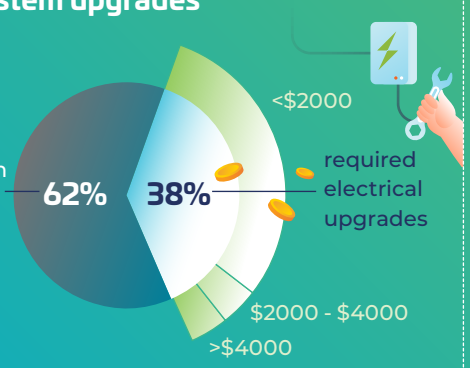
53%
have attached garage

70%
of EV owners who can charge at home indicated that their equipment costs, such as smart meter or a dedicated home charger, is less than $1000.

Costs to enable charging at home

Electrical system upgrades

did not incur expenses on electrical system upgrades for EV home charging



Electricity costs

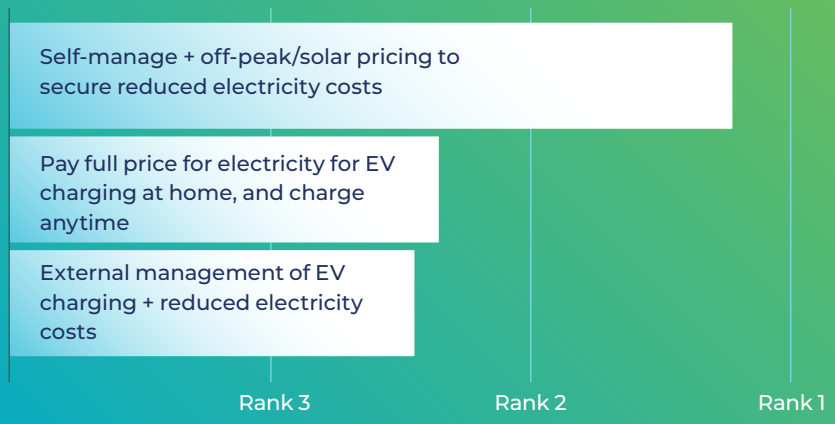
Only 1 in 4
have a special rate for EV charging applied to their electricity usage.

$0.27/kWh
is the average cost to charge an EV at home.

Electricity retailer arrangement

Most EV owners want to stay in control of home charging while keeping costs down. When asked to rank different options, 83% put first a scenario where they manage their own charging and use off-peak or solar power to reduce electricity costs. The other two options—allowing a third party such as their retailer or network to control charging in exchange for cheaper power or paying full price to charge anytime—are generally placed as second or third choices, with no clear preference between them. At present, only 8% of owners have an arrangement where their retailer externally controls their EV charging.

Preferred EV Charging Management Scenarios



8%
Energy retailer externally controls EV charging.

CASE STUDY:
Retailer-managed EV charging – David, NSW

David's family of five has transformed a typical gas-and-petrol home into a fully electric household. Over several years he disconnected gas, installed a 14 kW solar system, three Powerwall 2 batteries, five heat pumps for heating, cooling and hot water, and added two Teslas (Model Y and Model S) plus an Evnex smart charger. All energy use is managed through Amber Electric.

Most of David's driving is local, with occasional road trips. The Model S is charged slowly during the day from surplus solar and kept below 80% state of charge. The Model Y, with a lithium iron phosphate battery, is scheduled via the Amber app to charge to 100% using a mix of excess solar and cheap, mostly renewable grid power.

In one week, the Model Y used 35.9 kWh of energy for charging at an out-of-pocket cost of just one cent—equivalent to around $0.004 per 100 km, compared with $9.60–$11.20 per 100 km for a petrol SUV like a RAV4.

David's main motivation was to decarbonise his household emissions (around 15 tonnes per year) to near zero, with the financial savings an added bonus. He recommends EV owners install a home charger, noting that as smart meters and time-of-use tariffs expand, faster chargers (7–11 kW) will let drivers take fuller advantage of short windows of cheap, renewable electricity compared with slow trickle charging from a standard power point.

The EVC has released a guide to help EV owners identify the best home-charging electricity plans in each state. It's especially handy if your household bill separately shows EV charging costs. You can view the guide here.

Perceptions of Vehicle-to-Grid Technology

EV owners were questioned about their understanding of Vehicle-to-Grid technology and their perceived cost savings on their annual electricity bill.

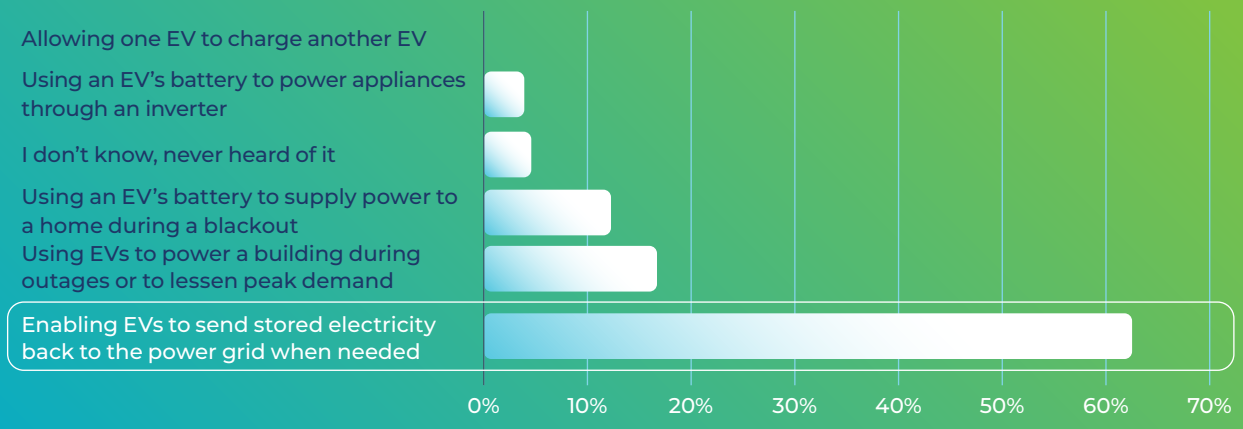
What is Vehicle-to-Grid?

Vehicle-to-Grid (V2G) is when an electric vehicle doesn't just *take* electricity from the grid, but can also *send* electricity back.

- When there's lots of cheap or renewable power (e.g. sunny, windy periods), the EV charges as normal.
- Later, when the grid is under pressure or prices are high, some of that stored energy can be fed back from the car's battery to the grid (or to the home) through a bi-directional (two-way) charger.

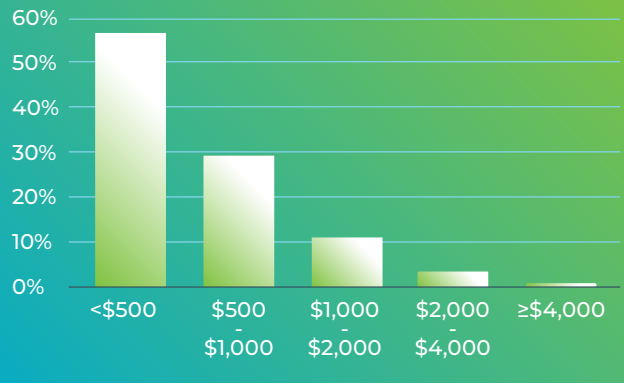
So instead of EV charging being a one-way flow, from grid to car, V2G makes it two-way (grid ↔ car). This can help support the electricity system and make better use of renewables. V2G technology and retail programs are yet to be established in Australia but will have the potential to greatly reduce energy costs for EV owners. Some modern EVs can also supply power back to the home or directly to external loads — such as running a kettle or power drill — through technologies known as Vehicle-to-Load (V2L) or Vehicle-to-Home (V2H), although this survey did not include specifics on other applications of bidirectional charging.

Understanding of V2G



A little over 3 out of 5 EV owners correctly identified the right description of V2G technology, highlighting a need for more consumer education in this space. The average perceived cost savings to the electricity bill from employing V2G technology across all EV owners in the survey is $630 per year, with savings of less than $500 per year being the most frequent response.

Annual cost saving to electricity bill from employing V2G



Workplace Charging

For frequent commuters, workplace charging is a priority for EV drivers that do not have adequate charging solutions at home.

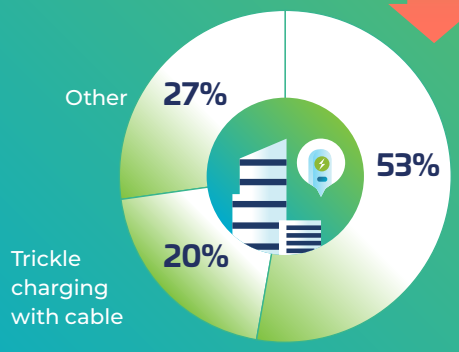
Access and Usage

23% of respondents that are employed and drive an EV to work on an average of 3 days a week, have access to charging at their work. This compares to around 29% observed in the 2024 EV Ownership survey.

Charging Duration and Setup

Of those that could charge at work, 70% of the workplaces have up to 4 charging solutions available, and typically are dedicated AC chargers provided by employers. 80% indicated that no time limit on charging is imposed on employees, although the average charging session duration is 3.5 hours, which is down from around 4.7 hours identified in the 2024 survey.

Available Charging in Workplaces

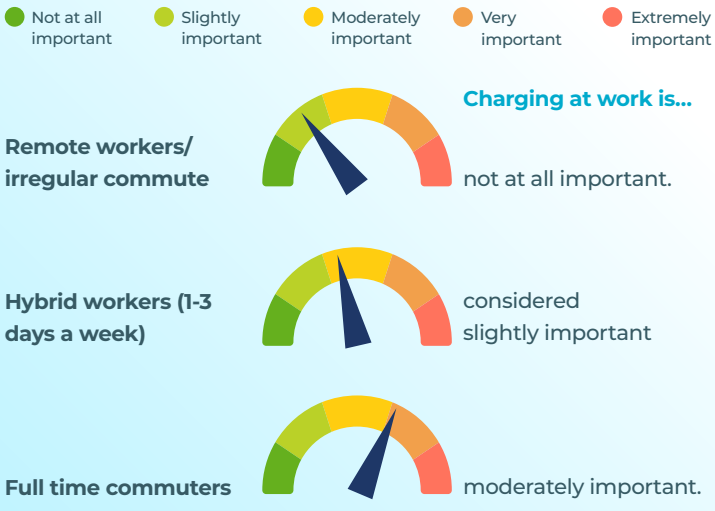


23%
can charge at Work, down from 29% in last year's survey

Average Charging duration at Work

3.5 hours
from 4.7 hrs in 2024 survey

Importance of charging at work increases with the frequency of commuting to work



Public Charging

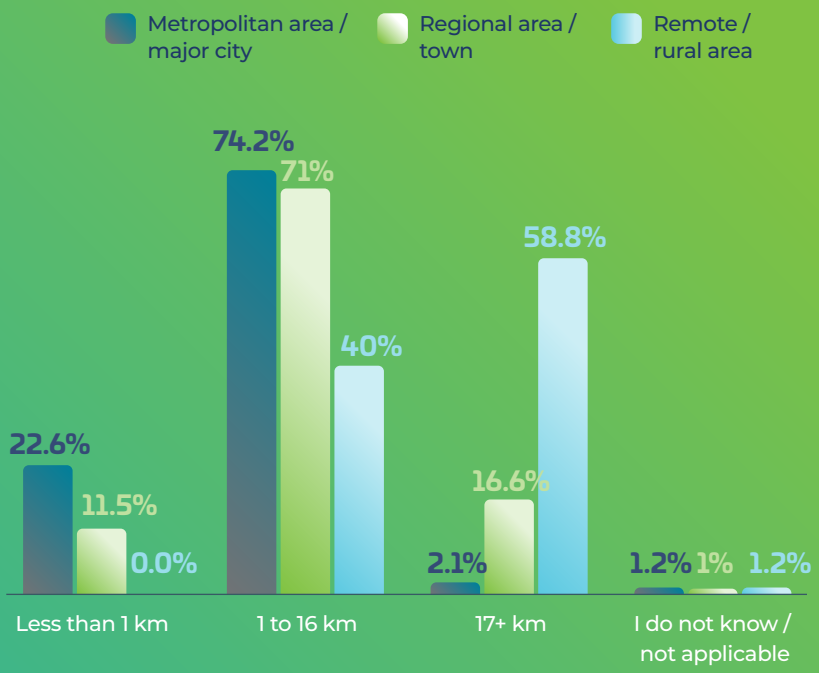
Public charging still plays a crucial role for EV owners, particularly for those who can't charge at home or work, because it offers both convenience and cost-effective options.

Proximity to public chargers depends on where you live

97%
of respondents in major cities are within 0 – 16 km of a public charger.

82%
of respondents in regional areas report living within 0-16 km of a public

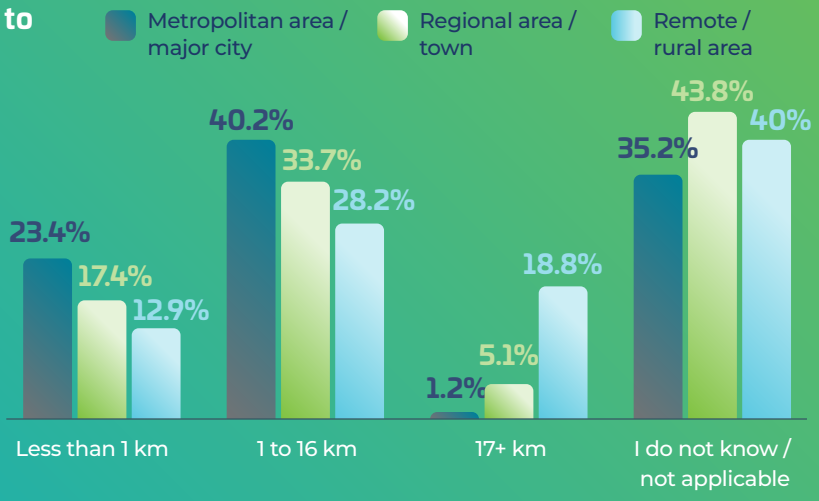
40%
of those in remote/rural areas live with 16 km of a public charger.



Access to public Charging close to the Workplace

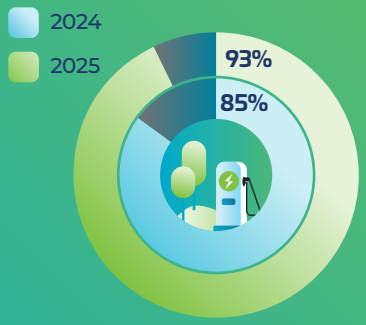
Up to 23%
of EV owners have access to public charging close to their workplace (<1km)

44%
don't know any public charging near their workplace.



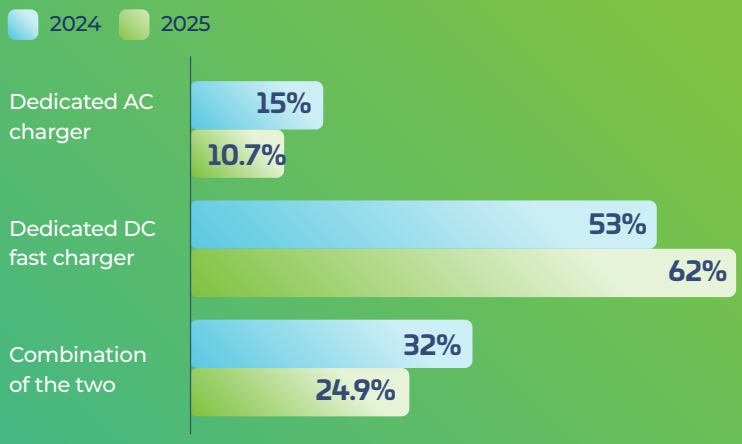
This could highlight the need for more accessible public charging in commercial and high employment areas to support EV drivers where workplace charging is not provided.

Utilisation of Public Charging



93%
of EV owners use public EV charging infrastructure, up from 85% in the previous year, highlighting its increasing importance in supporting EV ownership.

Charger Type Proportions by EV ownership survey



A shift from 53% to 62% of EV drivers prefer using dedicated DC fast charging

A drop in dedicated AC charging only down to 11%

Charging session duration and cost

AC Charging

On average, AC charging sessions last 60 minutes and cost $13.

DC Fast Charging

DC fast charging sessions are typically about 34 minutes and cost $21.

Combination Charging

For those that indicated a used of both AC and DC charging, the average session lasts 40 minutes, costing about $18.

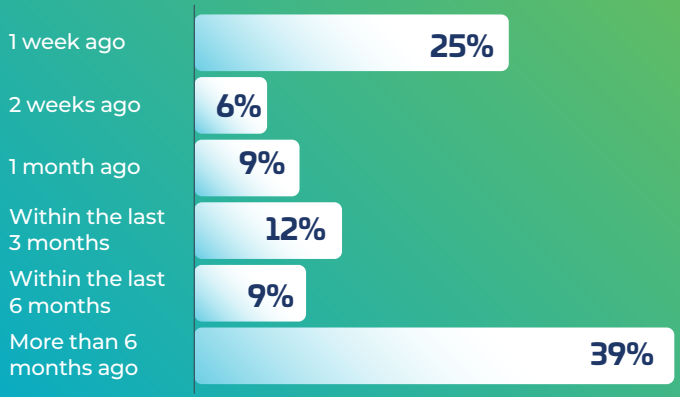
BYO charging cable

Typically, suburban street-side or kerbside, holiday accommodation or shopping mall AC chargers require you to bring your own (BYO) charging cable. Questions were asked of EV drivers on their ownership of AC Type 2 charging[2] cables and how often they use it.

Up to 40% used an AC charging cable more than 6 months ago, while 25% used a cable 1 week ago.

Own an AC Type 2 Charging Cable

When was it last used?



2 AC Type 2 charging is the connector type for the public level 1 charging option.

Charging behaviour

EV owners were asked if they charged their vehicle during the previous week to completing the survey, of which 96% of respondents indicated that they had. Those that had not, gave reasons such as low usage of the vehicle, were on holidays without their EV, took public transport or drove another vehicle. EV owners that charged their vehicle were asked of the locations of charging and motivations behind charging at that location.

In the week prior to the survey....

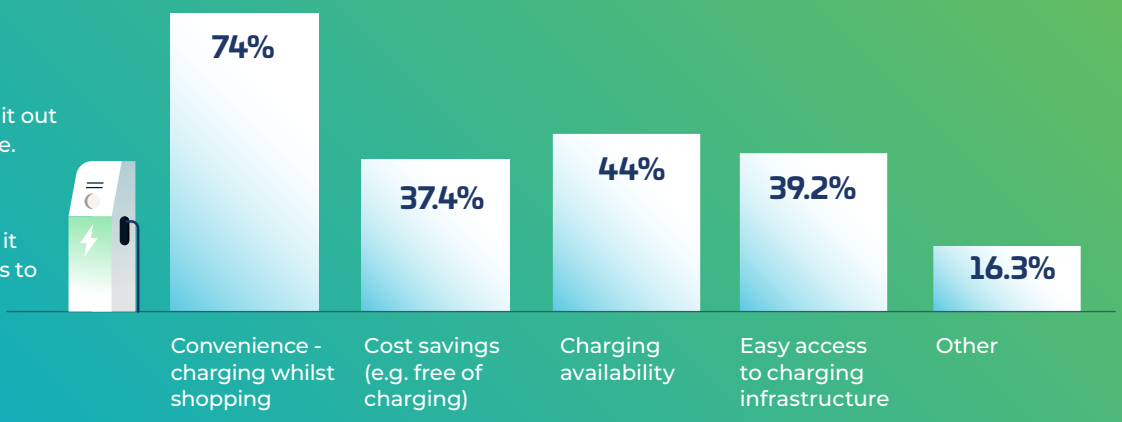
85%
of EV drivers charged at home.

13%
charged their EV at supermarkets and shopping centres.

Motivations for charging at a Supermarket

3 out of 4
EV drivers did it out of convenience.

2 out of 5
EV drivers did it for easy access to chargers.



CASE STUDY:

Powering Calderwood Village with Public EV Charging on Chargefox

Calderwood Village—in the heart of the Illawarra region—is one of New South Wales's fastest-growing communities, and it's become more EV-friendly with the installation of new high-speed public charging, produced by Kempower and available on Chargefox.

Meeting the Needs of a Growing EV Community

Developer Revelop prioritised EV infrastructure as a feature of their Village Centre, recognising growth in EV adoption among residents and visitors. By integrating chargers from day one, Revelop ensures the community is ready for the future of transport—not playing catch-up.

"Revelop sees EV infrastructure as a core amenity, not an add-on. At this centre, on-site solar contributes to powering EV charging, creating a direct link between renewable energy and transport needs."
— Alex Michael, Commercial Manager at Revelop

Charging Where People Already Are

The chargers are positioned within a shopping, dining, and entertainment hub to maximise:

- Visibility – Chargers are easy to spot, normalising EV ownership in a growing region.
- Convenience – Drivers can top up while shopping, dining, or enjoying local services.
- Business benefit – Retailers benefit from increased dwell time, foot traffic, and customer spend.
- Operational efficiency – Charger owners benefit from consistently strong utilisation of chargers.

Supporting the Shift to Electric Vehicles

Locations like this are crucial in addressing one of the biggest barriers to EV adoption: the perception that public charging is hard to find. By increasing the number of charging sites in everyday destinations, more Australians gain the confidence to switch.

Seamless Integration with Australia's Largest EV Charging Platform

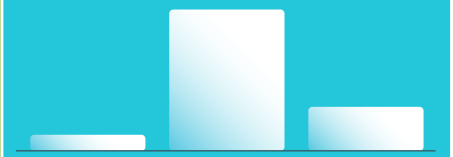
"Partnering with Chargefox has been critical in delivering a reliable, highly efficient experience. Chargefox's scale, technology and deep local expertise underpins an approach that supports Revelop's vision for future-ready, sustainable centres." — Alex Michael, Commercial Manager at Revelop

By hosting the site on Chargefox, Revelop ensures drivers enjoy a smooth, reliable experience:

- Simple access through the Chargefox app
- Real-time charger status updates
- 24/7 customer support
- Integration into Australia's largest EV charging network

Charging times and Usage patterns

EV owners were surveyed about their charging times in the given week at the various locations. The data highlights the periods of greatest propensity for charging.

	Time of day Overnight Day Evening	Day of week	Duration
Home Charging		Everyday	Less than 5 hours
Workplace Charging		Mondays Wednesdays Fridays	Less than 5 hours
Supermarket Charging		Saturdays	Less than 2 hours
Destination Charging		Weekends	Less than 2 hours
Other Public Charging		Weekends	Less than 2 hours

Conclusion

This second EVC and ITLS EV Ownership Survey shows that EV ownership in Australia is steadily moving from early adoption towards more mainstream use, particularly among established, home-owning households with string access to solar and home charging. Environmental goals and lower running costs remain the main reasons for going electric, supported by government incentives that continue to have a decisive impact on people's purchasing decisions, and by falling average purchase prices compared to the 2024 survey.

Home charging is integral in the EV ownership experience – most owners charge at home, many with rooftop solar and report relatively low upfront and ongoing costs to enable this. More EV drivers are using public chargers, and they are increasingly choosing DC fast chargers. But access to charging and awareness of what's available still depend a lot on where people live and work, especially for regional and remote drivers.

Most owners want to decide when they charge, aiming to use off-peak and solar energy. Retailer-managed charging and V2G are still emerging, and will need clearer information, better tariffs and suitable technology to grow.

These findings seek to provide a robust evidence base for industry and government to refine infrastructure planning, inform policy on incentives and support programs that make EV ownership more convenient, affordable for a wider range of households and regions.

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ELECTRIC VEHICLE COUNCIL

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EV Ownership Survey

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