

# Western Australian electric vehicle licensing data

September 2024 Quarter





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#### **Acknowledgment of Country**

The Department of Transport acknowledges the Traditional Custodians of the land throughout Western Australia and pay our respects to Elders both past and present.

We acknowledge the members of all Aboriginal communities, their cultures and continuing connection to Country throughout the state.

#### **About this Report**

The information contained in this publication is provided in good faith and believed to be accurate at time of publication.

The State shall in no way be liable for any loss sustained or incurred by anyone relying on the information.

Prepared by Department of Transport

Date 23 January 2025

#### Introduction

This publication provides statistics on the number of electric vehicles (EVs) licensed in Western Australia (WA) by the Department of Transport (DoT) and denotes trends in the uptake of EVs.

For information on how this data is prepared see the notes on terminology and methodology.

More information about EVs can be found at <a href="mailto:transport.wa.gov.au/projects/electric-vehicles">transport.wa.gov.au/projects/electric-vehicles</a>

# Why we share this data

This EV vehicle licence data is valuable to governments, industry and other stakeholders and creates a better understanding of the growth and uptake of EVs in WA.

It can be used to:

- develop and monitor strategies and policies
- assess performance for emissions targets
- plan transport and infrastructure projects
- plan and develop EV charging infrastructure
- assess EV charging demand, electricity grid impacts and opportunities.

Additionally, the information satisfies the growing curiosity among community members about the progress of EVs in our state.

# **Types of EVs**

**BEV**: Battery Electric Vehicle

PHEV: Plug-in Hybrid Electric Vehicle

FCEV: Fuel Cell Electric Vehicle

**HEV**: Hybrid Electric Vehicle



#### **Overview**

# September 2024 quarter Western Australian electric vehicle trends



The number of EVs licensed from the June 2024 quarter increased by 13.47 per cent.

- As of 30 September 2024, there were 26,239 licensed light EVs in WA and 2,097,625 light vehicles licensed in WA.
- There were significantly more BEVs licensed (22,611) compared to PHEVs (3,628).
- Licences for BEVs increased by 11.47 per cent and PHEVs by 27.70 per cent from the previous quarter.
- The number of EVs in WA increased by over 596 per cent between 31 December 2021 and 30 September 2024.



BEVs made up 86.17 per cent of WA's licensed light EV fleet and PHEVs 13.83 per cent.

- In September 2024, 79.04 per cent (20,740) of the EVs licensed were for personal use, compared to 20.96 per cent (5,499) for business use.
- Of the 20,740 EVs licensed for personal use, 17,941 were BEVs and 2,799 were PHEVs.
- Of the 5,499 EVs licensed for business use, 4,670 were BEVs and 829 were PHEVs.



The number of EVs in the Mid West has increased by over 30 per cent since the June 2024 quarter.

- At the end of the September 2024 quarter, there were EVs licensed in 260 different postcodes. See the table on page 5 for the top postcode locations of EV licences in the September 2024 quarter.
- There were EVs licensed in every region across WA with 90.71 per cent in Perth.
- The Peel, South West, Wheatbelt and Great Southern regions have the main proportion of regionally licensed EVs with more than 200 in each region.

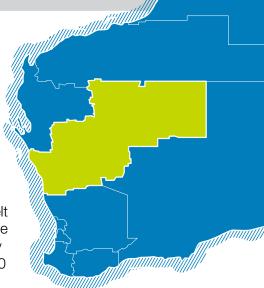


Figure 1: Cumulative electric vehicle data December 2021-September 2024

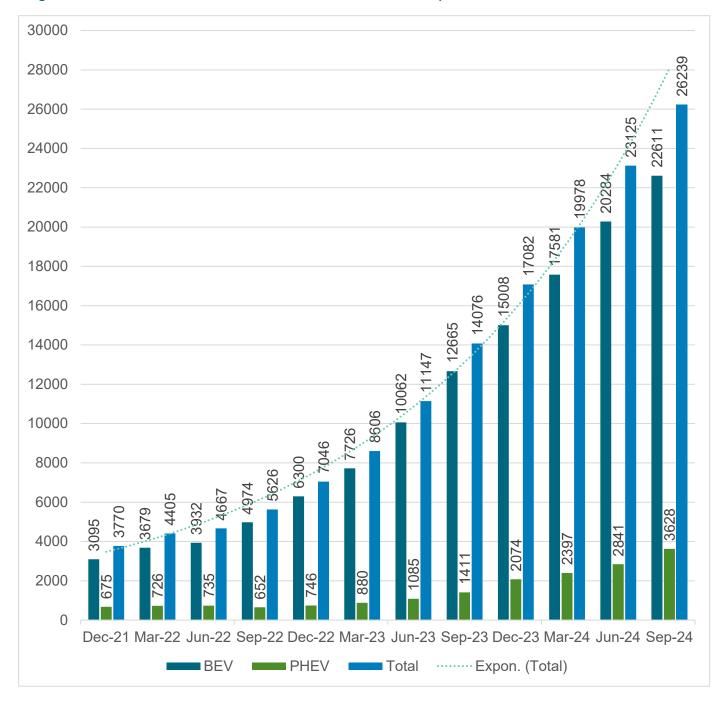


Figure 2: Top 25 postcode locations for electric vehicles in the September 2024 quarter

P/code	Suburb Locality	Total
6065	Ashby / Darch / Hocking / Kingsway / Landsdale / Madeley / Pearsall / Sinagra / Tapping / Wangara / Wanneroo	821
6164	Atwell / Aubin Grove / Banjup / Beeliar / Cockburn Central / Hammond Park / Jandakot / South Lake / Success / Treeby / Yangebup	810
6155	Canning Vale / Canning Vale South / Willetton	779
6018	Churchlands / Doubleview / Gwelup / Innaloo / Karrinyup / Woodlands	704
6112	Armadale / Bedfordale / Brookdale / Doobarda / Forrestdale / Harrisdale / Haynes / Hilbert / Mount Nasura / Mount Richon / Piara Waters / Seville Grove / Wugong	671
6153	Applecross / Applecross North / Ardross / Brentwood / Canning Bridge Applecross / Mount Pleasant	576
6163	Bibra Lake / Coolbellup / Hamilton Hill / Hilton / Kardinya / North Coogee / North Lake / O'Connor / Samson / Spearwood	574
6009	Broadway Nedlands / Crawley / Dalkeith / Nedlands	544
6010	Claremont / Claremont North / Karrakatta / Mount Claremont / Swanbourne	482
6014	Floreat / Jolimont / Wembley	463
6152	Como / Karawara / Manning / Salter Point / Waterford	448
6210	Coodanup / Dudley Park / Erskine / Falcon / Greenfields / Halls Head / Madora Bay / Mandurah / Mandurah East / Mandurah North / Meadow Springs / San Remo / Silver Sands / Wannanup	444
6105	Cloverdale / Kewdale / Perth Airport	426
6017	Herdsman / Osborne Park	403
6107	Beckenham / Cannington / East Cannington / Kenwick / Queens Park / Wattle Grove / Wilson	397
6020	Carine / Marmion / North Beach / Sorrento / Watermans Bay	393
6008	Daglish / Shenton Park / Subiaco / Subiaco East	390
6027	Beldon / Connolly / Edgewater / Heathridge / Joondalup / Mullaloo / Ocean Reef	389
6069	Aveley / Belhus / Brigadoon / Ellenbrook / The Vines / Upper Swan	374
6055	Brabham / Bushmead / Caversham / Dayton / Guildford / Hazelmere / Henley Brook / South Guildford / West Swan	370
6000	Perth	358
6021	Balcatta / Stirling	347
6019	Scarborough/Wembley Downs	328
6148	Ferndale / Riverton / Rossmoyne / Shelley	326
6151	Kensington / South Perth	325

### **Definitions**

Electric Vehicle (EV): A vehicle that is powered by one or more electric motors or traction motors that are the only propulsion system for the vehicle or used in conjunction with another propulsion system. For the purposes of this data, an EV is defined as a battery electric vehicle (BEV), plug-in hybrid electric vehicle (PHEV) or fuel cell electric vehicle (FCEV). This aligns with the definition and purpose of the State EV Strategy for WA.

Battery Electric Vehicle (BEV): A vehicle fully powered by an onboard battery that may be recharged via an electrical power source.

Plug-In Hybrid Electric Vehicle (PHEV): A vehicle powered by the combination of a battery that may be recharged via an electrical power source and a petrol or diesel internal combustion engine.

Fuel Cell Electric Vehicle (FCEV): A vehicle powered by a hydrogen fuel system which has one or more hydrogen fuel containers fitted to the vehicle for the system.

Hybrid Electric Vehicle (HEV): A vehicle powered by an internal combustion engine and a battery that doesn't have the ability to be recharged from a plug.



# Notes on terminology and methodology

This publication uses the term 'vehicle licence'. Previous publications used the term 'vehicle registration'. This is a change in terminology and not data so comparisons can be made between the publications.

The data in this summary is based on vehicle licence data. The quality of the data is reliant upon dealerships, companies and individuals providing accurate details about a vehicle at the time that the vehicle is licensed in WA or when the vehicle licence is transferred or renewed.

Only data on licensed light EVs is included in this summary. Data for other vehicle types, such as heavy vehicles and special recreation vehicles, are excluded. This data includes light BEVs and light PHEVs.

This publication provides figures on the number of EVs licensed in WA by DoT. There may be EVs operating on private property such as mine sites and farms which are not licensed to operate on public roads. These are not included in this data. The data in this publication is 'point in time' data.

#### This means that:

- New EVs may have been licensed since the previous snapshot.
- Licence details for an EV in a previous snapshot may have changed,
  e.g. an EV may be licensed to a different postcode after the owner moves house or an EV may have been sold second-hand.
- An EV in a previous snapshot may have been delicensed,
  e.g. licence transferred to another State or Territory, or the EV has been involved in an accident and 'written-off'.

Calculation of the quarterly EV figures uses the following data:

- existing EV licences that have not changed during the quarter (historical frequency)
- new EV licences during the quarter (increases in frequency)
- delicenses during the quarter (reductions in frequency)
- EV licence changes during the quarter (changes in distribution, use type etc. this is used when calculating cohort totals such as the number of EVs licensed in a postcode).

The EV totals published in this summary, such as Figure 1: Cumulative electric vehicle data, take into account all the data listed above. The summary does not report a separate figure for the number of EVs newly licensed during the quarter due to recalculation, re-identification and privacy risks.

All figures in this publication provide the totals and sub-totals for EVs licensed in WA on the last day of the quarter. Figure 1 shows the total number of light EVs licensed as at the end of each quarter listed in the chart.

EV data cleaning and verification methods have improved over time. The accuracy of data reporting has increased through improved verification. Vehicles which could not be verified to be EVs are excluded from the data.

Only data for the use types of Business and Personal are included. Data for other use types are excluded.

Data is suppressed for EV types which have low uptake in WA due to the risk of reidentifying an individual vehicle, owner or business. FCEV data is currently excluded due to the low number of licensed FCEVs in WA.

HEVs are not included in this data, in line with the definition and intent of the State EV Strategy for WA.

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This publication is available in alternative formats upon request. Contact us to request a copy or submit an enquiry.