



Electric Vehicle Fact Sheet (March 2026)

Safety

- **Universal Standards:** All Australian vehicles, regardless of fuel type, must meet rigorous Australian Design Rules (ADRs) for safety, manufacturing, and anti-theft performance.
- **Elite Safety Ratings:** EVs are safety leaders, with ANCAP awarding its maximum 5-star rating to over 100 models; in 2025, EVs dominated rankings for occupant protection.
- **Superior Stability:** Heavy batteries positioned low in the chassis create a lower center of gravity, making EVs significantly less prone to rollovers than traditional vehicles of a similar height.
- **Advanced Safety Tech:** EVs frequently debut state-of-the-art features, including automated braking, lane guidance, and energy-absorbent materials designed to maximize collision protection.
- **Low Fire Risk:** EV battery fires are statistically rare; EV FireSafe recorded only 12 cases in Australia by late 2025, all but 2 of these were due to external factors such as arson, rather than the vehicle itself.
- **Active Monitoring & Alerts:** Modern systems manage battery temperature to prevent overheating, while new AVAS regulations require acoustic alerts to ensure pedestrian and cyclist safety at low speeds.

Cost

- **Substantial Operational Savings:** EV drivers can save up to 70% on fuel costs and 40% on servicing. This is driven by superior energy efficiency and a simplified design with far fewer moving parts than internal combustion engines.
 - **Reduced Running Costs:** For the average driver (13,700km/year), switching to an EV can save \$1000-\$1500 or more per year in fuel alone., particularly when utilizing off-peak electricity rates or home solar.
 - **Long-Term Household Wealth:** A 2026 CSIRO analysis predicts that households fully transitioning to EVs by 2030 could save up to \$30,000 over 20 years compared to those continuing with petrol or diesel vehicles.
 - **Increasing Affordability:** The upfront "green premium" is disappearing; several new 2026 models, such as the BYD Atto 1, are now available in Australia for under \$25,000, with many other options priced between \$30,000 and \$40,000.
 - **Tax Incentives:** The Federal Government's Electric Car Discount provides a full Fringe Benefits Tax (FBT) exemption for eligible EVs. Through a salary sacrifice arrangement, this can save employees up to \$4,700 per year on a \$50,000 vehicle compared to a petrol equivalent.
- Source: <https://www.energy.gov.au/electric-vehicles/electric-vehicle-basics/electric-vehicle-facts>





Electric Vehicle Fact Sheet (March 2026)

Range & Charging

- **Sufficient Daily Range:** The average Australian commute has recently grown to approximately 37 km per day, meaning even an entry-level EV with a 250–300 km range can comfortably cover a full week of driving on a single charge.
- **High-Performance Long Distance:** Most popular 2026 models now exceed 450 km of range, with flagship vehicles like the updated Tesla Model 3 and Polestar 3 reaching between 700 km and 750 km, effectively eliminating range anxiety for long-haul travel.
- **Charging Flexibility:** EVs offer the unique convenience of charging wherever there is power; they can be plugged into any standard 10-amp wall socket for overnight top-ups or connected to a dedicated Level 2 home charger for faster speeds and better control over solar energy use.
- **Predominance of Home Charging:** Approximately 80–85% of charging occurs at home, allowing owners to wake up to a "full tank" and significantly reduce fuel costs—averaging just \$0.04 per km compared to approximately \$0.20 per km for petrol.
- **Rapid Infrastructure Expansion:** Australia's public network has surged to over 1,270 fast-charging sites and thousands of "destination chargers" at hotels and shopping centers, with major highway routes now featuring charging hubs roughly every 150 km.
- **Smart Journey Planning:** Modern EVs utilize integrated navigation and apps like Charge@Large to provide real-time data on charger availability, speeds, and pricing, making it easier than ever to coordinate stops on extended road trips.

Sustainability

- **Extended Operational Lifespan:** While most new EVs feature an 8-year warranty (guaranteeing approximately 70-80% capacity), real-world 2026 data shows modern batteries typically last 15 to 20 years, with average annual degradation rates as low as 1.8% to 2.3%.
- **Rapid Carbon Payback:** Despite the energy-intensive manufacturing process, an EV usually offsets its initial "carbon debt" within 2 years of driving. Over its full lifecycle, an EV produces significantly lower emissions than a comparable petrol or diesel vehicle.
- **Circular Economy & Recycling:** At the end of their automotive life, batteries are increasingly repurposed for stationary energy storage or processed in specialized Australian facilities like EcoBatt, which can recover up to 98% of minerals (lithium, cobalt, and nickel) for use in new batteries.
- **Performance Beyond the Odometer:** Recent large-scale studies of high-mileage EVs indicate that age and distance do not strictly correlate with failure; many vehicles with over 160,000 km still retain up to 95% of their original battery health.

Source: <https://www.energy.gov.au/electric-vehicles/electric-vehicle-basics/electric-vehicle-facts>

