



**Australian
Electric
Vehicle
Association**
Est. 1973



Batteries

Battery capacity is measured in kilowatt-hours (kWh) and varies considerably. More battery means more weight, and more up-front cost.

Batteries work best between 20°C and 35°C.

Any cooler they underperform; and any hotter they risk degradation. High quality EV batteries are built with thermal management.

EV batteries should last at least 15 years before the range is deemed unacceptable. Batteries may be repurposed for solar storage and when completely spent, they are 100% recyclable.

Choose an EV with a battery which suits your typical transport needs - there's no point paying for an enormous battery unless you really need it. For trips under 10 km, why not consider an electric scooter or bike!



Range

Range depends mostly on the size of the battery and the efficiency of your vehicle. Larger, heavier vehicles, and motorcycles, will be less efficient due to increased rolling drag.

Travelling faster also consumes more energy per kilometre, so you can expect your highway mileage to be worse than your city mileage.

An efficiency of 117 Wh/km around town means a 55 kWh battery offers 470 km range.

A highway efficiency of 180 Wh/km results in 300 km of driving before you need to recharge.

Consider the weather too - strong headwinds or rain might reduce your range by over 30%.

For more detailed information on a wide variety of including range, visit the AEVA website!



A SIMPLE GUIDE TO EV OWNERSHIP

GO ELECTRIC!



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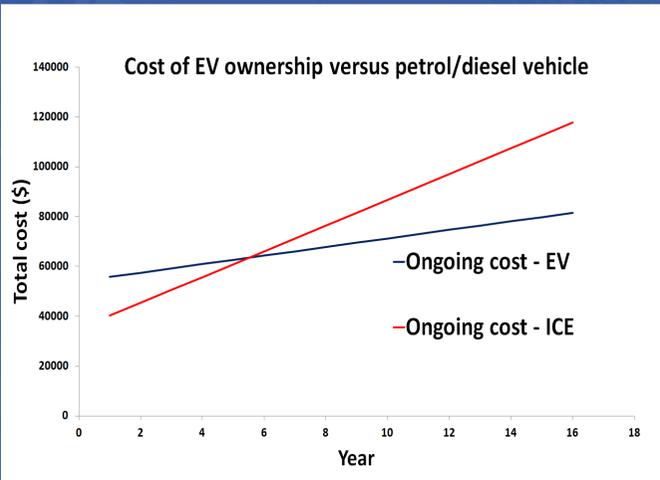
Image courtesy of Ford



EV Economics

Can I tow?

Recharging



Electric vehicles might be a little more expensive up front, but the long-term savings are huge. Australians spend around \$2000 per year in fuel, while an EV charged from the grid might cost less than \$500 per year. This drops to zero if charged from solar. The more efficient your EV the greater the savings.

Maintenance on an EV is also considerably cheaper - there's so few moving parts, nothing wears out! The economics of EVs only get better with the more km driven, so if you drive a lot, expect the savings sooner!

With abundant torque from a stand-still, EVs make great towing vehicles. Several makes and models are rated to tow up to 2 tons, while others may have tow bars fitted with formal engineering certification. Driving range drops substantially when towing heavy or bulky loads, so plan your charge stops ahead of time, and slow down a bit.

More electric utes and vans will be offered for sale in Australia over the coming years.

For more specific information about towing, range and price for various makes and models, visit the Resources page on the website.



Charging your EV is super simple – just plug in and walk away! Most people charge at home; overnight or on the weekends. A dedicated 32 amp EV charger is recommended for full convenience and functionality. Some chargers are even able to maximise solar generation, ensuring your EV is only charged on renewable energy.

Workplaces and businesses are increasingly offering EV charging to staff and customers, while changes to Fringe Benefits Tax strongly favour EVs. The average EV will only need one full charge a week, so set up a roster if there are several EV drivers. The Australian electricity grid often exceeds 50% renewable energy through the middle of the day; so let your EV soak up that clean energy!

On the highway, some DC fast chargers will provide up to 300 km in the time it takes to order a coffee, but others might take up to an hour. Most chargers require an App and/or a credit card for payment. Check out Plugshare.com for a global list of charge points, including their power levels, costs and accessibility!

