

Going Electric?

What to look for in an electric vehicle

As with any vehicle purchase, a lot depends on what your needs are. A huge range of electric vehicles is coming on to the Australian market, and it's hard to keep track of all of them. The NRMA has an excellent on-line tool to help you narrow down your selection:

<https://www.mynrma.com.au/cars-and-driving/electric-vehicles/buying/best-ev>

We're also happy to recommend you visit The Driven—an on line publication with expertise in electric vehicles: <https://thedriver.io/>

Things to think about:

Do you have access to off-street parking where you could charge the car either overnight (off peak electricity from a renewable source) or during the day (solar energy)

Are you comfortable using a smart phone and downloading and using apps to manage charging and trip planning?

Will you be able to take the car back to a dealer for annual service? (Not all mechanics know EVs yet)

Should you organise roadside assistance or does the manufacturer offer this service?



SHASA's proud electric vehicle drivers January 2022

The Nissan Leaf

SHASA did a careful study of its requirements, particularly with regard to operating range, and found that the ZE1 NISSAN LEAF would easily fit the bill—we purchased it in November 2020.

EVs offer reduced running costs and maintenance, plus high resale value.

The vehicle uses 14.5kWh per 100km, which is approximately 25% the energy requirement of a similarly sized Toyota Corolla (about 55-60kWh/100km).

SHASA further reduces running costs by mainly charging from rooftop solar.

The service interval is 20,000km or annually whichever occurs sooner. The service costs about \$240 at the moment.

If regenerative braking is used the brakes don't get used much which also saves money. No technical issues have been found (yet) (e.g. ball joints in some Fords, or control arm bushes in some VWs). There is no gearbox to fix and no oil to change.

Battery life is excellent—for most EVs, the battery will outlast the car, and can be re-used and re-purposed when no longer suitable for a vehicle.

About SHASA

Community-led solutions to climate crisis including drought, floods and bush-fires

- Solar Bulk Buy for residences
- Community facility solar and energy efficiency projects
- Hire of SHASA owned electric bicycles
- Repair Café where items are repaired by volunteers instead of going to landfill

Check out our strategic plan for SHASA's 2030 Vision

Our Aim: **100% Renewable Energy Eurobodalla by 2030.**

<https://shasa.com.au/>



SHASA Project Manager, Louise McFadden with the SHASA Nissan leaf—driving the change 2021. The Leaf is available for test drives—contact Louise on 0490 518 452.

Do You Need More Reasons to Drive Electric?

EVs make Financial Sense

- Running cost of your EV always charged from the grid is **70% lower** than for an equivalent petrol car travelling 15,000 km/yr (approximately **\$1000 vs \$3,500**).
- You can better that. If always charged from roof-top solar, your EV **running cost is up to 85% lower** than its petrol equivalent.
- Roof-top solar plus an EV will typically put close to **\$4,000 back in your pocket annually**.
- That's **\$40,000 over ten years!** That more than covers the higher EV purchase price and roof-top solar installation cost.

The end of Range Anxiety?

There is a network of [EV chargers in many locations around Australia](#). The **PlugShare** app shows available chargers for your vehicle. **NSW Electric Vehicle Strategy** goes a long way to deliver the network of chargers we need and provides other incentives too:

- \$171 million to expand the [EV charging network](#)
- Grants to local businesses to install chargers and attract EV tourists
- Gives purchase rebates of \$3000
- Phases out stamp duty on EVs, and
- Provides incentives for fleet operators.

EVs will help save the planet

- Charging your EV from rooftop solar cuts your CO₂ emissions by **3 tonnes** saving 7 tonnes in total - every single year. Just from these two measures, an **average Australian** can reduce **their annual 20t of emissions by a third**.
- EVs are better for everyone's health being both quieter and far lower in emissions. 3,000 Australians die each year from the effects of pollution ([AIHW](#)). More stringent emissions standards for transport would go a long way towards preventing these deaths.

Would you like to do more?

Interest groups can do a lot to develop actions and policies that benefit individual car owners and their communities.

Consider joining **Climate Action Monaro**, **SHASA**, your local car club/s, the **NRMA**, subscribe to **The Driven**, talk to your friends and neighbours about zero emissions transport

Contact your local representatives, Local, State and Federal and make your opinions known.



*Background research courtesy of **ZeroSE**—a Citizen's Alliance dedicated to reducing carbon emissions to zero in south east NSW. We use evidence-based research to show how to reach our emissions target and create local jobs and a healthy environment for the future. We are lobbying for policy change and individual, local and community action to support our transition to a low carbon economy.*





	 Power	 Range added per hour	 Charging time	 Typical application
Level 1 – single phase (domestic)	2.4-3.7kW	10-20km range / hour	5-16 hours	Home
Level 2 slow – single phase (domestic or public)	7 kW	30-45km range / hour	2-5 hours	Home, work, shopping centres, car parks
Level 2 fast – three-phase (public)	11-22kW	50-130km range / hour	30mins – 2 hours	Urban roadside
Level 3 – fast charge (public)	50kW	250-300km range / hour	20-60 mins	Regional near highways, motorways and key routes
Level 4 – super-fast charge (public)	120kW	400-500km range / hour	20-40 mins	Regional near highways, motorways and key routes
Ultra-fast charge (public)	350kW	1000+ km range / hour	10-15 mins	Highways and motorways

Table courtesy of Transport NSW



SHASA President Kathryn Maxwell (and a small friend), at the NRMA Batemans Bay Fast Charger