

FUTURE TRANSPORT

The current revolution of transport technology shows that battery powered EVs (Electric Vehicles) are the future. While some may debate whether an EV is better than an ICE (Internal Combustion Engine) vehicle, for most who have experienced the benefits of an EV, there is no doubt which is better. For many, the question is if and when I should change my car to an EV?

The benefits of EVs are:

- No toxic pollution
- No CO2 emissions contributing to climate change
- Quiet and powerful
- Cheap to run and low maintenance with fewer moving parts
- The total cost of ownership is less than for a similar ICE car
- You can charge at home (if that is available) so generally don't need to visit external charging stations except on longer trips

Things to consider

While most of the perceived negatives are not relevant, the issue of affordability does put EVs out of reach for many people. Most EVs with a range capable of out-of-town trips are new or near new, and are priced at the middle to upper end of the market. This is partly because the largest single cost in an EV car is the battery, making the construction of a cheaper EV with good range not yet possible. No new cars are ever cheap, and in the past we have relied on used imports from Japan to fill the affordable end of the market.

Generally, the cost of buying an EV vs an ICE vehicle comes down to the difference between the new car cost and the resale value of your existing car. This is also what you can relate the potential savings to. It is also worth considering that the resale value of ICE cars will likely plummet over the next few years, while second hand EV prices will remain strong. A new EV has a much longer life than an ICE car due to the lack of mechanical complexity and moving parts. A life of upward of 500,000km is talked about as being expected. This is twice the lifespan of a typical ICE car, and would likely make it a much better prospect than a \$15,000 second hand car every 5-10 years.

Some banks offer funding at lower interest rates, as buying an EV is seen as investment. By reducing ongoing running and maintenance costs, and working to reduce the effects of climate change, that makes it quite a different investment buying a new ICE vehicle.

What should I do from here?

Aiming for a low carbon future means that we will all be moving toward EVs within what is likely to be a surprisingly short time. To that end buying a new ICE vehicle will likely become a costly mistake as used ICE vehicle prices will sharply decline when people realise the running costs are higher, and there is an oversupply of second-hand options as new EVs come into the market in large numbers. If possible, selling your used ICE car before the market starts to decline and moving to an EV to start saving money on maintenance and running costs as soon as you can would be good option if it is affordable.

The first step would be to investigate what funding is available and consider all costs such as interest and insurance when deciding what are your best options, so if you provide E4E with information such as: your weekly routines; whether you have a garage or off-street parking; your existing vehicle; your family situation; and frequency of trips out of town, we will then make recommendations as to your best options.

Some perceived negatives are:

- Range of battery
- Charging speed
- Lack of charging infrastructure
- Battery degradation
- Upfront costs

Second-hand options

Nissan Leaf EV, and Mitsubishi Outlander plug-in hybrid (PHEV), are currently the most affordable second-hand EVs on the market.

The Mitsubishi Outlander plug-in hybrid offers significant savings in running costs. While its full electric range is somewhat limited at around 20-30km, this suits many people for close-to-home use. Being a hybrid with a petrol engine means it can be taken on longer trips. This is a reasonably large, efficient family car, so prices have stayed strong, with 2016 versions still retailing between \$25,000 and \$35,000.

A Nissan Leaf is a full electric vehicle which has been around since 2010 and is still being made. While it generally has limited range for road trips, for affordable inner city driving the second hand cars available are very hard to beat!

If you can find a second hand Mitsubishi or Nissan Leaf with good battery health and an adequate travel range for your lifestyle they are probably the most affordable and cost-effective cars there is!

Alternative transport

And don't forget, it's also worth considering alternative transport options that are easier on the planet and your wallet such as walking, cycling, e-bikes and e-scooters or public transport, all of which reduce pollution, traffic congestion, and parking costs!

