

Electric vehicles

Frequently asked questions



We're getting EVs!

The Shire of Harvey will transition 30 per cent of its light vehicle fleet to electric vehicles by 2030. This will save the Shire approximately \$3000 per year.

This initiative is part of the Shire's plan to improve sustainability across its operations and safeguard against the impacts of climate change.

FAQs

Why is the Shire getting EVs?

EVs have lower operation and servicing costs, they will also reduce the Shire's operational emissions.

Aren't significant emissions generated through the battery sourcing and manufacturing process?

An EV has slightly higher manufacturing emissions than an internal combustion engine vehicle, however, when the EV is charged via renewable energy, it's estimated to mitigate emissions from the battery sourcing/manufacturing process after approximately 15,000km - 18,000km. This is a result of there being zero tailpipe emissions.

If an EV is charged entirely via the South West Interconnected System (SWIS), which is the main power grid in WA, it will become greener than a petrol vehicle at approximately 45,000km.

How will the cars be charged?

The fleet vehicles will be predominantly charged via solar PV systems at Shire facilities.

This number will continue to reduce as more of the WA grid is powered by renewable energy. For example, the Tasmanian grid is 95% - 100% renewable energy, so the offset point is significantly lower at 20,000km.

For more information, please visit the [Lifecycle Emissions Calculator - Electric Vehicle Council](#)



FAQs

When do solar panels offset their manufacturing emissions?

Manufacturing of the solar PV panels is estimated to be mitigated after 4 – 8 months of operation.

Are the batteries recyclable?

Yes, an EV battery is 98% recyclable and the recycling of lithium-ion batteries currently takes place within Australia.

Are electric vehicles cheaper to maintain than combustion engine vehicles?

EVs have lower running costs than petrol, diesel or hybrid vehicles since they have fewer moving parts, and have less components that require servicing. For some EV models, owners are estimated to save between \$300-\$400 every year in maintenance costs compared to an equivalent combustion engine vehicle.

What is the mix of the energy grid in WA?

In 2023, 35% of all power generation from the South West Interconnected System (SWIS) in WA came from renewable energy.

Where does a lot of the lithium come from?

The largest hard-rock lithium mine in the world is in Greenbushes, WA. One of the largest lithium hydroxide processors has an operation within the Shire of Harvey's boundaries.

Where can I go for more information?

- [Electric Vehicle Council](#)
- [Electric Vehicle Lifecycle Calculator](#)
- [WA Government Electric Vehicle Strategy and Information Services](#)

