Notice of Motion

For Council OCM June 16 2020, for Motion to be on the Agenda of OCM 21 July 2020

Motion: That, within the next twelve months, the Merredin Shire Council should purchase for the Shire fleet a battery-electric (BEV or EV) passenger vehicle. This vehicle should not be additional to the vehicle fleet, but should replace one passenger vehicle sold after the usual retention period of 12 months.

Background

Although still relatively rare in Australia, and especially in rural Australia, BEVs are no longer experimental or unproven. It is time that the Shire purchased an electric vehicle, and join an increasing number of urban and rural shires around Australia that, by doing so, are displaying their commitment to innovation and sustainable energy practices.

There is world-wide science-based concern about climate change, associated with a rise in greenhouse gas emissions. Vehicle emissions are responsible for some of the greenhouse gases, and also for other noxious gases. Compared with internal combustion engine – driven (ICE) vehicles, EVs emit no exhaust gases. EVs are much more economical than ICE vehicles (at least half as expensive) to both fuel and to maintain. To drive, an EV is similar, but superior to an ICE automatic vehicle, especially in relation to acceleration, silence and ability to regain some battery charge while slowing or descending.

Criticisms of EVs currently relate to purchase price, range, battery issues (especially replacement cost) and ease and speed of battery charging. For the Shire an EV purchase price will be markedly less than for a private citizen. There are now at least three EV models available in Australia that will travel ~400 km or more on a full charge. Battery warranties are generally for ~8 years. Most privately owned EVs are charged at home for ~80% of the time, often from an owner's solar PV system. The Shire has numerous arrays of PV panels on Shire property so would obviously use their own power for most charging. For travelling, a network of vehicle chargers is now widespread in WA, though admittedly they are less common in rural areas. Fast DC chargers, that will charge a battery to 80% in ~40 minutes or less, are mainly still limited to the city and SW coastal areas. So-called destination chargers will take perhaps 5-8 hours for 80% plus charge. This is quite satisfactory for an overnight stay or longer daytime stop.

The rapid uptake of solar photovoltaic (PV) panels for private and commercial use illustrates that citizens are willing to take action, given clear environmental and economic incentives for PV systems. The logical next step for many who have home PV arrays is some kind of battery storage (at home or in the community) and an electric car. Both of these, though desirable, are currently not yet cost effective for most people. The Shire should show leadership in obtaining an EV, and explain to the community why it has taken this step. The vehicle should be made readily visible by signage or other distinguishing feature.

The following websites contain relevant information:

Best website for EV info is The Driven https://thedriven.io/

Australian EV owners https://www.aeva.asn.au/

For general sustainable technology info, including EVs, One Step Off The Grid <u>https://onestepoffthegrid.com.au/</u>