EV Transition Resources – Councils

The following links and resources offer fleet transition planners straightforward and reliable electric vehicle information. The pack is up-to-date as of September 2024.



EV basics and Vehicle data

Electric Vehicle Council – great resources on vehicle models, charging, the latest rebate programs nationally and much more. <u>https://electricvehiclecouncil.com.au/</u>

NRMA EV Hub- While consumer focussed, this site offers lots of practical advice on EV basics and how to. Scroll to the FAQ on each page:

- EV Basics https://www.mynrma.com.au/electric-vehicles/basics
- Light vehicle buying guide https://www.mynrma.com.au/electric-vehicles/buying
- EV ownership https://www.mynrma.com.au/electric-vehicles/owning
- Charging FAQs <u>https://www.mynrma.com.au/electric-vehicles/charging</u>

Driven.io EV model list - Australia's premier EV focussed online publication has an actively updated list of current and coming models, their attributes and pricing. https://thedriven.io/ev-models/

Vehicle Emission Star Rating (VESR) – This upgraded approach to the green vehicle guide and star rating offers fleets a comparison for light vehicles emissions presented by the NSW Govt and endorsed by all Australian jurisdictions. <u>https://www.vesr.gov.au/</u>

NSW Govt EV fleet incentives - The NSW Govt provides financial incentives for fleets meeting its conditions (including local government).

https://www.energy.nsw.gov.au/business-and-industry/programs-grants-andschemes/electric-vehicles/electric-vehicle-fleets

FairCharge UK – the little book of EV Myths – the best single source for EV mythbusting. <u>https://www.faircharge.co.uk/little-book-of-ev-myths</u>

Consumable Media

Podcasts and online videos can be a great source of information, the following are some good local sources. The list below suits both people who are beginning with EVs or who are more experienced.



Podcasts

- Watts under the bonnet Australian automotive journalists engage guests on their experience questions and concerns. Their 22nd August 2024 episode on common questions and myths is particularly good for initial learning.
- Emerging possibilities Focussed on zero emission trucking and hosted by Volvo Trucks e-Mobility specialists, they engage industry experts in trucking to discuss the challenges and opportunities in electric trucking.





Blogs

ZEV Integrations – Our website includes several blogs addressing myths and misinformation around EVs. <u>https://zevint.au/</u>

Online videos (YouTube)

Fully Charged UK – The largest, longest running and most accessible EV video channel https://www.youtube.com/@fullychargedshow

EVSE - Charging basics and selection https://www.youtube.com/@evsecharging

Engineering Explained – a world renowned explainer of EV technology for those who want to know a bit more under the skin.

https://www.youtube.com/@EngineeringExplained

EV FireSafe – The most comprehensive EV fire research, preparation and response platform in the world (and they are Australian) <u>https://www.youtube.com/@evfiresafe</u>

Risk Management

EV FireSafe - The most comprehensive EV fire research, preparation and response platform in the world. Their website offers great resources including:

- EV Fire FAQs <u>https://www.evfiresafe.com/ev-fire-faqs</u>
- Latest global EV fire statistics
 <u>https://www.evfiresafe.training/ev-fire-latest-data</u>
- Risks and charging training course
 <u>https://www.evfiresafe.training/course/ev-charging-fire</u>

Don't forget to download the free EV Charging reminder sign (Click the poster here to link to the download)



Information provided to support fleets and operators to engage in transport decarbonisation. Links may break over time and content should be used as part of your research. For direct engagement find us at <u>www.ZEVint.au</u>



Charging

EVSE - Great written advice at the website https://evse.com.au/

EV Council – charging info and many suppliers of EV charging equipment listed. https://electricvehiclecouncil.com.au/a-z-charging/

In general there are dozens of charging suppliers that are looking to support your charging needs. Much of the product is similar in design and components. Importantly you need to ensure that the company is reputable and their products are built to Australian standards. The market has matured and there are many brands and levels of quality available.

Develop your charging procurement process from the findings of your plan. Ensure it is a tight specification but only after you have explored the many options available to you. Get many quotes. Consider the future but don't procure for the entire solution up front as technology and pricing will change.

Technical Training

Many components of an EV are the same as a traditional ICE vehicle, and do not require an EV qualification (e.g. changing a tire or wiper blades). Technicians undertaking more in-depth maintenance, however, will need to be trained to be safe, effective and efficient. Consider whether the EVs manufacturer will undertake this in-depth maintenance before you decide on training. Consider whether a couple of people in the workshop with a special interest could be trained rather than the complete staff. Local training options are:

CIT EV TAFE Centre of Excellence – Canberra is the hub for the best EV training in Australia and has been offering EV training for over 6 years. They are now leading the nation as the first EV Centre of Excellence and will support other states to grow capacity. <u>https://cit.edu.au/about/ev_tafe_centre_of_excellence</u>

All State TAFEs and Motor Traders Associations (MTA) offer EV technical courses. Contact your typical technical skills provider for the right training for you workforce.

Managing change and the growth in confidence

EVs are a new technology and those engaged need to have their confidence developed – usually though experience. Try the following approaches:

• Test drives - Ensure this includes light trucks, vans and all types of light vehicles. Ensure the experience is extended to senior decision makers as well as end users. Suit the test drive to the user i.e. expand beyond passenger cars to include light trucks, vans and possibly heavy vehicles. For example, managers and staff



responsible for parks will want to understand light trucks and vans, as much as passenger cars. Resource recovery and the executive may want to understand all types of vehicles.

- Engage in fleet and trade events Most vehicle manufacturers are engaging in trade shows and fleet focused events on a quarterly basis around the country. Engage in these events too make the most of several vehicles and specialists in one place. The Electric Vehicle Council, IPWEA, AfMA and NRMA are a good source of information about these.
- Follow key publications there are many publications in the market offering
 information on new EVs. Some including <u>www.thedriven.IO</u> and
 <u>https://fleetevnews.com.au/</u> offer good information relevant to fleets. Not all EV
 information is grounded in reality, be cautious and engage in fact checking.

CO2 calculations

The method for calculating CO2 and other greenhouse gas (GHG) emissions is set by the Australian Government: National Greenhouse Accounts Factors - DCCEEW

Calculations are generally straightforward and for a given type of vehicle is typically:

[litres of fuel consumed] x [emissions factor] = [amount of greenhouses gases emitted]

The emissions factors for petrol and diesel recently changed in order to include the GHG emissions from previously unrecognised activities. In summary these factors now include the Scope 3 emissions associated with the fuel's extraction, processing and transport. The result is a rise of around 25% over factors used in recent years, and vehicles therefore contribute more to a council's carbon footprint than previously thought.

Carbon Emissions Factors Simplified

The Australian National Greenhouse Accounts Factors document describes the full calculation, and in summary the updated emissions factors (s of 2023) are:

1 litre of diesel consumed in a modern truck (built after 2004) = 3.3817kg CO2-e

1 litre of petrol (gasoline) consumed in a vehicle or plant = 2.9008kg CO2-e

Note: CO2-e = carbon dioxide equivalent. This represents all the combined factors of all GHGs in the fuel, scaled to a carbon dioxide equivalent to provide one metric.

Emission factors differ for some diesel vehicles based on emissions control systems. Modern trucks have systems to better burn the fuel and reduce the release of methane (a strong GHG) while plant and equipment often do not. The factor changes very marginally and for fleet planning the truck value is sufficient.



Climate and carbon information

4 minute explainer from David Attenborough (video): BBC One - Climate Change - The Facts, Climate Change – The Facts in 4 minutes https://www.bbc.co.uk/programmes/p076w7g5

Basics from NASA: What Is Climate Change? | Facts – Climate Change: Vital Signs of the Planet <u>https://science.nasa.gov/climate-change/what-is-climate-change/</u>

Basics from the UN: Facts about the climate emergency | UNEP - UN Environment Programme <u>https://www.unep.org/climate-emergency</u>

Quick climate glossary: A quick guide to climate change jargon – what experts mean by mitigation, carbon neutral and 6 other key terms <u>https://theconversation.com/a-quick-guide-to-climate-change-jargon-what-experts-mean-by-mitigation-carbon-neutral-and-6-other-key-terms-167172</u>

Zero emission vehicle (ZEV) technologies



ICE engine and small battery

25-40km electric range

Eg: Mitsubishi Outlander, MINI PHEV, 2025 Ford Ranger



BEV

Battery Electric Vehicle

Battery only

150-600km range

Eg: Hyundai loniq, Nissan Leaf, Tesla, BYD, MG ZS and 4



FCEV

Fuel Cell Electric Vehicle

Hydrogen tank & small battery

Around 400km on tank

Eg: Toyota Mirai, Hyundai Nexo

Information provided to support fleets and operators to engage in transport decarbonisation. Links may break over time and content should be used as part of your research. For direct engagement find us at www.ZEVint.au

