



# The Australian New Vehicle Efficiency Standard

Leveraging Off CER.

Chris Lehmann & Georgia Holmes 29 February 2024 Master Electricians Australia (MEA) is the trade association representing electrical contractors recognised by industry, government and the community as the electrical industry's leading business partner, knowledge source and advocate. You can visit our website at <a href="www.masterelectricians.com.au">www.masterelectricians.com.au</a>

As strong advocates for consumer energy resources (CER) and the significant role EV batteries have in optimising its benefits, MEA supports implementation of the New Energy Vehicle Standard (NVES) in an effort to increase household purchase of EVs. While our expertise is limited to the role of EVs within CER, we are taking the opportunity to respond as an industry signal of support for the NVES. Moreover, MEA believe CER provides solutions to some limitations identified throughout the consultation paper.

### **EVs as Part of Consumer Energy Resources**

Throughout multiple Federal and State consultations, MEA has advocated for CER which provides cleaner, cheaper and more reliable energy for consumers. EV batteries play a vital role in optimising CER as they provide a reservoir to soak excess solar energy, with the possibility of being dispatched during times of need.

#### **Limitations**

### **Charging Capacity**

The consultation paper identified charging infrastructure capacity as a limitation. We further note the growing prevalence of EVs is expected to exert additional strain on our energy grid. The escalating demands for charging will jeopardise the stability, reliability and affordability of our traditional energy supply. However, through solar PV, consumers will have the ability to charge their EVs at home through independently sourced solar power, inherently alleviating demand pressures on both public charging infrastructure and grid stability.

## Stakeholder Confidence/Communicating Long-Term Benefits to Consumers Cost Savings

The combined consumer fuel and energy cost savings enabled through EVs (when paired with solar PV) will significantly increase household disposable income. Utilising key stakeholders such as Government and industry leaders to raise awareness and education towards these financial benefits is likely to aid in promoting EVs despite the initial capital costs.

### **Bi-Directional Charging**

To enhance the consumer benefits of embracing EVs, MEA see it imperative that any future policies and legislation incorporate and promote the ability for household bi-directional charging. The current network infrastructure enables one-way energy supply, however, with EV batteries consumers can participate in a two-way energy supply chain by using the stored excess energy from the large capacity batteries in EVs for household consumption (thereby reducing the evening peak demand) or exporting back to the grid for a financial return. The prospect of reducing energy costs through EVs provides additional incentive for consumer uptake, combining transport with energy storage capacity for households.

### **NVES Option Selection**

As aforementioned, EV regulation is beyond MEA's expertise. However, we note option B appears to be most aligned with the electrical industry's interests. State and Federal electrification consultations have both immediate and longer targets for achieving the transition. Option B's pace and flexibility best aligns with momentum in the electrification arena.

### **Conclusion**

MEA supports the NVES in an effort to increase the number of EVs in Australia. Solar PV and EV batteries complement each other, with Solar PV mitigating charging infrastructure problems and EV batteries providing a reservoir to store excess solar energy. Overall, both contribute towards increasing households' disposable income while reducing carbon emissions.

We hope to see any further regulatory development regarding EV infrastructure consider the benefits of solar PV, ensuring that bi-directional charging capabilities are integrated into the network as a readily available option, increasing the amount of dispatchable energy in the NEM.

We appreciate the opportunity to participate in the NVES consultation and hope to be apart of any further discussion.