



**Australian Government**  
**Australian Renewable**  
**Energy Agency**

**ARENA**

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Attn: Director, Fuel Efficiency Standards – Surface  
Transport Emissions and Policy Division

Department of Infrastructure, Transport, Regional  
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## **ARENA response to the proposed design and implementation of Australia’s New Vehicle Efficiency Standard (NVES)**

This submission provides information and insights relevant to the proposed New Vehicle Efficiency Standard.

### **ARENA supports the early introduction of an Australian NVES**

ARENA supports the swift introduction of the NVES, as we agree Australians will be better off the sooner we can secure the supply of lower and zero emission vehicles (ZEV) to help reach Australia’s 2030 greenhouse gas emission reduction targets.

In response to the Department’s consultation in 2023, ARENA proposed three suggestions<sup>1</sup> on the design details of the Fuel Efficiency Standard:

- Consider other right-hand drive markets as a group when determining an appropriate efficiency standard.
- Beginning sooner with a softer standard is preferable to a steeper trajectory after a later start date.
- Vehicle-to-everything (V2X) capability (i.e. capability to plug in appliances and export electricity to the home and the grid) should be considered as a bonus credit.

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<sup>1</sup> [cca-australian-renewable-energy-agency-arena.pdf \(infrastructure.gov.au\)](https://www.infrastructure.gov.au/cca-australian-renewable-energy-agency-arena.pdf)

Upon reading the 2024 Consultation Impact Analysis report<sup>2</sup>, ARENA understands the Government is consulting on three options:

- **Option A:** Slow Start, which does not seek to catch up to other jurisdictions.
- **Option B:** Fast but Flexible, with the intention to balance extremely high costs while supporting supplier investment. This option omits technology credits (e.g. super-credits and off-cycle credits) to reduce the risk of the NVES not meeting emissions reduction or fuel cost saving targets and reduces administrative costs.
- **Option C:** Fast Start, provides the fastest transition in an effort to catch up to the United States by 2027. This option results in high net benefit and greater emissions abatement but risks the unavailability of technology.

Consistent with our submission to the previous consultation, ARENA's comments on the options outlined in the Consultation Impact Analysis report are as follows:

1. ARENA supports the introduction of the NVES on 1 January 2025. Early commencement of the NVES reduces the time needed for Australia to align with international standards and secure adequate supply of low-emission vehicles to meet our decarbonisation target.
2. ARENA supports the introduction of Option C, as it will send a clear signal to international car makers and suppliers to provide Australia with more low-emission and electric vehicles (EVs). Option C also is the most effective option to reduce emissions, provides improved access to electric vehicles and leads international standards on NVESs. ARENA also has a particular interest in encouraging international car makers to increase supply of low-emission and EVs to Australia in order to support ARENA-funded EV and V2X projects.
3. ARENA does support the NVES adopting the details associated with either Option B or Option C, as set out in Table 4 *Options for NVES policy settings*<sup>3</sup>.
4. ARENA agrees that the inclusion of technology credits may complicate and potentially dilute the effectiveness of the NVES and therefore should not be adopted at the outset. However, ARENA maintains that V2X capability provides an exceptional opportunity for consumers and the grid and we believe that future amendments to the Standard should consider the introduction of V2X-specific technology credits.

### **The benefits of V2X outweigh the potential administrative burden and warrant a technology credit**

V2X offers significant potential to reduce emissions and deliver customer value in a variety of non-transport related ways. For this reason, ARENA maintains support for the implementation of a modest off-cycle credit to encourage manufacturers to adopt V2X. The off-cycle credit would operate until this technological capability becomes mainstream.

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<sup>2</sup> [Cleaner, Cheaper to Run Cars: The Australian New Vehicle Efficiency Standard—Consultation Impact Analysis \(infrastructure.gov.au\)](#)

<sup>3</sup> Pages 32-35 of the Consultation Impact Analysis report.

There are many benefits that can be derived from supporting more V2X-enabled vehicles in Australia, including but not limited to:

- **Vehicle-to-load (V2L):** The ability for mobile tradespeople to plug electrical tools into a socket provided in the vehicle can reduce the use of thermal fuel-based tools and devices (e.g. diesel generators), further reducing emissions and providing a reliable source of power for workers on the move.
- **Vehicle-to-home (V2H):** EV battery capacity is increasing quickly and is already at a point where vehicles can provide back-up electricity for homes for several days during power outages. This is a particularly important consideration in regional and rural areas that are increasingly susceptible extreme weather events like storms and bushfires that disrupt power.
- **Vehicle-to-grid (V2G):** V2G capability provides the potential for EV batteries to reduce customers' energy bills and reduce substation critical peak demand. ARENA commissioned enX Consulting to explore the role of alternative network tariff arrangements in supporting V2G operation and found that V2G is more cost-beneficial than smart charging for all customers under all modelled scenarios with average savings per household of \$550 per annum<sup>4</sup>.

### Decarbonising transport: an ARENA strategic priority

ARENA has identified decarbonising transport as a key strategic priority and is supporting innovation to accelerate the decarbonisation of transport in Australia, with the goal of reaching net zero emissions in this sector by 2050.

ARENA has a long history of supporting transport innovation. Announced in 2022, the Government's Driving the Nation Fund<sup>5</sup> provides \$500 million to invest in cheaper and cleaner transport. This program builds on the former Future Fuels Fund, established in 2020, which provided support for business fleets, new technologies for heavy and long-distance vehicles, public charging, smart charging, and hydrogen refuelling stations.

### About ARENA

The Australian Renewable Energy Agency (ARENA) was established in 2012 by the Australian Government. ARENA's function and objectives are set out in the *Australian Renewable Energy Agency Act 2011*.

ARENA provides financial assistance to support innovation and the commercialisation of renewable energy and enabling technologies by helping to overcome technical and commercial barriers. A key part of ARENA's role is to collect, store and disseminate knowledge gained from

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<sup>4</sup> [Network Tariffs for V2G \(arena.gov.au\)](https://www.arena.gov.au/network-tariffs-for-v2g)

<sup>5</sup> [Driving the Nation Program - Australian Renewable Energy Agency \(ARENA\)](https://www.arena.gov.au/driving-the-nation-program)

the projects and activities it supports for use by the wider industry and Australia's energy market institutions.

Please contact Adrian Salinas, Knowledge Sharing Manager, at [adrian.salinas@arena.gov.au](mailto:adrian.salinas@arena.gov.au) if you would like to discuss any aspect of ARENA's submission.

Yours sincerely,



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