

4 March 2024

Department of Infrastructure, Transport, Regional Development, Communications and the Arts
Australian Government

Submission on the New Vehicle Efficiency Standard – Consultation Impact Analysis

Nexa Advisory appreciates the opportunity to contribute our perspectives in endorsement of the Federal Government's New Vehicle Efficiency Standard (NVES). We warmly welcome this much-anticipated initiative as a commendable step towards enhancing the efficiency of the vehicle fleet.

Context

Nexa Advisory is very pleased with the Federal Government's proactive approach with the release of the NVES and we strongly support the recommendations put forth by the Federal Government.

In Nexa's submission on the National Fuel Efficiency Standard in May 2023¹, we provided policy measure recommendations focussed on fleet policies, promoting the second-hand EV market, supporting low-income households, ensuring charging infrastructure access, and aligning with global EV policy trends. Nexa asserts that the success of the NVES will be maximised by implementing the standards and regulations previously recommended by us, aimed at enhancing market access for EVs.

Similarly, in our submission to the National Electric Vehicle Strategy in October 2022², Nexa urged the Federal Government to set ambitious goals for decarbonising the transport sector, aligning fuel efficiency standards with the EV strategy. Without such standards, manufacturers lack the incentive to bring EVs to Australia, limiting the availability of efficient vehicle choices for Australians. Nexa stresses that the full benefits of introduced incentives and policies will only be realised with the introduction of a fuel efficiency standard, increasing the supply of electric vehicles in the country.

Preferred option

While Nexa endorses Option B, aiming to strike a balance between ambition and achievability, we also express strong support for Option C, which represents the most stringent and ambitious approach. Our rationale for backing Option C stems from concerns about Option B's ability to attract the most efficient vehicles to Australia. Despite Option B intending to align with US standards by 2028, Nexa believes this might not incentivise manufacturers to prioritise Australia over the US or other jurisdictions.

¹ <https://nexaadvisory.com.au/nexa-advisory-submission-national-fuel-efficiency-standard/>

² <https://nexaadvisory.com.au/site/wp-content/uploads/2023/06/National-Electric-Vehicle-Strategy-Submission-Nexa-Advisory.pdf>

We contend that Australia should introduce fuel efficiency standards that not only match but preferably surpass global benchmarks. Simply meeting existing standards in other markets puts Australia in the queue for EVs without standing out. EV manufacturers prioritise markets demonstrating leadership in EV and fuel efficiency standards. Merely revamping old standards will not suffice; for significant benefits, Australia's fuel efficiency standard must be robust, competitive, and well-crafted. To realise these advantages, Australia must compete with major markets that manufacturers already favour. Nexa advocates for a science-aligned vehicle emission reduction target, aiming for zero emissions in our new vehicle fleet by at least 2035.

Level of ambition needed

Aligning with EU standards presents the most effective position for Australia. The EU has enforced fuel efficiency standards for light vehicles since 2012, encompassing all car manufacturers within its region. The breadth and advancement of EU standards surpass those of other countries, creating further incentives for manufacturers to prioritise delivering their most efficient vehicles to the EU market first.

This preference for the EU is exemplified by Europe's anticipated leadership in EV adoption. For instance, Kia is aiming for a 100% EV lineup in Europe by 2030 and globally by 2035³. The EU has implemented rigorous fuel efficiency standards through regulations like Regulation (EU) 2019/631, which sets CO₂ emission performance standards for new passenger cars and vans⁴.

The EU standard encourages collaboration among suppliers to comply, phasing out multiplier credits to incentivise the supply of vehicles producing less than 50 g CO₂/km, and introducing low and zero emission vehicles (LZEV) sales targets from 2025⁵. 'Off-cycle' credits are granted for approved eco-innovations, addressing real-world fuel reduction conditions not covered in official laboratory tests.

The current EU g CO₂/km standard for 2020 to 2024 targets a fleetwide average of at least 95 g/km for new passenger vehicles and 147 g/km for light commercial vehicles. Additional reductions of 15% are mandated for 2025, with further targets for 50% by 2030 and 100% reduction by 2035, making it impossible to sell new fossil fuel-powered vehicles in the EU beyond that timeframe⁶.

Should the Australian FES fail to align with the proportional reduction in emissions seen in leading markets, particularly the EU, Australia's greenhouse gas reduction and EV adoption are at risk of lagging. The absence of globally competitive FES emissions ceilings risks

³ <https://www.infrastructure.gov.au/sites/default/files/documents/cleaner-cheaper-to-run-cars-the-australian-new-vehicle-efficiency-standard-consultation-impact-analysis-february2024.pdf>

⁴ https://climate.ec.europa.eu/eu-action/transport-emissions/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en

⁵ <https://www.infrastructure.gov.au/sites/default/files/documents/fuel-efficiency-standard-cleaner-cheaper-run-cars-australia-consultation-paper-april2023.pdf>

⁶ https://climate.ec.europa.eu/eu-action/transport/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en

providing inadequate incentives for global vehicle manufacturers to supply sought-after EVs to Australia.

Additional benefits EVs

The NVES has yet to explore the additional advantages associated with the growing adoption of EVs, particularly in terms of electricity load balancing services enabled by smart energy management.

Implementing smart energy management systems presents a viable solution to address the minimum demand challenges in the electricity network. The integration of EVs introduces a new load to the National Electricity Market (NEM), making an important contribution. Pairing this with incentive-driven tariffs for public charging offers substantial benefits to both the system with EV users.

Original Equipment Manufacturers (OEMs) are crucial in promoting smart management of charging demands by engaging in activities like developing communication protocols, executing load management strategies, facilitating V2G technology, integrating renewable energy and offering data analytics and insights.

For example, V2G technology allows EVs to function as energy storage systems, delivering advantages like grid stabilisation while recharging stored energy during periods of low demand. OEMs can employ V2G technology to transfer electricity between the EV battery and the power grid, allowing owners to receive pricing incentives from service providers and aggregators for selling excess energy back to the grid during peak hours.

An important caveat to consider is the matter of control. Drawing insights from the experience with distributed energy resources (DER), it is vital to establish consumer trust early on for effective smart EV energy management. It is imperative that the introduced solutions prioritise consumer outcomes, fostering incentivised behaviour and building trust to facilitate the development of more effective solutions.

Nexa strongly advocates for the inclusion of smart energy management benefits in the cost-benefit analysis. Additionally, to realise the full advantages of smart energy management, there is a need for improved technical standards and regulations for DER. Nexa cautions against the implementation of complex state-based technical standards imposed by distributed network services providers (DNSPs). These requirements are being imposed onto EV owners, and are technically infeasible, as exemplified by the recent charging mandates in Queensland⁷. Therefore, the NVES should be supported by updated standards and regulations that align with the opportunities presented by smart energy management.

⁷ <https://www.talkingenergy.com.au/qecm2023>

About Nexa Advisory

Nexa is a full-service advisory firm. We work with public and private clients including renewable energy developers, investors and climate impact philanthropists to help accelerate efforts towards a clean energy transition. We've been shaping the energy industry for over 20 years. With a proven track record across policy creation, advocacy, political risk assessment and project delivery, we're holistic in our approach and deliver solutions with commercial intent.

The Nexa Advisory team is a collaboration of passionate energy specialists, all committed to the successful transformation of Australia's energy markets. The team is focused on helping clients grasp the unpredicted opportunities the energy transformation will bring. The decentralisation of energy promises, for the first time, to enable a truly democratised ecosystem with people and communities at the centre. We believe in an energy industry where people are at the centre of every recommendation we make. This belief guides our approach to the challenges we solve, and the outcomes we create.

Thank you again for the opportunity to comment on this important consultation. Please feel free to contact me if you would like to discuss any aspects further.

Yours Sincerely,

Stephanie Bashir
CEO and Principal
Nexa Advisory