Australia and New Zealand

Institute of Transportation Engineers

Australia and New Zealand Section Inc

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Consultation Hub Electric Vehicle Strategy https://consult.industry.gov.au/national-electric-vehicle-strategy/submission

cc The Hon. Catherine King, MP Minister for Infrastructure, Transport, Regional Development and Local Government <u>Minister.King@mo.infrastructure.gov.au</u>

The Hon. Chris Bowen, MP Minister for Climate Change and Energy Chris.Bowen.MP@aph.gov.au

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Dear Ministers

NATIONAL ELECTRIC VEHICLE STRATEGY

We make this submission in response to the National Electric Vehicle Strategy Consultation Paper of September 2022.

The Institute of Transportation Engineers - Australia and New Zealand Section (ITE-ANZ) is part of an international organisation representing a community of transport professionals including transport engineers, transport planners, urban planners, consultants, educators and researchers. Globally, the ITE works to improve mobility and safety for all transport system users and helps build smart and liveable communities. Founded in 1930, the ITE community has about 16,000 members working in more than 75 countries. Within Australia and New Zealand, ITE-ANZ activities cover all transport modes, transport advocacy and professional development.

The ITE-ANZ welcomes this work towards a National Electric Vehicle Strategy and the government's policy commitments to encourage the take up of EVs.

Policy Position

ITE-ANZ firmly supports the adoption of mandatory vehicle emission standards in Australia. This reform is long overdue and should be implemented with the greatest urgency. The standards should be ambitious, and they should be progressively tightened over time to align with those adopted by comparable countries around the world.

Terminology

We prefer the legislation to be called "vehicle emission standards" rather than "fuel efficiency standards" because, strictly speaking, electricity is not a fuel. Electricity is an energy carrier, whereas fuel is a combustible material. The standards relate directly to the output of CO_2 emissions across the fleet, rather than fuel consumption. Nevertheless, the policy outcomes are more important than the name.

Policy Justification

Compared to similar countries, Australia's transport is energy intensive and inefficient. The transport sector contributes around 19% of CO_2 emissions. Since 2005, transport emissions in Australia have increased more than 60%. The average CO_2 emissions for new passenger and light commercial vehicles sold in Australia is 45% higher than in Europe.

Mandatory vehicle emission standards have already been legislated in all comparable countries. It is a national embarrassment that Australia and Russia are the only developed countries that have not taken this important step.

There is a long lead time to reduce emissions due to the time it takes for the vehicle fleet to turn over. Immediate action is required for there to be any hope of meeting emissions reduction targets in this sector by the agreed target date of 2050.

Global manufacturers already have vehicles which meet the low emission standards set by countries in the major international markets. However, many of these low emission models are not available in Australia because, without mandatory standards, there is a strong incentive for the industry to continue to sell their petrol- and diesel-powered vehicles in the Australian market. Globally, carmakers are rolling out more EV and hybrid models, but Australians are being denied access to most of them due to the lack of mandatory emission standards.

The Federal Chamber of Automotive Industries (FCAI) is monitoring average emissions from each manufacturers' vehicle sales, but this process is purely voluntary and is having limited impact.

As well as reducing CO_2 emissions, the transition to low emission vehicles will have the following important benefits:

- It will lead to a decrease in vehicle operating costs which will create savings to industry as well as individual households.
- Low emission vehicles provide public health benefits by reducing particulate pollutants and noxious gases in the air that we breathe, and reducing noise pollution.
- A reduction in overall fuel consumption will improve Australia's fuel security and ability to survive supply disruptions. It will also create a large economic benefit in reducing one of Australia's largest balance of payments liabilities: the purchase of imported oil. Most of Australia's fuel is refined offshore, which represents a strategic risk in the current international climate. Australia has no onshore strategic fuel reserve.

Leaving vehicle emission improvements to market forces is clearly not enough. Although the number of EV and hybrid vehicles is slowly increasing, evidence from other countries and all Australian studies show that technology-neutral, mandatory measures are necessary to achieve accelerated reduction in CO_2 emissions. EVs were 3% of sales in Australia in 2021, lagging the OECD average of 8%.

Of all the policy options available to the government to achieve climate change targets in the transport sector, imposing mandatory CO_2 standards is one of the easiest to implement with no adversely affected groups. The government would only need to fund the administrative costs, which would be minimal, and could be covered by any penalties imposed on the auto industry. It would be a simple matter to adapt the regulatory model from one of the more enlightened countries. The introduction of mandatory emission standards is self-evidently the most effective way to achieve a faster transition to low emission vehicles over the next two decades.



Responses to Issues Raised

- 1. Do you agree with the objectives and do you think they will achieve our proposed goals? Are there other objectives we should consider?
- Yes. We fully support these objectives.
- 2. What are the implications if other countries accelerate EV uptake faster than Australia?

Australia is currently lagging most other developed countries in the uptake of EVs. We should try to catch up while still maintaining a global view.

3. What are suitable indicators to measure if we are on track to achieve our goals and objectives?

The key performance measure is our total CO_2 emissions from road vehicles. This must track towards zero by 2050 or earlier.

4. Are there other measures by governments and industry that could increase affordability and accessibility of EVs to help drive demand?

Mandatory vehicle emission standards for new vehicles and a rollout of charging infrastructure are the two most important areas for action.

To complement this, Governments (State or Federal, as appropriate) should:

- immediately impose building and planning regulations to ensure all new buildings are provided with electrical wiring so that they are EV ready
- provide subsidies for retrofitting car parks in apartment buildings with EV chargers
- subsidise or co-fund the installation of public EV charging stations
- coordinate the location of public EV charging stations in townships and along major arterial roads and highways, aiming to have charging facilities at least every 50 to 100 km by 2025.
- 5. Over what timeframe should we be incentivising low emission vehicles as we transition to zero emission vehicles?

Mandatory vehicle emission standards should come into effect as soon as possible in 2023. By 2035, the emission standard should be close to zero for all new vehicles.

6. What information could help increase demand and is Government or industry best placed to inform Australians about EVs?

Information campaigns are useful and should be pursued by State and Federal Governments as well as the auto industry.

7. Are vehicle fuel efficiency standards an effective mechanism to reduce passenger and light commercial fleet emissions?

Absolutely. This is the most effective public policy reform to achieve the objectives.



- 8. Would vehicle fuel efficiency standards incentivise global manufacturers to send EVs and lower emission vehicles to Australia?
- Yes. Without these standards, Australia will remain the dumping ground for high-emission vehicles.
- 9. In addition to vehicle fuel efficiency standards for passenger and light commercial vehicles, would vehicle fuel efficiency standards be an appropriate mechanism to increase the supply of heavy vehicle classes to Australia?

Maybe. The emission standard would have to relate to the carrying capacity of the vehicle.

10. What design features should the Government consider in more detail for vehicle fuel efficiency standards, including level of ambition, who they should apply to, commencement date, penalties and enforcement?

The detailed design features need to be determined quickly so that the scheme can be operational in 2023. Learn from the experiences of Europe, USA, Scandinavian countries and New Zealand.

The level of ambition is very important. Matching the current European standard of 95 gCO_2/km for cars in the first year is perhaps too ambitious. However, the emission standard should reduce steeply each year to close the gap between our standard and the standards imposed by the rest of the world. The New Zealand scheme seems to have struck a good balance between ambition and achievability.

11. What policies and/or industry actions could complement vehicle fuel efficiency standards to help increase supply of EVs to Australia and electrify the Australian fleet?

To complement vehicle emission standards, Governments (State or Federal, as appropriate) should:

- immediately impose building and planning regulations to ensure all new buildings are provided with electrical wiring so that they are EV ready
- provide subsidies for retrofitting car parks in apartment buildings with EV chargers
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- coordinate the location of public EV charging stations in townships and along major arterial roads and highways, aiming to have charging facilities at least every 50 to 100 km by 2025.

The Australian Government should take steps to improve the quality of petrol. We welcome the upgrades of the two remaining refineries in Australia to supply fuel with no more than 10 ppm sulphur by 2024. To further reduce sulphur content and match the European standards, we urge the Government to transition from importing 91 RON to 95 RON for unleaded petrol by 2024.

Governments at all levels should plan and implement changes to land use and the transport system in our cities to encourage greater use of public transport, walking, cycling and electric bicycles.

With Government guidance and assistance, the electricity industry will need to accelerate the transition to renewable electricity generation and expansion of electricity generation to cater for the additional demand from EVs.

The electricity industry should modify the design of electrical infrastructure to permit EV batteries to feed into the grid.



12. Do we need different measures to ensure all segments of the road transport sector are able to reduce emissions and, if so, what government and industry measures might well support the uptake of electric bikes, micro-mobility and motorbikes?

The immediate need is for emissions standards with separate targets for:

- light passenger cars and SUVs; and
- light commercial vehicles.

For heavy vehicles, technology-neutral emissions standards or some other regulatory measure should be implemented within the next two years.

Motorbikes should be addressed as a separate segment in emissions standards legislation or by a simple ban on sales of petrol and diesel motorbikes by, say, 2030.

Other forms of zero-emissions transport modes should be encouraged but generally left to market forces.

13. How could we best increase the number of affordable second hand EVs?

All new Government fleet vehicles should be EVs. Otherwise, the second-hand market should be left to market forces.

14. Should the Government consider ways to increase the supply of second hand EVs independently imported to the Australian market? Could the safety and consumer risks of this approach be mitigated?

Importing second-hand EVs should be permitted, but only if they meet the safety requirements in the Australian Design Rules or are modified to do so. The safety requirements should not be compromised.

The consumer risks are for the consumer to weigh up. Consumers will also have to consider whether replacement batteries will be available when they reach the end of their life.

15. What actions can governments and industry take to strengthen our competitiveness and innovate across the full lifecycle of the EV value chain?

The government should encourage local industry to manufacture batteries and provide services to recycle or repurpose them.

16. How can we expand our existing domestic heavy vehicle manufacturing and assembly capability?

We don't have a view on this.

17. Is it viable to extend Australian domestic manufacturing and assembly capability to other vehicle classes?

We don't have a view on this.

18. Are there other proposals that could help drive demand for EVs and provide a revenue source to help fund road infrastructure?

Fuel excise should remain in place. It could even be increased in future years.



To make up for lost fuel excise revenue, a nationally consistent distance-based charge should be imposed for all vehicles. All State and Territory vehicle registration fees should be abolished. These changes should be revenue neutral.

By 2030, at the latest, the distance-based charge should be modified to introduce a Road User Charging system, through which charges would be based on distance, location and time of travel. This effectively introduces a congestion charge with city driving being more expensive than rural driving, and extra surcharges for peak hours. As well as encouraging low emission vehicles, these reforms would encourage public transport and active transport modes, thus reducing emissions by reducing road congestion.

Our profession has been advocating these reforms for a long time.

19. What more needs to be done nationally to ensure we deliver a nationally comprehensive framework for EVs?

See responses above.

20. How can we best make sure all Australians get access to the opportunities and benefits from the transition?

See responses above.

Incentives in Traffic Operations

In Figure 4 of the Consultation Paper, there is mention of "*non-financial incentives such as transit lane access and free car parking and charging*". The ITE-ANZ does not support such measures. They would be the responsibility of State, Territory and local government but, even so, should not be encouraged by a national strategy.

While car parking conditions and fees will obviously be different for EVs in parking spaces where charging is available, there should be no difference in parking conditions or fees elsewhere.

Similarly, transit lanes should remain available only to the current categories of vehicles. Opening transit lanes to EVs, whose numbers will steadily increase, would adversely affect bus operations.

Such measures may provide a small incentive while EV numbers are small, but they would add unnecessary complexity and would need to be removed again once EV numbers become significant.

Conclusion

Thank you for the opportunity to comment on this important reform.

Yours sincerely

GNAL

David Nash Secretary

