

## Economics Legislation Committee

### Inquiry into the Treasury Laws Amendment (Electric Car Discount) Bill 2022

#### RE: The Australia Institute's response to Questions on Notice

31 August 2022

#### Question 1

Senator O'Neill: "A technical clarification: are you talking about Euro 6 level there, instead of Euro 5? ... If you could provide me with something that will help me understand that, and the difference"

#### Answer

Fuel efficiency standards (sometimes referred to as CO2 emissions standards) regulate the efficiency of new vehicles sold. They involve a fleet average efficiency target, where manufacturers pay a penalty for exceedance of that target (based on the average of the new vehicles they sell). Australia currently has no mandatory fuel efficiency standards. Fuel efficiency standards formed part of the announcement from the Minister Bowen on 19 August 2022 regarding the new EV Strategy.<sup>1</sup> Fuel efficiency standards are different to vehicle emissions standards.

Vehicle emissions standards regulate noxious emissions from vehicles, such as carbon monoxide.<sup>2</sup> These standards have been in place in Australia since the 1970s and are set by the Australian Design Rules (ADRs) under the Road Vehicle Standards Act 2018.<sup>3</sup>

Vehicle emissions standards for light vehicles are currently set at ADR 79/04, equivalent to the Euro 5 standards, which set limit values for multiple pollutants.<sup>4</sup>

Australian vehicle emission standards are weaker than emissions standards adopted internationally, including in the United States and European Union.<sup>5</sup> In Europe, stricter Euro 6 standards have been in place since 2015, and a new emissions standard – Euro 7 – is currently under development.<sup>6</sup> To improve air quality and reduce the effects of air pollution, Australia should consider strengthening

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<sup>1</sup> Minister Bowen (2022) Address to the National EV Summit <https://minister.dcceew.gov.au/bowen/speeches-and-transcripts/address-national-ev-summit>

<sup>2</sup> Australian Government (n.d) *Final Emissions Limits for Light Vehicles*, [https://www.infrastructure.gov.au/sites/default/files/documents/Final\\_Emission\\_Limits\\_for\\_Light\\_Vehicles\\_Euro\\_2-Euro\\_6.pdf](https://www.infrastructure.gov.au/sites/default/files/documents/Final_Emission_Limits_for_Light_Vehicles_Euro_2-Euro_6.pdf)

<sup>3</sup> Federal Register of Legislation, *Vehicle Standard (Australian Design Rule 79/04 – Emissions Control for Light Vehicles) 2011*

<sup>4</sup> Ibid.

Australian Government (n.d) *Vehicle emissions standards*, <https://www.infrastructure.gov.au/infrastructure-transport-vehicles/vehicles/vehicle-safety-environment/emission-standards>

<sup>5</sup> Ibid.

<sup>6</sup> Transport and Environment (2021) *Euro 7*, <https://www.transportenvironment.org/challenges/air-quality/the-euro-7/>

vehicle emissions standards. However, this would be a separate process to the introduction of fuel efficiency standards.

Moving to stronger Euro 6 emissions standards could be done immediately for diesel fuel vehicles in Australia and should be done as soon as possible for petrol vehicles, following fuel quality improvements.<sup>7</sup> Previous investments by the former Coalition Government in Australia’s two refineries, and recent commitments by the current government to regulate low sulphur petrol, means Euro 6 standards should be achievable for petrol vehicles by 2024/25.

### Vehicle emissions vs fuel efficiency standards in Australia

	Fuel Efficiency Standards	Vehicle Emissions Standards
<b>Measurement</b>	CO <sub>2</sub> emissions or litres of fuel	Noxious emissions (eg. carbon monoxide and PM2.5)
<b>What is regulated</b>	Vehicle technology	Vehicle technology
<b>Department</b>	Climate Change, Energy, Environment & Water	Infrastructure, Transport, Regional Development, Communications & the Arts
<b>Mandatory standards</b>	None	Australian Design Rule (ADR) 79/04 based on Euro 5 (light vehicles) <sup>8</sup>



<sup>7</sup> Terrill, Burfurd & Fox (2021) *The Grattan car plan*, P 16, <https://grattan.edu.au/wp-content/uploads/2021/10/Grattan-Car-Plan.pdf>

<sup>8</sup> Federal Register of Legislation, *Vehicle Standard (Australian Design Rule 79/04 – Emissions Control for Light Vehicles) 2011*, <https://www.legislation.gov.au/Details/F2021C01200>

## **Question 2**

Senator Smith: *“Could you have a look at the Institute of Public Accountants' submission. They have quantified what they expect to be the total number of new electric vehicles over the four-year period and perhaps you might be able to provide comment on the accuracy, or otherwise, of their estimations.”*

## **Answer**

The Institute of Public Accountants have provided an ‘illustration’ to compare the cost of Electric Vehicles (EVs) to petrol cars at the same retail price point.

Regarding this illustration, the Institute shares the view that EVs have lower running and maintenance costs, therefore at the same drive away price an EV will lower household expenditure on transport.

The Australia Institute is not in a position to judge the accuracy of the extrapolation from the Institute of Public Accountants on the uptake of EVs over a four-year period, though the general trend (of a slow uptake followed by non-linear increases) is in line with the Federal Government’s expectations outlined in the explanatory memorandum.

**Question 3**

Senator O'Neill: *"Can you respond to UnitingCare, who indicate that adopting early, in 2009, hasn't made financial sense to them; they have actually materialised profit and gain on the sale into a second-hand market..."*

**Answer**

The Australia Institute does not have access to the UnitingCare Queensland's fleet modelling which formed the basis of their submission.

#### Question 4

Senator O'Neill: "Could you give us some of your thoughts on the benefits of a more coordinated national approach to EVs and what role that National Electric Vehicle Strategy might play in coordinating efforts across government, industry, unions and consumer groups?"

#### Answer

The first recommendation of the Senate Select Committee on Electric Vehicles Report handed down on 31 January 2019 was for the federal government to "develop a national EV strategy to facilitate and accelerate EV uptake and ensure Australia takes advantage of the opportunities, and manages the risks and challenges, of the transition to EVs."<sup>9</sup>

In 2021, the previous Australian Government released a Future Fuels Strategy (FFS) which fell short of this ambition. It is only now, with the current Australian Government that a National Electric Vehicle Strategy will be delivered.

The absence of national leadership on electric vehicles has resulted in a fractured response at the sub-national level. While some states have advanced a suite of EV incentives, others have gone a different route. The most concerning route has been taken by the Victorian Government in pursuing a Road User Charge only on EVs. Polling by the Australia Institute in South Australia found that around 70% agreed a road user tax on EVs would make them less likely to purchase one.<sup>10</sup> Note this Victorian Road User Charge is being challenged in the High Court by two Victorian EV drivers who have recently been joined by the Commonwealth.<sup>11</sup> The new South Australian Government also reappealed their similar Road user Charge.

The Storer Review (Senate Select Committee on Electric Vehicles Report) also highlighted the opportunities to build some of the EV solutions in Australia. The Australian Manufacturing Workers Union recently called for a new tripartite council of government, unions, and industry to drive Australian uptake of electric vehicles (EVs). The council would be "tasked with generating and co-ordinating the execution of a long-term plan for EVs in Australia, with a focus on industry policy, jobs, and skills and training".<sup>12</sup> These opportunities can be coordinated through a National EV Strategy.

The Strategy should also pursue is robust mandatory fuel efficiency standards in line with Europe. Benefits to consumers include lower fuel costs and increased access to electric vehicle models. Additionally, standards would reduce greenhouse gas emissions from the light motor vehicle fleet and improve Australia's fuel security by decreasing the transport sector's reliance on imported oil.

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<sup>9</sup> Select Committee on Electric Vehicles (2019) Report  
[https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Electric\\_Vehicles/ElectricVehicles/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Electric_Vehicles/ElectricVehicles/Report)

<sup>10</sup>The Australia Institute (2021) SA EV Tax Improved but Support Still Inadequate  
<https://australiainstitute.org.au/post/sa-ev-tax-improved-but-support-still-inadequate/>

<sup>11</sup> Equity Generation Lawyers (2021) Christopher Vanderstock & Kathleen Davies v State of Victoria  
<https://equitygenerationlawyers.com/cases/vanderstock-v-victoria/>

<sup>12</sup> AMWU (2022) AMWU calls for National Electric Vehicle Council to boost domestic manufacturing  
[https://www.amwu.org.au/amwu\\_calls\\_for\\_tripartite\\_ev\\_council](https://www.amwu.org.au/amwu_calls_for_tripartite_ev_council)

## Fuel savings

More efficient vehicles require less fuel to travel the same distance, saving consumers money on fuel. The fuel savings benefits of introducing fuel efficiency standards in Australia have been well recognised, including by the Climate Change Authority (CCA) and the Ministerial Forum on Vehicle Emissions.<sup>13</sup>

Analysis by Smit, Whitehead and Surawski estimates that Australian car owners would have saved \$1.3 billion over a three-year period (2016-2018) in fuel costs if fuel efficiency standards were in place.<sup>14</sup> Using the same methodology, savings over a six-year period (2016-2021) would be approximately \$5.9 billion.

Fuel cost savings derived from fuel efficiency standards are cumulative, as cars continue to save on fuel costs over their lifetime. Additionally, petrol prices have increased over the past three years, increasing the savings associated with efficient fuel use.

## Reduced imported oil

Introducing fuel efficiency would help ensure liquid fuels are consumed more efficiently and decrease overall liquid fuel consumption.

Australia is almost entirely reliant on imports of refined fuels and crude to meet consumption. In FY2021, 91 per cent of all fuel consumed in Australia was imported – including 68 per cent imported as refined crude, while 71 per cent of fuel refined in Australia is imported as crude and condensate.<sup>15</sup> Three quarters (73 per cent) of Australia's total liquid fuel demand is consumed by the transport sector and over half (54 per cent) is consumed by road transport alone. If fuel efficiency standards had been introduced in 2016, Australia could have imported 4000ML less oil (see Annex for calculations and assumptions).

## Reduced CO<sub>2</sub> emissions

Fuel efficiency standards would reduce transport emissions by increasing the efficiency of the vehicle fleet. Australia could have prevented 9 million tonnes of greenhouse gas emissions if fuel efficiency standards had been introduced in 2016 (see Annex for calculations and assumptions). This is similar to emissions from domestic aviation in a normal year.<sup>16</sup>

Transport is the third highest emitting sector in Australia. The vast majority (85%) of transport emissions come from road transport, and 44% come from private passenger vehicles alone.<sup>17</sup>

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<sup>13</sup> Climate Change Authority (2014) *Light Vehicle Emissions Standards for Australia Research Report*, <https://www.climatechangeauthority.gov.au/publications/light-vehicle-emissions-standards-australia>

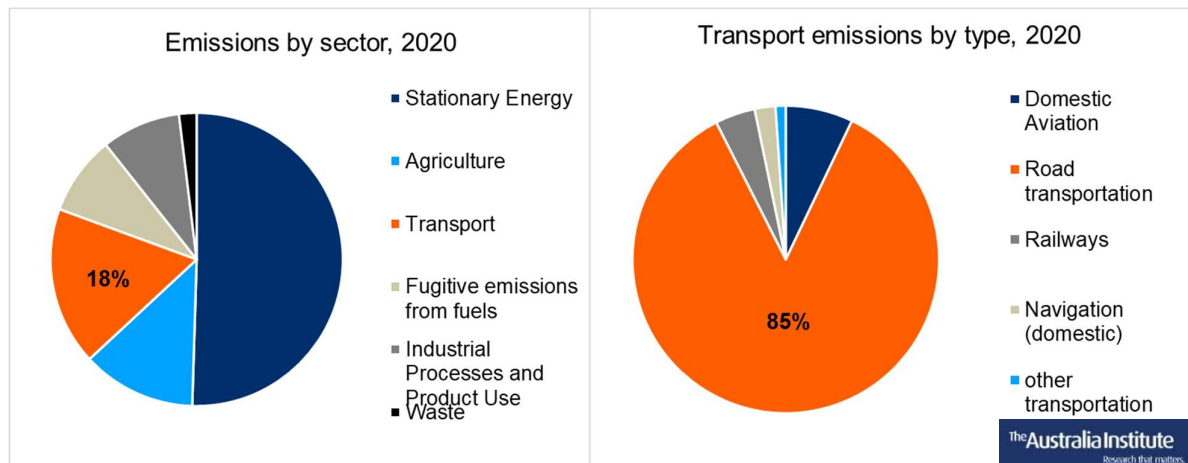
<sup>14</sup> Smit, Whitehead and Surawski (2019) *Australians could have saved over \$1 billion in fuel if car emissions standards were introduced 3 years ago*, <https://theconversation.com/australians-could-have-saved-over-1-billion-in-fuel-if-car-emissions-standards-were-introduced-3-years-ago-117190>

<sup>15</sup> Carter, Quicke and Armistead (2022) *Over a Barrel*, [https://australiainstitute.org.au/wp-content/uploads/2022/04/P1036-Over-a-barrel\\_liquid-fuel-security-WEB.pdf](https://australiainstitute.org.au/wp-content/uploads/2022/04/P1036-Over-a-barrel_liquid-fuel-security-WEB.pdf)

<sup>16</sup> Department of the Environment and Energy (2018) *Australia's emissions projections 2018*, p 22, <https://www.industry.gov.au/sites/default/files/2020-07/australias-emissions-projections-2018.pdf>

<sup>17</sup> Australian Government (2020) *National Inventory Report*, <https://www.industry.gov.au/data-and-publications/national-inventory-reports>

## Australian greenhouse gas emissions by sector, and transport emissions by type, 2020



Source: National Inventory Report 2020, P 35

Transport emissions have increased 48.8% or 29.8 Mt CO<sub>2</sub>-e since 1990, despite a recent temporary drop due to the impacts of the COVID-19 pandemic.<sup>18</sup>

## Increased electric vehicle availability

Fuel efficiency standards create an incentive to bring more efficient and electric models to market. Currently, Australia is facing an electric vehicle supply problem. Waiting lists for electric vehicles are long, driving second hand electric vehicle prices up. While this supply problem is not confined to Australia (internationally, supply chains are struggling due to lack of critical minerals and the COVID-19 pandemic) it is exacerbated in Australia due to the lack of standards. The limited number of electric vehicle models that are available globally will likely be placed in markets with standards in place – to help avoid manufacturers facing fines. This has been made clear through calls from industry to introduce standards.<sup>19</sup>

The International Energy Agency (IEA) recommends ambitious fuel efficiency standards to accelerate the uptake of electric vehicles worldwide, stating that ‘Stringent [fuel] efficiency and/or CO<sub>2</sub> standards have promoted EV adoption in most leading EV markets and should be adopted by all countries seeking to hasten the transition to electromobility.’<sup>20</sup>

<sup>18</sup> Australian Government (2021) P 10, *Quarterly Update of Australia’s National Greenhouse gas Inventory: September 2021*, <https://www.industry.gov.au/sites/default/files/February%202022/document/nggi-quarterly-update-september-2021.pdf>

<sup>19</sup> Mercer and Mackintosh (2022) *Electric vehicles are racing ahead overseas, so why isn’t that happening in Australia?* <https://www.abc.net.au/news/2022-06-17/electric-vehicles-in-australia/101155228>

<sup>20</sup> IEA (2022) *Global EV Outlook*, <https://www.iea.org/reports/global-ev-outlook-2022>