

# **Additional Comments by Senator Rex Patrick**

## **Australia's Electric Vehicle Policy: Battery Dead, Jump Start Required**

### **The Work of the Committee**

1.1 I thank the committee for the work it has done in relation to this inquiry. I also thank the secretariat for their background work in organising the committee activities and assisting in preparing the report.

1.2 The compiled facts and descriptions laid out in Chapters 1 through 5 of the Committee's report are comprehensive, solid and most useful.

1.3 However the recommendations, as they stand in Chapter 6, represent a lost opportunity to accelerate the uptake of electric vehicles (EVs) in Australia and to exploit opportunities for Australian industry in this growing worldwide market.

1.4 It is not as though the Government is being asked to back a technology that ultimately may fail by way of uptake. The car manufacturers themselves have backed the technology and are all moving to supply electric vehicles into a growing market. Other countries are setting solid targets in relation to EV take up. EVs are at the forefront of a major transformation of the world's transport sector. It's not a question of if, simply one of when.

1.5 That the Government and alternative Government were not prepared to endorse a report containing affirmative and, in many cases, costed policy approaches epitomises what is wrong about the two major political parties in this country; they lack vision and conviction when it matters most and are at best perfunctory in their approach to important national issues.

1.6 The Committee recommendations are shallow and weak. While I support them, they must be broadened and strengthened.

### **The Chair's Recommendations**

1.7 The recommendations made by the Chair in his additional comments go a long way to broadening and strengthening the Committee's recommendations. To the extent that the Chair's recommendations are not inconsistent with my recommendations below, they should also be accepted.

### **Benefits of electric vehicles and opportunities for Australia**

1.8 As noted in Chapter 3 of the report, there are considerable benefits associated with an increased uptake in EVs. These benefits include:

- **GDP Improvements:** If EVs made up 57 per cent of new car sales in 2030, there would be an increase in real GDP of \$2.9 billion, an increase in net employment of 13,400 jobs and additional investment in charging infrastructure of \$3.2 billion.

- **Productivity Improvement:** On account of EV's fuel economy and maintenance simplicity, there would be direct fuel savings of \$500 million and \$100 million in maintenance costs for each one million EVs in the national fleet.
- **Balance of Payment Advantages:** There is the potential for up to \$15 billion dollars per annum in fuel import replacement and benefit to the balance of payments, with \$8 billion dollars transferred to the local economy.
- **Fuel Security Advantages:** Against a backdrop of failed fuel security policy by successive governments, switching the national fleet to EVs would substantially reduce Australia's reliance on imported oil, reducing vulnerabilities to potential supply disruption and unexpected changes in demand from other customers in Asia.
- **Reduced Greenhouse Gas Emission:** Transport, in particular light vehicles, are the second largest source (19 per cent) of greenhouse gas emissions in Australia. A national uptake of EVs would greatly assist Australia in reaching, indeed exceeding, its Paris targets. Noting all the benefits of EVs, and the current Government total paralysis on actively dealing with electricity sector emissions, supporting the uptake of EVs should have been a policy 'no-brainer' for the Coalition fighting climate change deniers within the party.
- **Reduction in Air Pollutants:** The elimination of internal combustion engine (ICE) vehicle air pollutants such as carbon dioxide, nitrogen oxides and particulate matter from the air has significant public health advantages.

1.9 While there are some challenges that come with the switch from ICE vehicles to EVs, these are all surmountable if the recommendations of the Committee, coupled with the Chair's recommendations (in his additional comments), were accepted. However, even more can and should be done.

### **Manufacturing and Value Chain Activities**

1.10 As identified in Chapter 4 of the Report, there is substantial opportunity for Australia, leveraging off the considerable ongoing and residual automotive industry skill and experience, to become involved in the manufacturing of EVs and EV components in-country.

1.11 Ambition in this area should extend to the manufacturing and assembly of complete EVs in addition to the continuing and transitioning the OEM and after-market design and manufacturing that resides in Australia.

1.12 One component area that deserves special attention (and was discussed in the report) is the potential for Australia to design, manufacture and export EV batteries.

1.13 Australia currently mines over 60 per cent of the world's lithium by value. We also have all of the other minerals necessary to progress further down the lithium ion battery value chain.

1.14 Australia has historically mined all kinds of minerals and shipped them offshore to subsequently be turned into product for importing back here as much more expensive product. In doing so it has sold itself out and distorted our balance of trade.

1.15 With large lithium reserves that have captured 60 per cent of a world market hungry for lithium batteries, Australia has a chance to change its mining modus

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operandi to great national benefit. With a plan and national will, Australia could become an international lithium battery power house – not just for EVs, but for batteries needed in consumer electronics, power tools, robots, drones and home power banks.

1.16 There are five stages of processing in the production of lithium batteries; mining and concentrating (world market total in 2025 is projected to be US\$12 billion), refining and processing (US\$41 billion), electro chemical processing (US\$297 billion), cell production (US\$424 billion) and battery assembly (US\$1.3 trillion). We don't want to just dig and export; that's not where the money, or jobs, lie.

1.17 A well-considered whole of government approach to the industry could see Australia engaging in all five stages with significant benefits to the Australian economy. Mining and concentrating is in hand. We are currently transitioning into second stage 'refine and process' through Tianqi's recent investment at Kwinana in WA.

1.18 In relation to the latter stages of processing, Australia has many of the reagents and input materials for the second and third processing stages and, finally, there are already early stage proposals to develop cell production facilities in Townsville and Darwin and the SA Government has recently supported a battery manufacturing plant in Adelaide as part of its Home Solar Panel Battery Scheme. A national lithium battery endeavour could be supercharged through the production of EV batteries in Australia.

1.19 Clearly support for manufacturing of EVs and components, including and especially batteries, must come from Government. Fortunately there is already money allocated by statute for assisting Australia's automotive industry in the form of an Automotive Transformation Scheme (ATS). In the wake of the Abbott Government's foolish decision to shut down the ICE automotive industry in Australia, that money has not been fully spent.

1.20 Analysis undertaken by the Parliamentary Budget Office for former Senator Nick Xenophon in 2016 outlined the capped component of ATS funding allocated to the program, funding that has been spent, estimated future spending and amounts of underspend.

1.21 This analysis shows that the ATS underspend will be approximately \$740 million.

1.22 This significant amount of money could and should be utilised for EV manufacturing and value chain support. Such a decision would very obviously be in Australia's national interest.

### **Recommendation 1**

**The Government should utilise the approximate \$740 million of underspent and forecast underspend funding in the ATS to jump start EV manufacturing and value chain support activities.**

## **Proper EV Targets**

1.23 As noted in the Committee report, worldwide, in 2017, there has been a 57 per cent increase of new EV sales from the previous year to 3.1 million electric passenger cars sold. More than half of global sales of EVs were in China, where electric cars hold a market share of 2.2 per cent.

1.24 The data from Australia is sobering and demonstrates that substantially more needs to be done to accelerate the uptake of EVs. Recent annual sales figures show that, of over a million cars purchased in 2017, only a measly 2300 were battery-electric vehicles or plug-in electric vehicles – about 0.2 per cent market share.

1.25 Australia's position is in stark contrast to other countries. While Australia has geographical challenges not faced by many European countries, the uptake of EVs through targets and the eventual prohibition of the sale of new ICEs is a challenge that should be met with tenacity and decisiveness; not put in the too hard basket.

1.26 China, Germany and the USA are just three of the many countries that have targets for the uptake of EVs.

1.27 There are also more than a dozen countries (including China, Germany and the US) that have announced they will ban the sale of new ICE vehicles. Further, the Volkswagen Group has announced that its next generation of ICEs, due in 2026, would be its last.

1.28 It's clear the world and manufacturers are transitioning. This transition must be embraced by current and future Australian governments.

1.29 The most significant policy decision the Government could pursue is prohibiting the import and sale of new vehicles with ICEs. While a prohibition appears to be a dramatic position to take, it has some key advantages.

1.30 Prohibiting the import and sale of new vehicles with ICEs sends a clear message that Australia recognises that the world is in transition and is embracing a future where EVs are commonplace. A prohibition of ICEs, rather than setting targets for the uptake of EVs, is the most effective way of addressing the risks and challenges associated with the transition to EVs.

## **Recommendation 2**

**The Government should legislate to prohibit the sale and import of new internal combustion engines in motor vehicles by 2035.**

## **Luddite Policies Must be Overcome**

1.31 The Government must abandon its Luddite approach to Australia's inevitable transition from ICE Vehicles to EVs. The Government must accept and implement the Committee's, the Chair's and my recommendations as a matter of urgency.

**Senator Rex Patrick**