

Smart Energy Council submission to the National Electric Vehicle Strategy Consultation Paper

The Smart Energy Council welcomes the opportunity to provide a submission on the National Electric Vehicle Strategy (the Strategy) Consultation Paper.

The Smart Energy Council (SEC) is the peak independent body for Australia's smart energy industry, representing around 1000 household, commercial and large-scale renewable energy, renewable hydrogen, and smart transport companies.

The SEC believes we can have a strong economy and a safe climate. Electric vehicles will play a critical role in achieving that vision. With the right policy settings, we can almost eliminate transport emissions, whilst creating employment and economic opportunities through a strong electric vehicle industry.

Electric vehicles will play a critical role in the energy grid of the future, operating as batteries on wheels and providing critical grid support.

Context

The SEC strongly supports the Australian Government's draft National Electric Vehicle Strategy, noting it can be improved through amendments suggested below.

The SEC is heartened to see the pace with which this strategy consultation was released so soon after the National Electric Vehicle Summit, hosted by the Smart Energy Council, Electric Vehicle Council, The Australia Institute and Boundless in August 2022. We've been looking forward to this paper and to the Government's proposal for introducing fuel emissions standards.

This work is a key piece of SEC's broader agenda to electrify everything with renewable energy and other smart energy systems, and of course support genuinely renewable hydrogen for use in industry, some transport and other areas of the economy where electric storage is not yet feasible.

Scope

The SEC has provided comments on the Strategy's discussion points where these

- Impact on the commerciality of our members' provision of goods and services
- Have relevance to SEC's national agenda of smart energy advocacy
- Impact on SEC's achieving its stated mission – to better environmental protection outcomes.

Key Points

Critical to the success of the Strategy must be *strong national fuel efficiency standards*. These must be consistent with leading fuel efficiency standards such as those set by the European Union.

The Australian Government must work with state, territory, city and key regional local governments to ensure a *coordinated rollout of a comprehensive charging network* for cars, trucks and buses, ensuring that no-one is left behind.

The SEC also believes the Australian Government should set a *target* of 1 million electric vehicles on Australian roads by 2027.

The SEC has classified our additional feedback into four priority areas.

1. Broaden goals and objectives

To be consistent with our nation's climate action, energy security and energy performance agendas, we need this Strategy to prioritise EV (batteries on wheels) grid connection. We recommend revising the goals and objectives to ensure the Strategy explicitly aims to provide essential energy storage infrastructure for Australia's energy system through enabling the rapid uptake of EVs and their useful and coordinated connection to the grid.

Smart transport - the integration of electric vehicles into the energy grid of the future - must be at the heart of the Strategy.

Given the rapidly changing pace of the EV and smart energy systems marketplace, it's important that performance against this Strategy is regularly measured and the goals and objectives revised.

2. Drive affordability and accessibility

There are a number of complementary measures that when executed in a coordinated fashion shall deliver least cost and effective national strategy. These include:

- I. *Ambitious and effective vehicle fuel efficiency standards* for light vehicles operationalised no later than January 2024, that create a level playing field at home for new and used cars and improve supply of EVs to the Australian market.
- II. *Government backed finance solutions* to address complex areas such as EV charging for low income earners that are renting or residing in public/community housing, to co-invest alongside private investors and help to de-risk early stage commercialisation or to address large capex barriers that exist with the purchase of a new EV. Incentives should be temporary and be applied mindful of the principles of inclusive access for all and long-term sustainability of the industry.

- III. *Clear targets for all vehicle categories* - although not binding, they provide a common understanding of the direction and pace of public policy and facilitates smoother investment and business decision making. Targets for passenger vehicles may be more ambitious than those for heavy vehicles and this is necessary because the market conditions for these differ across vehicle categories.
- IV. *Government fleet procurement targets* such as those proposed by the Commonwealth, except that eligible vehicles must only include battery only electric vehicles (BEVs) to help increase the supply of second hand vehicles and establish existing import arrangements and relationships.
- V. *Incentivise commercial fleets to go electric* including through tax concessions and/or revised accounting rules.
- VI. *Support for second-hand vehicles* such that they are considered parallel imports with new BEVs and are subjected to the same import tariff relief measures, and fringe benefits tax concessions for fleets.
- VII. *Break the hold that original equipment manufacturers (OEMs) have on maintenance and servicing, and ensure charging and APIs (Application Programming Interfaces) are fungible to support accessibility for charging.*

3. Strengthen value chain competitiveness

Recent global shocks and strains including the Covid19 pandemic and the impact of war on commodity prices has shown us how vulnerable our nation is when reliant on international value chains. Given Australia's own EV marketplace is nascent, there is enormous potential for the Government to support a local manufacturing sector. It is also an exciting and enormous opportunity for Australian industry and workforces and provides an opportunity for the Government to revitalize communities where car manufacturing has previously been housed, and also potentially position Australia as an exporter of EV components for the booming EV market internationally.

- I. The early investment by governments in downstream supply infrastructure, including *local manufacturing of EV*, charging and battery components and assembly, is central to supply chain security and reliability.
- II. Government co-investment in processing and refining of upstream critical minerals is also a critical priority for economic productivity and international competitiveness.
- III. The *tax treatment of EVs* - import tariffs, fringe benefits tax exemptions for fleets, fast right downs - will play another important role in strengthening value chain competitiveness across new and second hand EVs.

4. Build consumer confidence

Range anxiety and battery utility are real concerns for consumers and impact their intention to participate early in the market; these are just some matters impacting consumer confidence. The Commonwealth Government has a key role in supporting the systems and infrastructure required to build consumer confidence and stimulate rapid uptake.

- I. Coordinated and harmonized *nation-wide charging network* and its integration to the grid with advanced planning for the energy system enables EV drivers (cars, buses, trucks and other vehicles) to 'charge up' at a nationally consistent / interchangeable network; a priority focus should be on suburbs with high-density, multi-story buildings and regional areas.
- II. Avoidance of OEM technology and services bubbles, through the *interruptibility / fungibility* of parts supply, application programming interfaces, vehicle to grid charging stations, maintenance and roadside assistance enabling consumer access to all infrastructure.
- III. A system for *repurpose and recycling of batteries* including care and maintenance that can be done at any qualified EV services provider.
- IV. The ability (commercially, regulatorily, legally) to *connect their EVs* to their household energy system, and the energy grid and participate in their own energy reliability and security.
- V. Focus by the Commonwealth Government to support and grow the *domestic workforce* with career and job opportunity information, new skills training and relevant accreditations.

I welcome the opportunity to provide further information on any of the points made in our submission, or the 'other comments' featured on the following pages. Wishing you well with your deliberations.

Should you wish to discuss this further, I can be contacted on 0417 141 812 or at wayne@smartenergy.org.au

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Smart Energy Council

Other comments

We need batteries on wheels: To date, most discussion on battery energy storage systems has centred on 'big' batteries across the transmission grid. Less discussed is that battery storage across distribution networks will also be needed. SEC member eleXsys estimates that around 20 gigawatts of storage across Australia's distribution grids will be required to support the 'Electrification of Everything', including a significantly increased national EV fleet by 2050. Considering that only approximately 1GWh of storage has been installed in Australia over the past five years, the task at hand is enormous, and the need to get moving is compelling.

Emissions standards is THE key piece of the puzzle: Critical to the success of the Government's National Electric Vehicles Strategy must be *strong national fuel efficiency standards*. These must be consistent with leading fuel efficiency standards such as those set by the European Union which stipulate an average new vehicle tailpipe emissions rate of less than 60 grams per kilometre by 2030 or more than 60% EV sales by 2030. We support these

SEC supports the policy position of the Electric Vehicle Council to put in place an ambitious fuel efficiency standard that targets Anything less ambitious than this is likely to mean that transport emissions in 2030 will remain higher than 2005-levels, and the burden of further emissions cuts will be placed on other sectors of the economy to achieve our national 43% reduction target. Standards taking effect no later than January 1, 2024.

Leadership and oversight is a national responsibility: A temporary coordinating institution (much like COAG task force) should be established that addresses the intersectionality of decarbonisation for all sectors of the economy. The aim would be that experts and systems-thinkers would identify priority policy interventions that enable multiple sectors to (such as using EVs from the transport sector to provide energy storage capacity and reliability for the stationary electricity network) addresses opportunities for priority actions and mitigate the risks of unintentional consequences.

This government coordinating institution would include representatives from states and territory governments (key regulators and supervisors such as AEMO and the National Transport Commission) as well as city governments and key regional ones. The latter grouping will be instrumental in coordination of and consent over critical infrastructure and needs to work closely with charging station providers.

Picking winners is OK because the race has started: The scope of what's included in the strategy needs to be limited to battery only electric vehicles (BEVs) and be sure to lock out models (such as hybrids and PHEVs) that may be dumped into Australia as other markets move swiftly to all-electric. This is essential so we maximize the public investment in providing electricity network capacity and flexibility via "batteries on wheels".

Second-hand EVs are important to the transition: Import restrictions are now presenting as anti-competitive and restrict and slow the path to affordability and model availability for Australian drivers. The Harper Review¹ commissioned by the Australian Government in 2015 came to the findings that

¹ <https://treasury.gov.au/publication/p2015-cpr-final-report>

Parallel import restrictions are similar to other import restrictions (such as tariffs) in that they benefit local producers by shielding them from international competition. They are effectively an implicit tax on Australian consumers and businesses

Removing parallel import restrictions would promote competition and potentially lower prices of many consumer goods, while concerns raised about parallel imports (such as consumer safety, counterfeit products and inadequate enforcement) could be addressed directly through regulatory and compliance frameworks and consumer education campaigns.

For the purpose of access and affordability, we need a robust second-hand EV market. We recommend to you the submission of SEC member and import, seller of second-hand electric vehicles, The Good Car Co.

We need to treat all imported battery only EVs equally for the purposes of assessing eligibility for import tariff exemptions. Therefore, the removal of the current restrictions on second hand imports should be considered by amending the Road Vehicle Standards Act 2018 to facilitate the import of all late-model, low-mileage EVs.

FBT exemption must apply to second hand BEV imports and the Government should move towards full parallel imports.

Safety and consumer risks posed by independent importers can be mitigated, such as how The Good Car Co has via its voluntary consumer protections measures.

- Declaration of as manufactured NCAP, Euro Star or ANCAP rating.
- Connecting VIN of vehicles to a national recall database. Allocating legislative responsibility for recall monitoring to either a) the dealership or b) the SEV's Model Report owner.
- Dealerships that import vehicles maintain a strategy to support vehicles consumables, repairs and servicing.
- Imposing an import age limit of no older than 6 years, to ensure that used imports are younger than the current fleet average of 9.8 years.
- Dealerships that import vehicles declare major differences to an equivalent Australian OEM vehicle.
- That each dealership that imports a vehicle maintains a recall monitoring and advice system.

Additional consumer protection measures include:

- Detailed vehicle mechanical inspections before purchase
- Battery diagnostics to assess battery health and performance
- Declaring battery health to consumers and providing "de-rated" real world range estimates of the vehicle for its age
- Ensuring full consumer rights in alignment with Australian Consumer Law²
- Providing up to 3 year battery warranty (sometimes exceeding the manufacturer's own

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<https://www.accc.gov.au/business/selling-products-and-services/selling-parallel-imports#your-obligations-as-a-seller-of-parallel-imports>

- warranty terms)
- Above statutory mechanical warranty
 - No fault returns policy for full refund of purchase price
 - 12 month roadside assistance
 - National servicing through independent and networked mechanics
 - Recall monitoring.

Let's drive forward together: There are a number of stakeholder groups that start from behind in terms of gaining access to and benefiting from the convenience and operational affordability benefits of going electric. This includes renters that pay for their own energy bills but not the capital infrastructure that goes into their homes. It can also include those owning in strata complexes that are often medium or high density residential living. If they can afford EVs in the first place (the first group), they may be cut out of home charging (the second group) because of 'death by admin' or no physical provision for charging infrastructure where cars are parked.

Public and community housing providers need to retrofit infrastructure with at-home V2G charging.

Incentives for strata owners to retrofit buildings with charging points in car parks is required.

For those that don't have access to off street parking but still using EVs, a sufficient infrastructure of public charging needs to be made available, particularly in places such as shopping centres where commuters may conveniently park whilst participating in commerce.

Second hand cars must be made available and affordable.. not just to buy, but also to service.

Public fleet vehicles such as taxis and private fleets such as those made available by companies, must also be incentivised to switch, and the relative tax treatment of EVs and ICEs could be considered as a way of making the move to BEVs more attractive.

State and territory governments need to consider the impact on efforts to electrify private transport with the cost base of providing ongoing public transport in the form of trains and buses. Whilst it is technically feasible to retrofit the bus fleet from diesel and LNG to electric, most existing (passenger transport) rolling stock infrastructure is already electric. Care must be taken not to increase the overall provision of parking spaces for the purposes of EV charging, hence encouraging more private transit adding to congestion, particularly in cities. Public transport must remain a viable and attractive choice, particularly for commuters and for people with different access requirements including lower incomes. Consideration should be given to the requirement for smart meters, ensuring optimized charging, and the role of the Distributed Network Service Provider in the provision of connecting EVs to the Grid and maximizing their value as providing additional storage capacity and flexibility for the Grid.

Going in circles: Development of recycling, reuse and disposal standards for vehicles and their components (such as batteries) is important for resource efficiency and public confidence.

Initiatives such as the Australia Circular Economy Hub (ACE Hub) hosted by the Planet Ark Environmental Foundation highlight environmental challenges arising from the transition to a clean energy future. The disposal/reuse of solar PV panels at the end of their anticipated lives (~20 years) has already received attention – particularly overseas. How EV batteries will be disposed of/reused at the

end of their lives (~10 years) is another issue that requires attention now from industry, policymakers and circular economy advocates in Australia, given the timeframes for investment in new or expanded enterprises in this space.

Refer to this recent White Paper by Australian company IM Group <https://infinitev.au/>

Taking cover: Government has a role to play in convening a conversation with the insurance sector such that the issues they have about providing affordable insurance for new and used BEVs can be addressed. Insurability of BEVs will be a key part to providing consumer confidence in this emerging market.

Talk it up: Despite changes to FBT, for EVs up to \$85k, a vast majority of consumers do not know about it. Industry is well placed to assist in communicating the opportunities that are now available to drive the uptake to EVs.

Furthermore, it may be worth considering AEMO's purview to be extended to more sincerely address distributed energy resources including battery EVs. As a starting point, this may include the publication of key terms (a taxonomy of sorts) that could be consistently across Australian industries by all tiers of government, industry, consumers and NGOs. A key priority would be extending its registry and hub; this could be extended to EV registration as well.

Make subsidies, incentives and tax breaks targetted and temporary: As with development of any new industry, government incentives have a role to play but they should be provided only for a discrete task (to address inequalities for example or to de-risk private investment) within a defined period. Indefinite and "knee jerk" incentives disrupt business planning and can negatively impact consumer and investor confidence.

According to the Electric Vehicle Council, there is general discussion about 25% market penetration being the tipping point for suppliers and the infrastructure needed, systems tested, consumer confidence, second hand vehicle volumes and pricing. Close to this point, it will be critical that the Government engages deeply with industry and consumer groups to test the efficacy of continuing with government incentives.

It is important to note that we incentivise the *right* type of EVs. There is a risk that setting vehicle emissions standards, particularly for passenger vehicles and fleets too loosely will see the market flooded with hybrid EVs which *do not* align with the goal of helping electrify the Australian economy. Therefore ensuring that full BEVs are incentivised via standards settings (as per EU standards), the better for consumers, energy sector and the economy more broadly.

Failure to do this immediately, could have a similar effect that the 'gas transition' had on the decarbonisation of the economy back at the start of 2000. We can't afford another step change transition; we need to undertake a leap change as soon as practical.

Imagine driving an Aussie-made electric ute: A unique opportunity exists in Australia for domestically developed EV infrastructure innovations and solutions to be trialled and demonstrated across diverse environments to support a national EV fleet. Australia has already witnessed and supported the growth of a range of EV manufacturing and infrastructure companies that, in some cases, are already leading, competing, and driving innovation internationally. They are to be applauded and should drive

policymakers to provide further support and encouragement to the increasing number of innovators working in the EV support and infrastructure space.

Ensuring innovative solutions are sought and encouraged should be a priority outcome to be achieved by government EV industry support initiatives.

Australian Design Rule changes? - handle with care: Any changes to the ADR must be done in close consultation with the Australian Manufacturers' Union. We understand that albeit nascent, there is a local manufacturing industry and changes to the ADR must be mindful of the impact that this has on opening up the local market to imports, weighed up against consumer interests to have access to a range of heavy vehicles.

Furthermore, changes to the ADR would impact an existing EV retrofit market for heavy vehicles. We refer you to the submission by SEC member Janus Electric.