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The Hon Chris Bowen MP Minister for Climate Change and Energy Department of Climate Change, Energy, the Environment and Water Submitted via Consultation hub

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National Electric Vehicle Strategy Consultation paper – for Consultation

Dear Minister,

Thank you for the opportunity to respond to the National Electric Vehicle Strategy Consultation Paper (Consultation Paper), and contribute to the development of a framework and measures to capture the opportunities of electric vehicles (EVs) and advance an orderly transition to electrification.

Energy Consumers Australia (ECA) is the national voice of residential and small business energy consumers. Our vision is for consumer values, expectations, and needs to be realised through a modern, flexible, and resilient system. We enable residential and small business energy consumers to have their voices heard by the sector by working with other consumer groups to gather evidence-based research with a national perspective, distil it to key viewpoints, and feed it back to the market to influence outcomes.

As a form of Consumer Energy Resources (CER), EVs will have an increasingly prominent place in the lives of Australians and the future energy system. The National Electric Vehicle Strategy has an important role in enabling a nationally comprehensive policy that allows all Australians to access the benefits of EVs, for both mobility and supporting the transition to a lower carbon electricity industry.

Our submission makes three key points:

- ECA supports policy measures to accelerate uptake of EVs. The wide-spread roll-out of EVs has the potential to provide flow-on benefits to both individual EV owners and energy consumers more widely, by providing flexibility in the way energy is used.
- Coordination will be required between the National Electric Vehicle Strategy, energy policy, and consumer protections, with recognition that the consumer journey does not end with the purchase of an EV. For example, consumers' charging at home must be empowered to choose an energy plan that suits the way they want to charge their EV, including any supporting infrastructure, and with the accompanying appropriate consumer protections.
- The transition to EVs needs to be equitable. Appropriate support, including charging infrastructure, must be available to those that don't have off-street parking or the agency to install the necessary infrastructure, including renters and those that live in apartments.

As we discuss in our submission, consumers need advice to support their decision making on EV related issues, and policy should be developed around consumers' mobility needs and behaviours to make EVs an easy and accessible choice.

Finally, we note that the National Electric Vehicle Strategy will need to work in step with other policy developments being carried out within and in parallel across sectors, for example transport, energy, home efficiency, climate, and consumer protections. There is value in thinking about the EV environment holistically when developing policy, to ensure that various sectoral policies complement each other, and do not inadvertently form new barriers for EV uptake.

Please find our detailed submission attached. Should you have any questions or require clarification, please contact Isabella Darin at isabella.darin@energyconsumersaustralia.com.au.

Yours sincerely,

A Gallagher

Lynne Gallagher Chief Executive Officer

Submission to the Electric Vehicle Smart Charging Issues Paper

1. Accelerated uptake of EVs has benefits for both individual EV users and electricity consumers more broadly

We support accelerating the uptake of EVs, including the introduction of fuel efficiency standards to encourage an increased supply of EVs in Australia.¹

EVs have potential benefits beyond reducing emissions in the transport sector. The spill-over benefits to the electricity sector are substantial if these can be harnessed through a coordinated approach to accelerated uptake of EVs, such that consumers have agency to make decisions about their energy usage that maximise the benefits both for individual EV owners and energy consumers more broadly.

For individual consumers, EVs present opportunities to optimise their energy arrangements

EV owners can benefit from lower electricity bills by having flexibility in how they use their energy. That is, by taking advantage of the lower cost energy available from renewable generation during the day, combined with appropriate retail prices to encourage this type of use.

Further, while primarily used for mobility, EVs can also act as a battery, absorbing energy when it is cheap, clean, and abundant, and discharging when energy is more expensive. This opportunity is currently available for some with bidirectional chargers, and again rewards consumers with lower electricity bills through their flexibility in how they use energy.

Work is also underway to enable consumers to be rewarded for using electricity in ways that support network stability, including through coordinated "virtual power plants" (VPP) and for exporting energy at peak times.² These mechanisms can provide further opportunities for consumers to lower their electricity bills by leveraging their EV, subject to consumer interest and technical feasibility.³

EVs also present opportunities to reduce electricity costs for all electricity users

Greater proliferation of EVs, combined with appropriate incentives and other mechanisms to encourage people to charge their EVs in flexible ways, will have benefits for all electricity users.

These include:

- Absorbing low-cost, clean energy during the day when there is excess solar production, helping to manage network stability and reducing the need for electricity network investment;
- Reducing network prices by improving network capacity utilisation³; and
- Sending energy back into the grid at times of peak demand if they have "vehicle-to -grid" (V2G) capability, removing or delaying the need to invest in additional network capacity.

¹ <u>https://electricvehiclecouncil.com.au/wp-content/uploads/2022/08/EVC-Briefing_Increasing-the-supply-of-EVs-to-Australia.pdf</u> ² For example, <u>https://arena.gov.au/projects/sa-power-networks-flexible-exports-for-solar-pv-trial/</u>; and

https://energyconsumersaustralia.com.au/publications/submission-to-the-energy-security-boards-interoperability-policyconsultation-paper

³ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/ECA-Response-to-ESB-EV-Smart-Charging-Issues-Paper.pdf</u> p 6-9.

For the above outcomes to be realised, energy policy must be designed in a way that incorporates consumers' diversity and preferences. This issue is discussed in our recent submission to the Energy Security Board (ESB) on their *Electric Vehicle Smart Charging Issues Paper.*⁴

A strong social licence is also important

Given the National Electric Vehicle Strategy's objective to encourage the rapid increase of demand for EVs, it must consider how it will build consumer trust in EVs and the related policy environment. The ESB *Customer Insights Collaboration Release 1 Report* identifies that a critical barrier in public acceptance and adoption of Consumer Energy Resources (CER), including EVs, is a lack of trust in institutions, organisations, and CER products and services.⁵ Consumer trust will be critical if consumers are to adopt measures that make it easier for EV charging to be automated, which, if successful, will help lower energy costs for everyone. Yet current research suggests that consumers are not willing to hand over control of their devices.⁶

2. Consumers need to be empowered to realise the benefits of EVs

Consumers must be empowered to make decisions that benefit them when engaging with EVs

Other policy levers will not be effective without targeted, tailored advice for consumers to support their decisions on EV related issues. Consumers should be able to determine their desired outcomes and circumstances in the choices that they make, when accessing EVs and their related energy services.⁷ As the number of choices in how consumers use and manage their energy technologies and services grows, there is risk that consumers' agency to make decisions in their best interests will be reduced.⁸

This includes advice on how to maximise the benefits for consumers regarding:

- The sale of EVs and associated financial arrangements, e.g., leasing, credit, or buy now pay later arrangements;
- Contracts on the pricing of electricity bought and sold if a consumer is charging their EV at home,⁹ e.g., specifics on pricing plans and export charges, as well as related arrangements such as dynamic operating envelopes (DOEs)¹⁰;
- Types of chargers and infrastructure is suitable if they are charging at home,¹¹
- Energy services for charging EVs outside the home;
- Contracts for control of a consumer's EV, e.g., VPP or V2G arrangements;
- Bundled services, e.g., a subscription rate for charging and lease or purchase of an EV; and
- Green loan schemes, or government incentives for EV technologies.

EV policy should also be aligned with broader energy efficiency strategies, particularly improving energy efficiency in the home. As electricity bills increase for those charging their EV at home, consumers may look for alternative ways to reduce their bills. Low-cost energy efficiency improvements are a promising option for consumers to deliver bill savings.

⁴ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/ECA-Response-to-ESB-EV-Smart-Charging-Issues-Paper.pdf</u> p 3-4.

⁵ https://www.datocms-assets.com/32572/1658964111-esb-cic-knowledge-share-report-final_250722.pdf p 23.

⁶ https://ecss.energyconsumersaustralia.com.au/behaviour-survey-oct-2022/how-people-use-energy-2022/; and

https://www.monash.edu/__data/assets/pdf_file/0011/2617157/DEF-Future-Home-Life-Full-Report.pdf_

⁷ https://energyconsumersaustralia.com.au/wp-content/uploads/20220628 Submission-to-M-Feather AER Retail-Authorisation-and-Exemptions-Review-amended-28.06.pdf p 8-9.

https://energyconsumersaustralia.com.au/wp-content/uploads/Power-Shift-Final-Report-February-2020.pdf p 43.

⁹ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/Attachment-2-Prices-to-devices.pdf</u>

¹⁰ https://arena.gov.au/assets/2022/03/dynamic-operating-envelope-working-group-outcomes-report.pdf p 38.

¹¹ https://renew.org.au/sanctuary-magazine/ideas-advice/charging-forward-getting-your-home-electric-vehicle-ready/

Consumers need to know they are protected

A fit-for-purpose consumer agency, protections and dispute resolution framework¹² must be developed that is comprehensive and robust in its application to evolving innovative EV-related technologies and services. Consumers should feel confident that EV product and service providers will act in consumers' best interests, and that they can easily access affordable external dispute resolution. Further it is important to consider how EV protections cut across multiple sectors, including transport, energy, and finance.

Appropriate standards are also an important element for consumers' confidence in the choice and control over their EV and related devices, by guiding manufacturers and installers to ensure a safe and effective product.¹³ Further, policy should ensure the interoperability of EVs and devices, which can enable the choice and flexibility critical in ensuring consumers' expectations for our future transport and energy system.¹⁴

Consumers need adequate infrastructure

Smart meters have a role to play in maximising benefits for EV users, specifically those who can charge at home. For example, smart meters enable more sophisticated bill pricing structures, which present opportunities for consumers to reduce their electricity bills.¹⁵ Outside of Victoria, only about 17% of household and residential customers currently have smart meters installed.¹⁶ The Australian Energy Market Commission is currently considering ways to accelerate the roll-out of smart meters, and ECA considers there is a role for Governments to play in supporting this process.¹⁷

Adequate protections are also crucial for public charging infrastructure to ensure good outcomes for consumers. Looking to European learnings, this may include requirements to support user choice on where to charge and how to pay, and on network reliability and customer service.¹⁸ For example, requirements for public chargers to include credit or debit cards as a method of payment – and not requiring the use of a particular mobile app, addresses barrier on accessibility for some consumers.¹⁹

3. Policy must also ensure that the transition is equitable – such that all consumers can benefit from EVs

It is important that the National Electric Vehicle Strategy prioritise an equitable transition that ensures all consumers can access the opportunities of EVs.

¹² <u>https://energyconsumersaustralia.com.au/wp-content/uploads/20220628_Submission-to-M-Feather_AER_Retail-Authorisation-and-Exemptions-Review-amended-28.06.pdf</u>

 ¹³ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/Submission-to-the-AEMC-Governance-of-Distributed-Energy-Resources-Technical-Standards-Draft-Determination-Paper..pdf</u>
 ¹⁴ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/Submission-to-the-Energy-Security-Board%E2%80%99s-</u>

¹⁴ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/Submission-to-the-Energy-Security-Board%E2%80%99s-Interoperability-Policy-consultation-paper.pdf</u>

¹⁵ <u>https://www.researchgate.net/publication/364338861_EV_Integration_Recommendations_and_Project_Summary p 45.</u>

¹⁶ https://www.aemc.gov.au/sites/default/files/2020-

^{12/}EMO0040%20Review%20of%20the%20regulatory%20framework%20for%20metering%20services-

^{%20}Consult%20paper%20FINAL%20v2.pdf p 18.

¹⁷ <u>https://energyconsumersaustralia.com.au/wp-content/uploads/SUBMISSION-TO-THE-SA-GOV-ON-ACCELERATING-THE-ROLL-OUT-OF-SMART-METERS-IN-SOUTH-AUSTRALIA.pdf</u>

¹⁸ https://cdn.eurelectric.org/media/5699/power_sector_accelerating_e-mobility-2022_eyeurelectric_report-2022-030-0059-01-eh-3270E9C2.pdf p 9.

¹⁹ <u>https://www.gov.uk/government/consultations/the-consumer-experience-at-public-electric-vehicle-chargepoints/the-consumer-experience-at-public-chargepoints/the-consumer-experience-at-public-electric-vehicle-chargepoints/the-consumer-experience-at-pu</u>

Some consumers face barriers to access EVs that won't be solved through increased supply

Policy must facilitate accessible and widespread charging infrastructure to ensure the transition to an electrified transport system does not leave anyone behind, particularly renters and those without offstreet parking. Our June 2022 Consumer Sentiment Survey revealed that two reasons why households²⁰ and small businesses²¹ have not yet bought an EV (apart from cost) are that there are not enough charging stations, and that they don't have anywhere to charge an EV at home.²² Further, policy concerning the deployment of charging infrastructure also has an important role in addressing the barriers faced by rural and remote communities.²³ In this way, public charging is a key enabler to uptake of EVs.

Policy must also address barriers faced by those in multi-unit dwellings, including building codes and strata law.²⁴ We support working with the states and territories for full implementation of the National Construction Code 2022 requirement that new apartment buildings are EV ready by 1 October 2023, and developing further measures to support easy and safe charging of EVs. Further, policy should support the retrofitting of existing multi-unit dwellings to be EV-ready in all states and territories, leveraging the jurisdictional work already underway.²⁵

Potential energy system costs of EV integration may disproportionally affect some consumers

As discussed in our submission to the ESB on their *Electric Vehicle Smart Charging Issues Paper*, greater network upgrades may be required in rural and regional areas, and households in financial pressure are likely to be disproportionally impacted by higher network charges.²⁶ Measures to assist those households and small business could differ across networks and should be tailored to the needs of those consumers.

Further, it is important that there is visibility by government, regulators, and industry to see where adverse distributional impacts may emerge. For example, the Australian Energy Regulator in its Consumer Vulnerability Strategy is considering approaches to monitor and report the impact on consumers at risk of vulnerability.²⁷ This includes great Britain's energy regulator Ofgem's approach in assessing the distributional impacts of its regulatory decisions, which we would welcome.²⁸

²⁰ https://ecss.energyconsumersaustralia.com.au/sentiment-survey-june-2022/featured-content-household-sentiment-june-2022/

²¹ https://ecss.energyconsumersaustralia.com.au/sentiment-survey-june-2022/featured-content-household-sentiment-june-2022/

²² https://energyconsumersaustralia.com.au/wp-content/uploads/ECA-Response-to-ESB-EV-Smart-Charging-Issues-Paper.pdf

p 9. ²³ https://doi.org/10.1080/00049182.2022.2086720

²⁴ https://www.abc.net.au/news/2022-09-27/ev-apartment-electric-car-barriers-costs-installation-tesla/101473158

²⁵ https://www.energy.nsw.gov.au/business-and-industry/programs-grants-and-schemes/electric-vehicles/electric-vehicle-ready

²⁶ https://energyconsumersaustralia.com.au/wp-content/uploads/ECA-Response-to-ESB-EV-Smart-Charging-Issues-Paper.pdf p 9. ²⁷ https://www.aer.gov.au/sites/www.aer.gov.au/files/Consumer%20Vulnerability%20Strategy%20-

^{%20}Draft%20for%20consultation.pdf p 52.

²⁸https://www.ofgem.gov.uk/sites/default/files/docs/2020/05/assessing_the_distributional_impacts_of_economic_regulation_1.pd

Appendix: Consultation Questions

CONSULTATION QUESTION	RESPONSE
Question 1 – Do you agree with the objectives, and do you think they will achieve our proposed goals? Are there other objectives we should consider?	We support the proposed goals and objectives in the Consultation Paper, as increased uptake of EVs has benefits for both EV users and energy consumers more broadly (as we discuss in Section 1).
	However, a missing goal in the proposed framework is that consumers are well informed about EVs and the related environment, such that they can make decisions in their best interests. As we discuss in Section 2 of our submission, other policy levers will not be effective without targeted, tailored advice for consumers to support their decision making on EV related issues.
	Further, while the Consultation Paper asserts that it will "address national gaps so all Australian can access the benefits of EVs" ²⁹ this is not adequately reflected in the proposed framework. As we highlight in Section 3 of our submission, policy must ensure that the transition to an electric transport system is equitable.
Question 3 – What are suitable indicators to measure if we are on track to achieve our goals and objectives?	We support the Consultation Paper's recognition that the National Electric Vehicle Strategy will need to be dynamic and adaptive, with ongoing reviews to measure and inform adjustments needed.
	We recommend that a key measure to track progress of the National Electric Vehicle Strategy should be undertaking consumer surveys to understand the consumer experience in relation to its goals. For example, Ofgem interviews energy consumers yearly to understand the rate of adoption of EVs, the adoption of smart charging, and how EV owners use and charge their vehicles, to support their work in ensuring that all consumers can benefit from the transition. ³⁰
Question 4 – Are there any other measures by government and industry that can increase affordability and accessibility of EVs to help drive demand?	In Sections 2 and 3 of our submission, we identify measures to increase the accessibility of EVs to help drive demand. For example:
	 Tailored advices for consumers to support their decisions on EV related issues, A fit-for-purpose consumer agency, protections and dispute resolution framework, Robust public charging infrastructure and measures to ensure homes are EV ready.
	Additionally, we note that rebate and incentive programs alone will not increase affordability of EVs for all consumers, as such programs disproportionally favour those on the highest incomes. ³¹ As ACTCOSS has noted, there is need for targeted policy for low-income households, as these are the consumers who are least able to make the transition without assistance but are most effected by increasing fuel and other costs. ³²

 ²⁹ <u>https://storage.googleapis.com/converlens-au-industry/industry/p/prj21fdd5bb6514260f47fcd/public_assets/National%20Electric%20Vehicle%20Strategy%20Consultation%20Paper.pdf p 3.
 ³⁰ <u>https://www.ofgem.gov.uk/sites/default/files/202111/Consumer%20survey%20EVs%20summary%20FINAL.pdf</u>
 ³¹ <u>https://scholarworks.sjsu.edu/cgi/viewcontent.cgi?article=1947&context=etd_projects p 19-20.</u>
 ³² <u>https://www.actcoss.org.au/sites/default/files/public/publications/2022-Submission-to-Inquiry-into-EV-Adoption.pdf p 2.</u>
</u>

Question 6 – What information could help increase demand and is Government or industry best placed to inform Australians about EVs?	We address this question in Section 2 of our submission, recommending that other policy levers will not be effective without targeted, tailored advice to consumers, such that consumers are empowered to make decisions that benefit them when engaging with EVs and the related environment. This could include advice on:
	 The sale of EVs and associated financial arrangements, e.g., leasing, credit, or buy now pay later arrangements; Contracts on the pricing of electricity bought and sold if a consumer is charging their EV at home, e.g., specifics on pricing plans and export charges, as well as related arrangements such as dynamic operating envelopes (DOEs); Types of chargers and infrastructure is suitable if they are charging at home; Energy services for charging EVs outside the home; Contracts for control of a consumer's EV, e.g., VPP or V2G arrangements; Bundled services, e.g., a subscription rate for charging and lease or purchase of an EV; and Green loan schemes, or government incentives for EV technologies.
	Additionally, we note that we have recently launched materials aimed at ensuring greater consumer confidence in rooftop solar, home batteries, and EVs. The 'Plug In' campaign features a dedicated information hub, and includes two 'white-labelled' fact sheets on buying and using EVs. ³³
	In October 2022, we have also proposed to Energy Ministers' an 'Energy Trust' to bridge the energy information gap and unlock consumer participation to drive down bills.
Question 8 – Would vehicle fuel efficiency standards incentivise global manufacturers to send EVs and lower emission vehicles to Australia?	As we mention in Section 1 of our submission, we support accelerating the uptake of EVs, including the introduction of fuel efficiency standards to encourage an increased supply of EVs in Australia. ³⁴
Question 19 – What more needs to be done nationally to ensure we deliver a nationally comprehensive framework for EVs?	 We address this in Section 2 and 3 of our submission. In additional to measures already mentioned in this appendix: We support working with the states and territories for full implementation of the National Construction Code 2022 requirement that new apartment buildings are EV ready by 1 October 2023, and developing further measures to support easy and safe charging of EVs; Policy should support the retrofitting of existing multi-unit dwellings to be EV-ready in all states and territories, leveraging the jurisdictional work already underway; and Policy should ensure that any potential energy system costs due to EVs do not disproportionally affect any consumers.

https://www.energytechguide.com.au/resources
 https://electricvehiclecouncil.com.au/wp-content/uploads/2022/08/EVC-Briefing_Increasing-the-supply-of-EVs-to-Australia.pdf

	Additionally, we see value in national coordination of market and tariff reforms that incentivise EV charging practices
	at optimal times for consumers, and plans for future vehicle-to-grid opportunities, to ensure consistent and effective
	outcomes for consumers in all jurisdictions.
Question 20 – How can we best make sure all	We address this in Section 3 of our submission, recommending that the National Electric Vehicle Strategy prioritises
Australians get access to the opportunities and benefits	an equitable transition that ensures all consumers can access the opportunities of EVs. This includes policy that
from the transition?	mitigates barriers of uptake faced by some consumers, for example renters, those without off-street parking, those
	in multi-unit dwellings, and those in rural and remote communities.