

AGL Energy Limited

ABN: 74 115 061 375 Level 24, 200 George St Sydney NSW 2000 Locked Bag 1837 St Leonards NSW 2065 t: 02 9921 2999 f: 02 9921 2552 agl.com.au

Zero Emissions Vehicles Expert Advisory Panel Department of Transport Victorian Government

Submitted via email: ZEVExpertPanel@transport.vic.gov.au

14 October 2021

Zero Emissions Vehicles Expert Advisory Panel Consultation, September 2021

AGL Energy (**AGL**) welcomes the opportunity to respond to the Victorian Government's Zero Emissions Vehicles (**ZEV**) Expert Advisory Panel Consultation, September 2021 (**Consultation Document**).

AGL is one of Australia's leading integrated energy companies and one of the largest ASX listed owner, operator, and developer of renewable generation. AGL is also a significant retailer of energy and telecommunications with 4.5 million customer accounts across Australia.

AGL is a market leader in electric vehicle (**EV**) products and services. In 2020, AGL became the first Australian company to join EV100, committing to make our own corporate fleet entirely electric by 2030.¹ AGL has delivered multiple EV projects and trials, including:

- The \$1/day electric car energy plan. Launched in 2016 and concluded in 2018, the plan provided consumers unlimited EV charging for \$1/day with complimentary carbon offset for the EV load.
- AGL's current offer for electric vehicle owners² that includes bonus credits and complimentary carbon offset for the whole of house energy load.
- The EV Subscription program,³ that was launched in 2020, providing customers with the opportunity to experience the benefits of an EV without the commitment of ownership.
- AGL's EV Orchestration Trial,⁴ that was launched in 2020 in partnership with the Australian Renewable Energy Agency (ARENA). The purpose of this Trial is to seek to understand how EVs could help the wider energy system by 'orchestrating' vehicle charging through smart chargers, Vehicle to Grid chargers and API technology.

Our feedback on the Consultation Document is bases on our experience in EV products and services and ongoing engagement in policy and regulatory design for EVs.

¹ See further, The Climate Group's EV100 initiative, available at https://www.theclimategroup.org/ev100.

² See further, AGL EV Plan, available at https://www.agl.com.au/electric-vehicles.

³ See further AGL Subscription Program, available at <a href="https://next.agl.com.au/ev-subscription?utm_campaign=Adwords&utm_source=ppc&utm_medium=BrandCampaign%20&utm_term=AGLSubscription&utm_content=Subscribetofuture&gclid=EAIaIQobChMlg5L0yvX87wIV1X0rCh0AQqGjEAAYASAAEgJk_fD_BwE

⁴ See further, AGL Electric Vehicle Orchestration Trial, available at https://arena.gov.au/projects/agl-electric-vehicle-orchestrationtrial/.



Strategic direction

As we previously observed in response to the Victorian Government's Zero Emissions Vehicle Roadmap Consultation Paper, AGL believes that energy and transport policy, and accompanying regulatory frameworks will play a crucial role in facilitating the smooth transition of the energy system, and broader economy, in addressing climate change. In our view, EVs present an opportunity to support the decarbonisation of the Victorian economy whilst delivering customer-centric solutions that enable customers to exert more control over their energy arrangements and realise value from their investment in distributed energy resources (**DER**).

We welcome the Victorian Government's Zero Emissions Vehicle and the commitment to invest \$100 million to accelerate Victoria's drive to zero emissions vehicles as an important starting point in accelerating the uptake of EVs in Victoria. We offer the following recommendations as a means to complement this investment to achieve the light zero emissions vehicles sales target of 50 per cent sales by 2030.

Recommendations

AGL recommends the Expert Panel complement the Roadmap with the following elements:

- Policies and programs to increase the range and affordability of new and used electric vehicles; such as financial incentives for EV owners, and programs to support the transition of Government fleets and private fleets towards EVs;
- 2. Policies and programs to support network planning and investment in charging infrastructure thereby reducing consumers' "range anxiety"; and
- 3. Programs to support EV skills training and improved customer awareness of the benefits of EVs.

We also recommend the Expert Panel carefully weigh any perceived barriers in optimising EV into the electricity grid, drawing relevant insights on EV grid integration from the existing breadth of trials and research to inform policy and regulatory reform. As this is a new and emerging market, it is important to make fact-based and 'no regret' regulatory changes to support the smooth integration of EVs.

Finally, we believe the Victoria Government's application of a road-user charge on ZEVs works against and potentially mitigates the benefits of the proposed Roadmap. As such, we recommend the Victorian Government set the current charge to zero and allow the proposed policies and programs to boost uptake of EVs in line with the Roadmap's sales target.

We elaborate on these recommendations in the **Attachment**.

Should you have any questions in relation to this submission, please contact Kurt Winter, Regulatory Strategy Manager, on 03 8633 7204 or KWinter@agl.com.au.

Yours sincerely

Con Hristodoulidis

A/ GM Policy and Markets Regulation



ATTACHMENT

1. Increasing the range and affordability of new and used electric vehicles

AGL considers the following Victorian Government policies and programs could be enhanced to ensure the Government meets its light zero emissions vehicles sales target of 50 per cent sales by 2030:

- The \$46 million ZEV Subsidy be expanded beyond its 20,000 subsidies to provide a longer-term budgetary horizon and continued access for Victorian consumers.
- The \$10 million Government fleet program be expanded to accommodate all new government fleet vehicles, consistent with Infrastructure Victoria's recommendation made in its updated 30-Year Infrastructure Strategy.⁵
- The \$5 million commercial fleets program be expanded to support scaled deployment by car share, rental, and subscription businesses, as well as consortiums aggregating demand from several fleet operators in a single grant application. We note that other jurisdictions have recently considered a reverse auction model to facilitate scaled deployment. While we anticipate this model would entail substantial administration complexity that will need to be carefully managed to mitigate any probity risk in the fulfilment of businesses cases after subsidies have been secured through bidding rounds, it does present a mechanism to deliver cost competitive deployment at scale.
- Registration charges be further revised to incentivize ZEV uptake and phase out internal combustion
 engine vehicles. The current \$100 registration discount could be increased to provide a stronger
 financial incentive for ZEV registrations. The Victorian Government could also introduce increasingly
 stringent vehicle registration emissions standards, scaling towards a total ban on registrations to
 support accelerated transition towards ZEVs, consistent with Infrastructure Victoria's
 recommendation made in its updated 30-Year Infrastructure Strategy.
- Consideration be given to providing stamp duty concessions to complement the upfront ZEV Subsidy. We note that the NSW Government has committed to removing stamp duty for EV purchases up to \$75,000, estimated to provide a further \$3,000 in savings to consumers.
- Complementary transport measures be considered, including priority access for ZEVs to transit lanes
 and toll exemptions for toll roads, as has been implemented in other international jurisdictions such
 as Norway. To contain the budgetary impact, toll exemptions could be implemented with a clear
 sunset clause as ZEVs reach scale consistent with the Government's targets.

We also consider that Victoria's application of a road-user charging framework on ZEVs at this point in time is likely to negatively impact the uptake of ZEVs at the early stage in the market's development. We would encourage revising this policy with the intent of laying the groundwork for a road user pricing framework in the long-term, whilst supporting ZEV uptake until such time as they reach price parity with ICE vehicles or material market share consistent with the Government's target.

We acknowledge that establishing a road-user charging framework will be integral to establishing a sustainable revenue model to support the maintenance and improvement of Australia's road networks into the future with the advent of emerging technologies such as ZEVs. However, with the comparatively small

⁵ See further Victoria's infrastructure strategy 2021-2051, Available at https://www.infrastructurevictoria.com.au/project/30-year-strategy/.



market for EVs that currently exists in Australia, we consider the introduction of any charges or taxes on EVs in their infancy will disincentivise consumers to purchase an EV and therefore stunt the development of this emerging industry and make it difficult for the Victorian Government to achieve its EV sales target.

The introduction of a road user charge also risks undermining business confidence and investment in the emerging market that is necessary to support the transition towards electrification. This includes investment in charging infrastructure, fleet transition and grid integration that are the focus of the Victorian Government's Zero Emissions Vehicle Roadmap.

2. Supporting network planning and investment in charging infrastructure

AGL supports the Victoria's Government's proposed \$19 million EV charging infrastructure program as an important starting point in the early deployment of charging infrastructure and would encourage the Government to deploy this program through a competitive grant tender process.

International experience underscores the strong correlation between public charging infrastructure and the uptake of EVs.⁶ At the early stages of the EV market, fast charging infrastructure addresses only an occasional need for EV owners, without necessarily capturing the indirect value of EV charging services, such as improved network asset utilisation if EV charging is appropriately managed and/or enhanced payback when EVs are coupled with local generation. Accordingly, AGL supports early market competitive grant programs to help bridge the payback gap for investors in the short term.

We also support the Victorian Government's focus on:

- Facilitating transparent distribution network capacity information to assist public charging companies
 to identify optimal charging station locations. We believe the Federal and State governments can
 take a leading and co-ordinating role by requesting distribution networks provide public information
 about the strength and quality of their networks to allow charging infrastructure proponents to
 properly plan and work with distribution networks on the efficient roll out of infrastructure.
- Adopting clear and agreed national EV grid integration standards to provide greater certainty and interoperability for manufacturers, installers, investors and consumers. In this regard, we note that there is currently a rule change proposal before the Australian Energy Market Commission to improve the governance arrangements for distributed energy resources technical standards.⁷ We would encourage the Victorian Government to support this national process to improve the national technical standards development process and enhance its linkage with the national electricity regulatory framework.

Beyond these matters, we also consider the Victorian Government, in collaboration with other jurisdictional governments, could support reforming the network connections framework to streamline and expedite the process and ensure consistency between jurisdictions. The connections approval process for setting up a public charging site is time-consuming and varies considerably between distribution networks businesses,

⁶ We note in the context of the Norwegian market, which is the global leader in terms of market share of EVs, the Norwegian Government launched a program in 2017 to finance the establishment of at least two multi-standard fast charging stations every 50km on all main roads in Norway (https://elbil.no/english/norwegian-ev-policy/).

⁷ See AEMC, Governance of distributed energy resources technical standards rule change, Available at https://www.aemc.gov.au/rule-changes/governance-distributed-energy-resources-technical-standards.



both in terms of the process for approval and the associated fees. We consider that greater alignment in the network connection framework would improve the viability of scaled investment in charging infrastructure.

3. EV skills training and improved customer awareness of the benefits of EVs

AGL supports the Victorian Government's focus on increasing public awareness and promoting uptake of ZEVs, through a proposed public education campaign, including online tools and guidance, demonstration events and capacity-building.

As we previously advised, we would recommend the Victorian Government leverage existing expertise, including through the Electric Vehicle Council and Charge Together Fleets Program, to facilitate knowledge sharing opportunities both with Victorian consumers and vehicle dealerships.

We also support the Victorian Government's proposal to support skills capability building and potential retraining opportunities in the transition to ZEVs and would encourage the Government to develop programs tailored to different segments of the EV supply chain, from maintenance and repair to roadside assistance and insurance.

4. EV grid integration

We note that the Zero Emissions Vehicle Roadmap elaborates a range of challenges with respect to optimising the integration of BEVs into Victoria's energy network, as summarised in Table 4.

We would recommend the Expert Panel carefully weigh any perceived barriers in optimising EV into the electricity grid, drawing relevant insights on EV grid integration for the existing breadth of trials and research to inform policy and regulatory reform. As this is a new and emerging market, it is important to make fact-based and 'no regret' regulatory changes to support the smooth integration of EVs.

By way of example, in a number of industry forums we have observed policymakers conflating vehicle-to-grid (**V2G**) charging with regular charging to develop insights on possible regulatory reform directions. As we have documented in our EV Orchestration Trial,⁸ detailed investigation into V2G technology has revealed that the technology is still at a very early stage, perhaps earlier than is widely thought. Nevertheless, these technical insights should not impact the application of regular EV charging and the way in which it is regulated through network connections and technical standards.

We also recommend the Government lean into existing regulatory frameworks and processes will support EV integration into the energy system. For example, the national economic regulatory framework under the national energy laws and rules provides for a clear pathway for Victorian distributions to forecast demand on their system as part of their 5-year revenue reset. EV load is no different to any other load that networks are required to forecast under this framework. Further, we note that the Australian Energy Market Operator's NEM Electricity Statement of Opportunities has already begun to forecast the impact of EV load in the electricity system.⁹

The Distributed Energy Integration Program (**DEIP**) has also been exploring pricing and demand response policy settings for peak demand management in a two-way flow energy system, including EV load. By way

⁸ See AGL Electric Vehicle Orchestration Trial, Lessons Learnt Report 1 (May 2021), Available at https://arena.gov.au/assets/2021/05/agl-electric-vehicle-orchestration-trial-lessons-learnt-report-1.pdf.

⁹ See AEMO, NEM Electricity Statement of Opportunities (2021), Available at https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-reliability/nem-electricity-statement-of-opportunities-esoo.



of example, AGL co-lead the Residential Tariffs and Incentives Taskforce with the Electric Vehicle Council, drawing a range of relevant insights to support network tariff design, including the following:

- There is currently no strong consensus that EV should be treated differently in network tariffs;
- Networks tariffs need to align with retail drivers to facilitate customer solutions as scale and support
 optionality; and
- Policymakers need to consider the relationship with technical solutions such as dynamic operating envelopes.

More broadly, as distribution networks transitions toward dynamic connections, we consider that an independently developed national connections framework would be best placed ensure that the network connections framework for DER aligns with the National Electricity Objective. Empowering an independent authority, such as the Australian Energy Regulator (AER), to develop national connection guidelines in consultation with industry stakeholders, and assess network connection applications, utilising these technical documents, would ensure a balanced approach to maintaining network stability and valuing consumer investments.

Ensuring consistent consumer outcomes in the delivery of dynamic customer connections will require a greater level of regulatory scrutiny from the AER over distribution networks' expenditure proposals to ensure network investment facilitates the interaction of DER with the broader energy market system. ¹⁰ As well as provided some degree of harmonisation in customer connection agreements, the AER's assessment of dynamic export operating envelopes will need to be informed by an established customer export value methodology that appropriately values customer impacts and differentiates between historic circumstances of distribution network operation and issues associated with higher DER penetration.

_

¹⁰ See further AGL submission in response to the AER on assessing distribution energy integration expenditure (20 January 2020), Available at https://thehub.agl.com.au/articles/2020/01/submission-to-aer-on-assessing-distributed-energy-integration-expenditure.