

Response ID ANON-J7XP-RG7D-W

Submitted to Charging Our Future
Submitted on 2023-05-10 08:55:53

Your details

What is your name?

Name:
Keith Hutchinson

What is your email address?

Email:
keith@electricity.org.nz

What is your organisation?

Organisation:
Electricity Networks Aotearoa

Introduction

1 Do you have any comments about the institutional arrangements for implementation set out in Annex 2, or on the way central government should work with the private sector when implementing the final version?

Please explain in the box below. :

ENA prefers the 'new crown statutory entity' (CSE) approach to delivering the EV charging strategy. We think that this strikes a good balance between having access to the resources of government, independence, and the complexity of standing up a new entity. The sector has worked very successfully with EECA on many initiatives over the years, and the CSE approach seems to us to be a good model to follow. All the proposed working arrangements described under the 'Working with the public sector' heading on page 43 of the discussion document are useful to deliver the EV charging strategy.

Next steps

Why have a strategy for EV charging?

Baseline: the current state of charging infrastructure

2 Do you agree with this description of the status quo? Is anything missing from this description of the status quo?

Please explain in the box below. :

This appears to be an accurate description of the status quo regarding EV charging in NZ. We have nothing to add.

Our vision for Aotearoa New Zealand's EV charging infrastructure

3 Do you think this draft vision serves as a useful guide for the EV Charging Strategy? If not, what is missing from the vision?

Please explain in the box below. :

We agree that the draft vision serves as a useful guide for the direction of EV charging provision in New Zealand. However, there is a risk that costs associated with the provision of electricity infrastructure to support EV charging may be avoided by passing these on to other users of electricity infrastructure (e.g. urban intensification, industrial process heat conversions, etc). While not necessarily a matter for the strategy's vision statement, it is important to consider electricity infrastructure costs holistically, and not specifically focus on one particular end-use.

Five long-term outcomes support the vision

Outcomes

Outcome 1, Q1 Do you agree with the focus area under outcome 1?

If not, please explain why.:

ENA agrees with the focus area under outcome 1 but we have some additional comments to make on some of the activities highlighted in the discussion document. ENA strongly advocates for the introduction of mandated smart EV charging in New Zealand – for more detailed thinking around this see our

response to EECA's green paper on improving the performance of electric vehicle chargers in September 2022.

ENA and the electricity distribution sector are very actively engaged with the Electricity Authority on its work updating the regulatory settings for distribution networks. In our response to that consultation, we strongly support an intervention by the Authority to improve EDB access to smart metering data, which is critical not only for management of the impacts of EV charging, but also other impacts arising on the distribution networks.

ENA remains concerned the Commerce Commission's price-quality regime does not adequately allow for the funding of 'new' activities by EDBs that they have not previously undertaken. In the case of EV charging, EDBs will likely need to develop new capabilities to monitor and control charging to mitigate the impacts on distribution networks, and this will entail some costs. The distribution sector is not confident that the current price-quality regime will allow them to incur the costs necessary to do so. This concern exists for a number of emerging areas associated with New Zealand's decarbonisation journey, and is not unique to EV charging.

Outcome 1, Q2 Which further actions under Focus area 1a would you prioritise?

Please explain your answer.:

ENA sees merit in undertaking all of the 'further actions' put forward under focus area 1a. In terms of prioritisation, we think that:

- Use vehicle and electricity supply data to identify and plan for electricity network requirements; and
- Promote the benefits and support the uptake of smart chargers for EVs.

should have the highest priorities.

Providing EDBs with improved access to both vehicle and electricity supply (e.g. smart metering) data are relatively straightforward steps that enable EDBs to more efficiently and effectively accommodate the impacts of electric vehicles charging on their networks.

Likewise, mandating the use of smart chargers is a simple step the government could take to ensure that the impacts of charging EVs at peak times are mitigated as much as possible.

Outcome 1, Q3 Please provide any comments on the timing of completing these actions.

Type your answer here :

The above actions ENA has suggested for prioritisation should be completed as soon as possible. Particularly in the case of the mandating of smart EV chargers, the longer it takes to put this mandate in place, the more 'dumb' EV chargers will be purchased and installed. Once these devices are in place, it's unlikely they will be replaced until the end of their useful life -10-15 years. This action should therefore be undertaken as soon as possible to ensure that New Zealand has the largest possible fleet of smart EV chargers, which will minimise the impact of charging on the electricity system and constrain costs to consumers.

Outcome 2, Q1 Do you agree with the focus areas under outcome 2?

If not, please explain why.:

ENA agrees with the focus areas under outcome 2. We'd add to the commentary under 'Multi-unit dwellings and social housing' that, in addition to the challenges already identified in retrofitting for EV charging, the provision of sufficient electricity network capacity may also be time-consuming and expensive.

Outcome 2, Q2 Which further actions under Focus areas 2a and 2b would you prioritise?

Please explain your answer.:

ENA members have a strong interest in supporting the deployment of EV charging infrastructure in their communities. We would therefore prioritise investigations into stationary battery storage and other charging innovations for rural locations

Outcome 2, Q3 Please provide any comments on the timing of completing these actions.

Type your answer here :

No comment.

Outcome 2, Q4 Are there any actions needed to reflect the particular EV charging needs of disabled communities, Māori, or other groups?

Please explain your answer.:

No comment.

Outcome 2, Q5 Please provide any comments relating to targets for EV charging infrastructure.

Type your answer here :

No comment.

Outcome 3, Q1 Do you agree with the focus areas under outcome 3?

If not, please explain why.:

ENA supports the strategy's focus on interoperability and standardisation.

Outcome 3, Q2 Which further actions under Focus areas 3a, 3b, and 3c would you prioritise?

Please explain your answer.:

Enabling the sharing of data to support standardisation and interoperability should be prioritised. There are a number of global standards for EV charging data such as Open Charge Point Protocol (OCPP) and IEC 63110. These global standards should be embedded into New Zealand's EV strategy and infrastructure to future-proof the sector's interoperability.

Mandating the real-time broadcast of the location, type and availability of public charges via EVRoam risks the duplication of existing systems, such as PlugShare, and may prove resource intensive.

Outcome 3, Q3 Please provide any comments on the timing of completing these actions.

Type your answer here :

No comment

Outcome 4 Q1 Do you agree with the focus areas under outcome 4

If not, please explain why.:

New Zealand's EDBs will be critical in the facilitation of public EV charging infrastructure connection to the grid. EDBs also have a role in facilitating the uptake of electrified transport in New Zealand.

EDBs are committed to the efficient provision of distribution infrastructure and services. EDBs are also dedicated to providing these services in a way which maximises benefits to the communities they serve.

EDBs are reforming their prices to become more efficient and cost-reflective (including connection charges) in line with Electricity Authority's Distribution Pricing Principles and guidance. At their core, cost-reflective prices aim to align a customer's price with the costs they impose and the benefits they receive. Cost-reflective prices ensure that other network users, including household users, do not cross-subsidise commercial EV charging operators.

As noted in the discussion document, EDBs are highly regulated with the Electricity Authority and Commerce Commission oversight of connections policies and pricing. The majority of EDBs are also subject to price-quality regulation by the Commerce Commission, this includes the setting of capital expenditure allowances. EDBs are penalised for expenditure in excess of these allowances.

ENA has put forward to the Commerce Commission a suite of proposed changes as part of its review of the Input Methodologies. These changes are aimed at increasing the flexibility of the regime and improving its ability to deal with uncertainty over the scale and timing of EDB investment need to facilitate the electrification of transport and industry in New Zealand.

The nascent public EV charging sector is currently highly concentrated. The future EV strategy must be careful not to undermine competition in the sector and enshrine market power in the hands of a small number of charging operators.

EDB processes for requests for connections to electricity distribution networks do not discriminate between load types. EDBs are experiencing a material increase in connection applications related to New Zealand's carbon emission reduction goals, including for industrial users undertaking process heat conversions, and from renewable energy generators. EDBs are not in a position to make judgments about the value of one connection application over another.

Outcome 4, Q2 Which further actions under Focus areas 4a and 4b would you prioritise?

Type your answer here :

ENA would like to see work with investors, charge point operators, and other key parties to support investment prioritised. ENA is keen to see all players including Government and EECA work together to ensure that public EV charging is delivered in an efficient manner that doesn't create cross-subsidies from other users of the electricity networks to commercial charging operators

Outcome 4, Q3 Please provide any comments on the timing of completing these actions.

Type your answer here :

ENA's view is that the work with stakeholders to support investment should commence as soon as possible. This will enable the early identification and resolution of issues and challenges allowing the EV charging market to, grow, evolve and adapt to support New Zealand's decarbonisation goals.

Outcome 5, Q1 Do you agree with the focus areas under outcome 5?

Type your answer here :

Large vehicles of the type discussed under outcome 5 are likely to have charging requirements which differ substantially from the needs of passenger vehicles and other light vehicles. Therefore it is appropriate that they are subject to detailed examination.

The discussion document focuses on the reform of electricity pricing from a distribution perspective. However, distribution prices are just one part of the prices faced by end consumers, including public EV charging operators, and are driven by a diverse set of pricing components and decisions made by various parties covering wholesale and transmission, and ultimately retailer pricing.

As noted above, EDBs are committed to cost-reflective prices for distribution services. A core component of this is to ensure that costs are recovered from those that give rise to the cost. This cost reflectivity includes ensuring that the cost of network upgrades triggered by investment in public charging are funded by these users, not by other users who do not benefit from the expenditure.

Outcome 5, Q2 Which further actions under Focus area 5a or 5b would you prioritise?

Please explain your answer.:

ENA suggests that research into the present and future system-wide charging needs for heavy vehicles, planes, trains, and ships, including opportunities for co-location of journey and destination charging be prioritised.

Outcome 5, Q3 Please provide any comments on the timing of completing these actions.

Type your answer here :

ENA recommends that research into the present and future system-wide charging needs for heavy vehicles, planes, trains, and ships, including opportunities for co-location of journey and destination charging commence as soon as possible.

Annexs