

1 August 2025

**Energy Policy** 

Ministry of Business, Innovation and Employment

By email: energyuse@mbie.govt.nz

Proposals to support the uptake of smart EV charging

Meridian welcomes the opportunity to comment on the Ministry of Business, Innovation and

Employment's (MBIE) consultation document on proposals to support the uptake of smart

electric vehicle charging.

Meridian operates the Zero<sup>1</sup> EV charging network with over 350 charge points available in

our nationwide charging network, making it the second largest in Aotearoa. Meridian has

ambitious plans regarding the rollout of public EV charging and is committed to accelerating

the transition to low-emissions transport and supporting the Government's goal of 10,000

public EV chargers by 2030.

Meridian supports businesses to go electric with EV charging solutions. We also offer

competitive home EV charging plans<sup>2</sup> and have been trialling smart home charging including

dynamic load control using customers' EV chargers to remotely manage peak demand on

the electricity system (amongst other potential system benefits). This is part of Meridian's

wider strategy to support transport electrification and facilitate the use of flexible resources

to deliver financial benefit to consumers.

It is inevitable that EV charging will result in electricity demand growth. Meridian agrees that

this needs to be managed effectively to minimise wholesale market and network impacts at

peak times, optimise the use of renewable energy, lower household power bills, and reduce

<sup>1</sup> https://zero.meridianenergy.co.nz/

<sup>2</sup> https://www.meridianenergy.co.nz/for-home/ev-plan

Phone +64-4 381 1200 Fax +64-4 381 1272 www.meridianenergy.co.nz the need for network and generation investments. We also acknowledge that low uptake of smart chargers could be an issue in future if it limits the ability of consumers to participate in the electricity system.

However, in Meridian's opinion the electricity market already provides strong incentives for electricity retailers and networks to develop innovative pricing and dynamic load control services that will return value to consumers and minimise cost pressures on the power system. We consider it highly likely that the market will deliver efficient smart charging solutions in the absence of regulation to mandate certain technologies.

Uptake of smart charging to date is not indicative of a market failure. Uptake reflects, in part, the vehicles in New Zealand's fleet and the limited value that consumers have been able to derive from smart charging historically. A large proportion of early EV uptake was vehicles with limited charging speeds (for example the 3.6kW charging speed of early Nissan Leaf models). Technology development means increasingly more vehicles are capable of higher charging speeds and have larger batteries, therefore the benefits of smart chargers over 3-pin plugs is also growing. Coupled with innovative EV charging propositions and pricing increasingly recognising the value of flexibility, we expect the uptake of smart chargers to naturally grow.

Labelling regulation may help consumers to make better informed choices and support this direction of travel. In the absence of labelling requirements consumers may be unsure what smart features could be valuable and may struggle to easily compare competing products. We do not want consumers to invest in what they believe is a smart charger only to find out later that functionality is somehow limited. Meridian therefore supports labelling requirements for EV chargers for private use. Labelling would sit alongside existing EECA information resources like the Voluntary Publicly Available Specifications and the EV Smart Charger Approved List. If this option proceeds, it will be critical that labelling requirements keep pace with technology changes and innovations.

Meridian is more cautious regarding the option to mandate smart chargers and is not confident that benefits to consumers will result. The market already incentivises uptake of smart charging and we expect uptake to accelerate over time (which would be further supported by labelling). There are also risks associated with more significant regulatory intervention to mandate certain smart charging technologies, for example:

limiting consumer choice to exclusively higher-cost charging solutions may not be
 efficient in all scenarios; and

efficient in all scenarios; and

regulation to specify mandated 'smart' characteristics may not keep pace with

technology change and could prevent consumers benefiting from innovations.

We do however recognise the risk of product obsolescence if non-smart EV chargers are

being supplied by default, for example when purchasing a new EV. If this is observed to be

prevalent in the market, then the case for a smart mandate may be stronger.

If the option to mandate smart charging progresses at all, in Meridian's opinion decision-

makers should consider limiting the scope of the mandate to investments in new chargers

of more than 7kW capacity. That scope could preserve consumer choice to some degree

and reduce the risk of unintended consequences under a complete mandate, while

delivering many of the benefits of a mandate. This option could have merit to the extent

decision-makers see evidence that electricity market incentives and consumer choice will

not deliver an efficient level of smart charger uptake.

Responses to the consultation questions are appended to this submission. Please contact

me if you have any queries regarding this submission.

Nāku noa, nā

Sam Fleming

**Manager Regulatory and Government Relations** 

## Appendix: Responses to consultation questions

|    | Question   | Response  |
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| 1. | Research indicates that most EV charging occurs at home. Do you have any comments on the split between private (home) and public charging and how this may change into the future? | Not at this stage.  |
| 2. | Do you have comments on the current state of private EV charging in New Zealand?   | The current state of private EV charging is heavily influenced by the early EV fleet adoption in New Zealand. We expect smart charger uptake to grow organically without mandate as bigger EV batteries and faster charging capacity cars become more common and retailers and networks increasingly offer value to consumers that can flex their charging. We are aware however of the risk of non-smart chargers being provided by some businesses without the full understanding of consumers (e.g. when purchasing a new EV). If this is observed to be prevalent in the market, then the case for a smart mandate may be stronger. |
| 3. | Do you agree that smart charging can support network infrastructure needs, and in turn realise benefits for end consumers?   | Yes. However, from a consumer's perspective it is critical that the value of their flexibility can be realised, and they can recover the capital spent on a more expensive fast charger.  |
| 4. | What are your views on whether the supply of chargers in New Zealand would move to predominantly smart charging without regulation?  | In Meridian's opinion this will occur without regulation. See the response to question 2 above.   |
| 5. | Do you have any comments on the availability of private EV charging for varying demographics, for example, homeowners versus renters?  | EVs and private chargers are predominantly owned by wealthy households who own their own home. Meridian expects these technologies to become more affordable and widespread over time, particularly as second-hand markets develop in New Zealand. However, challenges will remain for renters. A low cost, low system impact charging option (e.g 3-pin plug) should remain available to low-income consumers.   |

| 6.  | Is there any other relevant context, such as industry developments or international practice that we should consider?   | It may be worth considering smart charging regulation in Australia or other key trading partners. Consistency in approach could have value given the small size of the New Zealand market.  |
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| 7.  | What cybersecurity risks do you see with greater uptake of smart EV chargers?   | We are not aware of this currently being a risk but would support guidance regarding protection of consumer data.   |
| 8.  | Do you see a role for cybersecurity to be managed alongside any requirements relating to smart functionality, or should this be managed by another mechanism? | Consumer preferences and trust should strongly incentivise manufacturers to provide security features in response to any perceived threat.  |
| 9.  | Do you agree with the objectives? If you agree or disagree, please explain why.   | Yes, subject to one change. It is not just EV owners and electricity networks than benefit from tools to manage peak electricity demand. The first objective should be broadened to "EV owners, electricity market participants, and electricity networks have tools to manage peak electricity demand". There is considerable value to be realised for consumers from participation in electricity markets for example if charging can: avoid peak electricity prices (which can be distinct from peak network demand periods), offer into reserve markets (as aggregated interruptible load), and if aggregated injection from EV batteries can be dispatched into peak electricity price periods. There are also emerging flexibility providers and retailers with demonstrated capability to control and shift load which can benefit electricity networks. |
| 10. | Are there any additional objectives you think we should also adopt to inform decisions on this proposal?  | Additional objectives should be considered around enabling consumer choice and minimising costs to consumers.   |
| 11. | Which option do you prefer and why? Are there other options you think should be considered?   | For the reasons set out in this submission, Meridian prefers Option 3 – mandatory labelling. However, labelling must be maintained to keep pace with the dynamic environment with rapid technology change. The goal should be to ensure labelling requirements remain relevant and do not become barriers to innovative solutions that might emerge in future.  |

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| 12. | Do you agree with our assessment of the options against the objectives? If you agree or disagree, please explain why.  | Yes, however, the assessment is against an incomplete set of objectives and therefore fails to consider the potential costs to consumers of mandated EV charging technologies.   |
| 13. | What are your views on the functionality outcomes that could be adopted?  a. Are there any outcomes that you think should be required?  b. Do you think any functionality outcomes above should not be included, and if not why?  c. Are there any different types of requirements we need to consider for V2X chargers? | The list is reasonable by should be the features assessed by labelling rather than mandated.  We are not aware of energy efficiency being a problem with EV chargers.  |
| 14. | Do you think there is a case for voluntary or mandatory labelling of EV chargers, and why or why not?  a. If you support labelling, what content do you think should be incorporated in the label?   | See our response to question 13 above.   |
| 15. | What types of chargers should your preferred option be applied to? For instance, if you think different types of chargers (for example public vs private, or chargers smaller or larger than 2.4kW) should be subject to different parts of your preferred option, please explain.                                       | In Meridian's opinion labelling requirements should apply to chargers for private use only. Businesses installing public charging should be savvy enough to invest in suitable technologies for different use cases and are strongly incentivised by the competitive market to try to grow market share by offering a public charging proposition that delivers the greatest value to consumers. All chargers installed in Meridian's Zero network are smart chargers capable of operating flexibly. |
| 16. | Do you agree with our assessment of the scope against the objectives? If you agree or disagree, please explain why.  | Meridian is not convinced that expanding the scope to public chargers would result in any benefits to consumers. See the reasons provided in our response to question 15 above.  |
| 17. | If you agree with option four – requiring EV chargers to be smart:  a. What types of chargers should the requirements apply to? For  | Meridian is cautious of Option 4. However, to<br>the extent that this option proceeds, Meridian<br>recommends that the mandate of smart<br>chargers only applies to chargers over 7kW to   |

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|     | example, should there be a minimum or maximum size?  b. Is there a case to regulate public chargers as well as private, and what are the risks of including or excluding public chargers? | ensure that consumers can still elect low-cost trickle charging where it makes sense in their situation. Use cases will remain for 3-pin cables (e.g. to charge older vehicles or charge in offgrid applications) and consumer choice should not be limited to only second-hand charging products, which could have safety implications.  |
| 18. | Do you agree with our assessment of the costs and benefits of each option?  | Broadly. However, we consider the costs of mandating charging have likely been underestimated. In addition to the identified costs the costs of regulatory change over time to keep pace with technology change could be significant. The costs of reduced innovation if regulation does not keep pace with change are also likely to be significant.   |
| 19. | Are there any impacts you believe we should consider that are not covered?  | See our response to question 18 above.  |
| 20. | Are there any unintended consequences on the market for EV chargers or wider EV market you think we haven't considered?   | See our response to question 18 above.  |
| 21. | How do you see the proposal affecting different people and groups (e.g., business users, manufacturers, consumers)?   | Mandatory labelling would impact businesses importing and selling (or manufacturing) chargers in New Zealand. It should be expected that these costs will be passed on to consumers. However, the costs would be relatively minor, and distributional impacts would be negligible.  |
|     |   | Mandating smart chargers would have far greater distributional impacts, particularly for EV adopters that are less able to afford the increased upfront capital for smart charging. For example, a purchaser of a second-hand Nissan Leaf that needs to replace a damaged 3-pin cable may want a cheap like-for-like replacement but with the safety assurance of a new product. Under the Option 4 mandate this consumer would be forced to either purchase a second-hand cable or spend more on a new smart charger that exceeds their needs. The increased upfront capital requirement could |

|     |  | make it more difficult for low-income households to transition to an EV. |
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| 22. | Do you have and feedback on the next steps for this proposal?                                | No.  |
| 23. | Do you have any comments on implementation or a transition period for potential regulations? | No.  |