

SUBMISSION ON EV Charging Strategy

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To: Ministry of Transport

Name of Submitter: Horticulture New Zealand

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OVERVIEW

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Our submission

Horticulture New Zealand (HortNZ) thanks the Ministry of Transport for the opportunity to submit on the EV Charging Strategy and welcomes any opportunity to continue to work with the Ministry to discuss our submission.

The details of HortNZ's submission and decisions we are seeking are set out in our submission below.

HortNZ's Role

Background to HortNZ

HortNZ represents the interests of approximately 5,500 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruit, and vegetables. The horticultural sector provides over 40,000 jobs.

There is approximately, 80,000 hectares of land in New Zealand producing fruit and vegetables for domestic consumers and supplying our global trading partners with high quality food.

It is not just the direct economic benefits associated with horticultural production that are important. Horticulture production provides a platform for long term prosperity for communities, supports the growth of knowledge-intensive agri-tech and suppliers along the supply chain; and plays a key role in helping to achieve New Zealand's climate change objectives.

The horticulture sector plays an important role in food security for New Zealanders. Over 80% of vegetables grown are for the domestic market and many varieties of fruits are grown to serve the domestic market.

HortNZ's purpose is to create an enduring environment where growers prosper. This is done through enabling, promoting and advocating for growers in New Zealand.



Submission

On-farm vehicles, including light commercial vehicles (e.g., utes) and machinery for cultivation and harvest are important to growers, and while alternatives are available in some areas (e.g., forklifts), this is not the case for other types. Beyond the orchard gate, trucks are frequently used to transport fruit and vegetables to New Zealand consumers or ports. Some growers have their own truck fleets.

The sector is particularly reliant on trucks as a mode of transport between the orchard/farm and packhouse, and/or processing facility and port.

1. Power Generation and EV Charging

Given the large energy needs of an EV fleet, it may not be possible to charge during peak load periods. There needs to be confidence that New Zealand can produce sufficient energy. As noted in our response to the Emissions Reduction Plan¹, there needs to be analysis on how the ability for increased capacity and infrastructure to be delivered through the network and demand for electricity demands (e.g., alongside more EVs, etc.) can be met.

1.1. EV Charging

New Zealand currently has around 500 EV charging centres across New Zealand. Most of these can be found in shopping centre car parks or at service stations and are suitable for charging light vehicles. While most of the charging is carried out at home and at night², heavy vehicle drivers can travel for up to 13 hours per day and, depending on the timing of trips, stay overnight in motels/hotels. There will need to be significant investment in upgrading New Zealand's EV charging infrastructure to support the charging for enroute heavy vehicle trips.

2. Discussion Document Comments

HortNZ comments on the focus areas that are most relevant to growers.

2.1. Focus Area 1

The comments in the discussion document on the additional pressure to electricity demand from EV uptake are a genuine concern to consumers. The pressure on New Zealand's power generation capacity is well documented³. There would need to be significant investment into managing capacity, and HortNZ doesn't believe these costs should be passed to the consumer.

¹ <https://www.hortnz.co.nz/assets/About-Us/Submissions/HortNZ-submission-on-ERP-27-June-2022-.pdf>

² <https://www.nzta.govt.nz/planning-and-investment/planning/transport-planning/planning-for-electric-vehicles/national-guidance-for-public-electric-vehicle-charging-infrastructure/using-public-charging-infrastructure/charging-an-electric-vehicle/>

³ <https://www.nzherald.co.nz/nz/megan-woods-on-the-warpath-over-electricity-outages-throws-power-generators-under-the-bus-but-brushes-off-calls-to-resign/TG2C34R4FMA7NZFZMHNU5OBLXU/>

The NZ Government target of reaching zero emissions by 2050 should be underpinned by government investment to ensure New Zealand's power generation capacity can support this goal.

2.1.1 FURTHER ACTIONS 1A

Use vehicle and electricity supply data to identify and plan for electricity network requirements (i.e. avoid inefficient network upgrades)

While the intent of this action is to avoid network upgrades during peak charging times, it remains unclear how data from private chargers would be collected. It is also unclear if there would be privacy concerns with this approach.

Publish detailed electricity network capacity data so public and private infrastructure planners can see where constraints are to encourage efficient investment

HortNZ supports this approach.

Investigate emerging technologies that can prevent the need for additional power generation, with the aim of encouraging innovative technologies that will make a positive difference

HortNZ supports this approach.

Promote the benefits and support the uptake of smart chargers for EVs

While HortNZ supports this approach, clarification is required as to what 'support' means. Is this a financial incentive package to encourage uptake?

Work with lines companies to identify opportunities, mitigate risks, and clarify responsibilities in developing EV charging infrastructure

HortNZ supports this approach.

2.2. Focus Area 2B

HortNZ supports a target for journey chargers. We would, however, be interested in the methodology behind the set targets. If the country is to achieve zero emissions by 2050, more than 20 chargers per 150 - 200kms will likely be required to avoid congestion at charging stations and journey delays.

HortNZ supports public charging in small towns but suggest this should be targeted at 1000. The discussion document doesn't state how many journey chargers would be installed.

2.2.1. FURTHER ACTIONS 2B

Monitor the expansion of the public EV charging network in line with EV uptake forecast levels across regions to inform investment

HortNZ supports this approach.

Implement a consistent, practical planning and approval process across councils

HortNZ supports an EV charging national policy framework that excludes territorial authorities considering the development of public charging infrastructure under the Resource Management Act 1991 (RMA).

District plan rules are likely to differ across regions depending on councils' interpretation of the RMA. In addition, councils may have bylaws that will add another layer of compliance.

Provide additional government support (financial or otherwise) to assist the planning and installation of public charging infrastructure that specifically meets the needs of rural communities

HortNZ supports this approach.

Investigate the role of stationary battery storage and other charging innovations for rural locations. These measures can help to address seasonal EV charging demand peaks in more remote tourist areas and/or provide a lower-cost option for those areas facing costly electricity network upgrades due to regional energy supply barriers. The Low Emission Transport Fund is already actively encouraging applications of this technology.

HortNZ supports this approach.

2.3. Focus Area 3A

HortNZ agrees that national level guidance will be necessary to support local government to implement EV charging infrastructure in regions. We would, however, like to see this as a national framework, much like the National Planning Standards.

Promote national consistency and reliability of service and a customer eccentric approach to EV charging

HortNZ supports this approach.

Explore policy options to ensure chargers are efficient and safe

National standards would be more appropriate than policy options. While there are national standard guidelines currently published, these could be streamlined into requirements.

Support local authorities to implement the required public charging infrastructure

HortNZ supports this approach with the implementation of a national framework.

Develop systems and support networks to share best-practice between local authorities, industry and central government to ensure guidance and regulations are feasible and proportionate

HortNZ supports this approach.

2.4. Focus Area 4B

HortNZ agrees that depot charging will be the main source of charging for heavy vehicles. For long haul trips, there will need to be sufficient public charging stations across the country.

Some growers will have a truck but won't be able to afford the cost of installing EV charging infrastructure which is a barrier. There needs to be consideration to small business owners and affordability of uptake.

In the Bay of Plenty, most of the region's kiwifruit is transported by truck to the Port of Tauranga, resulting in 31,000 truck movements. Therefore, there needs to be sufficient EV charging available at the Port of Tauranga. This will also support the 270 truck movements from the Waikato to the Port.

3. Conclusion

HortNZ supports an EV charging strategy and national framework that supports local authorities and the user and removes unrealistic barriers. Much more work is needed to better understand how EV charging for heavy vehicles will work in New Zealand, the infrastructure required and how power generation capacity will cope.