From: John Kersnovski
Sent: Monday, 12 November 2018 2:36 PM
To: Climate Change, Public Mailbox (DPaC) <climatechange@dpac.tas.gov.au>
Cc: Michael Edrich
Subject: Supporting a Statewide Electric Vehicle Charging Network - Submission

Dear Sir/Madam,
I refer to the release of the *Supporting a Statewide Electric Vehicle Charging Network Consultation Paper – October 2018* and your call for submissions on possible approaches that the Tasmanian Government could take in providing funding support for a statewide electric vehicle charging network within Tasmania.

Firstly, on behalf of Council I would like to acknowledge the Governments support and grant that we have received as part of the ChargeSmart Grants Program to install a destination charger at the Central Coast Council offices in Ulverstone for Council and staff use as well as to be used to increase community awareness of electric vehicles.

The Central Coast Council is a member of the AEVA and is aware of the predicted uptake of electric vehicles within Australia over the next five years. We understand the need to be prepared for the increase of electric vehicles residing in our area or visiting our State on business or to enjoy the many wonders and experiences that are on offer. We thus understand that we need to be able to offer the services that supports electric vehicles usage and ensures that it is as convenient as possible.

Accordingly , we would like to offer the following comments in response to the consultation paper and to support the introduction of a statewide charging network for electric vehicles:-

(Q1) Should the Tasmanian Government support the installation of both destination (slower charge) and Inter-regional DC fast chargers?
Yes it would be appropriate and we acknowledge the support already provided by way of grants for destination chargers. Support for an Inter-regional DC fast charger network is also considered essential to ensuring that all areas of the State are accessible by electric vehicles particularly for those who are on business.

(Q2) What factors should be considered in determining what type of charger should be installed where?
An extensive statewide destination charger network is essential to ensure that electric vehicles can operate in all trafficable areas of the State. This will certainly assist the economy of many smaller communities due to the length of time needed to charge an electric vehicle and the likely expenditure that will result from EV drivers using their time whilst waiting for their vehicle to charge.

A statewide Inter-regional DC Fast Charger network is also required although the number of units within the network could be far less that the destination charger network initially. As the number of EVs increase so too will the commercial returns for a fast charger network. If the network commences with just a minimal number of units across the state say spaced at around 150 to 200km apart, it is envisaged that this will grow as the commercial return on investment becomes positive with the number of EVs on the road.

(Q3) Which locations (for example high-population areas or less-populated regional areas) should the Tasmanian Government consider as the highest priority for installing electric vehicle charging stations?

As indicated above, the destination charger network needs to be extensive and it is believed that almost every community where there are commercial facilities, e.g. shops, cafes offices etc. should have a charger, whether it be owned/operated by a Council or the local businesses. It is suggested that less populated regional areas have the most to gain from having a destination charger in operation and it would be appropriate for the Government to give these areas a higher priority.

As to fast charging units, it is suggested initially that these should be spaced between 150 to 200km apart along the major highways to allow EVs to travel to all parts of the State. As well there is possibly a need for additional chargers to be available at some of the tourist icons of the State e.g. Cradle Mountain. Ultimately, it is expected that the fast charger network would be as extensive at the current fuels service station network and that some of these may convert from dispensing the fossil fuels of today to the environmentally friendly energy source of the future.

(Q4) Which amenities are important to have nearby electric vehicle charging stations to facilitate a positive and convenient user-experience?

The current service stations of today are a good indication of what amenities are required adjacent to a inter-regional fast charger installation. However, for a destination charger, it is expected that as these are likely to host the EV for a longer time period, then they will be in close proximity to commercial centres of towns where various services are provided e.g. say the CBD of Penguin or Ulverstone.

(Q5) What type of operation and maintenance issues should be considered to ensure a positive and convenient user experience?

It is assumed that persons and businesses installing charging units are fully aware of the maintenance requirements of their units. It is thus suggested that they will be ensuring that their units are appropriately maintained and if in time additional charging units are required to cover the usage, then the additional units will be justified.

(Q6) What is the preferred payment mechanism(s) for electric vehicle charging station from a user perspective and an operator perspective?

In this technological age a simple user interface payment system seems appropriate to cover the costs of equipment maintenance and energy supply costs.

(Q7) Should charging stations offer an online booking system?

It is expected that an online booking system may be needed for the inter-regional fast charging units until there are sufficient to provide the service required by a growing fleet of EVs across the

State. Modern technology allows for such a system as part of the installation and it would be appropriate that a mobile phone app be used for this…similar to other service industry booking apps.

(Q8) What are the expectations of users with regards to reliability and availability of installed charging stations and how could these expectations be met?

The take up of electric vehicles is currently very low. One of the reasons for this may be that there are very few EV dealers and service agents in Tasmania and certainly to our knowledge there is none in the north of the State. It thus could also be expected that there are unlikely to be many rapid charging stations in the State.

The reliability of charging stations is increasing as is the number of charging stations albeit destination chargers. A base number of charging stations are needed across the State to ensure Tasmania is "EV Open for Business" and this should satisfy all current users until the "market" takes on the installation of chargers for commercial reasons.

(Q9) How important is providing multiple chargers at each site to cover for availability and possible equipment failure?

At this time, whilst there are few EVs in Tasmania, it is suggested that single charge units are probably only needed. In saying this, maybe all new units should be dual connection type units to allow for increased EV activity. As EVs become commercially available in Tasmania and many more of these are using the States roads, consideration will need to be given to having multiple chargers at particular locations to ensure that there are sufficient charging facilities. As mentioned previously, this will more than likely be a commercial decision rather than a State Government initiative.

(Q10) What funding delivery model would work best to stimulate potential suppliers to install electric vehicle charging infrastructure in Tasmania and why?

Mention has been made of the recent ChargeSmart Grant Program and it is suggested that the State should consider continuing with this Program for destination chargers for at least three years to ensure that there is a basic destination charger network across the State.

In regards to the funding model to stimulate the installation of a inter-regional DC fast charger funding model it is suggested that once the locations of a basic network across the State have been determined, then a decision on how the current Government funding can best be used to ensure that the network can be made. The cost of upgrading electrical networks to allow for the fast charger to be operated could perceivable be a high cost. Accordingly, it is suggested that the Government funding this year and possibly for future years should be firstly putt towards this upgrading and then if funds are still available then the remainder could be included in a grant scheme for local Government and community groups. Consideration should also be given by the State Government to providing a similar amount each year for the next three to five years to ensure that the necessary market stimulation occurs.

It is suggested that local Government and community groups may be well suited to determining the locations of all new facilities. Discussions with existing service stations would also be appropriate to see if there are ways of reducing compliance costs as well as approval costs or even upgrading electricity supply upgrades to assist with the installations.

(Q11) What level of funding (e.g. a percentage contribution to upfront costs) would be

reasonable for potential partner organisations/businesses to make towards the installation of electric vehicle charging infrastructure and why?

The provision of a dual connection inter-regional DC fast Charger is high and each one needs to be considered on merit including economics e.g. It is suggested that a percentage contribution may not be appropriate as the cost of the electricity supply upgrade to allow the installation may be cost prohibitive. Maybe the funding could be put towards subsidising the cost of the electricity upgrade and then any surplus funds provided as a set grant towards the units supply. This is suggested as the installation of the inter-regional DC fast Charger will hopefully be economically viable over the life of the unit and the grant should be more targeted where such units are not likely to be viable without initial assistance.

(Q12) Who should be responsible for ongoing costs and maintenance?

The operator of the charger is the appropriate person to meet the ongoing costs including maintenance for chargers. That said, a full cost pricing model should be applied for the use of a charger so that the owner of the facility is able to recoup the costs of the installed system.

(Q13) Should fees for charging at a station be based on commercial pricing or be subsidised to some extent?

Full cost pricing should apply although maybe it could be a selling feature if the owner of the system were to discount their charges initially to highlight the provision of the system. Transparency in pricing would need to be enforced and the requirements of legislation e.g. Trade Practices Act etc. should apply.

(Q14) What should the Tasmanian Government consider in raising community awareness of the statewide electric vehicle charging network?

Maybe the Government could consider using Local Government and community environmental and tourism groups to raise the awareness of the use of the EVs and the statewide network supporting their use. Certainly councils and tourism groups are well placed to advise everyone where the chargers are located as each has a website and a social media presence as well as the capacity to install directional signage where necessary.

I thank you for considering the above comments and suggestions.
Kind Regards

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