

Attachment 2 – Electric Vehicle Charging Station on Public Land Policy Submissions

Submission	Comment	Officer Recommendation
1 – Individual	<p>I would like to state my full support for your proposed Electric Car Parking Policy, as I believe electric cars will become increasingly common over the next few years and we need to provide the vital infrastructure to support them. Australia is far behind in EV compared to the rest of the developed world, in part by a lack of coherent policy from the federal government, so seeing my local council being proactive and forward looking is very encouraging. One addition I would like to suggest for the policy - is for council to allow parking wardens to issue tickets/fines for non-EVs parking in EV designated spaces. We need to ensure that once the infrastructure is in place it is able to be utilised most effectively and encourage the right behaviours from non-EV drivers to respect these spaces and keep them clear for the designated use.</p>	<p>Noted - Policy updated to include wording 'Should an EV not be charging, or another car parked there, the driver could incur a fine (Disobey No Parking Sign).'</p>
2 – Individual	<p>Just wanted to say the EV charging policy looks great the only thing I'd like to mention is your cable requirements for the cable to reach front, sides etc while awesome isn't possible for DC fast charging due to the need for a shorter cable length. Very excited we are getting EV chargers in Hornsby shire! Will happily bring our 2 EVs down to have a look.</p>	<p>Noted - Charging points will be designed in accordance with current industry practices and guidelines. Policy updated with amended wording to include 'where possible' and 'in accordance with current industry practices and guidelines'</p>
3 – Individual	<p>Hi, I don't live in Hornsby but am waiting for you to hurry up and get some DC fast chargers in the area. I live in Canterbury and am looking to buy an electric car. The only ones in my price range are second hand with a short range. I wouldn't be able to make it to my mum's place on the central coast. I would love to be able to use a charger around Hornsby or Berowra. Would be able to get there then. P.S Please put it near good coffee and I'll spend money in the area.</p>	<p>Noted</p>

<p>4 – Individual</p>	<p>As a ratepayer in Hornsby and owner of two electric vehicles I would like to thank Hornsby Council for the creation of the draft policy on electric vehicle charging stations. As a council area on the perimeter of Sydney the demand for EV charging for interstate travel will continue to increase in coming years and Hornsby currently has no fast charging facilities despite commercial EVs being on sale in Australia for 7 years. I understand that Evie Networks is planning to install an Ultra-Fast Charging Station in Hornsby in 2020 and hopefully that will be one of many locations on public and private land in the Hornsby council areas in the coming decade.</p> <p>Comment: Supporting ratepayers need for EV fast charging is equally important to that of travellers in our area and the Context section in the Policy should reflect this. While fast charging of EVs is an important requirement in supporting travellers through the Hornsby Council area it is also required to support Hornsby area residents who don't have off-street parking for home charging and may not have access to workplace charging. There are presumably thousands of Hornsby area residents who do not have access to private charging and by enabling the installation of DC fast charging facilities the potential to reduce transport emissions for the Hornsby community is very significant. These local vehicle owners will require access to fast charging facilities on a similar basis to petrol owners charging their vehicles on average once or maybe twice per week (assuming the average driving distance of 300km per week) depending on the vehicle's range.</p> <p>Offer for support at future events</p> <p>As a member of the Australian Electric Vehicle Association (AEVA) I have run many EV display and ride/drives activities around Sydney for councils including Randwick and Inner West Councils in recent years promoting electric vehicles at sustainability events. I would like to provide my personal support and that of AEVA to sustainability and EV promotional events that Hornsby may undertake in the future. I know other AEVA members including the NSW Chairman of AEVA who live or work in the Hornsby area and would be keen to provide support to such events.</p>	<p>Noted - Policy updated to include wording 'It will also support Hornsby residents who don't have access to off-street parking for home charging.'</p>
<p>5 – Individual</p>	<p>Is it appropriate for the policy to include that the charging station must be marked with. The organization responsible for the charging station and some contact details such as phone and email (to report faults for instance).</p> <p>The power the charger is rated to and technical information such as connector types. Any fees that apply and how to make payment. Any other restrictions (such as 2-hour parking/charging)</p>	<p>Noted - This would form part of the Lease Agreement requirements</p>

<p>6 – Industry Representative</p>	<p>This is great - we had a couple of points which we think are worth noting.</p> <p>"The land is located within reasonable walking distance (generally within 500m) of a town or village centre or strategic tourism location"</p> <ul style="list-style-type: none"> • We think there might be appropriate sites within Hornsby based on our assessment which might be further away than 500m metres from a town or village centre. Not sure if this will be a discretionary tool which council can use their best judgement? <p>"Where appropriate, the location of EV charging stations should not be in premium, high demand parking spaces that would encourage non-EVs to occupy the charging bay."</p> <ul style="list-style-type: none"> • Not sure how this would be assessed - doubt it would matter in reality as it seems a level of discretion would be applied, however, it would seem in the early days this would conflict with the above? <p>"Prior to the commencement of any works, a security bond will be required to be paid to Council. This bond will be held by the Council for the duration of any lease or licence agreement."</p> <p>This isn't something we have seen in other council deals, usually, the bond is released during the operation of the lease after construction is complete.</p> <p>"Promotion of tobacco, alcohol and gambling and related industries is not permitted on any advertising infrastructure related to the EV charging station."</p> <p>The advertising standards are maintained by the Outdoor Advertising Association Code of conduct as well as the applicable Australian legislation (which is how the council manages the bus shelter contracts). So this could be the best way to hand this. Hope this is helpful.</p>	<p>Distance would be evaluated on a case by case basis and is a guide only. Include wording 'Advertising is also to be undertaken in accordance with the Outdoor Media Association Code of Ethics.'</p>
<p>7 – Industry Representative</p>	<p>I work at the Electric Vehicle Council - the national peak body representing the EV industry in Australia. I read with interest that Hornsby Council has drafted an Electric Vehicle Charging Station on Public Land Policy draft. Congratulations! I would welcome the opportunity to discuss the policy draft and the process involved for writing the policy with the most appropriate person.</p> <p>The EVC is looking to encourage and facilitate the uptake of EVs in LGs by collating and sharing policy and process in relation to EVs across national local governments. We regularly get enquiries from councils and would like to be able to provide them with a 'resource pack' to speed up policy development at a local level. Basically, sharing the good work already being done by the frontrunners.</p> <p>I look forward to hearing from you,</p>	<p>Noted</p>

<p>8 – Individual</p>	<p>I drive a Mitsubishi Outlander PHEV. The Outlander PHEV in Australia is not sold with the same attachments as it is in Japan, and so therefore can't use fast charging stations. It can however, use an ordinary 10 amp or 15 amp household AC circuit, and there is a compartment in the car for holding the appropriate cable. This is the universal minimum standard — every electric car on the market can charge from a household circuit like this, and pretty much everyone I know who drives an electric vehicle carries around an extension cord and whatever adapter their car uses. (To be clear about what I mean: that thing on the wall that you plug your toaster into — that's a 10 amp household AC circuit. You will have a 15 amp circuit for your oven and cooktop. These are the attachment points that I use to charge my car, which is — as far as I know — the most common thing that electric car owners do.) It takes several hours to charge up from flat to fully-charged using the slow charger like this, but it's actually not usually a big problem. A common scenario is that I've used 60%-80% of the charge when I get to a public place, and I'd like to get back up to enough charge that I can get home. So even charging for an hour or two from an ordinary 10amp circuit while I'm doing some errands can be very helpful. My family have observed that I have become rather adept at finding places in carparks where an ordinary household circuit just happens to be on the wall somewhere for some reason. e.g. the other day I parked in Chatswood Concourse's parking station and in one corner there happened to be a AC plug on the wall, probably for some other purpose. It wasn't part of the electric car charging station, and it wasn't marked in any way. So I'm looking at the council's proposed policy, and I find that there's no mention of the really bog-standard bottom standard anywhere. It's all about high-speed chargers for the exotic and expensive electric cars. Here's what I see: • Consistent standards for charging connections based on European CCS2 and CHAdeMo for DC fast chargers, and Type 2 for AC charging. • Preference for connected and smart chargers, to allow the most efficient energy use for both consumers and network operators.</p>	<p>Noted - EV charge stations will be designed in accordance with current standards and industry practices.</p>
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<p>9 – Individual</p>	<p>I'm pleased to see Hornsby Council has developed a policy to encourage private providers to begin the installation of EV charging bays in areas that represent destinations for EV drivers. Definitely it is important to give travellers a further reason to stop in this shire while travelling. However, there should also be statements in the policy regarding restrictions on the length of time of parking as it is possible for parking to be taken by EV's that remain in occupation of the space while not charging. There are monitoring systems that impose a charge on vehicles that remain after charging is completed or in excess of a given time. That is, the policy should consider whether the EV charging is offered for the purpose of "destination charging" or for "topping up" while the driver is engaged in activities such as shopping, dining, sport, etc. These purposes can overlap. Secondly, I feel the policy could also address the provision of EV charging on private land such as car parking offered by shopping centres. I believe that this is a responsibility of all levels of government, including local, as controls must be placed on the use of connected Infrastructure.</p> <p>This is important so that consistent standards are developed for private owners. This may facilitate the greater volume of installation of such chargers.</p> <p>As such, my suggestion involves a change to the name of the policy and the addition of statements that allow the operators of private parking stations to adopt consistent standards in signage, type of technology, use of renewable energy for the charging station, monitoring of the usage of the space to prevent non-EV usage, including non-plug in hybrid vehicles.</p> <p>Thanks you for the opportunity to comment.</p>	<p>Noted - Policy relates to EV Charging stations on public land and excludes operations on private land or developments. Technology and design of EV Charging stations on public land will be based on current standards and industry practice.</p>
<p>10 – Individual</p>	<p>I am the owner of an EV for the last 2 years (a Renault ZOE) and would like to comment on the "EV charging stations On Public land" policy based on that experience. The policy is very comprehensive, and covers all the factors that I can think of. I would like to make comment on the following... In the section "Fair and equitable Selection of Providers", given the relative unreliability of DC chargers, and the fact that all EVs can use AC to charge (at rates from 2.5 to 22kW/hour, either directly using a Type2 plug, or via a Type2-Type1 adaptor cable) the policy should include a requirement that all Council financed sites will include provision for both AC and DC charging. In addition the policy should actively discourage chargers restricted to one make of vehicle. For example Tesla DC "superchargers" will only work with Tesla vehicles. Tesla AC "Destination Chargers" can be configured to work with any EV, or only Tesla vehicles. The last point in the section "Parking Configuration" is very salient. In my experience no matter what the signage, charging stations located in high demand places are invariably "ICED" – occupied by an Internal Combustion Engine vehicle. The Tesla</p>	<p>Noted - EV charge stations will be designed in accordance with current standards and industry best practices.</p>

	<p>Destination chargers at Scenic World at Katoomba and the ChargePoint station at the Fairmont at Leura are prime examples. On the other hand the ChargePoint station at Macquarie Centre is well away from high demand areas, and has never been ICED. Thanks for the work on this policy – I look forward to using the chargers that result from it in due course.</p>	
<p>11 – Individual</p>	<p>My feedback...“Terms of Lease/Licence” 1.) Fees collected by Hornsby Council should be minimal to cover costs associated with infrastructure and should not be considered as a source of income like parking meters. Vehicles are parked to charge/discharge only. 2.) The vehicle can be parked at the location to alternatively recharge (battery charge increases) OR alternatively supply power to the electrical network (battery discharges) by agreement between the provider and the vehicle owner. If discharging, I would suggest a time limit of 2 hours here. “Installation, maintenance and removal” 1.) The EV provider must update a public forum via a digital method (e.g. public website / phone app) if a (potential) customer informs them of an EV charging bay fault. This update should be within 4 hours of notification. All EV providers must ensure that customers are provided with a process for logging a fault, issue or complaint. 2.) No EV charging station should be unusable for greater than 2 weeks. "Application of ESD Principles” 1.) All power supplied should be Green power, from renewable sources. If the EV provider commits to only ever supplying Green power, Development Application costs and/or ongoing fees should be minimal. 2.) The charging station supplier should clearly advertise if the power is from a renewable or non-renewable source OR provide the option to choose when purchasing.</p>	<p>Noted - This would be considered as part of the Lease Agreement requirements. Design of EV charge stations will be dictated by industry best practice in accordance with current standards and guidelines.</p>

<p>12 – Individual</p>	<p>Firstly let me congratulate you on drafting a plan to support electric vehicles in Hornsby, as a long term EV driver it is very welcome to see.</p> <p>The draft policy has some well thought out elements and it is obvious that some consideration has been made. I would also recommend that the council look at the submissions that were made to the Senate enquiry in 2018, and would draw your attention to two in particular, the Australian Electric Vehicle Association and the Tesla Owners Club of Australia. You can find these at (PDF 884 KB) and (PDF 267 KB). There are also some points that I would like to raise for consideration.</p> <p>* Most Charging for electric vehicles happens at home, generally in the owner’s garage. This means that aside from opportunistic charging, the primary opportunity for public charging is for people on a long trip away from home.</p> <p>In these cases the speed of the charging is paramount, and while the council has identified 25kW as a minimum, for high speed charging infrastructure today I would contend that 50kW is more relevant. High speed chargers provide DC charging for cars and the infrastructure for them is considerably more expensive than a simple AC outlet.</p> <p>This being said, many cars - including my own - can charge at 22kW from an AC connection. The requirements for providing an AC connection are substantially lower - and a commercial charger can be had for under \$1200, in fact a simple 32A power point is suitable for people with their own charger.</p> <p>A 22Kw charger can provide over 100kph range to an EV, refilling a long range vehicle like a Tesla from nearly empty in 4 hours.</p> <p>* Public infrastructure will be useful for those who cannot charge at home. The requirement for these will vary depending on the type of use envisioned. As an example, an owner without off-street parking or where there are restrictions on installing at home will benefit greatly from public charging points.</p> <p>If the chargers proposed are intended for regular residents - for example power/light pole installations where the EV will be parked overnight then the power requirement is considerably lower and the same infrastructure and cost effectively cover multiple cars charging simultaneously.</p> <p>Many of the current AC charging stations can load share between multiple vehicles such that the same 22kW AC circuit can service 5 or more units, dynamically sharing the load between them to suit the demand at the time.</p> <p>In this way, more street parking stations can be provided to cater for overnight parking, adding significantly to the convenience.</p> <p>Most people drive less than 50km each day. Even a 2.4kW 10A</p>	<p>Noted - Design of EV charge stations will be dictated by industry best practice in accordance with current standards and guidelines</p>
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power outlet available overnight is more than adequate for many people - providing over 120km of range during 12 hours.

* Commuter car parks only need low power. As outlined above, if cars are able to be parked for a long period of time there is no need for high power chargers. In fact, a string of 10A power points would be appropriate - and extremely cheap to install and maintain. For convenience, using chargers with captive cables with type 2 Mennekes connectors would be better - albeit with the downside of additional maintenance and initial capital cost.

* Locating the chargers next to amenity is important. If the aim is to attract additional patronage to Hornsby, then proximity to attractions such as restaurants, shopping or entertainment will make a major difference. Since the cars will be parked for a reasonable period of time there is a good opportunity to bring additional business to facilities nearby the charging infrastructure.

Providing public high speed charging will attract travellers to the area and represent a good way to add to the Hornsby economy.

* Parking places must be clearly marked as EV charging only, and must have penalties for abuse. Over the last 5 years I have frequently encountered people who park their cars in EV charging places, both driving non-electric vehicles and electric vehicles.

To that end, I suggest making parking at high power 50kW or higher DC parking spaces a 2 hour maximum park - enough to fill any current EV. I also suggest making 22kW charging places a maximum of 4 hours, with penalties for cars that are not plugged in. Cars parked and not plugged in or charging in such spaces should be fined and potentially towed to prevent abuse.

* Solar panels make great shade for parking. When designing an EV charging station in an open car park. Canopies that hold PV arrays have a double benefit. They provide shade for the parked cars and can offset or even power the charging infrastructure. Open, unshaded car parks present as a great resource for generating power and when combined with EV charging substantially reduce or completely negate the operating costs.

* To be successful in attracting travellers to Hornsby the location of the charger should be convenient. Locating high speed chargers where it isn't difficult or time consuming to get into or out of will make them much more attractive. As time goes on neighbouring councils are also likely to implement charging facilities - and transit traffic will be drawn to where access is simple.

Thank you again for the opportunity to provide input.

I am excited to see the council seeking input from residents on this issue and am happy to be involved in any working group.

13 – Individual	It is great to see Hornsby Council addressing car sharing and electric vehicle charging. 1. Electric Vehicle (EV) Charging Stations on Public Land Policy. I support this policy.	Noted
14 – Individual	Thank you for the opportunity to review the policy titled "ELECTRIC VEHICLE (EV) CHARGING STATIONS ON PUBLIC LAND POLICY". As a council area resident and Electric Vehicle owner I note that the policy appears well thought through. One area I wish the council to consider under the section "EV Charging Station Design Considerations" with regard to Labelling and Signage is that signage should be as followed for the majority of parking / charging locations. "No Parking - Electric Vehicles while charging Excepted" Which should be enforced with relevant "No parking" offences where relevant. This signage is to ensure that visitors to the area who are depending on charging are not blocked by non-Electric Vehicles or Electric Vehicles who are not charging who could have occupied other parking locations. In the EV community drivers are becoming aware of locations that are often blocked by vehicles that are not using the provided facilities and are going to other areas they can depend on. Also, it would be great to have informational signage with written details on the economic and local environmental benefits of EVs - possibly with reference to local EV clubs. Thank you for the opportunity to provide feedback on this policy and good luck with any resultant installations	Noted - Policy updated to include wording 'Should an EV not be charging, or another car parked there, the driver could incur a fine (Disobey No Parking Sign).'