



# Electric Vehicle Charging for Local Governments

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Everyty  
Level 2, 11 York St  
Sydney NSW 2000  
Australia  
Website <https://everyty.com.au/>  
General email enquiries [hello@everyty.com.au](mailto:hello@everyty.com.au)

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This Guideline is designed to help Local Governments around Australia start thinking about how to build **electric vehicle (EV) charging networks**. Infrastructure that will be necessary in every community within the next decade.

Forecasts project **EVs will account for 30% of new car sales by 2030** (BNEF 2018). To handle the expected growth, it is important that those considering their own network have best practice information to make the best decisions possible. Luckily there have been various case studies overseas pioneering the way for other jurisdictions. This Guideline is based part on overseas experience as well as Everyt's knowledge of the Australian context.

**EVs have significant benefits over conventional internal combustion engined vehicles (ICE)** including reduced noise pollution, zero tailpipe emissions and lower health impacts. They are also quieter, more reliable and cheaper to run. Councils can take advantage of these by incorporating EVs not only into their fleet but supporting adoption in the community. Overseas experience shows that EV adoption is directly proportional to charging infrastructure. Therefore Councils can speed the transition to EVs by taking the lead in this area.

**There are several levels of chargers and plug types.** We recommend choosing high quality, networked chargers capable of being monetised and monitored. These chargers should be capable of servicing future EVs. Choose at least 7-22kW for AC Level 2 and at least 50 kW DC Level 3 for city placement and 50-350kW for highway placement. There are several recommended brands included in the Guideline. Most new EVs will come with plug Type 2, so Councils should focus on that plug for their rollout.

Developing a network involves **working with multiple stakeholders**. We have included a stakeholder flowchart that outlines the main stakeholders involved as well as their responsibilities. It's important to divide responsibilities early for smooth operation. It is also recommended to engage with an EV charging specialist/consultant to help with the process and for important network contacts.

**Goal setting is important** as it will help dictate the size and scale of the charger deployment. Issues to consider include the timescale of development, how many chargers are required and how the network contributes to overall goals like healthier communities, climate change mitigation as well as the future forecasted growth in the sector. At this stage it will help to develop internal momentum and 'buy-in' through consultations and briefings with important change agents.

**Take a strategic approach to charger deployment** rather than a demand response by asking key questions regarding your rollout such as; what kind of chargers you should choose, how many EVs you want to service and the period you wish to phase them in. It is important to conduct community surveys or research and then understand how that plays into your broader strategy.

**When designing a charging station**, consideration should be given to operational issues, price guidelines, security, adequate lighting, space requirements, signage, proper mounting, and protective measures like bollards. There are **several suggested siting factors** that will help optimise the selection of a physical location of the chargers. Councils should look at

existing infrastructure, location, electrical supply, access, physical safety, charging operations and site management.

There are **various sources of revenue, funds and finance** that Councils should investigate including public private partnerships, sales sharing models, grants from the CEFC and ARENA and low cost finance from Australia’s banks. There are some costs unique to charging network operation and installation and councils will have to understand these as well as several recommended ways to reduce these costs.

Councils must have the **right permits and agreements in place** before undertaking installation. It’s also important to choose a knowledgeable and up to date installer and where possible include a site plan or scope of works to minimise unforeseen costs. Councils should **regularly visit the site** to liaise with the site manager to eliminate any problems.

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