



Chargefox Electric Vehicle Charging Network Project

2018/APR125

Project results and lessons learnt

Lead organisation: Chargefox

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Executive Summary

The Project is the development and construction of at least 22 Charging Sites along major driving routes between Brisbane and Adelaide along the coast of Eastern Australia, in and around Perth in Western Australia, and in Tasmania, at approximately 200km apart. Each Charging Site will hold at least two (2) DC Charging Stations of a minimum charging capacity of 150kW each at the conclusion of the Project. Due to the additional stage 2 funding from the Victorian Government, the Melbourne site will hold a total of four (4) ultra-rapid Charging Stations and two (2) 50kW DC charging stations. In addition, four (4) other regional Victorian sites, will also have two (2) 50kW DC chargers added to them, allowing four cars to charge simultaneously at those sites. Other higher traffic sites on the network may include additional Charging Stations at lower capacity. The Project will allow all EV models currently available for sale in Australia to charge through its stations.

Project Overview

Project summary

Chargefox is a business dedicated to accelerating the uptake of electric vehicles (EV) in Australia. We have built an EV charger management platform and freely accessible **app** and have more than 1000 plugs under management. We are also building Australia's first Ultra-Rapid charging network, which connects Brisbane, Sydney, Melbourne and Adelaide, and adds stations in Western Australia and Tasmania. We will deliver at least 22 sites by mid 2020, using Ultra-Rapid chargers capable of 350kW DC for future vehicles at all our sites. www.chargefox.com

Project scope

The objectives for the Project will be achieved through the following Outcomes:

- creating an EV charger management platform designed and built in Australia, which helps EV drivers find chargers and business owners manage their chargers;
- developing, constructing and operating at least 22 Charging Sites, comprising at least 2 DC Charging Stations at each site, using ultra-rapid EV chargers to dramatically reduce charging times for drivers. The stations will be accessible to all EV models currently available for sale in Australia;
- installing solar PV and a battery to provide the electricity needs for all **the Charging Stations** for at least one Charging Site;
- providing accessibility to Charging Stations to at least 75% of the Australian population; and
- reducing range anxiety for prospective purchasers of EVs in Australia through the creation of a network of Charging Sites along major driving routes.

Outcomes

This project is currently in construction stage. Total of 13 sites are constructed and 9 are commissioned and operational.

Conclusion and next steps

Chargefox will continue to build the remaining 9 sites to completion.

Lessons Learnt

Lessons Learnt Report: Landlord negotiations

Project Name: Chargefox Electric Vehicle Charging Network Project

Knowledge Category:	Commercial
Knowledge Type:	Planning & Development approvals
Technology Type:	Electrical Vehicles
State/Territory:	All of Australia

Key learning

Landlords with limited knowledge of EVs are hard to negotiate with and reach an agreement. This makes doing business more risky/subject to irrational decisions.

Implications for future projects

Over time general knowledge of EVs and the required infrastructure will improve and hopefully assist in future negotiations.

Knowledge gap

Having options and established relationships at the start of the project makes it easier locate suitable sites and maintain continuity when problems occur.

Background

Objectives or project requirements

At this stage of the project, multiple landlords in the desired area are contacted to find a suitable site. A friendly landlord would result in a fast negotiation stage and an easy and timely construction phase.

Process undertaken

For the 22 sites, nominal locations were initially chosen, which were about 200Km apart. Then potential landlords were identified and contacted to discuss the commercial terms of the agreement with Chargefox.

Supporting information (optional)

N/A

Lessons Learnt Report: Emerging technology/industry

Project Name: Chargefox Electric Vehicle Charging Network Project

Knowledge Category:	Technical
Knowledge Type:	Operation and maintenance and supply chain
Technology Type:	Electrical Vehicles
State/Territory:	All of Australia

Key learning

Since the Electrical Vehicle charging is a new and emerging technology, it was difficult to find suitable equipment suppliers, stable technology and competent team to roll out the network.

Implications for future projects

Allow additional time to investigate the full supply chain, supplier's limitations and training suitable staff.

Knowledge gap

Better understanding of the technology available and matching its real performance to expected outcomes.

Background

Objectives or project requirements

To source the best performing technology to enable delivering the project's scope, by partnering with the industry leaders with proven track record of delivering to an agreed set timeline.

Process undertaken

At the start of the project, multiple technical solutions and suppliers were considered and reviewed.

Supporting information (optional)

N/A.