



Electric Highway Tasmania – Concept

October 2015

The Problem

Overnight charging at home allows electric vehicles to be used for urban daily travel, but trips that go beyond the range of a charge (100km to 300km depending on the vehicle) demand a “rest stop” while the EV is slowly “topped up” by a conventional power point.

The Solution!

A coordinated network of public chargers would allow people to travel in an EV between most destinations in Tasmania with speed and convenience. This proposal, the Electric Highway, is currently being developed by the Tasmanian branch of the Australian Electric Vehicle Association.

Other benefits

Once more public chargers are available, more people will purchase electric vehicles. A public charger network allowing EV travel throughout Tasmania would allow a new green tourism industry to develop: travel Tasmania emissions-free!

How Much Would It Cost to Build the Electric Highway?

The cost of the network will be about one million dollars. This is cheaper than a single petrol station! (Assumes councils are able to contribute their resources to provide basic civil works, such as trenching for cables and installing bollards to mount the chargers).

Location of Charging Points

Different types of chargers would be installed, depending on the location.

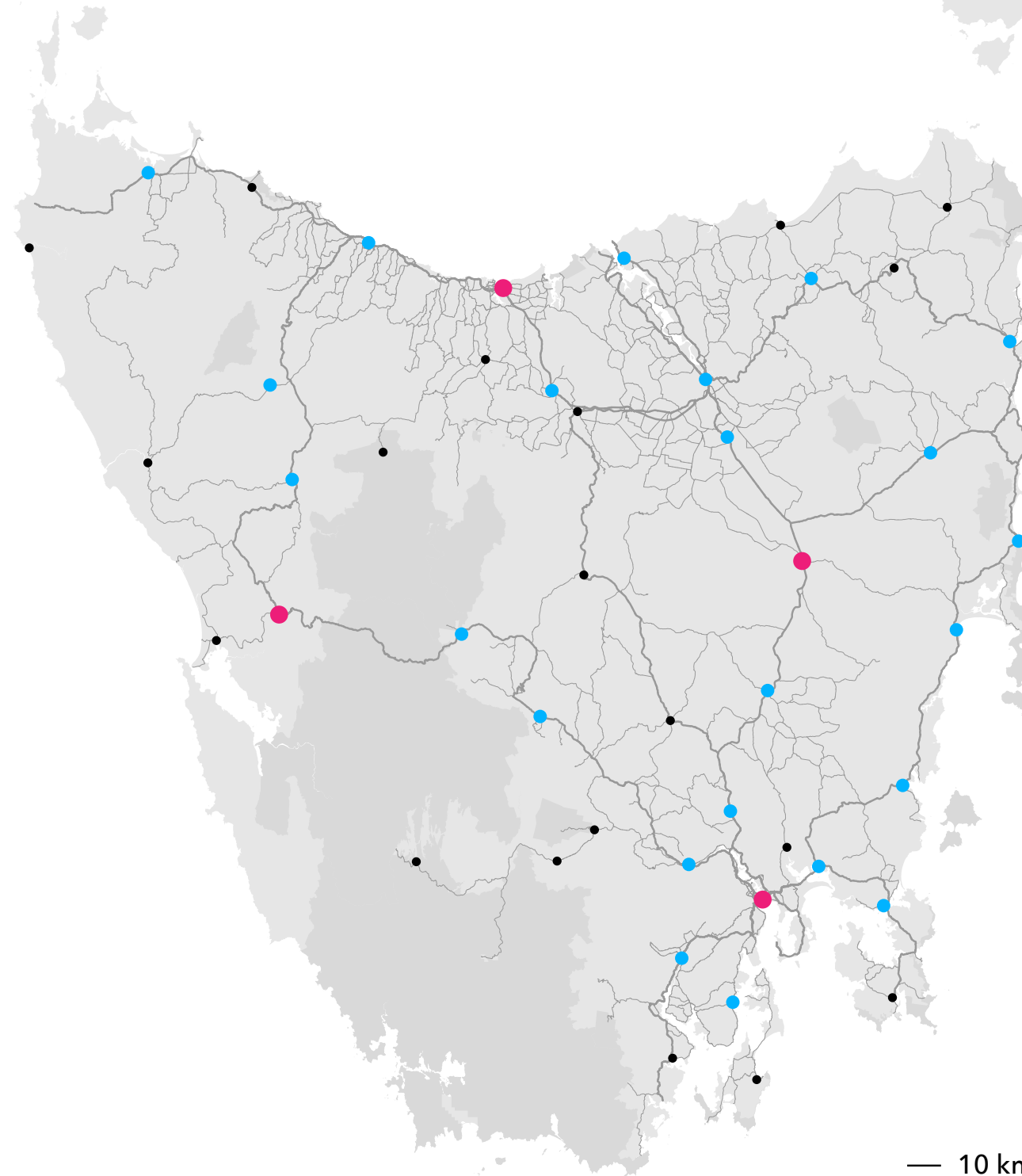
Fast chargers are many times more expensive than slower chargers. Economy demands a mixture of charging types.

Fast DC chargers (giving an 80% recharge in about 30 minutes) would be installed at stops along the major highways - eg Devonport, Campbell Town, Hobart and Queenstown. These would allow vehicles with larger batteries to travel around the state and recharge quickly.

Medium DC chargers would be located at other population centres or tourist destinations with a maximum 80 km spacing on all major routes.



- fast charge (50 kW)
- medium charge (25 kW)
- standard charge (7 kW)



Smaller capacity chargers would be located at other population centres or tourist destinations where visitors would stay for a while, such as Port Arthur or Strahan.

The types of chargers and locations are being further refined. The map shows the current proposal.

Would Charging be Free?

In the long term, free charging is not sustainable. Somebody has to pay for the electricity, and as electric vehicle usage increases, public charging stations will need to recover the electricity cost. A user pays principle is the most equitable. Ultimately we expect EV charging to be paid. It would still be cheaper than petrol.

EV commuters will still charge at home, and the Electric Highway will be used to extend range for trips further afield. EV owners would therefore be paying for the use of the electric highway infrastructure only sometimes.

Funding the Electric Highway

There are a number of organisations which will benefit from increased electric vehicle usage: electricity companies, fleet vehicle operators, electric vehicle manufacturers, the tourism industry, government and councils aiming reduce CO₂ emissions. We are proposing that the electric highway would be jointly funded by those who benefit financially from increased EV usage.

The Western Australian Experience

In 2015, the RAC (WA) funded an electric vehicle charging network in south west Western Australia. This allows fast and convenient travel in a modest car such as a Nissan Leaf from Perth to Augusta, a popular tourist route. We have been in discussions with those involved in the Western Australian charging network.

Further Information

To be kept informed of progress, sign up to receive emails from the Tasmanian branch of the Australian Electric Vehicle Association.