



Queensland’s Electric Super Highway

Government: Queensland, Australia

Region: Asia-Pacific

Sector: Clean transportation

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Summary

Queensland is taking the lead in accelerating Australia’s transition to a cleaner transport system. With limited electric vehicles (EVs) available for the Australian market and a lack of charging infrastructure, Australia has fallen behind other developed countries in EV uptake. The Queensland Government therefore acted to address range anxiety and tackle the infrastructure gap by rolling out the **Queensland Electric Super Highway (QESH)**.

Announced in June 2017 and completed seven months later, the QESH allows EV drivers to travel seamlessly from Coolangatta, on the border with New South Wales, to Cairns, about 1,800 kilometres north, and also from the capital Brisbane to Toowoomba in the west.

Fast charging stations – that can recharge a Nissan Leaf to 80% in 20-30 minutes – have been installed in 17 locations along the Queensland coast. The locations were selected for convenience and safety reasons, allowing motorists to easily charge their vehicle whilst enjoying a short break on their journey. The fast chargers will be free to use during the first phase of the project and provide Queenslanders and visitors with a great opportunity for low-emission road-touring to the state’s natural wonders. With the completion of this project, Queensland now has the most EV charging stations of any Australian state or territory.

To ensure that the full emissions reduction potential of EVs is realised, the electricity used to power the charging stations is purchased through green energy credits or offsets. Queensland also aims to produce more electricity from renewables locally, with a target of 50% renewable energy by 2030.

The QESH was developed in close collaboration with local governments and universities.

“We now have the world’s longest electric vehicle super highway in a single state stretching all the way up our beautiful eastern coastline. This is literally electrifying news for Queenslanders and just one example of the innovative and strategic direction this state continues to take.”

-- Mark Bailey, Minister for Transport and Main Roads, Queensland Government



Tritium: a Queensland success story

Launched in 2003 by three Brisbane university students, Tritium, Australia's only designer and manufacturer of fast chargers for EVs, now operates in 22 countries around the world. The company received AU \$2.5 million through the Queensland Government's Advance Queensland program in October 2017.

Results and next steps

The public's reaction to the QESH has been overwhelmingly positive and there have been over 2,600 individual charging sessions.

The Queensland Government estimates that an EV recharged by renewable power can save 3.8 tonnes of greenhouse gas (GHG) emissions annually, when compared to an internal combustion engine vehicle driving 15,000 kilometres each year.

A next phase project of AU\$ 2.5 million has been approved to place additional charging stations along the QESH, further reducing range anxiety and providing more opportunities for EV drivers to take a break along their journey. Queensland is also coordinating with the neighbouring state of New South Wales to ensure that the locations added during the second phase of the project are convenient for users driving from one state to the other.

Enabling conditions

In October 2017, Queensland published [The Future is Electric: Queensland's Electric Vehicle Strategy](#) – the first of its kind in Australia. The strategy focuses on accelerating the uptake of EVs by empowering consumers, enabling supporting infrastructure, exploring cost-effective support programs and envisaging future government actions. The strategy outlines 16 cost-effective actions, such as the QESH and transitioning the government's fleet to EVs.

As EVs are still a relative rarity in Queensland, exposure and public knowledge of the QESH is still a challenge. Empowering consumers is one of the key goals of the EV Strategy and the Queensland Government has a comprehensive public education program that includes promotion of the QESH.

Queensland also provides individual EV owners with financial incentives through discounted registration and registration duty fees, which reduce the upfront and ongoing cost of an EV purchase.

The QESH is a joint project between Energy Queensland, Economic Development Queensland and the Department of Transport and Main Roads. Success of the project relied on these agencies working together to understand the electrical network impacts, transport system requirements and community needs. Unlike refueling with petrol or diesel, the recharging profile of EV users is expected to be considerably different. By working together, Queensland agencies can manage any subsequent impacts on the energy network and transport system.

For more information

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[The Future is Electric: Queensland's Electric Vehicle Strategy](#)

This case study was developed as part of the [Under2 Zero Emission Vehicle \(ZEV\) Project](#), which supports state and regional governments to increase the number of zero emission vehicles on their roads. The Under2 ZEV Project is implemented by The Climate Group, as part of the Under2 Coalition, with the support of the Scottish Government.

