



Department of
INFRASTRUCTURE PLANNING AND LOGISTICS

Chief Executive
Level 5 Energy House
18-20 Cavenagh Street
DARWIN NT 0801

Postal Address
GPO Box 1680
DARWIN NT 0801

File Ref
DDPI2009/7543-0255

Committee Secretary
Standing Committee on Climate Change, Energy,
Environment and Water
PO Box 6021
CANBERRA NT 2600

Via email: CCEEW@aph.gov.au

Dear Committee Secretary

Re: Submission to the Inquiry into the Transition to Electric Vehicles

The Northern Territory Department of Infrastructure, Planning and Logistics would like to provide the following Submission to the Inquiry into the transition to Electric Vehicles (EV).

Access to a reliable EV charging network is a key enabler for the uptake of EV in the Northern Territory. To ensure the NT's remote and regional areas are not left behind in the transition to EVs, this submission focuses on the need for increased charging infrastructure, particularly in regional and remote areas.

EVs in the NT Context

The widespread uptake of EVs throughout the NT faces a number of unique challenges. These challenges include vast distances between populated areas, the isolation of many communities away from the major road network, the limited driving range of more affordable EVs and the current limited availability of long range and four wheel drive EVs.

Limited access to EV fast charging infrastructure outside of the major urban centres of Darwin and Alice Springs, has confined uptake of EVs to mainly within these two major centres. However, at the same time, with compact urban centres, relatively short commutes and abundant solar charging potential, there are also significant opportunities for EV transition in the NT's major urban centres.

In recognition of these challenges and opportunities, the NT Government released the NT Electric Vehicle Strategy and Implementation Plan in 2021 (NT Strategy) to support the uptake of EVs in the NT. The NT Strategy can be viewed at [Electric vehicle strategy and implementation plan](#). The Strategy includes a range of measures to address the availability and cost of EVs, the delivery of EV infrastructure and the transition of the NT Government fleet to EVs, including:

- removal of the registration component of registration fees and a \$1,500 Stamp Duty reduction on the purchase of an EV;
- introduction of an EV Charger Grants Scheme for residential and business applicants, with over 100 grants allocated to date for the purchase and installation of chargers;
- installation of the requisite charging equipment in government owned and leased buildings to support the transition of the NT Government fleet; and
- installation of public charging equipment at a number of NT Government facilities.

Since the introduction of the NT Strategy in 2021, the number of EVs registered in the NT has significantly increased from 60 EVs to over 550 in February 2024.

In 2022, the NT Government contributed to the preparation of the National Electric Vehicle Strategy. The Strategy's commitment to collaborating with governments to ensure a national approach to the roll-out of EV charging infrastructure across regional Australia is supported by the NT Government.

The Challenges for Remote EV Charging Infrastructure

The challenges to implementing EV charging infrastructure in remote and regional areas is well-recognised and includes:

- limited or no power and communications network coverage, and the need for off-grid energy solutions;
- safety, security and vandalism concerns;
- ongoing maintenance needs, including access to appropriate resourcing and technical expertise;
- unpredictable queuing and reliability for users, and as demand grows, the potential need for pre-booking charging sessions; and
- range anxiety, which is exacerbated in regional and remote areas.

To assist with providing guidance on these challenges, Austroads is currently preparing Guidelines for implementing EV charging in remote and rural areas. This project will focus on best practice for implementing EV charging infrastructure in remote and rural areas. The NT looks forward to the outcomes from this project, which is being undertaken during 2024.

The National EV Charging Network – Driving the Nation Program

The Australian Government's Driving the Nation Program aims to develop a national charging grid to facilitate EV uptake by providing stations at an average interval of 150 kilometres on the national highway network. The Australian Government's investment to date, and ongoing commitment to delivering EV charging infrastructure under this program is acknowledged and supported by the NT Government.

The first fast charger installation delivered in the NT under the program was commissioned in October 2023 at the remote Eridunda Roadhouse on the Stuart Highway. Located approximately 200 kilometres south of Alice Springs, Eridunda is strategically located at the intersection with the Lasseter Highway, which is the main access road to Uluru-Kata Tjuta National Park. As part of a trial of innovative off-grid technology, the installation includes four charging bays and features two 75 kW chargers, solar panels and a number of battery banks.

The anticipated near term commissioning of further fast chargers under the program in Alice Springs, Katherine and Tennant Creek will significantly increase services available for residents and visitors in these regions, including supporting EV tourism. Ongoing development of sites along the NT's national highway network including the Stuart, Barkly and Victoria Highways will further enable the uptake of EVs in the NT.

It is important that public electric vehicle charging infrastructure established under the program meets the minimum operating standards as endorsed by the Energy and Climate Ministerial Council in November 2023, where possible, to support accessibility and reliability. This includes the need for charging sites to have an option for contactless payment that supports credit and debit card transactions without requiring mobile or internet signal.

EV Charging Infrastructure – Supporting Sustainable Tourism

The tourism industry is a key sector in the NT, and the growing demand for sustainable tourism is identified as a trend within the NT'S Tourism Industry Strategy 2030 Update. Drive visitation is an important market for the NT, with over one million total drive tourists in 2023, representing approximately 40 percent of all visitors to the Territory, as recognised in Tourism NT's Drive Tourism Strategy (the Drive Strategy).

The availability of reliable EV charging infrastructure along key tourism routes is an important enabler of domestic and international tourists seeking sustainable road travel opportunities in the NT. To support the growth of this market, access to zero-emission charging infrastructure along the Territory's major tourism roads must be enhanced.

To ensure the Territory continues to attract drive visitors from key interstate source markets, further investment in EV infrastructure along the Territory's national highway network, which forms the primary access for interstate travel between the NT and the rest of Australia, is required.

In addition, the Drive Strategy identifies other priority drive routes for infrastructure investment across the NT, with the initial priority routes for EV tourism being the Central Australia loop drive (including Alice Springs to Uluru-Kata Tjuta National Park, Watarrka National Park and the West MacDonnell ranges) and the Top End loop drive (including Darwin, Litchfield National Park, Kakadu National Park, Katherine and Mataranka).

Tourism NT also encourages tourism providers to decarbonise transportation associated with their business, including installing EV charging stations to support visitor needs.

As well as facilitating sustainable travel to the NT, investment in EV infrastructure along key tourism drive routes will improve visitor experiences and alleviate visitor range anxiety. Importantly, it will enable visitor dispersal into the regions by broadening areas where visitors can reliably travel using EVs, supporting remote areas and investment under the NT Parks Masterplan 2023-2053.

An Increased Program of Regional and Remote EV Charging Infrastructure

While EV battery technology is continuing to evolve, the average driving range of an electric vehicle is currently approximately 450 kilometres.

To ensure a truly national charging grid is created, which includes the Territory's remote and regional areas, there is a critical need for more charging infrastructure to be established.

To enable the ongoing transition to EVs in the NT, the Department:

- supports the ongoing implementation of the current Driving the Nation EV Charger Program; and
- recommends that the Australian Government further expand this program, or implements additional new programs into the future.

Transitioning to EVs in Remote and Very Remote Areas

Even with the establishment of EV charging networks across Australia, there remains significant challenges to the transition to EVs in very remote areas of the NT. The Territory's population is small and widely dispersed with some of the most remote communities in Australia. More than 75 percent of the NT's Aboriginal population live in remote and very remote communities. Isolated communities are connected by an extensive 36,000 kilometres road network spread across 1.3 million square kilometres. While the 2,700 kilometres national highway network is fully sealed, 75 percent of the network is unsealed, often rough and intersected by flood ways, creek and river crossings. Flooding and road closures limit road access to many communities during the wet season. Travel in the regional and remote areas of the NT often requires high clearance, four-wheel drive vehicles.

Availability of electric heavy duty and four wheel drive passenger vehicles suitable for accessing these areas of the Territory, is currently extremely limited and the transition to EVs in remote areas is likely to be much longer term.

As more populated areas of Australia rapidly transition to EVs, it is important to ensure that the remote areas of Australia are not adversely impacted by this transition. Increasing costs or limited availability of suitable vehicles would deliver a negative impact on businesses and communities across the NT. It will also be important to ensure that the transition to EVs does not cause disruptions to traditional fuel markets in the short to medium term, potentially leading to higher fuel prices for remote areas.

Yours sincerely

Andrew Kirkman
Chief Executive

29 February 2024