

EMISSION FREE MODES OF PUBLIC TRANSPORT

Organisation: Department for Infrastructure and Transport (SA)

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Mr Tim James
Committee Chair
Legislative Assembly Committee on Transport and Infrastructure
Parliament of New South Wales
Parliament House
Macquarie Street
SYDNEY NSW 2000

Dear Mr James

INQUIRY INTO EMISSION FREE MODES OF PUBLIC TRANSPORT

Thank you for your correspondence dated 30 May 2022, inviting the Department for Infrastructure and Transport (the Department) to make a submission to the inquiry into emission free modes of public transport (the Enquiry).

In response to the Terms of Reference, the Department provides the following:

- a) the capacity and capability for industry to provide emission free modes of public transport:
 - a. Rail:
 - i. The Department has recently completed electrification of our major rail spine network and has purchased 12 new electric trains from Alstom which are manufactured in Dandenong, Victoria.
 - ii. The Department has a fleet of diesel electric trains currently being converted to Hybrid that are expected to operate on the network for approximately 10 years. The intent is to explore alternative options not yet currently available on the local market to provide emission free rail.
 - b. Bus:
 - i. The Department's bus provider, Scania, is currently producing a battery electric bus for trial on the metropolitan bus network.
 - ii. Local industry currently provides the bus bodies for the Scania contract.

- iii. A trial of battery electric buses produced by our local bus body builder have yet to prove suitable for use on the network and require further development.
 - iv. Bus building capacity across the country is seen as an issue for accelerated introduction of zero emission buses.
 - v. The ability for the Department to modify the existing bus depots to cater for zero emission fleets is also an industry capacity issue.
- b) benefits and costs to taxpayers:
 - a. Studies undertaken by the Department indicate that the whole of life costs to taxpayers is equivalent between battery electric buses and diesel buses with a significantly higher capital outlay but lower operational costs for battery electric buses.
 - b. The current higher supply cost of Hydrogen increases the operational cost for a Hydrogen solution. The South Australian Government is committed to improving the supply of Hydrogen within the State and an effective Hydrogen economy will improve the cost benefit.
 - c. Health advantages, as indicated in your report 1/57 – September 2020, are significant with the reduction of diesel emissions.
- c) the opportunities for, and impact to, local manufacturing operations:
 - a. The South Australian Government is committed to achieving 50% reduction in carbon emissions by 2030 and net zero by 2050. In addition, the South Australian Government developed the *Hydrogen Jobs Plan – Powering New Jobs and Industry*, with an election commitment of a new Hydrogen plant.
 - b. Ongoing opportunity for local industry bus builders to continue to supply bus bodies for local manufacture.
 - c. Opportunity for local industry innovation and participation in Hydrogen industry to improve viability of Hydrogen vehicles, road or rail.
- d) other jurisdictions that have emission free modes of public transport:
 - a. Battery electric buses are becoming increasingly common globally.
 - b. Hydrogen appears to be technologically viable but lack of Hydrogen economy is the main impediment,
 - c. Not aware of any currently viable battery electric heavy rail operations globally.
- e) any other related matters:
 - a. No additional comments.

I trust this information is of assistance.

Yours sincerely



Jon Whelan
Chief Executive

8 July 2022