National Waste and Recycling Industry Council

28 October 2022

Department of Climate Change, Energy, the Environment and Water

GPO Box 3090,

Canberra ACT 2601,

Dear Sir / Madam

Re: National Electric Vehicle Strategy - Consultation Paper

The National Waste and Recycling Industry Council (NWRIC) is a business council representing international and national companies with assets including major landfills, transfer stations, resource recovery facilities (including advanced manufacturing), firming power facilities, collection services and secondary reprocessing operations. Council members collectively, directly employ more than 15,000 Australians, at more than 650 specialty industry prized assets.

Council members provide solid, liquid, hazardous (including medical) waste and recycling services to more than 80% of Australia's commercial, retail, and industrial businesses weekly. We also service more than 80 % of all homes, units, apartments, and other forms of accommodation across Australia with their weekly, waste recycling and or organic collections. These front-end collections of the system are supported with our bulk and line haul services to safely transport these streams for further reprocessing or disposal.

With our extensive expertise across all forms of heavy vehicle movements we provide the following response to the consultation paper. Our members have and continue to invest significant resources into exploring the viability of Electric Vehicles (EV's) and other fuel forms for use within the waste management industry.

We welcome the opportunity to comment on the National Electric Vehicle Strategy Consultation Paper released by the Commonwealth Government for consultation, however we feel the scope is too narrow and limits discussion on a range of alternate options to address our greenhouse gas abatement challenge.

In terms of our broad understanding and experience the paper should have included discussion more broadly on exploring alternate fuels that are currently being utilised by heavy vehicles internationally.

These alternate options include hydrogen fuel cell and hydrogen internal combustion technology which may be more suitable to our industry including CNG and LNG fuels as well as Vegetable Vehicle Hydro oils.

The waste industry, as an essential service, employs a range of specialist heavy vehicles to collect, handle and transport waste across metropolitan, regional and rural Australia. Due to the tyranny of distance and to achieve operational efficiencies the range and payload of our heavy vehicles is paramount to being able to provide a reliable and cost-effective service to both the public and private sector.

Our industry considers that significant and inherent barriers exist to the implementation of the proposed strategy outlined in the paper and of its relevance to our sector.

National Waste, Recycling Industry Council ABN 22 617 891 899
A Level 1, The Realm, 18 National Circuit, Barton, Canberra, Australia
T +61 407 125 680 E ceo@nwric.com.au

These barriers are summarised below:

1. Dimensions and Weight of EVs

Current EVs which are manufactured overseas and are required for the majority of applications within the waste management industry exceed both the dimension and weight limits imposed by Australian Road Rules in all jurisdictions. Even in the event of exemptions being issued for the use of such vehicles, the additional weight of such EVs would have a detrimental impact of the road network leading to additional design, construction and maintenance costs which needs to be calculated and considered by Government. Impacts on the structure of local residential roads and pavements and internal building driveways would be catastrophic as they have not been constructed to bear the increased load limits.

2. Availability of Suitable EV Models

Manufacturers currently have a cooperation timeline to determine whether an offer for an electric vehicle can be made to end users which includes:

- Initial meetings to understand needs.
- Transport mission schedule.
- Route simulation
- Charging infrastructure
- Discussion of alternatives
- Specification and offer.
- Delivery.

Our discussions thus far indicate that all manufacturers will decline to make an offer for the majority of our applications due to the range, energy requirements for operating equipment such as compaction and payload requirements of our fleet.

3. Increase Capital Cost

The cost of an EV suitable for our applications costs between five and six times higher than current non-EV. Due to the size of the batteries and the limited range available, we estimate additional EVs are required to complete the work of an existing non-EV. The increase in cost of acquiring EVs in heavy industrial applications will ultimately be passed onto consumers directly from business or indirectly through government subsidies.

4. Investigation of Alternative Fuel Sources

The paper does not acknowledge any other forms of alternative fuel sources such as hydrogen fuel cell and hydrogen internal combustion technology which may be more suitable to our industry.

5. International Case Studies

The paper needs to consider real world examples where EVs have been implemented including their applications, restrictions and the substantial subsidies and tax exemptions that are required to offset the cost of the transition.

6. Charging and Infrastructure

Our fleets are scheduled to run during the day due to noise restrictions imposed by government regulation. This would result in large numbers EVs requiring charging in one location which will draw significant power from the grid. We are concerned that the technology and hardware does not current support this arrangement.

7. Maintenance Skills Gap

We hold concerns that additional skilled staff will be required to maintain EVs. The paper needs to consider the current skills shortage and map out how existing or new tradespeople will be trained to be able to appropriately maintain EVs on such a large scale.

8. Net Benefit for Energy Intensive Applications

The larger the battery, the greater the mass and therefore there is a substantial reduction in payload. This means that the vehicle is expending a great deal of energy simply moving the battery around. The greater the battery size the less viable the vehicle becomes.

There does not appear to be consideration in the paper for:

- The costs, emissions and resources involved in recycling the batteries.
- The increase in number of employees, vehicles and batteries required to replace the work completed by existing non EVs.
- How are charging stations in regional and remote areas going to be powered.

We trust our response and concerns raised provide useful insights in the development of the strategy as it impacts our sector

Yours Sincerely

National Waste Recycling Industry Association

Rick Ralph

Chief Executive Officer