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Department of Industry, Science and Resources

National Electric Vehicle Strategy: Consultation Paper

Thank you for the opportunity to comment on the National Electric Vehicle Strategy (NEVS) Consultation Paper.

The **Australian Research Council (ARC) Centre of Excellence for Climate Extremes** is Australia's leading climate science centre across five partner universities - The University of New South Wales, Monash University, The Australian National University, The University of Melbourne and The University of Tasmania as well as multiple national and international partner organisations. Its research focuses on understanding the underlying processes of climate extremes to reduce Australia's economic, social and environmental vulnerability.

The Centre acknowledges the important role that the NEVS will play in reducing transport emissions to achieve Australia's emissions reduction target of 43% of 2005 levels by 2030 and reaching net zero emissions by 2050. We support the substance of the goals, objectives and actions outlined in the NEVS consultation paper and confine our comments to the goals and actions in this submission.

NEVS Strategy Framework: Goals

The Earth's climate is warming, primarily due to the increase in carbon dioxide emitted into the atmosphere by human-driven activities including mainly the burning of fossil fuels (coal, oil, and natural gas) but including land use and land cover change. The direct link between emissions and climate change is unequivocal and with Australia's climate warming slightly faster than the global average temperature, (Australia's climate has warmed by $1.44 \pm 0.24^\circ\text{C}$ over 1910–2019¹). It is therefore imperative that Australia reduces emissions.

Our region is already facing climate extremes which affect many facets of Australian society including health, soil and water, agriculture, infrastructure, energy security and financial security posing significant risks to the global and Australian economy. There are likely to be more intense extremes in the future with more frequent swings from extreme droughts to flooding rains².

The amount of global warming depends on the amount of future global greenhouse gas emissions and the ability to deploy rapid and sustained actions to reduce atmospheric carbon dioxide. There is a finite amount of the carbon budget beyond which the warming will exceed 1.5°C . The IPCC has stated that from 2020, the world has only 500 billion tonnes of carbon dioxide left in the global carbon budget to emit to have a 50%

likelihood of limiting global warming to 1.5°C. At current global emission rates, this will be exhausted within 11 years³. It is therefore vital that the emissions reductions policies are employed rapidly.

As outlined in the consultation paper, transport is Australia's second largest source of emissions, responsible for 19% of national emissions with approximately 85% of transport emissions resulting from road vehicles. At present, Australia is lagging other developed and emerging economies in the global transition towards electrifying transport and moving away from fossil fuel usage. This presents an important opportunity to make significant progress towards our nationally legislated emissions reduction targets by accelerating the uptake of EVs. The need to reduce emissions should therefore be the primary goal of the NEVS and be reflected as the most important goal.

Greater accessibility to electric vehicles will help to reduce emissions. A suite of additional emissions reduction policies such as continued efforts towards decarbonising electricity generation, investment in battery progress and support of emissions standards for all vehicles will complement the NEVS.

NEVS Strategy Framework: Actions

It is important that the government undertakes a holistic emissions reduction program across all government portfolios measuring progress against targets set by its own newly legislated Climate Change Bill 2022 and Climate Change (Consequential) Amendments Bill 2022.

To evaluate the policy objective of emissions reduction, the NEVS strategy would benefit from incorporating a comprehensive monitoring and reporting program conducted initially to provide a baseline of current road vehicle emissions and thereafter to measure progress against climate reduction targets set in legislation.

The Centre urges the Australian Government to undertake rapid policy actions to accelerate emissions reduction through the uptake of EVs to make a real difference on transport emissions in Australia.

Thank you for considering our submission, we would be happy to provide further advice if required.

Regards,



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References

1. [State of the Climate 2020: Bureau of Meteorology \(bom.gov.au\)](https://www.bom.gov.au)
2. Fowler et al., 2021, Towards advancing scientific knowledge of climate change impacts on short-duration rainfall extremes, Phil. Trans. R. Soc. A., <https://doi.org/10.1098/rsta.2019.0542>
3. Holbrook et al., 2020, Keeping pace with marine heatwaves, Nature Reviews Earth & Environment, <https://doi.org/10.1038/s43017-020-0068-4>