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Ministry of Business, Innovation and Employment (MBIE) 15 Stout Street Wellington 6011

By email: hydrogen@mbie.govt.nz

DCC SUBMISSION ON THE GREEN PAPER: A VISION FOR HYDROGEN IN NEW ZEALAND

Introduction

- 1. The Dunedin City Council (DCC) welcomes the opportunity to submit feedback on the Government's Green Paper "a Vision for Hydrogen in New Zealand".
- 2. The DCC supports the Government's aim for a carbon neutral future for New Zealand, a strong low emissions economy and the role that hydrogen can play in supporting these objectives.

Submission

- 3. The DCC notes that the development of New Zealand's hydrogen capacity, and the industry more broadly, has alignment with Dunedin's Energy Plan goals in so far as it:
 - takes advantage of economic opportunities in a changing energy context;
 - saves costs and enhances quality of life from energy efficiency improvements;
 - boosts the city's energy security and ability adapt to future change; and
 - reduces Dunedin's climate change and environmental effects.
- 4. A commitment to energy efficiency and investigating innovative renewable energy solutions are also key aspects of Te Ao Tūroa The Natural World, Dunedin's Environmental Strategy.
- 5. In particular, the DCC notes the benefits of 'green hydrogen' and the opportunity to capitalise on New Zealand's existing advantage in renewable electricity. The DCC is encouraged by green hydrogen opportunities toward creating new jobs, moving away from fossil fuels, enhancing security of electricity supply and securing greater local commercial opportunities arising from energy exports.
- 6. The DCC strongly supports the role of green hydrogen and its potential to contribute to reducing emissions. The DCC has an ambitious goal to become a net carbon zero city by 2030 and, with stationary energy accounting for 13.4% of the city's carbon footprint,

welcomes decarbonisation opportunities and meeting the city's ambitious local emissions target.

- 7. The Green Paper specifically explores the potential role of hydrogen in decarbonising the transport sector, in particular, the heavy transport sector. This is especially important for Dunedin as a regional transport hub and where transport emissions account for 28.4% of Dunedin's total carbon footprint. The DCC strongly encourages the Government to support research and development (R&D) aimed at transport-related applications but also the real-world application of hydrogen technologies and implementation of green hydrogen production.
- 8. More broadly, Dunedin has shown a strong commitment to adopting less emissions intensive transport options with the highest rate of electric vehicle ownership of any city in New Zealand (at around 4.1 vehicles per thousand people, compared to the national average of 2.6 per thousand people).
- 9. While the DCC is encouraged by opportunities in hydrogen technology, and green hydrogen in particular, the DCC notes the range of factors that contribute to green hydrogen production costs mentioned in the Green Paper existing electricity costs and taxes, grid fees and the capacity utilisation rates of electrolysers. As the paper also notes, if production costs fall and carbon prices rise in the medium term, then hydrogen will become more cost competitive with natural gas and liquid fuels.
- 10. The DCC encourages further work to explore the above challenges and the accessibility of hydrogen technology. This is especially important given that the Green Paper notes the importance of a 'just transition that is fair, equitable and inclusive'. As part of this work, the DCC would also like to see where there are opportunities for local authorities in promoting greater hydrogen uptake at a local level and the importance of continued protocols for hydrogen safety handling.

Conclusion

- 11. The DCC commends the Government's forward-thinking in considering the development of hydrogen as a future potential energy source in New Zealand.
- 12. The DCC supports the continued efforts to shift towards a carbon neutral economy by 2050, noting DCC's recent commitment to being a net carbon zero city by 2030.

Yours faithfully,

Dave Cull

Mayor of Dunedin