



COVERSHEET

Minister	Hon Dr Megan Woods	Portfolio	Energy and Resources
Title of Cabinet paper	Report on Overseas Travel: Hon Dr Megan Woods	Date to be published	31 October 2023

List of documents that have been proactively released

Date	Title	Author
September 2023	Report on Overseas Travel: Hon Dr Megan Woods	Office of the Minister of Energy and Resources
18 September 2023	Report on Overseas Travel: Hon Dr Megan Woods CAB-23-MIN-0437 Minute	Cabinet Office

Information redacted

NO

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Office of the Minister of Energy and Resources

Cabinet

Report on Overseas Travel: Hon Woods visit to the United States of America 13-20 August 2023

Proposal

- 1 I recommend Cabinet note this report on my recent travel to the United States of America to attend the APEC Energy Ministers Meeting. I also undertook a range of bilateral meetings and site visits related to my Energy and Resources and Building and Construction portfolios.

Report

Seattle, Washington State, USA

- 2 Between 13 and 20 August, I travelled to the United States of America. The primary purpose of my visit was to attend the APEC Energy Ministers Meeting in Seattle 15-16 August.
- 3 The meeting's theme was "Creating a Resilient and Sustainable Future for All". It was the first time in eight years that APEC Energy Ministers had met in person. **Chair, US Energy Secretary Jennifer Granholm**, spoke of the need to set new goals for decarbonisation and methane reduction to achieve a 1.5 degree pathway, and to turn the challenges to meeting that, into opportunities.
- 4 My statement to the meeting included comments on the crucial role APEC has to drive action on fossil fuel subsidy reform, New Zealand's recent experience with severe weather events and our progress toward net zero emissions by 2050. I also spoke about the negative impacts on global energy markets from Russia's illegal invasion that has resulted in high energy prices for consumers.

While in Seattle, I held bilateral meetings with overseas colleagues:

- 5 **Tan See Leng, Minister of Manpower for Singapore** and I discussed opportunities for hydrogen and New Zealand's progress on the development of a Hydrogen Roadmap and other initiatives to stimulate use of hydrogen announced as part of Budget 2023. We also discussed the role of hydrogen in aviation and more broadly, progress on Sustainable Aviation Fuel.
- 6 **Fusae Ota, State Minister of Japan** and I also discussed hydrogen, including for heavy transport vehicles and Japan's demonstration of a ship using liquid hydrogen, during its hosting of the G7. We agreed to continue our cooperation on exchanging information about hydrogen. We also discussed Japan's experience on the regulation of an offshore wind regulatory regime, something New Zealand is currently working on, and how offshore wind could be an effective tool for achieving carbon neutrality. We agreed to engage further on supply chains, possibly through Indo-Pacific Economic Framework for Prosperity (IPEF).

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In addition to these bilateral meetings, I also attended an APEC Ministers and delegates site visit to Group 14:

- 7 **Eric Luebbe and Henry Constantino are the co-founders of Group 14** in Seattle which is commercialising lithium-silicon battery technology for EVs that delivers high energy density battery technology, combined with fast charging. Group 14 has a \$100 million government grant in addition to backing by Porsche and Microsoft to build the largest factory in the world for EV components to meet global decarbonisation demands, at Moses Lake, WA.

While in Seattle I also met with:

- 8 **Amazon's Kara Hurst, VP of World Sustainability, Daniel Gross, Director Climate Pledge Fund, Ken Haig, Head of Energy and Environment Policy, Bryan Huber, AMER West and APEC Lead, Michael Punke, Vice President for Global Public Policy.** Amazon has a net zero by 2040 Climate Pledge and \$2 billion of investment across US and in Europe, aimed at decarbonising their own operations including with the use of EV delivery vans, low-emissions aviation and shipping and energy efficient data centres. Amazon is constructing three data centres in Auckland, with \$7.5 billion investment over 15 years and long-term Power Purchase Agreements with Mercury for 100% renewable energy.
- 9 **New Zealand Honorary Consul Katharine Holdsworth** and her husband who are based in Seattle hosted a lunch and spoke about investment opportunities in innovative clean technology and the need for developing more skills in the sector.
- 10 **Mike Boots, Executive Vice President, and Adria Wilson, Director for US Policy and Advocacy from Breakthrough Energy.** Breakthrough Energy is a Bill Gates' backed non-government organisation (NGO) working on advocacy and funding to commercialise clean tech products. We spoke about critical areas of clean energy development including storage, hydrogen, Sustainable Aviation Fuel, and modernisation of electricity transmission and distribution systems as economies move toward a decarbonised energy system.

In San Francisco I was hosted by:

- 11 **Antoine Peiffer, Vice President, Engineering, Seth Price, Vice President, Technology, Daewoong Son, Principal Naval Architect, and Ao Zhang, Business Development Manager for Asia Pacific at Principle Power.** Principle Power develops floating offshore wind turbines and has projects in Portugal, Scotland and France. Its technology allows for deep water wind turbines that use semi-submersible foundations, chained to the sea floor. With New Zealand currently developing an offshore energy regulatory regime, it was valuable to hear about its international experience of establishing wind farms. I invited Principle Power to make a submission to MBIE as part of the consultation process on the regime.
- 12 **At Stanford University's Precourt Institute** I met with **Liang Min (Managing Director, Bits & Watts), and Ram Rajagopal (Faculty Co-Director, Bits and Watts),** who spoke about electricity research, with **Fritz Prinz (Faculty Co-Director), and Xiaolin Zheng (Faculty Co-Director)** presenting on hydrogen research, and **Will Chueh (Faculty Co-Director)** who talked about energy storage. The PreCourt Institute is Stanford's newest school and is focused on accelerating sustainability, clean technology, climate and energy resilience. We spoke about the opportunities of decarbonisation, electrifying the energy system, challenges of demand response on

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electricity grids, energy performance standards for buildings, and energy efficiency data.

- 13 **At Google X, Page Crahan, General Manager, Tapestry, and Andy Ott, Director, Tapestry** gave an update on Project Tapestry, whereby Google X is working Vector on grid visualisation in West Auckland, to better understand energy input and help manage demand on the system. Ara Ake, New Zealand's Future Energy Centre, and Google X have a Memorandum of Understanding to map out Auckland's solar potential. We also discussed Tapestry's work on modelling of national grids as they work toward a 'Google maps for electrons' and to help better understand options for grid investment.
- 14 At the **San Francisco Environment Department, Tyrone Jue, Director, San Francisco Environment, Cyndy Comerford, Climate Program Manager, Charles Sheehan, Chief Policy and Public Affairs Officer, Lowell Chu, Energy Program Manager, Joseph Paisecki, Policy and Public Affairs Coordinator, Joseph Sweiss, Environmental Advisor** spoke about the city's 2040 Net Zero emissions targets. Its 2021 Climate Action Plan tackles greenhouse gas emissions as well as equity, housing, economics, health, buildings and community resilience. The city has a goal to reduce its emissions by 61% by 2030, with a particular focus on buildings and transport which each account for 44% of emissions. We discussed energy efficiency programmes such as San Francisco's BAYREN, to incentivise efficiency and cleaner energy sources and New Zealand's highly successful Warmer Kiwi Homes programme.

Proactive Release

- 15 This paper will be proactively released as per Cabinet Office Circular CO (18) 4 on the Ministry of Business, Innovation and Employment website. The paper will be subject to redaction as appropriate on the grounds set out under the Official Information Act 1982.

Recommendations

The Minister of Energy and Resources recommends that Cabinet:

- 1 note this report on the Minister of Energy and Resources recent travel to the United States of America

Authorised for lodgement

Hon Dr Megan Woods

Minister of Energy and Resources