



COVERSHEET

Minister	Hon Dr Megan Woods	Portfolio	Energy and Resources
Title of Cabinet paper	Update on the New Zealand Battery Project	Date to be published	5 August 2022

List of documents that have been proactively released			
Date	Title	Author	
June 2022	Update on the New Zealand Battery Project	Office of the Minister of the Minister of Energy and Resources	
22 June 2022	New Zealand Battery Project: Update DEV-22-MIN-0138 Minute	Cabinet Office	

Information redacted

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YES

Some information has been withheld for the reason of Confidential information entrusted to the Government.

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Cabinet Economic Development Committee

Minute of Decision

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New Zealand Battery Project: Update

Portfolio Energy and Resources

On 22 June 2022, the Cabinet Economic Development Committee (DEV):

- noted that on 16 December 2020, the Cabinet Business Committee:
 - 1.1 agreed to set up the New Zealand Battery Project to assess renewable storage options to address the dry year problem;
 - 1.2 agreed that the New Zealand Battery Project should examine the viability of pumped hydro, particularly at Lake Onslow, and consider this solution against alternative technologies;

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- **noted** that the New Zealand Battery Project fits into a wider work programme to transition to highly renewable electricity generation, alongside continued electrification of the economy;
- noted that reliance on weather dependent electricity generation creates 'dry year' security of supply risks that equates to 3-5 terawatt hours less energy available for electricity generation, compared to an average year;
- 4 **noted** that a pumped hydro scheme at Lake Onslow is technically feasible, could solve the dry year problem, support a transition to highly renewable generation, and provide gross benefits to the electricity sector, including:
 - 4.1 assisting in maintaining security of supply, without coal, gas and oil plant;
 - 4.2 reducing the need for overbuilding generating capacity;
 - enabling the storage of energy when it is in abundance (such as windy and sunny periods), for use later when it is scarce;
 - 4.4 smoothing wholesale electricity prices, with a likely average effect of downwards pressure on wholesale prices, compared to a scenario without the asset;
- 5 **noted** that developing pumped hydro at Lake Onslow comes with some significant environmental, cultural and social trade-offs;

- **noted** that investigations to date have not identified an alternative renewable dry year solution that is large enough to solve the problem to the same extent as Lake Onslow, and that comes without significant challenges, costs and risks;
- agreed to continue feasibility assessments into pumped hydro at Lake Onslow as a potential solution to the dry year problem, including environmental and geotechnical investigations, engineering concept design, and options for market integration;
- **agreed** to continue feasibility work on other hydro options, as comparisons to pumped hydro at Lake Onslow;
- agreed to continue feasibility work into the potential of biomass, hydrogen, geothermal and demand response as partial or portfolio solutions to the dry year problem;
- invited the Minister of Energy and Resources to report back to DEV in December 2022, with a feasibility assessment and an Indicative Business Case on pumped hydro at Lake Onslow, and other renewable electricity storage options.

Janine Harvey Committee Secretary

Present:

Hon Grant Robertson (Chair)
Hon Dr Megan Woods
Hon David Parker
Hon Poto Williams
Hon Damien O'Connor
Hon Stuart Nash
Hon Michael Wood
Hon Meka Whaitiri
Hon Kieran McAnulty
Rino Tirikatene, MP

Dr Deborah Russell, MP

Officials present from:

Office of the Prime Minister DPMC