

New Zealand's Regulatory and Planning Regime for Conventional Geothermal Resource Use

D. Kissick¹, S. Bendall¹, M. Climo²

¹*Traverse Environmental, PO Box 245, Taupo 3351 New Zealand*

²*Bridger Consulting, PO Box 36-118, Christchurch 8146, New Zealand*

Email: deborah@traverse.co.nz

In New Zealand, geothermal resources are treated as water resources, and their use is predominantly governed by broad environmental management legislation, in particular the Resource Management Act, 1991. However, while geothermal projects are managed regionally, these developments must also navigate a more complex web of interconnected national, regional and district policies and plans.

This paper provides a summary of a recent review of regulatory and planning frameworks that relate to the existing use and development of conventional geothermal resources in New Zealand. This review was undertaken to inform a second study on the applicability of existing policy frameworks for managing the potential future use of supercritical geothermal resources.

Supercritical resources offer significant reserves of sustainable, indigenous energy aligned with New Zealand's goal for being "carbon zero" by 2050, but there are many scientific, technical and societal challenges to resolve, unknown in conventional geothermal resource use.

This is an opportunity to design an optimal policy and planning approach to ensure supercritical heat resource management is sustainable, and appropriate, that opens up the opportunity for investment in these resources that are anticipated to play an important part in the energy scene post 2050.

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