



February 1, 2023

Attn: Committee Staff
Environment Committee
Parliament Buildings
Wellington
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Submission on *Spatial Planning Bill*, November 2022

This document is submitted on behalf of the New Zealand Geothermal Association by Kennie Tsui (Chief Executive).

New Zealand Geothermal Association (NZGA)

1. The NZGA, incorporated in 1992, is a non-political, non-governmental and not-for-profit organisation, with a focus on fostering a sustainable future for Aotearoa New Zealand through the use, development and protection of geothermal resources. The NZGA is an affiliated member of the International Geothermal Association and the Royal Society of New Zealand. The NZGA connects with global geothermal communities and is well positioned to positively influence geothermal initiatives on the international stage.
2. NZGA membership comprises ca. 500 individuals, as well as corporate members, representing, research organisations, Māori trusts, regional councils, geothermal electricity generators, engineering consultants, technology companies and planning consultants. This diverse and skilled network of people work and live with Aotearoa's geothermal resources.
3. This submission has been prepared by members of the New Zealand geothermal community. The submission was reviewed by a reference group comprising experienced practitioners in the consenting of geothermal projects (including scientists, engineers, Māori, planners, lawyers and others). This submission was approved for release by the NZGA executive board.

Submission overview

4. Our challenge as a nation is to ensure that we maximise all of Aotearoa New Zealand's renewable energy resources during the transition to our low-carbon energy future. This submission is prepared from a viewpoint that Aotearoa New Zealand's geothermal energy resources are critical to our way of life, and that our legacy of low-carbon geothermal energy use gives the nation a competitive advantage in transitioning its energy sector and diverse economy created by multiple businesses.

5. Geothermal resources¹ are vibrant, proven and indigenous, and can enable industries to thrive and regions to grow. The geothermal community seeks to ensure that reform of the Resource Management Act, not only allows, but *enables* further sustainable geothermal development while ensuring appropriate protections for those geothermal features recognised as being significant.
6. Aotearoa New Zealand’s geothermal resources are already widely used to generate low-carbon electricity, and geothermal heat is used directly to support residential, commercial and industrial scale uses (from tourism, to recreation, and industrial heating).
7. The NZGA is confident that there is much more that geothermal resources can contribute to New Zealand’s renewable energy and carbon goals, with further exploration and development of existing resources nationally and the potential, particularly within the Taupō Volcanic Zone, for deeper hotter supercritical resources.
8. New Zealand’s current approach to geothermal resource use and development is internationally recognised. Our global reputation for sound geothermal resource management is looked to by several other nations as a good practice example, and New Zealand is considered to be internationally leading in this space. While there is always room for improvement, the NZGA seeks that our good practice experience is not lost through the RMA reform process.
9. Under the RMA, sophisticated measures have been developed to manage the inherent uncertainties associated with the use and development of geothermal resources. This includes data-driven system management plans, monitoring, transparent reporting, adaptive management and the use of peer review panels. The uncertainty associated with geothermal resource use and development requires that the RMA provides flexibility to facilitate exploration to increase knowledge and understanding of geothermal resources, and to support an appropriate regulatory regime for geothermal development projects.
10. The Spatial Planning Act needs to be cognisant of the practical reality that Regional Councils are heavily reliant on external expertise in regulatory processes due to the specialist nature of the field. A cross-regional spatial strategy is an opportunity to optimise the expertise available, by providing a consistent and comprehensive approach to the management and use of geothermal resources at a scale relevant to the resources themselves, while avoiding existing cross-boundary issues at a regulatory level that add unnecessary complexity, uncertainty and duplication. This is largely in place already for the Taupō Volcanic Zone through a similar regulatory approach that has been taken by the Bay of Plenty and Waikato Regional Councils in their respective planning documents.

¹ The reference to “Geothermal Resources” throughout this submission is a term that is used to describe both low enthalpy resources (>30°C), high-enthalpy conventional geothermal resources (<~3.5 km deep with reservoir temperatures <350°C), and potential (but not yet proven) supercritical geothermal resources (>5 km, >400°C)

11. In Table 1 (**attached**), we offer comment on specific sections of the Bill.

I welcome the opportunity to present to the Select Committee regarding this submission and can provide additional and supporting information on request.

Nāku noa, nā,



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Table 1: Spatial Planning Bill - Submission Points for New Zealand Geothermal Association

| NBE Bill Part/subpart | Section | NZGA Position | NZGA Reasons | NZGA Relief Sought |
|---|--|--------------------------------|---|---|
| <p>Part 2 – Regional Spatial Strategies</p> <p>Subpart 2 – Scope and contents of regional spatial strategies</p> | Section 17 – Contents of regional spatial strategies – key matters | <i>Support with amendments</i> | <p>Section 17(1) identifies the key matters that the regional planning committee determine a regional spatial strategy must provide strategic direction on. Of relevance to NZGA members are the following subsections:</p> <p><i>(a) areas that may require protection, restoration or enhancement.</i></p> <p><i>(d) areas that are appropriate for developing, using or extracting natural resources, including generating power</i></p> <p><i>(g) major, existing, planning or potential infrastructure or major infrastructure corridors, networks or sites (including existing designations) that are required to meet current and future needs.</i></p> <p>NZGA is supportive of the identification of geothermal systems that are valued for their inherent natural characteristics (S.17(1)(a)). In the Bay of Plenty and Waikato Regions, these systems are currently identified through existing Regional Plan documents.</p> <p>NZGA considers that there is a lack of acknowledgement in Section 17, and therefore a lack of direction, on the need to promote the use of renewable energy generation in a move away from reliance on the use of fossil fuels. Renewable energy generation plays a critical role in New Zealand achieving its ambitions to achieve zero greenhouse gas emissions by 2050 and to meet its international climate change obligations.</p> | <p>NZGA support intent of s17 and seek the addition of recognition and greater emphasis on the importance of renewable energy generation in achieving New Zealand’s international obligations and in meeting greenhouse gas emissions reductions.</p> |
| <p>Part 2 – Regional Spatial Strategies</p> <p>Subpart 3 – Preparation and review of regional spatial strategies</p> <p>Process for preparing regional spatial strategies</p> | Sections 30 - 36 | <i>Support with amendments</i> | <p>The process for preparing Regional Spatial Strategies (“RSS”) as outlined in Sections 30 -36 is highly participatory. However, NZGA is concerned that, as currently drafted, there is a lack of clear direction regarding the input of industry bodies and other bodies, such as NZGA, who represent relevant aspects of the public interest.</p> <p>In particular, NZGA consider that amendment is required to Section 32 to include reference to the role of regionally relevant interest groups.</p> | <p>NZGA seeks amendment to Section 32 as outlined below (additions underlined), or any alternative relief which achieves the same or similar intent:</p> <p><i>32 Process must encourage participation</i></p> <p><i>The process required by section 30 must be designed to encourage participation by the public and all interested parties, particularly those who may <u>represent a relevant aspect of the public interest</u> be involved in implementing the regional spatial strategy.</i></p> |
| <p>Part 2 – Regional Spatial Strategies</p> <p>Subpart 3 – Preparation and review of</p> | Sections 42 - 43 | <i>Support</i> | <p>Geothermal resources can be local but also span broad areas; for example the Taupō Volcanic Zone which spans the Bay of Plenty and Waikato Regions. As such, geothermal systems are suitable for consideration for a cross-regional spatial strategy.</p> <p>Waikato Regional Council and Bay of Plenty Regional Council currently have regional regulatory frameworks that have a very similar approach to the identification and management of geothermal resources which recognises this and illustrates how RSS</p> | <p>NZGA support the option of utilising cross-regional spatial strategies for issues that are common to 2 or more regions, such as geothermal resource management.</p> |

| <i>NBE Bill Part/subpart</i> | <i>Section</i> | <i>NZGA Position</i> | <i>NZGA Reasons</i> | <i>NZGA Relief Sought</i> |
|---|-----------------------|-----------------------------|--|----------------------------------|
| <p>regional spatial strategies</p> <p>Cross regional issues</p> | | | <p>approach could be useful for the management of geothermal resources and this opportunity should be retained.</p> <p>NZGA acknowledge that Regional Councils are heavily reliant on external expertise in regulatory processes. A cross-regional spatial strategy is an opportunity to optimise the expertise available, by providing a consistent and comprehensive approach to the management and use of geothermal resources at a scale relevant to the resources themselves, while avoiding existing cross-boundary issues at a regulatory level that add unnecessary complexity, uncertainty and duplication.</p> | |