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Energy Markets Policy
Ministry of Business, Innovation and Employment
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Submission on discussion document: Accelerating renewable energy and energy efficiency

Introduction

1. The Taranaki Regional Council (the Council) thanks the Ministry of Business, Innovation and Employment for the opportunity to make a submission on the discussion document: *Accelerating renewable energy and energy efficiency*, henceforth referred to as the 'discussion document'.
2. The Council makes this submission in recognition of its:
 - functions and responsibilities under the *Local Government Act* and the *Resource Management Act 1991* (RMA); and
 - its regional advocacy responsibilities whereby the Council represents the Taranaki region on matters of regional significance or concern.

General comments

3. The Council supports Government reviewing issues and options to accelerate the future development of renewable energy and energy efficiency. As noted in the discussion document, New Zealand is better placed than many countries to transition to a low emissions energy sector in that New Zealand already generates a high proportion of its electricity from hydro and geothermal sources. However, further opportunities exist for the likes of wind energy and other technologies. Accordingly, the Council would support a Government-led review of the opportunities and constraints to accelerate future development of renewable energy and promote energy efficiencies in New Zealand.
4. The Council's comments in this submission focus on areas of particular interest to this organisation, namely:
 - the establishment of a problem definition or high level objective;

- Section 2 [Developing markets for bioenergy and direct geothermal use];
 - Section 4 [Phasing out fossil fuels in process heat]; and
 - Section 7 [Enabling development of renewable energy under the RMA].
5. Of note, the Council has not commented on all of the options and questions presented in the discussion document as others will be better placed to comment.

Problem definition

6. The Council notes difficulties in responding to Government proposals and providing feedback on options and 'solutions' in the absence of an adequate 'problem definition'.
7. Section 1 [Introduction] provides some 'high level' narrative on the energy system and policy drivers for transition to a low emissions economy but this is insufficient for a meaningful analysis. For example, the discussion document identifies that New Zealand is not expected to meet its 2030 emissions reduction targets under the Zero Carbon legislation. However, it is not established whether the options presented in this paper are hoped to meet this target, reduce the shortfall or achieve some other goal. The explanations of Parts A and B do provide some guidance on what is hoped to be achieved, however, they do not go far enough.
8. Not establishing an adequate problem definition or high level objective means that it is difficult to assess the benefits and costs of the interventions proposed, including their alternatives. The discussion document required that all of the intervention options must be considered in isolation of each other. It is not possible to determine if some interventions have greater value than others in achieving a higher purpose.
9. The Council suggests that direction on achieving the Government's goals of encouraging energy efficiency and uptake of renewable fuels in industry and accelerating renewable energy generation and infrastructure within a specified timeframe, plus establishing the levels of risk, would have added value for those submitting and allow greater analysis across all of the options presented.
10. The Council also questions whether the discussions presented on each sections are adequate to appropriately inform on the matters and options recommended. Each section could arguably be its own discussion document and a deeper analysis and explanation of the interventions provided.

Developing markets for bioenergy and direct geothermal use

11. Section 2 [Developing markets for bioenergy and direct geothermal use] of the discussion document considers the potential for increasing use of biomass as fuel for process heat.
12. It is the view of the Council that there are some significant omissions of fact in the assessment of the current use of biomass within New Zealand, and omissions of considerations that should be recognized and applied to future policy development or interventions.

13. Firstly, the Council notes issues associated with location and security of supply of biomass. There is a very significant (30-40,000 tonnes per year) process of utilizing wood chip and shavings in Taranaki, as bedding for the broiler chicken industry. The used bedding is then recovered by a spreading company, and the product is in high demand amongst pastoral famers for its soil conditioning and nutrient value. This industry has had significant recent investment and is confidently expected to grow substantially in the next few years. This very effective recycling activity has multiple benefits. Any consideration of developing a bioenergy market must be acutely attuned to the possibility of perverse outcomes for alternative uses for biomass in either supply or market economics.
14. Secondly, bioenergy in general, runs counter to and in competition with the parallel global concerns of food security and 'food miles', because the same land can easily become the resource in demand for both. It is internationally recognised that our agricultural production efficiency means New Zealand generate less emissions per unit of product than agriculture in most other countries. This is a critical consideration in a world where food security is an ever-growing issue, brought about by increasing populations, loss of productive soils, conflicting demands for land for biofuels production, and re-forestation. A blinkered approach to the promotion of bioenergy, including expansion of the extent of land committed to this activity, risks simultaneously exacerbating another global issue.
15. Thirdly, the discussion document is rather dismissive of the option of geothermal heat. While it is true that hydrothermal activity in the form of surface steam vents, geysers, boiling mud pools, or deep superheated reservoirs etc are located only in specific and spatially limited areas of New Zealand, heat differentials between the earth's surface and deeper rock offer significant potential for energy recovery and transfer by alternative technologies, even if of comparatively low 'quality' when assessed against the energy requirements of some intensive industries.
16. In terms of the options for interventions described in Section 2 of the discussion document, the Council would support the development of a users' guide to the application of the *National Environmental Standards for Air Quality*. However, such a guide should not only cover the material listed on pg 30 of the discussion document, but should also include a discussion of current emissions control technology (for dust, smoke, steam plume, and odour). In particular, this is an opportunity for the Ministry for the Environment to take a leadership role and set out operational requirements under which a biomass-burning facility could operate as a permitted activity. Such requirements could most efficiently be delivered at a national level via an amendment to the *National Environmental Standards for Air Quality*.
17. Alternatively, the Council suggests that well-constructed guidance, supported by appropriate research would facilitate councils incorporating supporting provisions into RMA plans. However, this would be a considerably more cumbersome pathway to achieve the same outcome.
18. It also remains unclear to this Council why the discussion document sees biomass burning (wood energy) as necessitating a resource consent in all circumstances of design, location, and operation. For example through an NES or through a Regional

Air Quality Plan certain activities involving the burning of biomass may be provided for as permitted activities, therefore not requiring the need for a resource consent.

19. In response to the questions set out in this section, the Council provides the following comments:
- Q2.1: the Council is not aware of what rules in which regional councils' air plans hinder the wood energy industry;
 - Q2.2: the Council supports a user guide for wood energy facilities that targets existing regulatory barriers;
 - Q2.3: see above comments for possible content of a guide;
 - Q2.4: The implications of Regulation 17 of the *National Environmental Standards for Air Quality* will have to be addressed. In simple terms, this regulation forbids the establishment of a new discharging industry in any air shed deemed polluted, unless the industry takes responsibility for reducing the pollution in the airshed regardless of whether the source of the pollution is industrial, residential, or vehicular; and
 - Q2.5 see above re using the NES process to create a 'permitted' or 'controlled' category for wood energy facilities, instead of expecting an assessment of each individual process as a fully discretionary application (with attendant costs for applicant and Council).

Phasing out fossil fuels in process heat

20. Section 4 [Phasing out fossil fuels in process heat] of the discussion document considers issues around phasing out coal fired process heat.
21. The Council noted that, with regards to the *Air Quality Plan for Taranaki*, no provision has been made for the burning of biomass for process heat. The abundance and convenience of natural gas has made the latter the preferred option for energy supply for process heat in the Taranaki region.
22. Section 2 discusses the potential of biofuel for process heat and also acknowledges the mismatch of supply and demand at a regional level. If existing operations are expected to convert from coal to either biomass or electricity for process heat then the Government should ensure that the supply can keep up with the demand both over the phase out period and into the future. The Government should identify areas where supply may fall short over demand. It is not only a matter of matching supply to demand, but of ensuring the ready and unhindered transport of biomass for the region of supply to the region of demand, in the volumes and with the timing required.
23. The paper also suggests there is a risk of facilities switching to gas despite other lower emission options being available. If the Government considers gas not to be an appropriate alternative it should make that clear. The Council notes that gas has been internationally recognized as a significant transition energy source.

24. Lower emission options may not be available everywhere and the Government should ensure that greater encouragement is given in those locations/circumstances where lower emission options are more easily accessible and/or already available.
25. In response to the questions set out in this section, the Council provides the following comments:
- Q4.1: The Council is supportive of option 1 and considers the banning of new coal-fired boilers a reasonable and practical option. Such a ban would have no effect (neither negative nor positive) on the region, as there are no low or medium temperature requirements currently being satisfied by coal, nor being proposed; and
 - Q4.2: Option 4.2 in the discussion paper suggests a ban on existing low-temperature coal-fired systems by 2030. This proposal has very significant legal and statutory implications, as it would directly require the cancellation of existing resource consents sought and granted in good faith under existing RMA provisions. To the best of the Council's knowledge, the imposition of a national curtailment of RMA rights has never been implemented before, and the Council queries whether there is sufficient justification (environmental benefit) for such a step in this case.
26. The Council suggests as a more practical step, that in conjunction with Option 4.1 for new equipment, there could be a requirement that no existing coal-fired low process heat (<100°C) equipment should be allowed to have its consent renewed after <date to be determined- 2030 or earlier>, or be allowed to continue as a permitted activity after <date to be determined- 2030 or earlier>. This sends a strong and irresistible market signal, without the deeper issues that unilateral and universal consent cancellations would entail.
27. The discussion document has already acknowledged that there is a mismatch between regional woody biomass supply and process heat demand and that in some regions it would not be economical to replace all coal with wood energy for process heat purposes¹. With this in mind, a 2030 goal is likely to be ambitious. The Council seeks that the Government consider a regionally staggered approach that focuses initially on those areas where alternative options are already available while working with regions that do not yet have sufficient alternative resources to ensure that the transition can be smooth and well managed.
28. The Council also notes that the Government should also account for any possible industry growth and ensure that any options for the encouragement of biomass in process heat take into account any future increase in demand to ensure sustainability over the long term.

¹ Section 2, page 27 of the discussion document.

Enabling development of renewable energy under the RMA

29. The thrust of Section 7 [Enabling development of renewable energy under the RMA] of the discussion document is to consider options for allowing or enabling development of renewable energy under the RMA. Without taking a position on the matter, the Council highlights that this intent runs directly contrary to the direction of travel of the *Essential Freshwater Management* proposals of the Ministry for the Environment, most of all encapsulated in Te Mana o te Wai, that the health of any water must be the first priority in water management, and that consumption and use is now to be made the last and least priority, after also providing for essential human health needs. The conflicting expectations around waterway health versus around renewable energy have to be and can only be resolved at central Government level, especially if both are to be addressed within the RMA.
30. Therefore, the Council considers more than just strong directive wording in the *National Policy Statement for Renewable Electricity Generation* is required to achieve a simplified process for renewable energy activities. As already highlighted in the discussion document, issues arise when conflicting directions are given. More directive language is unlikely to resolve these core conflicts and, if left unaddressed, is likely to result in less clear direction and more complex, lengthy and costly disputes at the planning and consenting level, rather than creating a more straightforward and efficient pathway.
31. If this scenario is to be avoided, any amendments to the *National Policy Statement for Renewable Electricity Generation* should make clear how the NPSRE provisions are to be weighed against other national planning directions, including the *New Zealand Coastal Policy Statement*, *National Policy Statement for Freshwater Management*, *National Policy Statement for Electricity Transmission* and the *National Policy Statement for Indigenous Biodiversity* (as a minimum).
32. The Council seeks much better alignment between national policy directions under the RMA, including making clear which values have higher importance. For example, do plan provisions enabling activities that provide for renewable energy outweigh plan provisions protecting indigenous biodiversity, outstanding and high natural character and landscape features, amenity values, heritage values, tangata whenua values or other? How does the implementation of renewable energy sources weigh? Are all renewable energy activities considered equal or is there a hierarchy depending on scale of expected return, longevity of the facility, and the type of facility or other? If the answer to these questions are not clearly articulated through national policy statements and national environmental standards, and other conflicts between national planning instruments are left unresolved, then decision makers will be left to incur the add-on costs associated with planning processes and litigation to resolve the different and conflicting national planning instruments at the planning and consenting level.
33. In relation to Q7.2 of the discussion document, the Council suggests that the list of matters in paragraph b (i) on page 59 could usefully be extended to include identification of potential sites of hydro generation development alongside sites for wind, solar etc.

Conclusion

34. The Council again thanks the Ministry of Business, Innovation and Employment for the opportunity to comment on the discussion document: *Accelerating renewable energy and energy efficiency*.
35. As the Council has highlighted in this response, there are a number of areas for consideration that have not been addressed in the discussion document and that require careful and thorough exploration. The Council is also concerned that some of the options presented have broad implications under the RMA which have not been considered or identified.

Yours faithfully
BG Chamberlain
Chief Executive

A handwritten signature in black ink, appearing to read 'A D McLay', with a long horizontal flourish underneath.

per: A D McLay
Director - Resource Management