# #78

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## Page 1: Introduction

**Q1** Name (first and last name)

Dr Alexandra Macmillan

**Q2** Email

co-convenor@orataiao.org.nz

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| **Q3** Is this an individual submission, or is it on behalf of a group or organisation? | **On behalf of a group or organisation** |
| **Q4** Which group do you most identify with, or are representing? | Other (please specify): population health NGO |

**Q5** Business name or organisation (if applicable)

OraTaiao: NZ Climate & Health Council

**Q6** Position title (if applicable)

Co-Convenor

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| **Q7** Important information about your submission (important to read)The information provided in submissions will be used to inform the Ministry of Business, Innovation and Employment's (MBIE's) work on Accelerating renewable energy and energy efficiency.We will upload the submissions we receive and publish them on our website. If your submission contains any sensitive information that you do not want published, please indicate this in your submission.The Privacy Act 1993 applies to submissions. Any personal information you supply to MBIE in the course of making a submission will only be known by the team working on the Accelerating renewable energy and energy efficiency.Submissions may be requested under the Official Information Act 1982. Submissions provided in confidence can usually be withheld. MBIE will consult with submitters when responding to requests under the Official Information Act 1982.We intend to upload submissions to our website at www.mbie.govt.nz. Can we include your submission on the website? | **Yes** |
| **Q8** Can we include your name? | **Yes** |
| **Q9** Can we include your organisation (if submitting on behalf of an organisation)? | **Yes** |
| **Q10** All other personal information will not be proactively released, although it may need to be released if required under the Official Information Act. Please indicate if there is any other information you would like withheld. | **Respondent skipped this question** |

## Page 2

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| **Q11** Where are you located? | **Respondent skipped this question** |
| **Q12** In what region or regions does your organisation mostly operate? | **All of New Zealand** |

## Page 3: Areas you wish to provide feedback on

**Q13** Part A relates to process heat.Please indicate which sections, if any, you would like to provide feedback on.

**Section 1: Addressing information failures,**

**Section 2: Developing markets for bioenergy and direct geothermal use**

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**Section 3: Innovating and building capability,**

**Section 4: Phasing out fossil fuels in process heat,**

**Section 5: Boosting investment in renewable energy and energy efficiency technologies**

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**Section 6: Cost recovery mechanisms**

**Q14** Part B relates to renewable electricity generation. Please indicate which sections, if any, you would like to provide feedback on.

**Section 7: Enabling renewables uptake under the Resource Management Act 1991**

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**Section 8: Supporting renewable electricity generation investment**

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**Section 9: Facilitating local and community engagement in renewable energy and energy efficiency**

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**Section 10: Connecting to the national grid**

## Page 4: Section 1: Addressing information failures

**Q15** Option 1.1 would require large energy users to report their emissions and energy use annually, publish Corporate Energy Transitions Plans and conduct energy audits every four years.Do you support this option?

**Yes - I fully support this option**

**Q16** Please explain your answer

Transparency is needed for the government to achieve the targets set out in the Climate Change Amendment (Zero Carbon) Act

**Q17** Which parts (set out in Table 3) do you support?

**Target group - companies with an annual energy spend of greater than $2 million per annum**

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**Public reporting,**

**Government reporting,**

**Energy auditing,**

**Compliance**

**Q18** Please explain your answer

all are needed for accountability and action to protect health from climate change and the other health impacts of fossil fuel use

**Q19** What public reporting requirements (listed in Table 3) should be disclosed?

**Annual corporate-level energy use and emissions, split out by a range of sources including coal, gas, electricity and transport**

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**Energy efficiency actions taken that year,**

**Plans to reduce emissions to 2030,**

Other (please specify):

Amount of money spent lobbying government against action on climate change

**Q20** In your view, should businesses be expected to include transport energy and emissions in these reporting requirements?

**Yes,**

Please explain your answer:

Transport contributes 40% of NZ carbon emissions and is the fastest growing sector. For many businesses, transport will be the largest source of emissions, and because of their fleet size and reach, will have an impact on change across the whole vehicle fleet.

**Q21** For manufacturers: what will be the impact on your business to comply with the requirements?

**Respondent skipped this question**

**Q22** Option 1.1. Suggests that requirements to publish Corporate Energy Transition Plans should apply to large energy users, and propses defining large energy users as those with an annual energy spend (purchased) of greater than $2 million per annum.Do you agree with this definition?

**No**

**Q23** If you selected no, please describe what in your view would be an appropriate threshold to define ‘large energy users’.

There are many large organisations that would spend between 1 and 2 million on energy, which overall when added up make up a significant proportion of "industrial" energy use. This would include government owned organisations such as hospitals, which need to demonstrate leadership in accountability and transition to renewables. The threshold should therefore be $1million per annum

**Q24** Is there any potential for unnecessary duplication under these proposals and the disclosures proposed in the MBIE-Ministry for the Environment discussion document Climate-related Financial Disclosures – Understanding your business risks and opportunities related to climate change, October 2019?

**No**

## Page 5: Section 1 - Option 1.2: Electrification information package and feasibility studies

**Q25** Do you support the proposal to develop an electrification information package?

**Yes**

**Q26** Would an electrification information package be of use to your business?

**Respondent skipped this question**

**Q27** Do you support customised low-emission heating feasibility studies?

**Yes**

**Q28** In your view, which of the components should be scaled up and/or prioritised?

co-funding low-emission heating feasibility studies for EECA's business partners

**Scaled up**

**Q29** Would a customised low-emission heating feasibility study be of use to your business?

**Respondent skipped this question**

**Q30** Please describe any components other than those identified that could be included in an information package.

**Respondent skipped this question**

## Page 6: Section 1 - Option 1.3: Provide benchmarking information for food processing industries

**Q31** Do you support benchmarking in the food processing sector?

**Yes**

**Q32** Would benchmarking be suited to, and useful for, other industries, such as wood processing?

**Respondent skipped this question**

**Q33** Do you believe government should have a role in facilitating this or should it entirely be led by industry?

**Government should have a role**

**Q34** Please explain your answer

We have seen with other forms of benchmarking (e.g. in farming and freshwater) that its not until the government sets a changing benchmark that meaningful action is taken

## Page 7: Section 2: Developing markets for bioenergy and direct geothermal use

**Q35** Do you agree that some councils have regional air quality rules that are barriers to wood energy?

**Neither agree nor disagree**

**Q36** Please provide examples of regional air quality rules that you see as barriers to wood energy. Please also note which council's plan you are referring to.

This question is framed in such a way that it's impossible to answer well from a public health point of view. Air quality rules should mean that wood energy is carefully thought through, and that air quality standards are met. In some instances, a shift from coal to woody biomass can worsen local particulate air pollution, while improving other air pollution indicators, such as those for oxides of sulfur and nitrogen. All are important for public health. Problems arise when regional air quality rules are simplistic about the indicators used (e.g. using only fine particulates as their measure), and are not able to take full account of what the shift is that is proposed, what specific boiler technologies are being put in place and how it will affect air quality across the full range of air pollutants of importance to health. A shift to wood burning is not simplistically a positive for greenhouse gas emissions or air quality. A number of factors determine the outcomes, including:
1. what fuel is currently being used
2. the proposed boiler
3. the proposed woody biomass source (e.g. type of tree, logs or waste chips)
4. where the woody biomass is coming from and how
5. local geographical context, exposed populations and existing air quality

**Q37** Do you agree that a National Environmental Standards for Air Quality (NESAQ) users' guide on the development and operation of the wood energy facilities will help to reduce regulatory barriers to the use of wood energy for process heat?

**Strongly agree,**
Please explain your answer:
Such a guide is crucial for teasing out the complex issues described above

**Q38** What do you consider a NESAQ users' guide should cover? Please provide an explanation if possible.

All of the points raised in answer to q.35

**Q39** Please describe any other options that you consider would be more effective at reducing regulatory barriers to the use of wood energy for process heat.

**Respondent skipped this question**

**Q40** In your opinion, what technical rules relating to wood energy would be better addressed through the NESAQ than through the proposed users' guide (option 2.1)?

Requirements for air quality monitoring, which pollutants should be measured and taken into account and, obviously the actual standards for each of those pollutants

## Page 8: Section 2 - continued: Developing markets for bioenergy and direct geothermal use

**Q41** In your view, could the Industry Transformation Plans stimulate sufficient supply and demand for bioenergy to achieve desired outcomes?

**Respondent skipped this question**

**Q42** What other options are worth considering?

**Respondent skipped this question**

**Q43** Is Government best placed to provide market facilitation in bioenergy markets?

**Respondent skipped this question**

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| **Q44** How could Government best facilitate bioenergy markets?Please be as specific as possible, giving examples. | **Respondent skipped this question** |
| **Q45** In your view, how can government best support direct use of geothermal heat? | **Respondent skipped this question** |
| **Q46** What other options are worth considering? | **Respondent skipped this question** |

## Page 9: Section 3: Innovating and building capability

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| **Q47** Do you agree that de-risking commercially viable low-emission technology should be a focus of government support on process heat? | **Disagree,**<br>Please explain your answer:<br>I think there is a much more important role that government should be taking in setting the consistent policy signals that mean that the risk is in NOT tranistioning. "De-risking" sounds like a euphemism for subisidising large corporations who have had about 3 decades of knowing that change is coming and have actively avoided transitioning. There is an important equity issue here, where the government's role should be "de-risking" low-income households rather than corporations. The government has a limited pool of funding and needs to prioritise this ethically, taking into account who is responsible for the predicament we now find ourselves in, who will bear the brunt of the impacts, and who is most vulnerable to those impacts. Risk is part of business and if businesses are not responding to environmental/scientific/market and regulatory signals by building in innovation risk management that's just not good resilient business. The sorts of businesses and industries we want for a resilient long-term economic wellbeing are those that do build that in. |
| **Q48** Do you agree that diffusing commercially viable low-emission technology should be a focus of government support on process heat? | **Neither agree nor disagree,**<br>Please explain your answer:<br>The same arguments apply to "diffusing" when it comes to corporations v low-income households. |
| **Q49** Is Energy Efficiency and Conservation Authority (EECA) grant funding to support technology diffusion the best vehicle for this? | **No** |
| **Q50** For manufacturers and energy service experts: would peer learning and lead to reducing perceived technology risks? | **Respondent skipped this question** |

**Q51** For manufacturers and energy service experts: would on-site technology demonstration visits lead to reducing perceived technology risks?

**Respondent skipped this question**

**Q52** Is there a role for the Government in facilitating this?

**Yes**

## Page 10: Section 3 (continued): Innovating and building capability

**Q53** For emissions-intensive and highly integrated (EIHI) stakeholders: What are your views on our proposal to collaborate to develop low-carbon roadmaps?

Again, there is an issue of opportunity cost here. Do we hand-hold corporations or should we be providing that collaborative support to communities? I think it's unlikely that EECA funding would stretch to both.

**Q54** Would low-carbon roadmaps assist in identifying feasible technological pathways for decarbonisation?

**Yes,**
Please explain your answer:
No doubt they would, but perhaps rather than the government's time and money being used to support a participatory collaboration, a requirement for industries to develop them would be more effective.

**Q55** What are the most important issues that would benefit from a partnership and co-design approach?

**Respondent skipped this question**

**Q56** What, in your view, is the scale of resourcing required to make this initiative successful?

**Respondent skipped this question**

## Page 11: Section 4: Phasing out fossil fuels in process heat

**Q57** Do you agree with the proposal to ban new coal-fired boilers for low and medium temperature requirements?

**Strongly agree**

**Q58** Do you agree with the proposal to require existing coal-fired process heat equipment for end-use temperature requirements below 100 degrees Celsius to be phased out by 2030?

**Strongly agree**

**Q59** Referring to Question 56 - is this ambitious or is it not doing enough?

**Not doing enough,**
Please explain your answer:
We are receiving clear signals that we are in a climate emergency. The technologies are available for a more urgent transition away from coal within the next 5 years if it was treated as an emergency.

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| **Q60** For manufacturers: what would be the likely impacts or compliance costs on your business of a ban on new coal-fired process heat equipment? | **Respondent skipped this question** |
| **Q61** For manufacturers: what would be the likely impacts or compliance costs on your business of requiring existing coal-fired process heat equipment supplying end-use temperature requirements below 100°C to be phased out by 2030. | **Respondent skipped this question** |
| **Q62** Could the Corporate Energy Transition Plans (Option 1.1) help to design a more informed phase out of fossil fuels in process heat? | **Respondent skipped this question** |
| **Q63** Would a timetabled phase out of fossil fuels in process heat be necessary alongside the Corporate Energy Transition Plans? | **Yes** |
| **Q64** In your view, could national direction under the Resource Management Act (RMA) be an effective tool to support clean and low greenhouse gas-emitting methods of industrial production? | **Yes** |

**Q65** If yes, how?

by repealing section 74 that prohibits local government from taking into account greenhouse gas emissions in new and re-consenting processes

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| **Q66** In your view, could adoption of best available technologies be introduced via a mechanism other than the RMA? | **Yes,**<br>Please explain your answer:<br>Obviously the ETS will also play a part, as well as setting a requirement year for phasing out fossil fuel use |

## Page 12: Section 5: Boosting investment in energy efficiency and renewable energy technologies

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| **Q67** Do you agree that complementary measures to the New Zealand Emissions Trading Scheme (NZ-ETS) should be considered to accelerate the uptake of cost-effective clean energy projects? | **Strongly agree** |
| **Q68** Would you favour regulation, financial incentives or both? | **regulation,**<br>Please explain your answer:<br>This relates to arguments of equity outlined in our answers to the previous section |
| **Q69** In your view what is a bigger barrier to investment in clean energy technologies, internal competition for capital or access to capital? | **Respondent skipped this question** |

**Q70** If you favour financial support, what sort of incentives could be considered?

**Respondent skipped this question**

**Q71** What are the benefits of these incentives?

**Respondent skipped this question**

**Q72** What are the risks of these incentives?

**Respondent skipped this question**

**Q73** What are the costs of these incentives?

**Respondent skipped this question**

**Q74** What measures other than those identified above could be effective at accelerating investment in clean energy technologies?

**Respondent skipped this question**

## Page 13: Section 6: Cost recovery mechanisms

**Q75** What is your view on whether cost recovery mechanisms should be adopted to fund policy proposals in Part A of the Accelerating renewable energy and energy efficiency discussion document?

A levey on industrial consumers of coal makes sense, especially since this could get around the opportunity costs described previously, which make it problematic for the government to ethically financially support industry transition.

On the other hand, if the levy also applied to household coal burning this would be extremely problematic and inequitable. In our experience with trying to improve air quality in Otago/Southland, there is a complex interplay between tenure type, housing quality and coal burning, where it's often low income households in very poor quality private rental houing who are burning coal to heat their homes because it is the only cost effective way of doing so. The only fair and effective approach to eliminating household coal burning is through addressing the housing stock, particularly the quality of private rental housing, before any levy or regulatory approach could be used.

**Q76** What are the advantages of introducing a levy on consumers of coal to fund process heat activities?

**Respondent skipped this question**

**Q77** What are the disadvantages of introducing a levy on consumers of coal to fund process heat activities?

See answer to Q.74

## Page 14: Section 7: Enabling development of renewable energy under the Resource Management Act 1991

**Q78** Do you agree that the current NPSREG gives sufficient weight and direction to the importance of renewable energy?

**Disagree**

**Q79** What changes to the NPSREG would facilitate future development of renewable energy?

The NPSREG could be more directive

**Q80** What policies could be introduced or amended to provide sufficient direction to councils regarding the matters listed in points a-i mentioned on pages 60-61 of the discussion document?

**Respondent skipped this question**

**Q81** How should the NPSREG address the balancing of local environmental effects and the national benefits of renewable energy development in RMA decisions?

With the exception of large scale hydro power, renewable energy development performs comparatively well from a local environmental perspective. The problems seem to be ones of amenity rather than evidence of significant environmental or health harm. And yet often projects are proposed in areas where landscapes are already very significantly changed through human interventions, including farming. in these cases, the issues are ones of having strong community communication processes in the context of well-balanced national policy direction

**Q82** What are your views on the interaction and relative priority of the NPSREG with other existing or pending national direction instruments?

**Respondent skipped this question**

**Q83** Do you have any suggestions for how changes to the NPSREG could help achieve the right balance between renewable energy development and environmental outcomes?

Providing better guidance to local government about the evidence on environmental health impacts of different kinds of renewable energy generation may well be helpful.

**Q84** What objectives or policies could be included in the NPSREG regarding councils' role in locating and planning strategically for renewable energy resources?

**Respondent skipped this question**

**Q85** Can you identify any particular consenting barriers to development of other types of renewable energy than REG, such as green hydrogen, bioenergy and waste-to-energy facilities?

**Respondent skipped this question**

**Q86** Can any specific policies be included in a national policy statement to address these barriers?

**Respondent skipped this question**

**Q87** What specific policies could be included in the NPSREG for small-scale renewable energy projects?

**Respondent skipped this question**

**Q88** The NPSREG currently does not provide any definition or threshold for "small and community-scale renewable electricity generation activities". Do you have any view on the definition or threshold for these activities?

**Respondent skipped this question**

**Q89** What specific policies could be included to facilitate re-consenting consented but unbuilt wind farms, where consent variations are needed to allow the use of the latest technology?

**Respondent skipped this question**

**Q90** Are there any downsides or risks to amending the NPSREG?

The point of the RMA is that it is about balance - the needs of local communities need to be balanced with national priorities. It would be deeply unhelpful if communities feel like they are being railroaded, and this would lead to protest and blockading.

## Page 15: Section 7 - continued

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| **Q91** Do you agree that National Environmental Standards (NES) would be an effective and appropriate tool to accelerate the development of new renewables and streamline re-consenting? | **Neither agree nor disagree** |
| **Q92** What are the pros of using National Environmental Standards as a tool to accelerate the development of new renewables and streamline re-consenting? | **Respondent skipped this question** |
| **Q93** What are the cons of using National Environmental Standards as a tool to accelerate the development of new renewables and streamline re-consenting? | **Respondent skipped this question** |
| **Q94** What do you see as the relative merits and priorities of changes to the NPSREG compared with work on NES? | **Respondent skipped this question** |
| **Q95** What are the downsides and risks to developing NES? | **Respondent skipped this question** |
| **Q96** What renewables activities (including both REG activities and other types of renewable energy) would best be suited to NES? | **Respondent skipped this question** |
| **Q97** What technical issues could best be dealt with under a standardised national approach? | **Respondent skipped this question** |
| **Q98** Would it be practical for NES to set different types of activity status for activities with certain effects, for consenting or re-consenting? | **Respondent skipped this question** |
| **Q99** Are there any aspects of renewable activities that would have low environmental effects and would be suitable for having the status of permitted or controlled activities under the RMA? Please provide details. | **Respondent skipped this question** |
| **Q100** Do you have any suggestions for what rules or standards could be included in NES or National Planning Standards to help achieve the right balance between renewable energy development and environmental outcomes? | **Respondent skipped this question** |

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| **Q101** Compared to the NPSREG or National Environment Standards, would National Planning Standards or any other RMA tools be more suitable for providing councils with national direction on renewables ? | **Respondent skipped this question** |
| **Q102** Please explain your answer | **Respondent skipped this question** |

## Page 16: Section 7 - continued

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| **Q103** Are there opportunities for non-statutory spatial planning techniques to help identify suitable areas for renewables development (or no go areas)? | **Respondent skipped this question** |
| **Q104** Do you have any comments on potential options for pre-approval of renewable developments? | **Respondent skipped this question** |
| **Q105** Are the current National Policy Statement on Electricity Transmission (NPSET) and National Environmental Standards for Electricity Transmission Activities (NESETA) fit-for-purpose to enable accelerated development of renewable energy? | **Respondent skipped this question** |
| **Q106** What changes (if any) would you suggest for the NPSET and NESETA to accelerate the development of renewable energy? | **Respondent skipped this question** |
| **Q107** Can you suggest any other options (statutory or non-statutory) that would help accelerate the future development of renewable energy? | **Respondent skipped this question** |

## Page 17: Section 8: Supporting renewable electricity generation investment

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| **Q108** Do you agree there is a role for government to provide information, facilitate match-making and/or assume some financial risk for PPAs? | **Respondent skipped this question** |
| **Q109** Would support for PPAs effectively encourage electrification? | **Respondent skipped this question** |
| **Q110** Would support for PPAs effectively encourage new renewable generation investment? | **Respondent skipped this question** |
| **Q111** How could any potential mismatch between generation and demand profiles be managed by the Platform and/or counterparties? | **Respondent skipped this question** |

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| **Q112** Please rank the following variations on PPA Platforms in order of preference.1 = most preferred, 4 = least preferred. | **Respondent skipped this question** |
| **Q113** What are your views on Contract Matching Services? | **Respondent skipped this question** |
| **Q114** What are your views on State sector-led PPAs? | **Respondent skipped this question** |
| **Q115** What are your views on Government guaranteed contracts? | **Respondent skipped this question** |
| **Q116** What are your views on a Clearing house for PPAs? | **Respondent skipped this question** |
| **Q117** For manufacturers: what delivered electricity price do you require to electrify some or all of your process heat requirements? | **Respondent skipped this question** |
| **Q118** For manufacturers: is a long-term electricity contract an attractive proposition if it delivers more affordable electricity? | **Respondent skipped this question** |
| **Q119** For investors / developers: what contract length and price do you require to make a return on an investment in new renewable electricity generation capacity? | **Respondent skipped this question** |
| **Q120** For investors / developers: is a long-term electricity contract an attractive proposition if it delivers a predictable stream of revenues and a reasonable return on investment? | **Respondent skipped this question** |

## Page 18: Section 8 - continued

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| **Q121** Do you consider the development of the demand response (DR) market to be a priority for the energy sector? | **Respondent skipped this question** |
| **Q122** Do you think that demand response (DR) could help to manage existing or potential electricity sector issues? | **Respondent skipped this question** |
| **Q123** What are the key features of demand response markets? | **Respondent skipped this question** |

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| **Q124** Which features of a demand response market would enable load reduction or asset use optimisation across the energy system? | **Respondent skipped this question** |
| **Q125** Which features of a demand response market would enable the uptake of distributed energy resources? | **Respondent skipped this question** |
| **Q126** What types of demand response services should be enabled as a priority? | **Respondent skipped this question** |
| **Q127** Which services make sense for New Zealand? | **Respondent skipped this question** |

## Page 19: Section 8 - continued

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| **Q128** Would energy efficiency obligations effectively deliver increased investment in energy efficient technologies across the economy? | **Yes** |
| **Q129** Is there an alternative policy option that could deliver on this aim more effectively? | **Respondent skipped this question** |
| **Q130** If progressed, what types of energy efficiency measures and technologies should be considered in order to meet retailer/distributor obligations? | **Respondent skipped this question** |
| **Q131** Should these be targeted at certain consumer groups? | **Respondent skipped this question** |
| **Q132** Do you support the proposal to require electricity retailers and/or distributors to meet energy efficiency targets? | **I support the proposal** |

**Q133** Which entities would most effectively achieve energy savings?

Government owned organisations and public institutions could be supported to show leadership. Hospitals, schools and universities are good examples

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| **Q134** What are the likely compliance costs of this policy? | **Respondent skipped this question** |

## Page 20: Section 8 - continued

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| **Q135** Do you agree that the development of an offshore wind market should be a priority for the energy sector? | **Respondent skipped this question** |

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| **Q136** What do you perceive to be the major benefits to developing offshore wind assets in New Zealand? | **Respondent skipped this question** |
| **Q137** What do you perceive to be the major costs to developing offshore wind assets in New Zealand? | **Respondent skipped this question** |
| **Q138** What do you perceive to be the major risks to developing offshore wind assets in New Zealand? | **Respondent skipped this question** |

## Page 21: Section 8 - continued

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| **Q139** This policy option involves a high level of intervention and risk. Would another policy option better achieve our goals to encourage renewable energy generation investment? | **Respondent skipped this question** |
| **Q140** Could the proposed policy option be re-designed to better achieve our goals? | **Respondent skipped this question** |
| **Q141** Should the Government introduce Renewable Portfolio Standards (RPS) requirements? | **Respondent skipped this question** |
| **Q142** At what level should a RPS quota be set to incentivise additional renewable electricity generation investment? | **Respondent skipped this question** |
| **Q143** Should RPS requirements apply to all electricity retailers? | **Respondent skipped this question** |
| **Q144** Should RPS requirements apply to all major electricity users? | **Respondent skipped this question** |
| **Q145** What would be an appropriate threshold for the inclusion of major electricity users (i.e. annual consumption above a certain GWh threshold)? | **Respondent skipped this question** |
| **Q146** Would a government backed certification scheme support your corporate strategy and export credentials? | **Respondent skipped this question** |
| **Q147** What types of renewable projects should be eligible for renewable electricity certificates? | **Respondent skipped this question** |
| **Q148** If this policy option is progressed, should electricity retailers be permitted to invest in energy efficient technology investments to meet their renewable portfolio standards? (See option 8.3 on energy efficiency obligations). | **Respondent skipped this question** |

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| **Q149** If this policy option is progressed, should major electricity users be permitted to invest in energy efficient technology investments to meet their renewable portfolio standards? (See option 8.3 on energy efficiency obligations). | **Respondent skipped this question** |
| **Q150** What are the likely administrative and compliance costs of this policy for your organisation? | **Respondent skipped this question** |

## Page 22: Section 8 - continued

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| **Q151** This policy option involves a high level of intervention and risk. Would another policy option better achieve our goals to encourage renewable energy generation investment? | **Respondent skipped this question** |
| **Q152** Could this policy option be re-designed to better achieve our goals? | **Respondent skipped this question** |
| **Q153** Do you support the managed phase down of baseload thermal electricity generation? | **Strongly support** |
| **Q154** Would a strategic reserve mechanism adequately address supply security, and reduce emissions affordably, during a transition to higher levels of renewable electricity generation? | **Probably would** |
| **Q155** Under what market conditions should thermal baseload held in a strategic reserve be used? | **Respondent skipped this question** |
| **Q156** Would you support requiring thermal baseload assets to operate as peaking plants or during dry winters? | **Respondent skipped this question** |
| **Q157** What is the best way to meet resource adequacy needs as we transition away from fossil-fuelled electricity generation and towards a system dominated by renewables? | **Respondent skipped this question** |

## Page 23: Section 8 - continued

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| **Q158** Do you have any views regarding the options to encourage renewable electricity generation investment that we considered, but are not proposing to investigate further? (See pages 90 - 92 of the Accelerating renewable energy and energy efficiency discussion document). | **Respondent skipped this question** |

## Page 24: Section 9: Facilitating local and community engagement in renewable energy and energy efficiency

**Q159** Should New Zealand be encouraging greater development of community energy projects?

**Yes**

**Q160** What types of community energy project are most relevant in the New Zealand context?

Community level solar, wind and micro-hydro

**Q161** What are the key benefits of a focus on community energy?

They can potentially address energy affordability and equity issues if designed to do so, as well as contribute to security of supply during severe weather events and other disruptive events, as well as contributing to grid level security of supply

**Q162** What are the key downsides or risks of a focus on community energy?

They can be poorly designed, expensive to set up, poorly maintained and not achieve the benefits hoped.

**Q163** Have we accurately identified the barriers to community energy proposals?

**Respondent skipped this question**

**Q164** Which barriers do you consider most significant? You may select more than one answer.

**Electricity market arrangements**

**Q165** Are the barriers noted above in relation to electricity market arrangements adequately covered by the scope of existing work across the Electricity Authority and electricity distributors?

**Respondent skipped this question**

**Q166** What do you see as the pros of a clear government position on community energy?

**Respondent skipped this question**

**Q167** What do you see as the cons of a clear government position on community energy?

**Respondent skipped this question**

**Q168** What do you see as the pros of government support for pilot community energy projects?

**Respondent skipped this question**

**Q169** What do you see as the cons of government support for pilot community energy projects?

The problem with only funding pilots is the issue that many projects (e.g. small scale wind and hydro) require long-term support for maintenance

**Q170** Are there any other options you can suggest that would support further development of community energy initiatives?

**Respondent skipped this question**

## Page 25: Section 10: Connecting to the national grid

| | |
|---|---|
| **Q171** Please select the option or combination of options, if any, that would be most likely to address the first mover disadvantage. | **Respondent skipped this question** |
| **Q172** What do you see as the disadvantages or risks of Option 10.1? | **Respondent skipped this question** |
| **Q173** What do you see as the disadvantages or risks of Option 10.2? | **Respondent skipped this question** |
| **Q174** What do you see as the disadvantages or risks of Option 10.3.1? | **Respondent skipped this question** |
| **Q175** What do you see as the disadvantages or risks of Option 10.3.2? | **Respondent skipped this question** |
| **Q176** Would introducing a requirement, or new charge, for subsequent customers to contribute to costs already incurred by the first mover create any perverse incentives? | **Respondent skipped this question** |
| **Q177** Are there any additional options that should be considered? | **Respondent skipped this question** |

## Page 26: Section 10 (continued): Connecting to the national grid

| | |
|---|---|
| **Q178** Do you think that there is a role for government to provide more independent public data? | **Respondent skipped this question** |
| **Q179** Is there a role for Government to provide independent geospatial data (e.g. wind speeds for sites) to assist with information gaps? | **Respondent skipped this question** |
| **Q180** Should MBIE's Electricity Demand and Generation Scenarios (EDGS) be updated more frequently? | **Respondent skipped this question** |
| **Q181** If you said yes, how frequently should they be updated? | **Respondent skipped this question** |
| **Q182** Should MBIE's EDGS provide more detail, for example, information at a regional level? | **Respondent skipped this question** |

| | |
|---|---|
| **Q183** Should the costs to the Crown of preparing EDGS be recovered from Transpower, and therefore all electricity consumers (rather than tax-payers)? | **Respondent skipped this question** |
| **Q184** Would you find a users' guide (on current regulation and approval process for getting an upgraded or new connection) helpful? | **Respondent skipped this question** |
| **Q185** What information would you like to see in such a guide? | **Respondent skipped this question** |
| **Q186** Who would be best placed to produce a guide? | **Respondent skipped this question** |

## Page 27: Section 10 (continued): Connecting to the national grid

| | |
|---|---|
| **Q187** Do you think that there is a role for government in improving information sharing between parties to enable more coordinated investment? | **Respondent skipped this question** |
| **Q188** Is there value in the provision of a database (and/or map) of potential renewable generation and new demand, including location and potential size? | **Respondent skipped this question** |
| **Q189** If so, who would be best to develop and maintain this? | **Respondent skipped this question** |
| **Q190** How should it be funded? | **Respondent skipped this question** |
| **Q191** Should measures be introduced to enable coordination regarding the placement of new wind farms? | **Respondent skipped this question** |
| **Q192** Are there other information sharing options that could help address investment coordination issues? What are they? | **Respondent skipped this question** |

## Page 28: Section 11: Local network connections and trading arrangements

| | |
|---|---|
| **Q193** Have you experienced, or are you aware of, significant barriers to connecting to the local networks? Please describe them. | **Respondent skipped this question** |
| **Q194** Are there any barriers that will not be addressed by current work programmes outlined on pages 118 - 122 of the discussion document? | **Respondent skipped this question** |

**Q195** Should the option to produce a users' guide (see Option 10.6 on page 110) also include the process for getting an upgraded or new distribution line?

**Respondent skipped this question**

**Q196** Are there other Section 10 information options that could be extended to include information about local networks and distributed generation?

**Respondent skipped this question**

**Q197** Do the work programmes outlined on pages 118 - 122 cover all issues to ensure the settings for connecting to and trading on the local network are fit for purpose into the future?

**Respondent skipped this question**

**Q198** Are there things that should be prioritised, or sped up?

**Respondent skipped this question**

**Q199** What changes, if any, to the current arrangements would ensure distribution networks are fit for purpose into the future?

**Respondent skipped this question**

## Page 29: Additional comments

**Q200** Do you have any additional feedback?

Please find attached a cover letter explaining our organisation and high level input into the discussion document.

**Q201** You may upload additional feedback as a file.File size limit is 16MB. We accept PDF or DOC/DOCX.

**Renewable energy submission OraTaiao cover letter.docx (40.4KB)**

# #73

INCOMPLETE

| | |
|---|---|
| **Collector:** | Final submissions link (Web Link) |
| **Started:** | Friday, February 28, 2020 12:07:31 PM |
| **Last Modified:** | Friday, February 28, 2020 1:04:54 PM |
| **Time Spent:** | 00:57:23 |

## Page 1: Introduction

**Q1** Name (first and last name)

Dr Alexandra Macmillan

**Q2** Email

co-convenor@orataiao.org.nz

| | |
|---|---|
| **Q3** Is this an individual submission, or is it on behalf of a group or organisation? | **On behalf of a group or organisation** |
| **Q4** Which group do you most identify with, or are representing? | Other (please specify): population health NGO |

**Q5** Business name or organisation (if applicable)

OraTaiao: NZ Climate & Health Council

**Q6** Position title (if applicable)

Co-Convenor

| | |
|---|---|
| **Q7** Important information about your submission (important to read)The information provided in submissions will be used to inform the Ministry of Business, Innovation and Employment's (MBIE's) work on Accelerating renewable energy and energy efficiency.We will upload the submissions we receive and publish them on our website. If your submission contains any sensitive information that you do not want published, please indicate this in your submission.The Privacy Act 1993 applies to submissions. Any personal information you supply to MBIE in the course of making a submission will only be known by the team working on the Accelerating renewable energy and energy efficiency.Submissions may be requested under the Official Information Act 1982. Submissions provided in confidence can usually be withheld. MBIE will consult with submitters when responding to requests under the Official Information Act 1982.We intend to upload submissions to our website at www.mbie.govt.nz. Can we include your submission on the website? | **Yes** |
| **Q8** Can we include your name? | **Yes** |
| **Q9** Can we include your organisation (if submitting on behalf of an organisation)? | **Yes** |
| **Q10** All other personal information will not be proactively released, although it may need to be released if required under the Official Information Act. Please indicate if there is any other information you would like withheld. | **Respondent skipped this question** |

## Page 2

| | |
|---|---|
| **Q11** Where are you located? | **Respondent skipped this question** |
| **Q12** In what region or regions does your organisation mostly operate? | **All of New Zealand** |

## Page 3: Areas you wish to provide feedback on

| | |
|---|---|
| **Q13** Part A relates to process heat.Please indicate which sections, if any, you would like to provide feedback on. | **Section 1: Addressing information failures,**<br>**Section 2: Developing markets for bioenergy and direct geothermal use**<br>**,**<br>**Section 3: Innovating and building capability,**<br>**Section 4: Phasing out fossil fuels in process heat,**<br>**Section 5: Boosting investment in renewable energy and energy efficiency technologies**<br>**,**<br>**Section 6: Cost recovery mechanisms** |
| **Q14** Part B relates to renewable electricity generation. Please indicate which sections, if any, you would like to provide feedback on. | **Section 7: Enabling renewables uptake under the Resource Management Act 1991**<br>**,**<br>**Section 8: Supporting renewable electricity generation investment**<br>**,**<br>**Section 9: Facilitating local and community engagement in renewable energy and energy efficiency**<br>**,**<br>**Section 10: Connecting to the national grid** |

## Page 4: Section 1: Addressing information failures

| | |
|---|---|
| **Q15** Option 1.1 would require large energy users to report their emissions and energy use annually, publish Corporate Energy Transitions Plans and conduct energy audits every four years.Do you support this option? | **Respondent skipped this question** |
| **Q16** Please explain your answer | **Respondent skipped this question** |
| **Q17** Which parts (set out in Table 3) do you support? | **Respondent skipped this question** |
| **Q18** Please explain your answer | **Respondent skipped this question** |
| **Q19** What public reporting requirements (listed in Table 3) should be disclosed? | **Respondent skipped this question** |
| **Q20** In your view, should businesses be expected to include transport energy and emissions in these reporting requirements? | **Respondent skipped this question** |

| | |
|---|---|
| **Q21** For manufacturers: what will be the impact on your business to comply with the requirements? | **Respondent skipped this question** |
| **Q22** Option 1.1. Suggests that requirements to publish Corporate Energy Transition Plans should apply to large energy users, and propses defining large energy users as those with an annual energy spend (purchased) of greater than $2 million per annum.Do you agree with this definition? | **Respondent skipped this question** |
| **Q23** If you selected no, please describe what in your view would be an appropriate threshold to define 'large energy users'. | **Respondent skipped this question** |
| **Q24** Is there any potential for unnecessary duplication under these proposals and the disclosures proposed in the MBIE-Ministry for the Environment discussion document Climate-related Financial Disclosures – Understanding your business risks and opportunities related to climate change, October 2019? | **Respondent skipped this question** |

## Page 5: Section 1 - Option 1.2: Electrification information package and feasibility studies

| | |
|---|---|
| **Q25** Do you support the proposal to develop an electrification information package? | **Respondent skipped this question** |
| **Q26** Would an electrification information package be of use to your business? | **Respondent skipped this question** |
| **Q27** Do you support customised low-emission heating feasibility studies? | **Respondent skipped this question** |
| **Q28** In your view, which of the components should be scaled up and/or prioritised? | **Respondent skipped this question** |
| **Q29** Would a customised low-emission heating feasibility study be of use to your business? | **Respondent skipped this question** |
| **Q30** Please describe any components other than those identified that could be included in an information package. | **Respondent skipped this question** |

## Page 6: Section 1 - Option 1.3: Provide benchmarking information for food processing industries

| | |
|---|---|
| **Q31** Do you support benchmarking in the food processing sector? | **Respondent skipped this question** |

| | |
|---|---|
| **Q32** Would benchmarking be suited to, and useful for, other industries, such as wood processing? | **Respondent skipped this question** |
| **Q33** Do you believe government should have a role in facilitating this or should it entirely be led by industry? | **Respondent skipped this question** |
| **Q34** Please explain your answer | **Respondent skipped this question** |

## Page 7: Section 2: Developing markets for bioenergy and direct geothermal use

| | |
|---|---|
| **Q35** Do you agree that some councils have regional air quality rules that are barriers to wood energy? | **Respondent skipped this question** |
| **Q36** Please provide examples of regional air quality rules that you see as barriers to wood energy. Please also note which council's plan you are referring to. | **Respondent skipped this question** |
| **Q37** Do you agree that a National Environmental Standards for Air Quality (NESAQ) users' guide on the development and operation of the wood energy facilities will help to reduce regulatory barriers to the use of wood energy for process heat? | **Respondent skipped this question** |
| **Q38** What do you consider a NESAQ users' guide should cover? Please provide an explanation if possible. | **Respondent skipped this question** |
| **Q39** Please describe any other options that you consider would be more effective at reducing regulatory barriers to the use of wood energy for process heat. | **Respondent skipped this question** |
| **Q40** In your opinion, what technical rules relating to wood energy would be better addressed through the NESAQ than through the proposed users' guide (option 2.1)? | **Respondent skipped this question** |

## Page 8: Section 2 - continued: Developing markets for bioenergy and direct geothermal use

| | |
|---|---|
| **Q41** In your view, could the Industry Transformation Plans stimulate sufficient supply and demand for bioenergy to achieve desired outcomes? | **Respondent skipped this question** |
| **Q42** What other options are worth considering? | **Respondent skipped this question** |
| **Q43** Is Government best placed to provide market facilitation in bioenergy markets? | **Respondent skipped this question** |

| | |
|---|---|
| **Q44** How could Government best facilitate bioenergy markets?Please be as specific as possible, giving examples. | **Respondent skipped this question** |
| **Q45** In your view, how can government best support direct use of geothermal heat? | **Respondent skipped this question** |
| **Q46** What other options are worth considering? | **Respondent skipped this question** |

## Page 9: Section 3: Innovating and building capability

| | |
|---|---|
| **Q47** Do you agree that de-risking commercially viable low-emission technology should be a focus of government support on process heat? | **Respondent skipped this question** |
| **Q48** Do you agree that diffusing commercially viable low-emission technology should be a focus of government support on process heat? | **Respondent skipped this question** |
| **Q49** Is Energy Efficiency and Conservation Authority (EECA) grant funding to support technology diffusion the best vehicle for this? | **Respondent skipped this question** |
| **Q50** For manufacturers and energy service experts: would peer learning and lead to reducing perceived technology risks? | **Respondent skipped this question** |
| **Q51** For manufacturers and energy service experts: would on-site technology demonstration visits lead to reducing perceived technology risks? | **Respondent skipped this question** |
| **Q52** Is there a role for the Government in facilitating this? | **Respondent skipped this question** |

## Page 10: Section 3 (continued): Innovating and building capability

| | |
|---|---|
| **Q53** For emissions-intensive and highly integrated (EIHI) stakeholders: What are your views on our proposal to collaborate to develop low-carbon roadmaps? | **Respondent skipped this question** |
| **Q54** Would low-carbon roadmaps assist in identifying feasible technological pathways for decarbonisation? | **Respondent skipped this question** |
| **Q55** What are the most important issues that would benefit from a partnership and co-design approach? | **Respondent skipped this question** |

**Q56** What, in your view, is the scale of resourcing required to make this initiative successful?

**Respondent skipped this question**

## Page 11: Section 4: Phasing out fossil fuels in process heat

**Q57** Do you agree with the proposal to ban new coal-fired boilers for low and medium temperature requirements?

**Respondent skipped this question**

**Q58** Do you agree with the proposal to require existing coal-fired process heat equipment for end-use temperature requirements below 100 degrees Celsius to be phased out by 2030?

**Respondent skipped this question**

**Q59** Referring to Question 56 - is this ambitious or is it not doing enough?

**Respondent skipped this question**

**Q60** For manufacturers: what would be the likely impacts or compliance costs on your business of a ban on new coal-fired process heat equipment?

**Respondent skipped this question**

**Q61** For manufacturers: what would be the likely impacts or compliance costs on your business of requiring existing coal-fired process heat equipment supplying end-use temperature requirements below 100°C to be phased out by 2030.

**Respondent skipped this question**

**Q62** Could the Corporate Energy Transition Plans (Option 1.1) help to design a more informed phase out of fossil fuels in process heat?

**Respondent skipped this question**

**Q63** Would a timetabled phase out of fossil fuels in process heat be necessary alongside the Corporate Energy Transition Plans?

**Respondent skipped this question**

**Q64** In your view, could national direction under the Resource Management Act (RMA) be an effective tool to support clean and low greenhouse gas-emitting methods of industrial production?

**Respondent skipped this question**

**Q65** If yes, how?

**Respondent skipped this question**

**Q66** In your view, could adoption of best available technologies be introduced via a mechanism other than the RMA?

**Respondent skipped this question**

## Page 12: Section 5: Boosting investment in energy efficiency and renewable energy technologies

| | |
|---|---|
| **Q67** Do you agree that complementary measures to the New Zealand Emissions Trading Scheme (NZ-ETS) should be considered to accelerate the uptake of cost-effective clean energy projects? | **Respondent skipped this question** |
| **Q68** Would you favour regulation, financial incentives or both? | **Respondent skipped this question** |
| **Q69** In your view what is a bigger barrier to investment in clean energy technologies, internal competition for capital or access to capital? | **Respondent skipped this question** |
| **Q70** If you favour financial support, what sort of incentives could be considered? | **Respondent skipped this question** |
| **Q71** What are the benefits of these incentives? | **Respondent skipped this question** |
| **Q72** What are the risks of these incentives? | **Respondent skipped this question** |
| **Q73** What are the costs of these incentives? | **Respondent skipped this question** |
| **Q74** What measures other than those identified above could be effective at accelerating investment in clean energy technologies? | **Respondent skipped this question** |

## Page 13: Section 6: Cost recovery mechanisms

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|---|---|
| **Q75** What is your view on whether cost recovery mechanisms should be adopted to fund policy proposals in Part A of the Accelerating renewable energy and energy efficiency discussion document? | **Respondent skipped this question** |
| **Q76** What are the advantages of introducing a levy on consumers of coal to fund process heat activities? | **Respondent skipped this question** |
| **Q77** What are the disadvantages of introducing a levy on consumers of coal to fund process heat activities? | **Respondent skipped this question** |

## Page 14: Section 7: Enabling development of renewable energy under the Resource Management Act 1991

| | |
|---|---|
| **Q78** Do you agree that the current NPSREG gives sufficient weight and direction to the importance of renewable energy? | **Respondent skipped this question** |

| | |
|---|---|
| **Q79** What changes to the NPSREG would facilitate future development of renewable energy? | **Respondent skipped this question** |
| **Q80** What policies could be introduced or amended to provide sufficient direction to councils regarding the matters listed in points a-i mentioned on pages 60-61 of the discussion document? | **Respondent skipped this question** |
| **Q81** How should the NPSREG address the balancing of local environmental effects and the national benefits of renewable energy development in RMA decisions? | **Respondent skipped this question** |
| **Q82** What are your views on the interaction and relative priority of the NPSREG with other existing or pending national direction instruments? | **Respondent skipped this question** |
| **Q83** Do you have any suggestions for how changes to the NPSREG could help achieve the right balance between renewable energy development and environmental outcomes? | **Respondent skipped this question** |
| **Q84** What objectives or policies could be included in the NPSREG regarding councils' role in locating and planning strategically for renewable energy resources? | **Respondent skipped this question** |
| **Q85** Can you identify any particular consenting barriers to development of other types of renewable energy than REG, such as green hydrogen, bioenergy and waste-to-energy facilities? | **Respondent skipped this question** |
| **Q86** Can any specific policies be included in a national policy statement to address these barriers? | **Respondent skipped this question** |
| **Q87** What specific policies could be included in the NPSREG for small-scale renewable energy projects? | **Respondent skipped this question** |
| **Q88** The NPSREG currently does not provide any definition or threshold for "small and community-scale renewable electricity generation activities". Do you have any view on the definition or threshold for these activities? | **Respondent skipped this question** |
| **Q89** What specific policies could be included to facilitate re-consenting consented but unbuilt wind farms, where consent variations are needed to allow the use of the latest technology? | **Respondent skipped this question** |
| **Q90** Are there any downsides or risks to amending the NPSREG? | **Respondent skipped this question** |

Page 15: Section 7 - continued

| | |
|---|---|
| **Q91** Do you agree that National Environmental Standards (NES) would be an effective and appropriate tool to accelerate the development of new renewables and streamline re-consenting? | **Respondent skipped this question** |
| **Q92** What are the pros of using National Environmental Standards as a tool to accelerate the development of new renewables and streamline re-consenting? | **Respondent skipped this question** |
| **Q93** What are the cons of using National Environmental Standards as a tool to accelerate the development of new renewables and streamline re-consenting? | **Respondent skipped this question** |
| **Q94** What do you see as the relative merits and priorities of changes to the NPSREG compared with work on NES? | **Respondent skipped this question** |
| **Q95** What are the downsides and risks to developing NES? | **Respondent skipped this question** |
| **Q96** What renewables activities (including both REG activities and other types of renewable energy) would best be suited to NES? | **Respondent skipped this question** |
| **Q97** What technical issues could best be dealt with under a standardised national approach? | **Respondent skipped this question** |
| **Q98** Would it be practical for NES to set different types of activity status for activities with certain effects, for consenting or re-consenting? | **Respondent skipped this question** |
| **Q99** Are there any aspects of renewable activities that would have low environmental effects and would be suitable for having the status of permitted or controlled activities under the RMA? Please provide details. | **Respondent skipped this question** |
| **Q100** Do you have any suggestions for what rules or standards could be included in NES or National Planning Standards to help achieve the right balance between renewable energy development and environmental outcomes? | **Respondent skipped this question** |
| **Q101** Compared to the NPSREG or National Environment Standards, would National Planning Standards or any other RMA tools be more suitable for providing councils with national direction on renewables ? | **Respondent skipped this question** |

| | |
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| **Q102** Please explain your answer | **Respondent skipped this question** |

## Page 16: Section 7 - continued

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|---|---|
| **Q103** Are there opportunities for non-statutory spatial planning techniques to help identify suitable areas for renewables development (or no go areas)? | **Respondent skipped this question** |
| **Q104** Do you have any comments on potential options for pre-approval of renewable developments? | **Respondent skipped this question** |
| **Q105** Are the current National Policy Statement on Electricity Transmission (NPSET) and National Environmental Standards for Electricity Transmission Activities (NESETA) fit-for-purpose to enable accelerated development of renewable energy? | **Respondent skipped this question** |
| **Q106** What changes (if any) would you suggest for the NPSET and NESETA to accelerate the development of renewable energy? | **Respondent skipped this question** |
| **Q107** Can you suggest any other options (statutory or non-statutory) that would help accelerate the future development of renewable energy? | **Respondent skipped this question** |

## Page 17: Section 8: Supporting renewable electricity generation investment

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|---|---|
| **Q108** Do you agree there is a role for government to provide information, facilitate match-making and/or assume some financial risk for PPAs? | **Respondent skipped this question** |
| **Q109** Would support for PPAs effectively encourage electrification? | **Respondent skipped this question** |
| **Q110** Would support for PPAs effectively encourage new renewable generation investment? | **Respondent skipped this question** |
| **Q111** How could any potential mismatch between generation and demand profiles be managed by the Platform and/or counterparties? | **Respondent skipped this question** |
| **Q112** Please rank the following variations on PPA Platforms in order of preference.1 = most preferred, 4 = least preferred. | **Respondent skipped this question** |
| **Q113** What are your views on Contract Matching Services? | **Respondent skipped this question** |

| | |
|---|---|
| **Q114** What are your views on State sector-led PPAs? | **Respondent skipped this question** |
| **Q115** What are your views on Government guaranteed contracts? | **Respondent skipped this question** |
| **Q116** What are your views on a Clearing house for PPAs? | **Respondent skipped this question** |
| **Q117** For manufacturers: what delivered electricity price do you require to electrify some or all of your process heat requirements? | **Respondent skipped this question** |
| **Q118** For manufacturers: is a long-term electricity contract an attractive proposition if it delivers more affordable electricity? | **Respondent skipped this question** |
| **Q119** For investors / developers: what contract length and price do you require to make a return on an investment in new renewable electricity generation capacity? | **Respondent skipped this question** |
| **Q120** For investors / developers: is a long-term electricity contract an attractive proposition if it delivers a predictable stream of revenues and a reasonable return on investment? | **Respondent skipped this question** |

## Page 18: Section 8 - continued

| | |
|---|---|
| **Q121** Do you consider the development of the demand response (DR) market to be a priority for the energy sector? | **Respondent skipped this question** |
| **Q122** Do you think that demand response (DR) could help to manage existing or potential electricity sector issues? | **Respondent skipped this question** |
| **Q123** What are the key features of demand response markets? | **Respondent skipped this question** |
| **Q124** Which features of a demand response market would enable load reduction or asset use optimisation across the energy system? | **Respondent skipped this question** |
| **Q125** Which features of a demand response market would enable the uptake of distributed energy resources? | **Respondent skipped this question** |

| | |
|---|---|
| **Q126** What types of demand response services should be enabled as a priority? | **Respondent skipped this question** |
| **Q127** Which services make sense for New Zealand? | **Respondent skipped this question** |

Page 19: Section 8 - continued

| | |
|---|---|
| **Q128** Would energy efficiency obligations effectively deliver increased investment in energy efficient technologies across the economy? | **Respondent skipped this question** |
| **Q129** Is there an alternative policy option that could deliver on this aim more effectively? | **Respondent skipped this question** |
| **Q130** If progressed, what types of energy efficiency measures and technologies should be considered in order to meet retailer/distributor obligations? | **Respondent skipped this question** |
| **Q131** Should these be targeted at certain consumer groups? | **Respondent skipped this question** |
| **Q132** Do you support the proposal to require electricity retailers and/or distributors to meet energy efficiency targets? | **Respondent skipped this question** |
| **Q133** Which entities would most effectively achieve energy savings? | **Respondent skipped this question** |
| **Q134** What are the likely compliance costs of this policy? | **Respondent skipped this question** |

Page 20: Section 8 - continued

| | |
|---|---|
| **Q135** Do you agree that the development of an offshore wind market should be a priority for the energy sector? | **Respondent skipped this question** |
| **Q136** What do you perceive to be the major benefits to developing offshore wind assets in New Zealand? | **Respondent skipped this question** |
| **Q137** What do you perceive to be the major costs to developing offshore wind assets in New Zealand? | **Respondent skipped this question** |
| **Q138** What do you perceive to be the major risks to developing offshore wind assets in New Zealand? | **Respondent skipped this question** |

Page 21: Section 8 - continued

| | |
|---|---|
| **Q139** This policy option involves a high level of intervention and risk. Would another policy option better achieve our goals to encourage renewable energy generation investment? | **Respondent skipped this question** |
| **Q140** Could the proposed policy option be re-designed to better achieve our goals? | **Respondent skipped this question** |
| **Q141** Should the Government introduce Renewable Portfolio Standards (RPS) requirements? | **Respondent skipped this question** |
| **Q142** At what level should a RPS quota be set to incentivise additional renewable electricity generation investment? | **Respondent skipped this question** |
| **Q143** Should RPS requirements apply to all electricity retailers? | **Respondent skipped this question** |
| **Q144** Should RPS requirements apply to all major electricity users? | **Respondent skipped this question** |
| **Q145** What would be an appropriate threshold for the inclusion of major electricity users (i.e. annual consumption above a certain GWh threshold)? | **Respondent skipped this question** |
| **Q146** Would a government backed certification scheme support your corporate strategy and export credentials? | **Respondent skipped this question** |
| **Q147** What types of renewable projects should be eligible for renewable electricity certificates? | **Respondent skipped this question** |
| **Q148** If this policy option is progressed, should electricity retailers be permitted to invest in energy efficient technology investments to meet their renewable portfolio standards? (See option 8.3 on energy efficiency obligations). | **Respondent skipped this question** |
| **Q149** If this policy option is progressed, should major electricity users be permitted to invest in energy efficient technology investments to meet their renewable portfolio standards? (See option 8.3 on energy efficiency obligations). | **Respondent skipped this question** |
| **Q150** What are the likely administrative and compliance costs of this policy for your organisation? | **Respondent skipped this question** |

Page 22: Section 8 - continued

| | |
|---|---|
| **Q151** This policy option involves a high level of intervention and risk. Would another policy option better achieve our goals to encourage renewable energy generation investment? | **Respondent skipped this question** |
| **Q152** Could this policy option be re-designed to better achieve our goals? | **Respondent skipped this question** |
| **Q153** Do you support the managed phase down of baseload thermal electricity generation? | **Respondent skipped this question** |
| **Q154** Would a strategic reserve mechanism adequately address supply security, and reduce emissions affordably, during a transition to higher levels of renewable electricity generation? | **Respondent skipped this question** |
| **Q155** Under what market conditions should thermal baseload held in a strategic reserve be used? | **Respondent skipped this question** |
| **Q156** Would you support requiring thermal baseload assets to operate as peaking plants or during dry winters? | **Respondent skipped this question** |
| **Q157** What is the best way to meet resource adequacy needs as we transition away from fossil-fuelled electricity generation and towards a system dominated by renewables? | **Respondent skipped this question** |

## Page 23: Section 8 - continued

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| **Q158** Do you have any views regarding the options to encourage renewable electricity generation investment that we considered, but are not proposing to investigate further? (See pages 90 - 92 of the Accelerating renewable energy and energy efficiency discussion document). | **Respondent skipped this question** |

## Page 24: Section 9: Facilitating local and community engagement in renewable energy and energy efficiency

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| **Q159** Should New Zealand be encouraging greater development of community energy projects? | **Respondent skipped this question** |
| **Q160** What types of community energy project are most relevant in the New Zealand context? | **Respondent skipped this question** |
| **Q161** What are the key benefits of a focus on community energy? | **Respondent skipped this question** |

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| **Q162** What are the key downsides or risks of a focus on community energy? | **Respondent skipped this question** |
| **Q163** Have we accurately identified the barriers to community energy proposals? | **Respondent skipped this question** |
| **Q164** Which barriers do you consider most significant? You may select more than one answer. | **Respondent skipped this question** |
| **Q165** Are the barriers noted above in relation to electricity market arrangements adequately covered by the scope of existing work across the Electricity Authority and electricity distributors? | **Respondent skipped this question** |
| **Q166** What do you see as the pros of a clear government position on community energy? | **Respondent skipped this question** |
| **Q167** What do you see as the cons of a clear government position on community energy? | **Respondent skipped this question** |
| **Q168** What do you see as the pros of government support for pilot community energy projects? | **Respondent skipped this question** |
| **Q169** What do you see as the cons of government support for pilot community energy projects? | **Respondent skipped this question** |
| **Q170** Are there any other options you can suggest that would support further development of community energy initiatives? | **Respondent skipped this question** |

## Page 25: Section 10: Connecting to the national grid

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| **Q171** Please select the option or combination of options, if any, that would be most likely to address the first mover disadvantage. | **Respondent skipped this question** |
| **Q172** What do you see as the disadvantages or risks of Option 10.1? | **Respondent skipped this question** |
| **Q173** What do you see as the disadvantages or risks of Option 10.2? | **Respondent skipped this question** |
| **Q174** What do you see as the disadvantages or risks of Option 10.3.1? | **Respondent skipped this question** |

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| **Q175** What do you see as the disadvantages or risks of Option 10.3.2? | **Respondent skipped this question** |
| **Q176** Would introducing a requirement, or new charge, for subsequent customers to contribute to costs already incurred by the first mover create any perverse incentives? | **Respondent skipped this question** |
| **Q177** Are there any additional options that should be considered? | **Respondent skipped this question** |

## Page 26: Section 10 (continued): Connecting to the national grid

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| **Q178** Do you think that there is a role for government to provide more independent public data? | **Respondent skipped this question** |
| **Q179** Is there a role for Government to provide independent geospatial data (e.g. wind speeds for sites) to assist with information gaps? | **Respondent skipped this question** |
| **Q180** Should MBIE's Electricity Demand and Generation Scenarios (EDGS) be updated more frequently? | **Respondent skipped this question** |
| **Q181** If you said yes, how frequently should they be updated? | **Respondent skipped this question** |
| **Q182** Should MBIE's EDGS provide more detail, for example, information at a regional level? | **Respondent skipped this question** |
| **Q183** Should the costs to the Crown of preparing EDGS be recovered from Transpower, and therefore all electricity consumers (rather than tax-payers)? | **Respondent skipped this question** |
| **Q184** Would you find a users' guide (on current regulation and approval process for getting an upgraded or new connection) helpful? | **Respondent skipped this question** |
| **Q185** What information would you like to see in such a guide? | **Respondent skipped this question** |
| **Q186** Who would be best placed to produce a guide? | **Respondent skipped this question** |

## Page 27: Section 10 (continued): Connecting to the national grid

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| **Q187** Do you think that there is a role for government in improving information sharing between parties to enable more coordinated investment? | **Respondent skipped this question** |
| **Q188** Is there value in the provision of a database (and/or map) of potential renewable generation and new demand, including location and potential size? | **Respondent skipped this question** |
| **Q189** If so, who would be best to develop and maintain this? | **Respondent skipped this question** |
| **Q190** How should it be funded? | **Respondent skipped this question** |
| **Q191** Should measures be introduced to enable coordination regarding the placement of new wind farms? | **Respondent skipped this question** |
| **Q192** Are there other information sharing options that could help address investment coordination issues? What are they? | **Respondent skipped this question** |

## Page 28: Section 11: Local network connections and trading arrangements

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| **Q193** Have you experienced, or are you aware of, significant barriers to connecting to the local networks? Please describe them. | **Respondent skipped this question** |
| **Q194** Are there any barriers that will not be addressed by current work programmes outlined on pages 118 - 122 of the discussion document? | **Respondent skipped this question** |
| **Q195** Should the option to produce a users' guide (see Option 10.6 on page 110) also include the process for getting an upgraded or new distribution line? | **Respondent skipped this question** |
| **Q196** Are there other Section 10 information options that could be extended to include information about local networks and distributed generation? | **Respondent skipped this question** |
| **Q197** Do the work programmes outlined on pages 118 - 122 cover all issues to ensure the settings for connecting to and trading on the local network are fit for purpose into the future? | **Respondent skipped this question** |
| **Q198** Are there things that should be prioritised, or sped up? | **Respondent skipped this question** |

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| **Q199** What changes, if any, to the current arrangements would ensure distribution networks are fit for purpose into the future? | **Respondent skipped this question** |

## Page 29: Additional comments

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| **Q200** Do you have any additional feedback? | **Respondent skipped this question** |
| **Q201** You may upload additional feedback as a file.File size limit is 16MB. We accept PDF or DOC/DOCX. | **Respondent skipped this question** |

OraTaiao: NZ Climate & Health
www.orataiao.org.nz

26 February 2020

## OraTaiao submission on the discussion paper 'Accelerating renewable energy and energy efficiency'

*This submission is presented on behalf of **OraTaiao: New Zealand Climate & Health**. OraTaiao comprises more than 700 senior doctors and health professionals concerned about the impact of environmental factors on health and health services. In addition, we have built a coalition of all the major health professional organisations in New Zealand, in support of urgent, health-centred, Te Tiriti-founded action on climate change.*

Energy policy decisions made now have the potential to improve or worsen the unequal spread of health improvements across the population. This discussion paper sets the scene for improved efforts within New Zealand to mitigate potential runaway climate change and its catastrophic impacts on human survival and health. While we strongly support a strategy to develop renewable energy technologies within New Zealand, that there has not been enough emphasis on health and wellbeing, and health equity in evaluating options within the strategy.

We commend the discussion paper for making the connection between environmental sustainability and health by including health in its preliminary assessment of the costs and benefits of the options proposed. The paper also specifically mentions the effect of air pollution and warmer homes on health, which are important areas for an energy strategy to consider. However, instead of as a subcategory underneath 'wider economic effects', health and wellbeing should be a high level criteria alongside 'impact on greenhouse gas emissions'. The economy is only useful in so far it is contributing to human wellbeing and addressing structural injustice, and needs to be understood as such in all government policy.

Taking such and would place appropriate focus on the importance of climate change impacts on health, as well as the health co-benefits of renewable energy options. This is in accordance with leading medical journal, The Lancet, which reports that tackling climate change could, in fact, represent *"the greatest global health opportunity of the 21st century."*[1] Likewise, there are significant co-benefits that can be achieved with energy policy, which is not only a major goal in itself, but also helpful for gaining public support for the changes that are so urgently needed. These co-benefits can be measured and valued as part of the evaluative modelling of different policy options.

In addition to health, the discussion paper needs to place more emphasis on the impact of renewable energy options on Māori communities, who are at greater risk of experiencing poor health outcomes due to climate change.[2] We would urge the discussion paper to use the Articles of Te Tiriti o Waitangi as a framework for the development and assessment of renewable energy options, by which we mean the Articles and concepts in the Māori translation: rangatiratanga, mana and tikanga; kāwanatanga; and oritetanga. Further, there should

[1] Watts N, Adger WN, Agnolucci P, Blackstock J, Byass P, Cai W, et al. Health and climate change: policy responses to protect public health. The Lancet. 2015;386(10006):1861-914. Available from: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60854-6/fulltext

[2] Bennett H, Jones R, Keating G, Woodward A, Hales S, Metcalfe S. Health and equity impacts of climate change in Aotearoa-New Zealand, and health gains from climate action. Migration. 2014;3:12-6. Available from: http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2014/vol-127-no-1406/6366

be a particular focus on separately ensuring that the options proposed do not undermine the government's obligations under Te Tiriti o Waitangi, that impacts and co-benefits are considered broadly across aspects of Hauora Māori, that iwi are compensated for impacts on the value of Treaty claims, and that impacts are turned into opportunities for iwi and Māori communities. This could be done by also including impact on Māori as a high level criteria, instead of a sub-criteria assessment 'where relevant'. Our position is that Te Tiriti o Waitangi is always relevant when discussing policy, including energy strategy, in New Zealand.

The issue of equity and justice is central to a renewable energy transition. We commend the consideration of a Just Transitions approach within EIHI industry, though we would call for greater transparency on how this process will work. We also acclaim the inclusion of energy affordability as a sub-criterion for assessing options for electricity generation and infrastructure, and the encouragement of community-led projects. This will have co-benefits for community wellbeing, and support vulnerable groups such as low-income households. However, there should be greater consideration of the impact of different approaches on rural communities and rural resilience, particularly for hapū.

While we would support many options proposed, we would particularly urge the Government to consider supporting further developments in wind and solar technology. These are already widely used and promoted in the OECD, and the Government should consider specific incentive policies to increase the uptake of diverse renewable energy technologies and policies that incentivise the development of new renewable technology in New Zealand. This would enhance New Zealand's economy through innovation in this area.

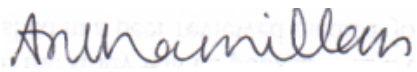
In summary, we support the development of renewable energy in New Zealand, as outlined by this discussion paper. However, when comparing options, we would propose a greater focus on the impact of these options on 1) health, 2) Māori communities, and 3) rural communities. This can be done by including these as compulsory criteria in the evaluation of these options. Options in solar and wind energy should be specifically considered.

Correspondence regarding this submission should be addressed to:

Dr Alexandra Macmillan
Privacy of natural persons

We would like to speak to this submission at a hearing.

Yours sincerely,



**Co-convenor, OraTaiao: NZ Climate and Health, Inc.**