Canterbury
District Health Board
Te Poari Hauora ō Waitaha

Submission on Discussion Document: Accelerating renewable energy and energy efficiency

To: Ministry of Business, Innovation and Employment (MBIE)

Submitter: Canterbury District Health Board

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Proposal: The discussion document on Accelerating renewable energy and energy efficiency intends to achieve the government's goal to transform Aotearoa New Zealand's economy into a more productive, sustainable and inclusive economy. The document is intended as a guiding document to meet Aotearoa's reduction target of a net zero carbon economy by 2050, a 2030 according to the countries commitments made under the Paris Agreement. The proposals and options in this paper build on and support other key commitments, including Aotearoa's response to the Productivity Commission's Low Emissions Economy report, and the Interim Climate Change Committee's Accelerated Electrification report.

SUBMISSION ON DISCUSSION DOCUMENT: ACCELERATING RENEWABLE ENERGY AND ENERGY EFFICIENCY

Details of submitter

1. Canterbury District Health Board (CDHB).

2. The submitter is responsible for promoting the reduction of adverse environmental effects on the health of people and communities and to improve, promote and protect their health pursuant to the New Zealand Public Health and Disability Act 2000 and the Health Act 1956. These statutory obligations are the responsibility of the Ministry of Health and, in the Canterbury District, are carried out under contract by Community and Public Health under Crown funding agreements on behalf of the Canterbury District Health Board.

3. The Ministry of Health requires the submitter to reduce potential health risks by such means as submissions to ensure the public health significance of potential adverse effects are adequately considered during policy development.

General comments

4. We welcome the opportunity to comment on the Discussion Document: Accelerating renewable energy and energy efficiency. The future health of our populations is not just reliant on health care services, but on a responsive environment where all sectors work collaboratively.

5. While health care services are an important determinant of health, health is also influenced by a wide range of factors beyond the health sector. These influences can be described as the conditions in which people are born, grow, live, work and age, and are impacted by environmental, social and behavioural factors. They are often referred to as the 'social determinants of health[1].

6. The most effective way to improve health and maximise people's wellbeing is to take these factors into account as early as possible during decision making and strategy development.

[1] *Public Health Advisory Committee. 2004. The Health of People and Communities. A Way Forward: Public Policy and the Economic Determinants of Health. Public Health Advisory Committee: Wellington.*

Overarching comments

7. Human health and wellbeing are intrinsically linked to the state of our environment. The Canterbury DHB has previously submitted on the Carbon Zero bill which we strongly supported. The Canterbury DHB also strongly supports the overall intention of the government to accelerate energy efficiency and the development of renewable energy.

8. We agree that greater energy efficiency will be critical to meeting our climate goals and will have co-benefits by supporting economic prosperity. (p. 9) we also note that as a general principle renewable energy is 'cleaner' than fossil fuel energy sources and has significant health benefits for our populations by improving air quality and by reducing carbon emissions. (MacNaughton, et al. 2018)

9. We note that the 2019 Renewable Energy Strategy has a focus area on the 'Just transition'. The Canterbury DHB supports this focus and recommends that any projects arising from this policy include an early equity assessment to ensure that the benefits of any such project are proportionately achieved by those who most need them.

10. Application of tools such as the "Health Equity Assessment Tool" (HEAT tool) (Signal, et al. 2008) are a practical example of frameworks that ensure equity issues are considered. In Aotearoa such guides need to be more widely used across, and in collaboration with, different sectors that impact on population health and wellbeing.

Pertaining to Question Series #1:

11. The Canterbury DHB supports the effectiveness of the short-term opportunities outlined on p.15 to reduce emissions from process heat. We note however that such opportunities generally require significant capital expenditure. The funding of building projects in the health sector have not always enabled such opportunities to be taken advantage off.

12. Current funding for public building projects prioritises Capital expenditure (CAPEX) over Operating expenditure (OPEX). which can lead to omission of Energy Management Opportunities (EMO's) from new builds and re-builds. CDHB recommends that the environmental sustainability and other health promoting

aspects of public buildings be adequately funded by central government for the benefit of current and future generations' health and wellbeing.

13. Sustainable design should focus on the CAPEX *and* the required OPEX. While CAPEX in environmentally sustainable options can be slightly higher than Business as Usual approaches, as a general rule, lower OPEX is where the value in sustainable energy options lie. Critical reflection on the case study cited in Northland Hospital (p. 124) supports this.

14. In principle the Canterbury DHB agrees with the proposal for Corporate Energy Transition Plans and the suggested benefits of such plans (p21).

15. Canterbury DHB has participated in the Toitū supported 'Carbon Emissions Measurement and reporting' (CEMARs) programme for six years now and has been able to demonstrate credible and significant emissions reductions through that programme.

16. Canterbury DHB achieved Gold status in the Toitū Energy-Mark programme which gave a staged approach to reach the equivalent of ISO 50001 (one of only two companies in Aotearoa to achieve this certification). Toitū are phasing this programme out currently due to lack of uptake.

17. As there are currently no accredited auditors that we are aware of in New Zealand, ISO 50001 certification will be difficult to achieve. To ensure implementation the Canterbury DHB recommends that the Government assist in providing ISO 50,001 auditors or encourage another organisation such as EMANZ/CEP to provide a similar system to EnergyMark.

18. The staffing costs of implementing Corporate Energy Transition Plans are significant. The Canterbury DHB recommends that funding to adequately cover staffing and membership fees of program memberships are considered. Staffing and program participation in initiatives such as the programmes Toitū offers are important prerequisites to ensure implementation of Corporate Energy Transition Plans.

19. CDHB supports the proposal to conduct energy audits on a regular basis. Although energy audits can be expensive we believe the proposed audit timeframe of four

years is appropriate. Adequate funding to DHBs to undertake such audits will be required.

20. Regardless of the frequency of audits they will only be of benefit if subsequent findings and recommendations are acted on. Energy audits generally result in the following types of Energy Management Opportunities identified to give potential savings:

    a) Low cost, easily implemented changes into more energy efficient options. (Most often implemented within funding constraints)

    b) High cost, long pay back changes which are not practical or affordable under current funding arrangements for DHBs.

21. The cost of undertaking mandatory audits is difficult to justify unless there is adequate funding to capitalise on the audit recommendations. To ensure implementation, the Canterbury DHB recommends that mandatory audits need to produce SMART (Specific, Measurable, Attainable, Relevant, Time Based) recommendations that can be funded within existing DHB budgets or come with funding assistance.

22. To improve audit and energy management efficiency, the Canterbury DHB recommends that MBIE consider drafting a standard spreadsheet and adding it as a contract clause that requires different suppliers to supply data in this spreadsheet format. Such a spreadsheet would include all useful consumption and cost data such as network charges.

Pertaining to Question series #2:

23. The Canterbury DHB have been pioneers in the use of biomass and have been assured through studies that were carried out for the DHB in 2013 and 2017 (internal documents) that there is enough woody biomass available locally for Canterbury DHBs needs. We are concerned about MBIEs assessment, as published in this Discussion Document, that there is limited availability of woody biomass supply in Canterbury (p. 27-28). Canterbury DHB would appreciate the opportunity to assess this information.

24. In relation to quality planning rules applicable to wood energy (p. 29), Canterbury DHB highlights that air quality differs between centres in New Zealand, requiring management of discharges to the air be individualised. For this reason, Canterbury DHB recommends that there be a requirement to work with Councils and other relevant stakeholders such as Public Health Units to ensure the rules are applied appropriately are context specific and fit for purpose.

Pertaining to Question series #5:

25. Canterbury DHB is supportive of the Governments intent to create initiatives to grow bio-economy (p. 33). More efficient harvesting using, for example forest slash and bark, could help to meet demand and improve the landscape left behind. Currently these initiatives are uneconomic. For this reason the Canterbury DHB would recommend that the Government develop plans to incentivise this activity.

Pertaining to Option 4:

26. From a health promoting and environmental perspective Canterbury DHB supports a ban on new coal-fired boilers for low and medium temperature requirements. Such a ban would require Government investment as DHBs and other public sectors entities (such as schools) which currently utilise coal burners begin to move to new energy sources. Both for new builds or as old burners reach the end of their lives. We appreciate the consultation is led by MBIE and the focus is on investment (by Government) into the private sector but we feel this should be expanded to include the public sector. As noted in a recent paper by Ernest and Young (New Zealand Infrastructure Commission, 2020) "*The New Zealand public sector, construction industry and infrastructure community need to collectively 'Lift our gaze' and view infrastructure as not only an enabler of economic growth, but as a catalyst for delivering a package of social, economic, and environmental benefits*." This requires ongoing investment and the right incentives and drivers for all projects. Central government leadership is necessary to enable public sector entities to transition to clean energy.

Pertaining to Question 5.5:

27. In relation to Q5.5 (p. 47), the Canterbury DHB recommends that the MBIE, and government as a whole, incentivise the use of green building approaches such as the Green Star building system in both public and private projects. This will improve energy sustainability and benefit public health. As with corporate energy transmission plans and energy audits the green star system ensures that specified 'green' building components are actually delivered in the project and the use of the project (energy is assessed at one year post-occupancy). Central government leadership and support will be required to achieve this change as there are relatively small increases in capital spend required to build green compared to current practise. A bigger issue is likely to be the cultural change required in the building industry to deliver on these standards.

Pertaining to Part B: "Accelerating renewable electricity generation and infrastructure":

28. The Canterbury DHB strongly supports the inclusion of considering the health and environmental benefits and costs discussed in "How we are assessing options" (p. 54, 3. d.). In regard to Q7.(, the Canterbury DHB also recommends that "Security of supply" (p. 54, 5. b.), consider appropriate distribution of supply continuation in cases of unforeseen events such as natural disasters.

Pertaining to Question series #7:

29. The Canterbury DHB agrees with benchmarking standards (eg. National Environmental Standards [NES]) and information that is discussed in option 1.3 (p. 25). Canterbury DHB suggests that such standards be applicable beyond food processing and include DHBs and other public entities.

Pertaining to Question series #8:

30. Canterbury DHB agrees with the Option 8.2 that aims to *"encourage greater demand-side participation and develop the demand response Market"* (p.74-76). The Canterbury DHB have participated in Transpower's Demand Response [DR] (see (Transpower, 2020) for information) and Orion's (see (Orion, 2020) for information) control period demands by using diesel powered emergency generators in peak demand periods. Our rationale is that using diesel in this way

reduces the use of thermal generation in the North Island and postpones the required increase in infrastructure to meet peak demands. This combination has been financially beneficial for the Canterbury DHB utilising our existing energy plant and we believe provides an appropriate balance of financial and environmental concerns.

Conclusion

31. Canterbury DHB notes and supports the comment on p. 78 'energy investment does not occur even when it makes sense from a system efficiency point of view…there is a risk that we lock-in high cost, low efficiency infrastructure investments if we fail to incentivise and realise the potential of energy efficiency across the economy.' Central government leadership is required to reduce this risk in public sector projects.

32. We strongly support the intention of this policy proposal to improve energy efficiency by accelerating the development and use of renewable energy for both environmental and health rationales.

33. Thank you for the opportunity to submit on Discussion Document: Accelerating renewable energy and energy efficiency

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