Response to Open Letter to Stakeholders on emerging technologies Molly Melhuish, 04 568 4873, 027 230 5911, melhuish@xtra.co.nz 25 May 2018

Thank you for the opportunity to comment on your open letter of 9 May on Emerging Technologies. I consider EDBs to be key players in New Zealand's necessary move to reduce carbon emissions – this Government's "nuclear moment" - from the energy sector. The scope of your continuing work needs to incorporate this explicitly. Section 54Q should be amended to include carbon reduction – energy efficiency is no longer enough.

I agree with the statement in your IM Review Vol 3

the electricity distribution network has the potential to provide increasing value to consumers who remain connected to it by enabling the delivery of new or complementary services.

And I agree that the distribution network needs to become consumer centric – providing consumers with real choices – including third party transactions, self-generation – but adding to the list in section 26

and contracts with consumers to reduce demand during peak times, and especially during notified critical-peak times.

The document's section 53 on efficient investment incentives is crucial, especially the fact that benefits are often split along the value chain. The benefits of investments related to smart grids, demand side management and energy efficiency typically accrue over the long term. This is especially the case for energy efficiency.

Your open letter does not mention asset management plans as an essential part of stakeholder engagement. It should. I submitted the following to the Electricity Authority's consultation on mass-market participation in the electricity market:

To enable mass participation, distributors should publicise their asset management plans detailing which of their planned expenditures could be deferred through demand management – a "statement of opportunities" for consumers to invest or change behaviour. As the consultation document says, there's about \$750m per year at stake – a huge opportunity for alternatives to network assets.

The obvious challenge is the need to bundle network prices into the retail bill. The other "challenge" is any corporate strategy that values the asset base for its financial benefit to shareholders, rather than as part of an evolving infrastructure built to serve consumers. "Competition", (or better, coordination) of energy efficiency and alternative fuels with centralised supply has the potential of maintaining profitability and consumer confidence, so long as asset management is aimed at financial and physical sustainability, not [pure] profit maximisation.

... The most important forms of active mass participation in New Zealand's electricity market are those that reduce demand at times that supply is most costly – winter peaks, and dry years. Residential consumers can do much to reduce those

demands when the cost savings are greatest. . . . A critical peak pricing option would be the single most important way for mass-market consumers to opt to reduce costs on the power system for a lower power bill. This should be a priority for the Authority to enable and encourage.

The European Union Directive of November 2016 expresses the European emphasis on climate policy – a contrast to New Zealand's previous government's emphasis on renewable electricity. The EU directive has been concisely summarised as follows¹ –

Efficiency, including energy efficiency and demand response, are fundamental to the cost-effective transition to a decarbonised, reliable energy system. . . .

"Efficiency First" is a guiding principle for energy policy that would require delivery of energy savings and demand response among end-use customers whenever these resources are less costly or more valuable than supply-side alternatives. It begins with use of a systematic procedure to assess the potential for energy savings and demand response as the first step in energy planning, investment, regulation, and market design. Policies, investments, and practical measures that increase energy savings and demand response among end-use customers must be prioritised wherever they are found to deliver higher net benefits than investments in networks or supply alone. [my emphases]

This process is as relevant to New Zealand as it is to Europe. It is the systematic procedure that is needed to make EDB asset management plans (AMPs) contestable by consumers.

For New Zealand, what else is needed is genuine representation of domestic consumers in all relevant regulatory procedures. Note that all consumer representatives in the Authority's advisory groups have been lost (through re-jigging of the groups) or quit.

¹ http://www.raponline.org/wp-content/uploads/2017/11/rap-openexp-eb-ys-efficiency-first-energy-union-2017-nov-20.pdf