To: Mayor Rachel Reese, Nelson City Council

14th February 2018

Dear Mayor

## Climate change and the Long Term Plan

In the wake of recent coastal storm damage, it is surely now clear that councils need to take account of climate change in their planning, especially as it relates to sea-level rise and the frequency of severe storms. A recently-published study\* shows that the pace of sea-level rise is increasing.

The professional engineers' NGO, *Engineers for Social Responsibility*, have been publishing information papers on aspects of climate change for the last five years (see <a href="www.esr.org.nz">www.esr.org.nz</a>). The papers cover topics such as sea-level rise, and are designed to be easily read, but with comprehensive references. All papers are subject to peer review. Printed copies of the first nine papers were sent to all MPs, mayors and council CEOs, as well as to the larger secondary schools. Many councils are now aware of the issues, and are taking action.

All of our councils need to ensure that the latest data on sea level, storm surge, and storm frequency, for example, are built into their Long Term Plans. Decisions need to be taken about how close to the coastline settlement and infrastructure can be supported. Over time, we need to think about moving inland. There needs to be a managed retreat to higher ground. Clearly this is a huge and expensive task, and will be painful for many. Nobody wants to hear that their house is too close to the shore to be supported, or insured. People rely on increasingly vulnerable coastal roads, and won't want to face their inevitable closure. We must deal with the facts, though. Even if we succeed in the planned reduction of carbon emissions, there is still enough inertia in the global climate system to ensure that we face years of sea-level rise and fierce storms. It's essential that local authorities know the facts, and plan accordingly.

We urge ratepayers to support councils in this difficult task. We also think central government should provide more support to councils struggling with coastal issues. In our view, we also need to focus on community-building. We need to understand that we are all in this together, and we need to work together to deal with the enormous problems we face from climate change. We already have the information we need. Given appropriate long-term planning, and with strong communities, we can deal with these very large issues.

Yours sincerely

Professor Thomas Neitzert President, Engineers for Social Responsibility Inc. www.esr.org.nz

\* https://www.theguardian.com/environment/2018/feb/13/melting-ice-sheets-are-hastening-sea-level-rise-satellite-data-confirms?CMP=share\_btn\_link