



# SUBMISSION ON THE CLIMATE CHANGE RESPONSE (ZERO CARBON) BILL 2019

Engineering New Zealand (formerly IPENZ) is New Zealand's peak professional body for engineers. We are New Zealand's strongest and most influential voice on engineering issues. Our membership is growing, with more than 23,000 members who want to help shape the public policy agenda.

## WE WELCOME THE BILL AND COMMISSION

Engineers work at the heart of all New Zealand's infrastructure, processes and systems. Our response to the massive challenges of climate change comes from our experience designing practical, innovative solutions and helping bring these solutions to life in partnership with our clients, communities and policy makers.

As we say in our publication *Engineering a Better New Zealand: Cleaner Energy*, our engineers now need to design tomorrow's low-emission energy systems for a future where sources of supply and demand are driven by technologies we can barely imagine.

We welcome the introduction of the Bill and strongly support the establishment of an independent, expert-led Climate Change Commission, which must be politically neutral and given a clear mandate and guidelines. This must also be reflected in the Commission's membership, with members being selected for their technical competence as well as political neutrality. In our view, it is critical that an engineer be appointed to the Commission.

## TARGET SETTING

As stated in our submission on the "Our Climate, Your Say" discussion document last year, we support the objective of net zero long-lived gases and reduced short-lived gases by 2050. However, we are thoughtful about the basis on which targets are set.

Engineers want targets that are realistic and achievable from an engineering perspective. We know that the engineering perspective is not the only perspective that needs to be taken into account – you'll be considering the economic, social and environmental perspectives too, informed by the work of other agencies, in particular the Climate Change Commission.

In our view, targets need to be based on science and bioengineering potentials. For example, we note that the biogenic methane targets in the Bill do not reflect the recommendations of the Parliamentary Commissioner for the Environment, no number for methane was included in the RIS, and we have just received the report from the Interim Climate Change Commission on reducing agricultural emissions, which also needs to be carefully considered.

We agree with the Regulatory Impact Statement that “setting a quantified 2050 target in primary legislation would provide the greatest domestic signal and certainty”. We suggest that within the context of a net zero carbon 2050 overarching target, all other specific targets and emissions budgets be set by the Climate Change Commission. As well as being represented on the Commission, engineers need to be part of the conversation with the Climate Change Commission to ensure we are setting realistic specific targets, budgets and timeframes.

We believe that the Bill needs to include specific provisions for the Climate Change Commission’s responsibility for laying out the pathway to achieve the required 2050 target. Furthermore, the Commission should be required by legislation to review and report on progress in respect of the pathway and targets to both Parliament and the public on a regular basis, outlining at the same time new technologies or mitigation strategies as they become available. This is consistent with a science- and technology-led approach, allowing flexibility over time as innovation develops. It would also be consistent with the advice in the Regulatory Impact Statement for an Advisory-plus Climate Change Commission.

## **RISK ASSESSMENT, MITIGATION AND ADAPTATION**

We welcome a National Climate Change Risk Assessment and National Adaptation Plan mandated in primary legislation with regular review.

We suggest that a Climate Change Commission is best focused on mitigation, noting that infrastructure being built today will be coping with, and managing the risks of, the climate that exists in 2050. It is important that the proposed Commission focuses on the reduction of emissions and does not become subsumed by the considerable societal challenges of adapting to the impacts of climate change, although the Commission does need to inform the public of the consequences as it sees them, to allow a designed balance between mitigation and adaptation.

There is inevitably a considerable overlap with the work of multiple agencies in defining appropriate adaptation strategies for the impacts of climate change. Informed co-ordination across these agencies will achieve stronger results and provide better risk management.

We suggest that a National Climate Change Risk Assessment is a function of a Climate Change Commission based on its assessed pathway and progress towards the goals it sets, but that the Adaptation Action Plan should rest with existing Ministries, led by the Ministry for the Environment, with responsibility for facilitating communication across the relevant agencies.

## WRAP UP

Overall, we welcome these proposals. Transforming into a low-emissions economy requires our industries to innovate within a framework of consistent emissions prices and budgets. An effective and authoritative expert-led Climate Change Commission is necessary for that transformation to be engineered in a knowledgeable and coordinated way for the benefit of all New Zealanders.

Your sincerely

A handwritten signature in black ink, appearing to read 'Susan Freeman-Greene', with a stylized flourish at the end.

**Susan Freeman-Greene**  
Chief Executive