CLIMATE CHANGE. Practice guidance for engineers

ENGINEERING CLIMATE ACTION

NOVEMBER 2021.



Position statement

Our Climate Change Position Statement outlines Engineering New Zealand's policy on climate change.

Our position, in short, is that anthropogenic (human-induced) climate change is a reality. There is overwhelming scientific evidence on the existence, cause, and physical impacts of anthropogenic climate change. Engineering professionals have a vital role and responsibility in mitigating, transitioning, and adapting to climate change. Engineering New Zealand will be proactive in providing leadership, collaboration, and support to members and the wider profession.

Preliminary guidelines

Engineering New Zealand is committed to supporting its members, and the engineering profession, to develop the solutions society needs to better face into the climate crisis. Engineers have a responsibility to proactively develop, adopt and implement technologies and systems that are sustainable and that support the transition to net zero emissions.

Our Code of Ethical Conduct requires our members, in the course of their engineering activities, to have regard to reasonably foreseeable effects on the environment from these activities and to have regard to the need for sustainable management of the environment.

We acknowledge, with the extensive information available on this topic, it can be difficult to determine what next steps to take. These preliminary guidelines have been developed to provide guidance on how engineers may meet their ethical obligations in their day-today practice of engineering.

Engineers should:

Learn – maintain and continuously improve their awareness and understanding of climate change issues related to their field of practice.

Engage – use the expertise of others to address climate change issues and to enhance their understanding and improve their practices.

Educate – proactively educate clients, the public, and future generations on opportunities for the mitigation of emissions, transition to net zero emissions, and adaptation to the impacts of climate change.

Plan – consider the impacts of climate change over the entire life cycle of their designs and projects. This should include risk analysis and advice on the likely impacts of the changing climate on their design and projects.

Transition – develop, adopt, and implement technologies and systems that are sustainable and support the transition to net zero emissions.

Advocate – prioritise and champion the use of sustainable solutions and approaches, whether through the adoption of innovative technology or the re-engineering of processes and systems.

Listen – be informed and guided by Te Tiriti o Waitangi and te ao Māori.

Support – recognise that existing inequalities will be exacerbated by climate change and aim for solutions that reduce inequity.

Through Engineering Climate Action, we will develop further guidance for engineers to support positive action to address climate change mitigation, transition and adaptation.