

10 January 2018

Hon Dr Megan Woods Minister of Energy and Resources Private Bag 18888 Parliament Buildings WELLINGTON 6160

By email: megan.woods@parliament.govt.nz

Tena koe Dr Woods

Congratulations on your new roles as Minister of Energy and Resources, Greater Christchurch Regeneration, Research, Science and Innovation, and Minister Responsible for Earthquake Commission.

We are New Zealand's professional body for engineers, with more than 20,000 members - and New Zealand's strongest and most influential voice on engineering issues.

This letter tells you who we are and what we do, and introduces some of the key engineering-related issues we see facing Aotearoa New Zealand.

We are very keen to work with you, particularly on seismic resilience, sustainable energy and innovation, which are priorities for Engineering New Zealand.

### WE HAVE A NEW NAME: ENGINEERING NEW ZEALAND

You might remember us as IPENZ. On 1 October 2017, we changed our name to Engineering New Zealand. Our new name explains much more clearly who we are and what we stand for (the name "Institution of Professional Engineers New Zealand" remains our legal name).

We have undertaken a significant programme of transformation in the past two years. Our new name reflects our change in strategic direction, which is based on extensive feedback from our members. They want us to deliver greater credibility, recognition, influence and connection. It's our job to bring engineering to life.

#### OUR NEW MEMBERSHIP PATHWAY CATERS FOR MORE ENGINEERS

On 1 October, we also launched a new Membership Pathway. This Pathway creates a professional home for engineers from all disciplines at all stages of their careers. It creates a place for senior managers, engineering geologists, academics, technicians and technologists, as well as engineering professionals from rapidly growing fields like robotics and software engineering.

The new Pathway strengthens members' credibility by requiring them to commit every year to our Code of Ethical Conduct and to carry out on-going professional development. It also provides a framework to guide the development of young engineers in the first years of their career.

## WE'RE SPEAKING UP FOR ENGINEERING PROFESSIONALS

#### Making expert voices heard

We have developed a list of experts from our technical groups who can provide media comment. Our technical experts are always available to answer any technical question you might need advice on.

# Taking a stand on engineering issues that matter to New Zealanders

We've asked our members what they see as the key issues facing New Zealand that an engineering perspective is important on. We're now working with a range of stakeholders to develop a report framing these issues, recommending how they can be addressed from an engineering perspective. This will be a high impact, accessible piece of thought leadership, focused on topical issues including seismic resilience and clean energy.

#### Seismic resilience

There have been some hard lessons learnt from the Canterbury and Kaikōura earthquakes, in terms of preventable death and injury, and enabling faster recovery. We are working to make sure these lessons are reinforced by legislation and professional engineering practice. We know that further progress can be made and this is a priority for us.

## Clean energy

Our engineers will lead the design and implementation of the innovative solutions required to make New Zealand a global leader in carbon neutral energy. Engineers are integral to our transformation to 100 percent renewable electricity by 2035. For example, increasing geothermal production and battery storage to reliably replace coal and gas to meet peak demand. Engineers will be working in and with New Zealand businesses and farmers to shift towards greater use of renewables in production processes and supply chains. Smart transport solutions depend upon the practical application of science by engineers.

We'll keep you updated and are interested in hearing your thoughts as to where we can best focus our collective efforts.

## WE'RE WORKING TO CHANGE THE FACE OF ENGINEERING

With the current shortage of engineers, it's crucial to grow our pipeline. It's also crucial that engineers better represent and reflect the diverse New Zealand that they serve.

### The Diversity [A]gender

We have joined forces with the New Zealand Institute of Architects and the Association of Consulting Engineers to create a programme called The Diversity [A]gender to increase the number of women in our respective professions, which we will launch next year. It includes a target, a code, resources and a public campaign. We are currently recruiting champions.

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# Attracting children and young people

We coordinate the interactive industry initiative "Week of Engineering", which this year saw more than 5000 people through our one-day public expos in Wellington, Auckland and Christchurch, and more than 700 students visiting engineering firms.

Our Futureintech programme, which we are currently overhauling, connects young professionals as STEM Ambassadors with schools. Futureintech is funded by Callaghan Innovation and seeks to inspire young New Zealanders to explore careers in science, technology and engineering. We also reward talent through our Student Innovator of the Year and Young Engineer of the Year awards.

### WE LOOK FORWARD TO MEETING YOU

Thank you for this opportunity to outline our work. We would very much like to meet in person to discuss how to promote seismic resilience, sustainable energy and innovation as well as anything else that may be helpful, including how we can best support you in your role.

Na māua noa, na

Craig Price President Susan Freeman-Greene Chief Executive

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