WORK WITH US TO ACHIEVE THE GOVERNMENT GOAL OF INCREASING ENGINEERING GRADUATES BY 500+ PER ANNUM

IN THIS ISSUE ... More on Make the World, the nationwide campaign promoting engineering as a subject and a career, and a call for applications for funding for Secondary-Tertiary Pathways projects

FROM THE CHAIR ... This newsletter highlights that the Engineering E2E programme is now at a point where we're able to take some very practical actions. I'm looking forward to the roll-out of the public awareness campaign next month, the establishment of Secondary-Tertiary Pathways projects and the exploration of on-the-job delivery of the BEngTech.

These and a number of other initiatives will get underway this year and I encourage you to get involved. The 'Make the World' campaign has the potential to make a real difference, but for it to gain traction and be lastingly effective, we need active support from all of our stakeholders.

If you have any ideas, want to know how you can get involved or simply want to find out more, we urge you to contact us at engineeringe2e@tec.govt.nz

I've mentioned the role of the Engineering E2E Steering Group in previous issues of this newsletter. The members have each made an important contribution to our work. This month Kevin Palfreyman, Liaison Manager, Research, Science, Technology & Development, at Fonterra Co-operative Group, has resigned from the Steering Group as he now has a new role at Fonterra. I'd like to thank Kevin very much for the commitment and energy he's shown over the past 20 months. Kevin has brought a useful industry perspective to the table and has made a particular contribution to our diversity work stream. I wish him all the very best in his new role.

Two members of the Engineering E2E Steering Group were honoured by IPENZ last week and I'd like to take this opportunity to congratulate them. Richard Muggleston, Senior Bid Manager, Infrastructure, Fletchers was made a Fellow of IPENZ and Michael Pervan, General Manager, Altitude Aerospace was presented with the John Cranko Award for technical excellence and innovation in the engineering field of mechanical and manufacturing.

#### SIR NEVILLE JORDAN

Chair, Engineering E2E Steering Group

Initiatives undertaken through the Engineering E2E programme contribute directly to the achievement of the Government's Business Growth Agenda priority of building a more productive and competitive economy.



# Time to 'walk the walk'

After over a year of stakeholder consultation, research, planning and pilots, 2016 is the year to focus on practical activities, and for active stakeholder engagement.

On 1 May, Engineering E2e will publically launch 'Make the World' – a nationwide advertising campaign to increase public awareness of engineering and promote the area as a study and career option. We are also offering funding for secondary tertiary pathways projects and will be piloting on-the-job delivery of the BEngTech.

"We have done the research, the planning and the pilots, and the pathway forward could not be clearer," says Sir Neville Jordan. "The time for talking is never over, but now is the time for us all to 'walk the walk'. Our Make the World campaign will create a great deal of awareness about engineering as a subject and career. ITPs and industry have a great opportunity to lever off this – the potential benefits for all of our stakeholders are enormous."

#### **PUBLIC AWARENESS CAMPAIGN**

An extensive \$2 million public awareness media campaign is in the late planning/early delivery stages. At its spearhead is the nationwide **Make the World** campaign, including advertising on television, in magazines and social media, radio, cinema and billboards in all ITP regions. The main launch will be consolidated to maximise reach in May, with subsequent 'flight' campaigns timed to coincide with Semester 1 recruitment in October/November and NCEA results in January 2016.

While the campaign will have a universal audience, it will also specifically target groups underrepresented in engineering employment: women, Māori and Pasifika.

The campaign will include video profiles of engineering graduates who break the mould of the typical engineer – interesting career stories that involve working on projects and products that aren't readily associated with engineering, and stories relating to their study – aspirations, goals, support networks etc.

Engineering E2E is calling on all stakeholders in the engineering industry/education sectors to make the campaign successful – we need to work together and help implement the various promotional activities:

- If you're an NZDE or BEngTech graduate with a good story to tell, we'd like to share it.
- Employers might hold open days/site visits for the public, or collaborate with other companies to run a local promotion. A good example of employer engagement is the recent Wellington pilot organised by engineers from four New Zealand companies. The initiative comprises three one-day sessions for 300 Year 11-13 students and a public open day is planned for August 2016.
- Educators could highlight the great things their NZDE/ BEngTech students are doing, to show the public and employers what's involved in these qualifications.

A Reference Group, with members from a range of engineering firms across the country, will provide feedback from an employer's point of view on upcoming activity.

#### **EDUCATIONAL DELIVERY**

## Secondary-Tertiary Pathways Project 2016

To increase enrolments in Level 6-7 engineering qualifications there is an urgent need to develop articulated pathways between secondary schools and tertiary education. Engineering E2E research over the past year has confirmed misalignment of school curricula, subject choice, and delivery between secondary and tertiary education in the 'engineering literacies'.

Engineering E2E's Secondary-Tertiary Pathways Project aims to smooth transitions in this area by providing funding for secondary schools and teriary education organisations to work collaboratively to deliver sustainable secondary-level programmes designed to successfully prepare and pathway students into tertiary engineering study.



## **FEATURED CASE STUDY**

## WHY EMPLOY BEngTech GRADUATES?

Almost 50% of the engineering staff of leading
Australasian engineering and design consultants
Harrison Grierson are Bachelor of Engineering Technology
(BEngTech) graduates.

Why? "Because they are good at technical design," explains Managing Director Glen Cornelius. "We need strong technical people with the capacity to undertake the problem-solving required in our technical designs."

Read more at: www.engineeringe2e.org.nz/Employers/ Case\_study.cfm?ID=43

Applications are invited for partnerships between secondary schools and tertiary providers. Partnerships must involve one or more tertiary provider(s) approved to deliver TEC-funded, quality assured engineering qualifications at Levels 6 and 7 on the NZQF, and one or more secondary school(s).

Applications close early May, and funding allocations will be approved by 1 July 2016. More information will be posted on the TEC and the Engineering E2E websites.

Some examples of projects in this area can be found at **engineeringeze.org.nz/Education**.

### On-the-job delivery of the BEngTech

The TEC-sponsored research Stepping into One Another's World: Apprenticeships – Transforming Engineering Technologist Education in New Zealand identified a global resurgence of apprenticeships as a means for delivering higher education, and recommended industry involvement in education by the mixing of academic with practical learning through sponsored degrees. A pilot programme to provide on-the-job delivery of the BEngTech is under development this year.

#### FIND OUT MORE...

Check out the Our Progress section on the Engineering
 E2E website: engineeringe2e.org.nz/Progress