

IN THIS ISSUE ...

We catch up on the regional launch events underway around the country, as well as take a closer look at some of the activity that's been happening in each of the programme's work streams, before briefly introducing you to the Engineering E2E Steering Group who are charged with ensuring we meet our goal of 500 additional engineering graduates in 2017.

Thanks again for all the support so far. If we keep working together, we can help raise the profile of engineering as a major contributor to New Zealand's social and economic development and a challenging, fulfilling choice of career.

Neville Jordan

Chair, Engineering E2E Steering Group

E2E STEERING GROUP

The Engineering E2E Steering Group provides guidance and support to the programme and comprises representatives from across the engineering field.

GRADY CAMERON, CE, Delta Utilities

LINDSAY CROSSEN,

Chairman, Board of Engineering Diplomas

DR RICK EDE, CE, Unitec

MARK FLOWERS, CE, Wintec

KAY GILES, CE, Christchurch Polytechnic Institute of Technology

TONY GRAY, CE, Nelson Marlborough Institute of Technology

PROFESSOR MARGARET HYLAND

Deputy Dean of Engineering
University of Auckland

MURRAY JOHNSON, TEC

NEVILLE JORDAN

Endeavour Capital (Chairperson)

MAX KERR, Metro Group

RICHARD MUGGLESTON, Senior Bid Manager

The Fletcher Construction Company Ltd

CARRIE MURDOCH, Manager - Education,
Skills & Trade, Business NZ

KEVIN PALFREYMAN, External Relationships
Liaison Manager, Fonterra

MICHAEL PERVAN

Managing Director, Altitude Aerospace

CRAIG PRICE

Regional Manager – South Island, Beca

ANTHONY WILSON

Chief Asset Officer, Wellington City Council

For more information and biographies on each of the Steering Group members, visit www.engineeringe2e.org.nz

Engineering E2E launch events

Over the last few weeks the Engineering E2E team worked with the institutes of technology and polytechnics around the country. Together we are hosting a number of events to help bring engineering and technology employers, educators, and other stakeholders together.

The aim is to launch the Engineering E2E programme and gain support from key stakeholders across the sector, to help promote a more accurate view of engineering and a better understanding of the exceptional range of exciting career opportunities they offer.

Through these events, people from all aspects of the engineering spectrum can come together, identify issues and look at how we can tackle them collectively. We know what the barriers are; now we need to work together across employers, educators, and other agencies to address them.

The first events were held in Wellington on 22 July and hosted by Fraser Engineering and BECA. The next event took place on 27 August in Hamilton and was hosted by Longveld. Similar events will follow in other regions.

“The launch events provided a great starting point for the programme and we were pleasantly surprised by the amount of business support,” says Mark Flowers, Chief Executive of Wintec (Waikato Institute of Technology), who is on the Engineering E2E Steering Group and spoke at these events. “There wasn’t a long lead-up and we didn’t have a lot of time to spread the word but it didn’t seem to matter. I think that’s because everyone gets it – this is an issue we all need to tackle together.”

“Engineers are critical to our future and New Zealand doesn’t have enough of them. That affects everyone and we need to up our game in how we tackle this. It will take time and we need everyone on board - there’s no quick fix and it’s not something that can just be resolved by schools, employers or tertiary providers working alone. We need a multifaceted approach.”

“That was something that perhaps registered with employers in a new way at the launches,” Mark adds. “Typically, and quite naturally, employers’ main focus is on running their business. But if we don’t tackle the shortage of engineers together, it will affect their operations as well. Being able to employ quality



From left: Kay Giles, CPIT, Rick Ede, Unitec, Linda Sissons, Weltec

engineers is critical in fields where your competitive edge relies on creative, innovative problem-solving.”

“There isn’t just one simple solution to this – if there was, it would have been found already! We need to understand the barriers and work together over a number of years to overcome them. Engineering and technology have so much to offer – not only to the country and the economy, but also the individual. It can be incredibly fulfilling.”

There are also some really fascinating questions on the table for discussion. As Mark explains, “People generally have very narrow perceptions of what we mean by engineering. If they understand engineering at all, most people only focus on mechanical and civil engineering. But this is as much about the newer fields and emerging disciplines as the traditional areas – some of these we don’t even have a clear view of yet, but they will have a huge bearing on our future.”

What does engineering look like in an online and digital global environment? How much of New Zealand’s future lies in the traditional fields of engineering? These are some of the questions Mark and the team are considering. “Economic development is partly about ideas, partly about

science and technology, but mostly it’s about people. Our breakthroughs come from clever, innovative and entrepreneurial people. How do we create an environment that enables those people to flourish?”

From Mark’s perspective, the Engineering E2E initiative is a great cause that the engineering field seems keen to get behind. These launch events are an initial step to help get the word out, and there’s more to come, but the key thing now is to focus on the practical actions we can take together.

“It really is about supporting the future growth and innovation of New Zealand. It’s a bigger issue than just growing an education or career pipeline, although it includes that. It’s more than just jobs. It’s about asking where we see the future of engineering in New Zealand. There’s a world of possibility in that, but our first step is arresting the current shortage of engineers – we can’t create the future together without them!”

Keep an eye on the **Engineering E2E website** for information about future launch events in your region. And if you’re keen to host an event, drop us a line at engineeringe2e@tec.govt.nz.

Engineering E2E Programme activity updates

There are three key work streams: Promotion, Employers and Education

PROMOTION

Working with Futureintech, we have developed additional careers information and materials to support the Diploma and BEngTech pathways – see www.futureintech.org.nz/Engineering-Pathways.cfm.

We have published a number of articles raising awareness of the Engineering E2E programme that we are now circulating through the IPENZ and ACENZ networks.

We are also preparing to conduct further market research to shed more light on the reasons why students have not been drawn to engineering study in the past, and identify barriers to studying at ITPs. The findings will help guide our future approach to the promotion and delivery of engineering study.

And, our Engineering E2E website is now live! Check it out at www.engineinge2e.org.nz. We will use the site increasingly to keep you informed and updated.

EMPLOYERS

Science and Innovation Minister Steven Joyce launched the Engineering E2E programme at events in Wellington and Waikato (see above). Another is scheduled in Auckland next month. These events are primarily focused on engaging

industry and employers. We are also planning to meet with a number of organisations that represent engineering employers, including ACENZ, IPENZ and Business NZ, to identify, capture and share examples of good practice by employers. This might include work placements, scholarships, internships, working with ITPs and in schools.

If you are aware of any examples that might be worth highlighting, email us at engineeringe2e@tec.govt.nz.

MBIE and IPENZ are currently working to update the skills data that underpinned the NEEP report. This should be available over the next few weeks.

EDUCATION

This month saw the Educational Advisory Group’s first meeting. The Group will provide feedback to the next Steering Group meeting (25 September), on priorities in education and on the four potential initiatives we are considering:

- enhanced bridging programmes;
- a unified network of engineering provision;
- continued improvements in teaching quality and learning experience; and
- the possibility of advanced apprenticeships.

We will keep you informed as this work stream progresses.

IF YOU HAVE ANY ENQUIRIES, PLEASE CONTACT US: ENGINEERING E2E PROGRAMME TEAM

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