

## Where to from here? Science and innovation in Australia

### **Australia is at a crossroads ...**

While the community is generally well-informed about the benefits of science and R&D, new science and technologies such as genetically modified food, nanotechnology, cloning, fertility treatments and nuclear power bring with them challenging ethical, social, political and environmental issues. Genuine trust in science and scientists will only be maintained if the community is involved in informed and rational debate with scientists and government to address the critical issues that come with the myriad of emerging technologies.

Faltering community trust in scientists and the trend toward “politicisation” of science have not-unexpectedly impacted morale in the science workforce. Science has also been marked by severe cuts, a growing exodus of talent to the new science hubs of China, India and South Korea, low levels of business investment in Australian science, a decline in the number of young people taking up STEM courses, and diminishing recognition, respect and reward for the work of professional scientists. The sustainability of Australian science in the longer term is in question.

As it stands, there is no central oversight of science policy in Australia. While the absence of a science minister could provide an opportunity to take account of the spread of science and technology across a broad range of policy domains, there’s also the risk that policy will become fragmented and lack strategic coherence. The balance between academia, industry, business, governments, etc. that holds our innovation system together is robust - but to expect the severe cuts currently being imposed across the sector not to seriously destabilise that system would be unrealistic. An informed coherent strategically-driven vision for science and innovation in Australia is needed.

Professionals Australia acknowledges the challenges in balancing fiscal responsibility and supporting science and R&D. This being said, we hold the firm view that our future as a science and innovation leader should be driven by strategy not finance. Suggesting that Australia simply cannot afford to spend more on science and innovation - and cutting funding without understanding the capabilities being lost - is short-termism and false economy at its worst.

Growing a science and technology workforce with the STEM and other capabilities needed to drive innovation, productivity improvement and global competitiveness over the next decade will require stable, strategic and sustainable investment and the development of world-class infrastructure to support it.

Now more than ever we need to position Australia for a future as a science and innovation leader.

### **Our key messages to political leaders are...**

- Properly funding science is central to the federal Government’s commitment to innovation as a key driver of economic growth and increasing our competitiveness in the global economy.
- Investment in science must be at the very least maintained for Australia to remain internationally competitive.
- Government needs to adopt a long-term strategic framework for science and the science workforce.
- Governments have a responsibility to act in the interests of the wider public in terms of safety, public health and the public interest. Budgeting and policy-making need to operate from a cost base which protects these values and recognises the importance of professional qualifications and professional standards.
- A sustainable and vibrant STEM workforce is essential to virtually every goal we have as a nation.