



EU-Australia Leadership Forum: Roundtable on Research and Innovation

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This panel sought to address three core questions:

1. How can research and innovation fit into larger picture of the EU-Australia partnership?
2. What do the EU and Australia already do together?
3. How do we strengthen this aspect of the EU-Australia relationship?

Background

Both the EU and Australia are recognised leaders in research and innovation. European and Australian institutions are known for their exceptional quality, as well as their prolific research outputs, which far outweigh their share relative to population. Both Australia and Europe see a great deal of value in collaborative research efforts and their universities have a long history of cooperation, both bilaterally and internationally. Australia currently has closest ties with the UK, followed by Germany, France and Italy. Both the EU and Australia would like to build on these relationships in order to strengthen their partnership moving forward.

Australia and the EU also face similar challenges in the field of research and innovation, identified below:

- Funding pressures
- Struggle to commercialise products and services based on research
- Australia has comparatively low rate of industry collaboration, although universities are seeking to strengthen these
- Not enough companies are currently involved with funding research
- Australia has weak venture capital markets

Funding Problems

Scientific progress cannot be made in the absence of adequate funding, and funding pressures have become an increasingly central concern for researchers worldwide, Australia and the EU included. In recent years, government-sponsored grant funding has become more difficult to secure in the face of budget cuts. Cultivating partnerships and collaborations between research and industry is a





paramount concern, both for the practical purposes of expanding the capital available to researchers, as well as for introducing innovations to the market. While Australia and the EU both produce high quality research, institutions in both Australia and Europe struggle to commercialise their innovations into marketable goods. Australia especially suffers from a disconnect between academia and industry. Australian universities have relatively weak direct ties to industry and few Australian companies fund research initiatives of their own.

EU-Australia Relationship

The importance of the Australia-EU relationship cannot be underscored enough. The EU provides Australia with vital access to markets, capital and talent pools, as well as extraordinary research products. Conversely, Australia, through its strong university and research systems, are on the vanguard of scientific innovation. The strong EU-Australia research relationship offers a symbiotic environment, in which extraordinary innovations, research products and ideas may be exchanged.

The EU's flagship programme for promoting research are the Framework Programmes (FP), now in their eighth round with FP8: Horizon 2020. Horizon 2020 offers over €80 billion in grants towards research and innovation over 7 years between 2014 and 2020, with the end of promoting research and innovation through a number of projects, both at home and abroad. Australia is currently an active participant in several Horizon 2020 programmes, including projects in the fields of biochemistry, health and energy. EU and Australia need to strengthen their research collaboration and the next, ninth EU framework programme (FP9) hopefully can address this.

Horizon 2020 provides an excellent building block for fostering collaboration, however even with these collaborations, there is room to expand Australia-EU research partnerships. One of the most effective ways to promote cooperation in the fields of research and innovation is university exchanges. Exchanging students, professors, researchers and others allows for the free flow of thoughts and ideas, permitting innovative and creative exchange.

Recommendations

One area of innovation that is left unaddressed by the Horizon 2020 initiative is that of defence. Defence projects are consistently on the cutting edge of innovation, in the past defence oriented projects have provided us with some of the most innovative cutting edge ideas ever produced. The current environment offers an excellent opportunity for Australian and European defence collaboration. Australia is already engaged with the EU through the Royal Australian Navy's shipbuilding programmes in France and Spain. Industry 4.0 is the most powerful programme seen in decades, however all parties must continue to push for new and innovative ideas. Technology has transformed the world, but at the end of the day, the difference is made by people.

Promoting links between research and industry, both in defence and other industries is a primary concern of this discussion, and as such, it was among the chief concerns raised when the panel went to discussion. Australia needs to find the resources to harness innovation, an issue which it could possibly address by following the European example over the past decade of looking at gaps and seeking out ways to address them by combining policy and innovation. A common theme in





contemporary research is to give too much thought to solutions, and not enough thought to questions. By considering the common problems Australia and the EU can and should work together to solve, researchers could work together towards returning to the root of innovation: informed inquiry.

By doing so, Australia and the EU could begin to take steps towards involving industry in the process of research and innovation from the very start. As government funding becomes increasingly more difficult to secure, cultivating links between research and industry will become vital for securing the future of innovation. Research is so often looked upon by industry as being 'too academic', in focusing on questions, and involving industry in this process, we can begin to bridge the gap between science and industry by offering industry a voice. Too often, researchers will have brilliant ideas, but industry will, for a variety of reasons, not want to invest. There are many approaches that can be taken to address this issue, however the first step is simply to get industry and science to start having active and productive dialogue about their relative needs, and the problems they can address by working together. If industry and academia are aligned around research topics, governments will hopefully find it easier to provide additional funding support for these topics.

But even as the EU and Australia begin to work towards improving the ties between science and industry, they should not let themselves forget the social responsibilities of science. Research and innovation have the potential to provide near limitless benefits to the public good. Research advancements almost invariably offer benefits to society as a whole, benefits which should be disseminated for the greater social good. But beyond these benefits offered by innovations in medicine and health, there is an economic boon extended by successful efforts to promote innovation. Social mobility and equality can be linked to economic success, which in turn relates to the new products and ideas produced by science and innovation.

