



Ai GROUP SUBMISSION

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Boosting the Commercial Returns from Research

 AUSTRALIAN INDUSTRY GROUP

About Australian Industry Group

The Australian Industry Group (Ai Group) is a peak industry association in Australia which along with its affiliates represents the interests of more than 60,000 businesses in an expanding range of sectors including: manufacturing; engineering; construction; automotive; food; transport; information technology; telecommunications; call centres; labour hire; printing; defence; mining equipment and supplies; airlines; and other industries. The businesses which we represent employ more than 1 million people. Ai Group members operate small, medium and large businesses across a range of industries. Ai Group is closely affiliated with more than 50 other employer groups in Australia alone and directly manages a number of those organisations.

Introduction

Key points

1. Boosting the commercial returns from research will require leadership, ownership and investment of time and money by industry and the research sector.
2. Action is needed across the entire innovation system, and needs to be integrated into all aspects of government policy, if we are to realise greater value from our investments in research.
3. National research priorities need to be clearly articulated and there needs to be bipartisan support and a strategic long-term view to pursuing and implementing these priorities.
4. Australia's innovation system needs to:
 - a. incentivise investment in innovation and encourage intellectual property (IP) and its flow on benefits to stay, and create jobs and wealth, in Australia;
 - b. facilitate networking opportunities;
 - c. develop and acquire human capital and skills; and
 - d. provide support for institutions and organisations that generate and disseminate knowledge.
5. Multiple channels will be needed to encourage collaboration between researchers and businesses of different sizes across the range of industries that exist in Australia.
6. The role of intermediaries in facilitating this collaboration should be given greater consideration.
7. Governments and public sector research organisations should also give greater consideration of the Australian Academy of Technological Sciences and Engineering (ATSE) proposal to develop an 'impact and engagement for Australia' metric that would sit alongside the Excellence in Research for Australia (ERA) assessment currently used to allocate funding to publicly funded research organisations.
8. There must be an ongoing focus on boosting the technical and non-technical skills of Australia's workforce.
9. For this to happen Australia's leadership capability needs to be enhanced and organisational structures and systems evolved to incentivise innovation.
10. We recommend that the Federal Government offer a reduced tax rate on profits from IP, based on the UK 'patent box' model adapted to suit the Australia environment.

Ai Group welcomes the Government's discussion paper to seek consultation on options to support the translation of research into commercial outcomes ('translation'). Boosting the commercial returns from research is extremely important to ensure that we are leveraging our strengths in research, growing successful Australian businesses, and supporting productivity and export growth to secure our future.

The discussion paper points out Australia's poor performance at translation. There is no silver bullet that will address this problem; a multi-faceted approach is needed. Further, it is not a problem that can be resolved by government, industry or researchers working in isolation, but a problem that will only be addressed by the collective efforts of each of these groups working collaboratively.

Governments have an important role in creating an environment and culture that aids in translation. But governments can only do so much. Boosting the commercial returns from research will also require leadership, ownership and investment of time and money by industry and the research sector

Many processes contribute to the outcome of commercial success; greater success will result when the innovation system is thoughtfully designed to:

- incentivise investment in innovation;
- facilitate networking opportunities;
- develop and acquire human capital and skills; and
- provide support for institutions and organisations that generate and disseminate knowledge.

Ai Group agrees that research needs to be better targeted if more of it is to be translated. Feedback from our members indicates that, for a number of years, this translation process has been hampered by the uncertain and short-term nature of government innovation policy in Australia. National research priorities need to be clearly articulated and there needs to be bipartisan support and a strategic long-term view to pursuing and implementing these priorities.

The discussion paper rightly points out that collaboration, and especially collaboration between industry and researchers is more likely to lead to commercial success. A whole host of other factors also contribute to commercial success, including: the strength of Australia's research system and international research engagement; the skills and knowledge of Australia's workforce; our innovation culture; and the ease of access to enabling technologies and finance for innovation. None of these factors can be overlooked. Action is needed across the entire innovation system if we are to realise greater value from our investments in research. We need to build on the strengths we have and work on our weaknesses.

Collaboration: Its importance to the commercialisation of research outcomes

Ai Group has for many years highlighted the strong potential for closer engagement between industry and researchers. Collaboration helps organisations access ideas, information and capabilities well beyond what they could develop internally. Through collaboration organisations can utilise tacit knowledge and ‘learning by doing’ to embed unique advantages that cannot be traded and are difficult to replicate. This is increasingly important in today’s competitive environment where survival and growth depend on the speed with which businesses can acquire new skills and knowledge and apply them to satisfy customer needs.

This closer engagement is also important to our national economy. The success of individual businesses and sectors will help sustain economic growth and a rising standard of living in Australia. Accordingly, innovation and critical supporting factors like collaboration need to be at the heart of economic policies to promote growth and competitiveness.

The relationship between the public research sector and industry represents a two-way opportunity for the exchange of knowledge, ideas and capabilities. By gaining access to technical expertise and research facilities businesses will be better equipped to exploit ideas and opportunities as they arise. Equally, businesses can aid scientists and researchers in identifying and exploiting commercial applications for their knowledge and resources. This mutually beneficial relationship will become more central as government funding of public research is restructured to place greater emphasis on the importance of demonstrating commercial outcomes.

Barriers to greater collaboration

The discussion paper considers a number of barriers to greater collaboration on innovation. Discussions with sections of industry highlight that some progress has been made towards addressing some of these barriers in recent years. This includes negotiating the management of intellectual property (IP) and finding research partners. The levers of control for addressing many of these barriers lie primarily with the public research sector or government. For example, if research organisations are interested in enhancing collaboration with industry, they will need to be more aware of business culture and practices and the importance of meeting commercial timeframes. This is really a question of will; public sector research organisations have to be willing to change the way they operate to ensure a greater ability to meet the needs of industry. Businesses, in turn, need to make sure that their needs are realistic and clearly articulated so that researchers can respond to them. As a starting point this may be as simple as pointing out that they are looking for graduates with workplace experience and skills in specific areas.

There is no question that sections of the public research sector are willing to tackle these challenges and see value in collaborating with industry. The Government’s discussion paper makes it clear that additional progress is needed. There is a role for industry in communicating the need for and benefit of collaboration on innovation, and in seeking out or creating opportunities. Government, in making decisions about how it finances innovation and what activities it will fund, can play a greater role in incentivising desired behaviour change. Real progress will require changes to incentive structures at the policy level and within research organisations.

The problem of ‘will’ does not lie entirely with researchers. The discussion paper hints at a very serious problem in saying that, *“collaboration between Australian researchers and industry is inadequate and falls well short of international benchmarks”*. The problem is that very few businesses are currently seeking opportunities to collaborate with researchers. In fact, only about 50 per cent of Australian businesses are ‘innovation active’ – actively engaged in any innovative activity – and only three per cent of these businesses are sourcing ideas from public research organisations (eg 1.5% of all businesses). These statistics are unlikely to improve without greater recognition within industry of the importance of innovation and collaboration. Governments, researchers and industry associations need to more successfully demonstrate and communicate:

- the need for and benefit of innovation and collaboration; and
- the support that is available to industry to engage in innovation and to find research partners.

Individual businesses should play their part in generating change and ensuring that their internal culture and capabilities are conducive to being innovative.

Enhancing collaboration between industry and researchers

Given the importance of collaboration to boosting the commercial returns from research and the economic benefits that this will provide it is highly pertinent to consider how we can foster greater linkages between the research and industrial sectors.

Policies and initiatives to enhance collaboration need to ensure that:

- opportunities are created for businesses of different sizes and across the range of industries;
- there is flexibility in the structure of collaborative arrangements;
- opportunities are not denied to collaboration between Australian and overseas-based businesses and research organisations; and
- there is scope for collaboration on the full range of commercial needs including in relation to the development of new or refined goods and services; new or significantly improved ways of producing, distributing and marketing goods and services; and new approaches to doing business.

We note also that opportunities for both incremental innovation and more radical or disruptive innovation can be strengthened through greater business-research links.

In our experience the most successful collaborative research projects occur when all parties contribute to the design and implementation of the project and have the potential to benefit from the collaboration.

There also needs to be:

- effective communication between researchers and business participants;
- firm and effective governance and strong leadership to ensure projects maintain their focus on the (often evolving) requirements and interests of end users;
- dedicated and motivated researchers who maintain a steady involvement in the research; and
- clarity around IP issues from the outset.

Networking for the sake of networking, without a clearly identified purpose is rarely successful. Industry is also less likely to engage in a project if they haven't had a hand in its design or the benefits of them engaging in the project are not clearly spelt out.

Multiple channels of engagement are needed

Australia cannot afford to limit opportunities for greater cooperation between researchers and industry to specific sectors or businesses of a specific size. As such, we believe it is critical that governments provide multiple channels to enable collaboration between researchers and industry. This should occur even if channels aren't specific to the generation of commercial outcomes; for example, student internships in industry or industry engagement with public research institutes on education and skills issues. In our experience, the vast majority of collaborative arrangements between industry and public research organisations, no matter how small, will if successful result in ongoing collaboration invariably leading to collaboration on innovation. For this reason we recommend focusing on the collaboration and not the outcome to embed a culture of sharing knowledge, ideas and resources between industry and researchers.

Multiple channels for collaboration between researchers and industry, which are flexible in style and approach, are also needed to address different business needs in relation to innovation, and different barriers to collaboration. This should include, but may not be limited to:

- longer-term research projects that require significant financial investment and commitment and may extend beyond the timeframe of a CRC project;
- large collaborative projects, including CRC projects, which involve many partners across the industrial and public research sectors;
- opportunities for individual companies or research units to approach each other to collaborate on innovation; and
- small projects that companies can engage in with minimal investments in time and money.

Some thought should be given to project models that enable businesses and researchers to 'dip in and out' of collaborative arrangements according to their needs, interest and other commitments, without jeopardising research momentum or the realisation of commercial outcomes. This could be done by ensuring that projects are driven by networks of people with a common interest or passion, but perhaps differing skill sets to bring that goal to fruition, rather than relying on binding financial or contractual agreements. Project models such as this would lower barriers to SME participation in public sector research, particularly if combined with financial and other incentives to encourage their participation.

Collaboration on research between Australian businesses and offshore companies is also particularly important. The discussion paper points out that Australia generates nearly four per cent of the world's research output. That means that more than 96 per cent of the world's research output is generated outside of Australia. Focusing only on collaborations between Australian businesses and researchers greatly restricts opportunities. Offshore businesses often realise the commercial benefits of IP generated in Australia. There is no reason why IP derived from overseas should not provide similar benefits to Australian businesses.

We strongly support targeting Australia's research effort, narrowing the range of research areas that we specialise in as proposed in the discussion paper. By providing channels for Australian businesses to collaborate with offshore researchers this specialisation can be achieved without adversely affecting businesses' access to the broad range of technical skills and research expertise that they may need to realise their goals.

A number of channels already exist, or are being developed, to encourage collaboration between industry and researchers on innovation. These include the Entrepreneurs' Infrastructure Program (EIP), the Cooperative Research Centres (CRCs) and the Industry Growth Centres. We make the following comments about these initiatives:

- The Research Connections component of the EIP program is highly successful at driving collaboration between researchers and industry and we would like to see support for this program increased. Currently the Research Connections program can fund about 100 projects nationally across all eligible sectors. While this helps individual companies, with significant economic benefits, it is far from sufficient to transform whole sectors.
- We suggested in our recent submission to the CRC Programme Review (attached) that changes could be made to enhance industry engagement in the CRC program and improve the program's effectiveness at realising commercial outcomes.
- As outlined in our submission to the Senate Economics Reference Committee Inquiry into the Australian Innovation System (also attached) we believe the UK's Technology Strategy Board's (TSB) Catapult Programme, and the USA's Small Business Innovation Research programs have done a tremendous amount to bridge the gap between business, academia, research and government. We believe these programs should be considered as models for the Industry Growth Centres. We are pursuing a strong role in working with industry, government and researchers to inform the design of the Growth Centres.

Incentivising collaboration

As already mentioned, the responsibility for changing incentive structures to encourage collaboration lies with both research organisations and government. Public research institutions set internal policies and priorities, while governments can drive change through their formulae and metrics for allocating research funding. At present approaches to rewards and recognition within research organisations often do not give appropriate weight to the application of research to commercial ends. The paper and stakeholder discussion sessions highlighted a number of promising approaches for incentivising collaboration, including:

- reviewing frameworks for performance evaluation and employee progression within universities;
- ensuring that researcher recruitment decisions are based not only on academic achievements, but also recognise the value of industry experience;
- increasing labour mobility between the public research and private sectors, including by ensuring that employee career development is not jeopardised by this movement (employees are not penalised for moving and have a job to come back to if they return within an agreed timeframe);
- ensuring that there are practical drivers for research priorities, or that the commercial imperative for a research project is clearly articulated and not just the research priority;
- reviewing how research outcomes and impact are measured;

- providing training in commercialisation and business skills as part of the PhD curriculum; and
- providing greater opportunities for student placements in industry.

Successful commercial collaboration should be as advantageous to researchers' careers and funding opportunities as widely cited research publications. This does not take away from the importance of basic research, academic publications and education in the development and dissemination of new knowledge by researchers. Commercial outcomes are more likely to arise from academically excellent research. Clearly, improved incentives need to reward contributions in each of these areas sufficiently to balance the innovation system and allow researchers to contribute where they are most valuable. We believe the allocation of government research funding could be improved to strike a better balance between academic excellence and commercialisation. This should include consideration of the Australian Academy of Technological Sciences and Engineering (ATSE) proposal to develop an 'impact and engagement for Australia' metric that would sit alongside the Excellence in Research for Australia (ERA) assessment currently used to allocate funding to publicly funded research organisations.

The role of intermediaries in facilitating collaboration

We welcome the mention in the discussion paper of the important role of intermediaries in providing pathways for businesses and researchers to collaborate on innovative projects. By bringing together resources and people, and exposing people to new opportunities, ideas and ways of thinking intermediaries play a central role in creating an environment for the successful commercialisation of research findings. They can also help disseminate the outcomes of collaborative projects across sectors and value chains, improving the social return on research investment and allowing many businesses to become more agile and better positioned to innovate and seize opportunities.

We believe intermediaries can help by:

- organising introductions and meetings to 'seed' ideas for new collaborations, animate them (or bring them to life) and build momentum and support for specific research projects;
- ensuring that collaborative projects respond to industry needs (innovation is user-centred) and that ideas are captured and turned into achievable plans;
- ensuring that projects are progressing in a manner that satisfies the needs of all the parties involved and taking corrective action when this is not the case;
- finding opportunities for the placement of interns into business; and
- fostering partnerships between companies within and across value chains to:
 - extend opportunities for collaboration;
 - act as an aggregator to identify collections of SME businesses with a mutual interest in a particular research project, thereby making it easier for SMEs to engage in larger collaborative projects;
 - reduce 'bottlenecks' to implementing research findings and realising commercial outcomes; and
 - increase the value realised by the research project by ensuring that project findings and information about the benefits of engaging in collaboration are disseminated to a broader audience.

Australian Industry Group and the Entrepreneurs' Infrastructure Program

The Research Connections (RC) program is an element of the Australian Government's Entrepreneurs' Infrastructure Program (EIP), Australia's flagship national business capability development program. Research Connections Facilitators actively support SMEs to innovate and collaborate with the research sector by firstly undertaking a research needs assessment of the business and then work with the business to develop an innovation pathway. This can include facilitating access to critical research, expertise and technology, and can involve support for the placement of public sector researchers into businesses to develop and implement new ideas with commercial potential.

The innovative delivery of the program, in partnership with industry associations, provides a model for research/business collaboration that is helping to:

- break down the cultural divide between Australian businesses and the public research sector;
- stimulate the dissemination of expertise from research organizations to industry and the return of industry knowledge back into the research community;
- accelerate the adoption of new ideas and technologies by Australian firms; and
- increase the competitiveness of Australian firms.

Ai Group is one of a number of industry organisations partnering in the facilitation of the EIP. Our ability to connect with a large number of companies through our membership and activities has helped to broaden industry involvement in the program. Our status as a trusted source of advice has also helped alleviate potential business concerns about loss of confidentiality and dealing with bureaucratic 'red tape'.

As an example, an Ai Group facilitator supported the placement of a mathematics and information technology expert from Wollongong University's School of Information Systems and Technology into Sydney based health care company Simavita. This partnership led to the successful commercialisation of a revolutionary new product which helps manage patient incontinence in aged care facilities. The project enabled Simavita to quickly take its product to both Australian and international markets.

Skills to enhance commercialisation

The countries that are the most successful at translation tend to be those with a high diversity of embedded knowledge and a sophisticated array of capabilities – the ability to do many things well – and the ability to combine and use their intellectual capital to create more sophisticated innovations. In Australia higher skill levels and genuine interaction across a range of disciplines and specialisations (within and between businesses, and between industry and researchers) will be important to boost the creation and commercialisation of new innovations.¹ This includes technical skills, or skills in science, technology, engineering and mathematics – the so-called STEM skills and non-technical skills. The latter includes, among other things, skills in leadership, management and entrepreneurial skills, and the ability to be adaptable, network, communicate and negotiate.

At face value, the technical skills and knowledge of Australia's workforce appear to compare favourably to those of other countries.^{2,3,4,5} Compared to the OECD average, Australia has more skilled professionals in the workplace and more tertiary educated people in the working-age population, including more PhD graduates. Moreover, Australia's Programme for International Student Assessment (PISA) scores - which test the mathematical, reading and scientific literacy of 15-year-old students from 64 different countries at a time when they are nearing the end of the compulsory years of schooling – indicate that Australian students, on average, perform better than students in other OECD countries. Australia also has more research and development personnel in the workplace, although as the discussion paper points out, when compared to other OECD countries, very few of these professionals work in industry.

Nonetheless, there remains a considerable gap between Australia's performance in these indicators and the top performers in the OECD. Australia is also outperformed by a number of Asian countries and regions, including Shanghai, Singapore, Hong Kong, Taiwan and Macau, when PISA scores for reading, mathematics and science are considered.⁵ Furthermore, a time series analysis of Australia's performance in PISA tests also indicates that, although still above the OECD average, Australian students' performance in mathematics and reading has deteriorated over the last decade, while our performance in science has been relatively stagnant. A diminishing number of students are also electing to study STEM subjects, and a high proportion of students who do elect to take these courses at a tertiary level are discontinuing their studies after the first year.^{6,7,8,9,10}

¹ Australian Government (2012), Australian Innovation System Report—2012, DIISRTE, Canberra

² OECD, *Main Science and Technology Indicators database, 2013/1*.

³ OECD (various), Science, Technology and Industry Scoreboard.

⁴ OECD (various), Education at a Glance.

⁵ OECD, PISA 2012 Results.

⁶ University of Sydney 2013. HSC maths and science on the decline, October 2013.
<http://sydney.edu.au/news/84.html?newsstoryid=12516>

Non-technical skills are also important. Whilst many organisations wish to develop a more collaborative and innovative culture, this transition requires greater knowledge sharing, participatory decision-making, creativity, experimentation and learning, reduced management control and an increased tolerance for risk. Developing the skills and culture that will enable this transition is a major challenge for those with leadership responsibilities. Lifting Australia's leadership capability in order to enhance productivity, innovation and sustainability is in turn recognised as a key challenge for Australia by policymakers and businesses.

In Australia, the perception of management practices by employees, relative to other countries has been dropping, with Australia's ranking falling from 8th in 2009 to 18th in 2014.¹¹ Of particular concern is the drop in Australia's ranking 'Attitudes and Values' which fell from 4th place in 2010 to 17th place in 2014.¹¹ This indicator ranks ability to be flexible and adaptable when faced with new challenges, and also how well corporate values take into account the values of employees. The drop in the score is significant and suggests the efficacy of Australia's leaders to effect change in business is declining. Between 2011 and 2014 Australia's leaders' willingness to delegate authority and to invest in staff training also declined by 6 and 13 percentage points, respectively.¹²

Locally, Australian Management Matters research¹³ found Australian businesses score least well in people management and lag behind in the deployment of advanced people management practices. These include attracting, developing and retaining talent and identifying innovative but practical ways of developing human capital to improve performance and add value to organisations. Once more, Australian leaders were inclined to overestimate their own company's management capabilities. This over-estimation of capability indicates a lack of self-awareness that is likely to lead to under-investment in leadership capability development.

⁷ Falkiner, A (2012). National trends in Year 12 course completions, Policy Note, No. 6., April 2012. Prepared for the Group of Eight. http://www.go8.edu.au/__documents/go8-policy-analysis/2012/go8policynote6_year12completions.pdf

⁸ Lyons, T. & Quinn, F. (2010), *Choosing Science: Understanding the declines in senior high school science enrolments*. Research report to the Australian Science Teachers Association (ASTA). <http://www.une.edu.au/simerr>.

⁹ Chinnapan, M.; Dinham, S.; Herrington, T. & Scott, D. (2007), Year 12 students and higher mathematics: Emerging issues. Paper presented to the Australian Association for Research in Education, Annual Conference, Fremantle, 25-29 November 2007.

¹⁰ Dobson, I.R. (2012), *Unhealthy Science? University Natural and Physical Sciences, 2002 to 2009/10*, Network for Higher Education and Innovation Research, University of Helsinki; Centre for Population & Urban Research, Monash University; and the Educational Policy Institute. A study commissioned by the Chief Scientist, February 2012.

¹¹ International Institute of Management Development (2013), *World Competitiveness Yearbook*

¹² World Economic Forum (2013), *Global Competitiveness Report*

¹³ University of Technology Sydney (2009) *Management Matters in Australia: Just how productive are we?*

While Australia does have many excellent leaders, it is matched by an equal number of poor performers. Many supervisors and managers are promoted for their technical expertise yet many have received little or no leader development at all. Leadership and management development is typically viewed as a cost to the business perhaps because the correlation between leadership development interventions and improved business performance can be hard to measure. Low levels of investment could also be attributed to an excessive focus on the short term and a perception that the return on investment of leadership programs is limited.

A step change is needed regarding the commitment to developing our leadership capability and evolving our organisational structures and systems if Australia is to improve its productivity and capacity to innovate. Whilst much of the responsibility for poor management performance appears to land in the lap of organisations and their managers, the leadership development framework that has for so long trained our organisations' leaders must also bear some responsibility. Many leadership and management programs have failed in what they set out to achieve. While these courses are often of high quality, they are held back by a lack of organisational specific context and the assumption that the 'transfer of learning' will occur once individual returns to the workplace. Instead the ability to put into practice the skills learnt is constrained by a lack of workplace support, and cultural norms and workplace practices once attendees return to work. Government and industry need to place greater emphasis on the workplace as the main locus of learning. Businesses also need to ensure greater alignment between the leadership framework they promote (including the behaviours, systems, structures and processes) and their organisation's goals.

If we are to boost the commercial returns from research there must be an ongoing focus on boosting the technical and non-technical skills of Australia's workforce. Ai Group believes a multi-faceted strategy will be needed to achieve this, including initiatives to up-skill the existing workforce, attract skilled professionals to the sector and ensure the retention of existing skilled professionals. The relationship between businesses and education and training institutions will be critical to the success of these initiatives. Engagement by students at all levels of education with industry also needs to be further encouraged, deepened and planned. Our submission to the manufacturing workforce issues paper (2013) provides a detailed account of the policy options we believe are important to enhance skills and knowledge in industry. There also needs to be greater recognition within industry of the importance of professional development and up-skilling, along with a work environment that rewards and stimulates skilled workers.

Incentivising commercialisation

At present Australia does not capture the social and economic benefits of domestic research. Indeed, many of the benefits are captured in other countries including in the form of jobs, exports, manufacturing and clinical trials.

It is vital that policies are introduced to encourage IP and its flow on benefits to stay, and create jobs and wealth, in Australia. We believe this could be achieved by introducing a 'patent box' or 'innovation box' policy to offer a reduced tax rate on profits from IP. Such a policy would complement and build on the benefits of the existing R&D tax incentive by encouraging companies to locate activity associated with the development, manufacture and exploitation of the IP in Australia. This would contribute to an end-to-end tax regime capable of securing our competitiveness for the future.

There are at least ten countries (nine in Europe and China) that offer reduced tax rates on profits from IP, with many more looking to introduce similar regimes in the future¹⁴. We recommend that the Federal Government consider adopting the UK 'patent box' model and adapt the policy to suit the Australia environment.

¹⁴ Australian Innovation and Manufacturing (AIM) Incentive:
<http://www.ausbiotech.org/data/downloads/AIM%20Incentive%20August%202014.pdf>

Other government policies to boost the commercial returns from research

Submissions to the Senate Economics Reference Committee Inquiry into the Australian Innovation System by Ai Group and others clearly spell out the role of government in creating an environment and culture that aids in translating our success in research into commercial outcomes. Australia needs to build a thoughtfully designed innovation ecosystem that incentivises investment in innovation and captures the flow on benefits of that, and other countries' investment in innovation, in Australia.

Currently investment in innovation is hindered by policy uncertainty. A key instance of this is the R&D tax incentive, which has been under constant review since 2008. Bills to enact further change are currently before the Parliament, the *Tax Laws Amendment (Research and Development) Bill 2013* and *Tax and Superannuation Laws Amendment (2014 Measures No. 5) Bill* – and proposals for significant change to these bills are also being debated. If passed, these may be applied retrospectively as far back as June 2013 – compounding uncertainty about the reliability of any policy. Governments need to avoid short-term or narrowly considered savings measures that may detract from businesses' ability to contribute to Government revenue collections now or at a later date.

Australia desperately needs bipartisan support for innovation and a strategic long term view. It is important that innovation is recognised for its critical role in driving growth and competitiveness and improving our standard of living. Innovation is not a program that needs to be delivered, but a way of thinking and acting that needs to be integrated into all aspects of government policy. Innovation policies should recognise and build on Australia's strengths and define the key challenges we face and seek to manage them. We recommend they focus on:

- incentivising investment in innovation;
- facilitating networking opportunities;
- ensuring we have the human capital and skills required to achieve commercial success; and
- providing support for institutions and organisations that generate and disseminate knowledge.

Regulatory and taxation policies that are competitive, workable, predictable and efficient will be critical to incentivising investment in innovation. As pointed out in our submission to the Financial Services Inquiry we also need a stable and competitive financial system which ensures that Australian industry is able to access finance at a competitive cost so it can expand and invest in new ideas. Other prominent reform priorities that would improve the supporting environment for innovation and productivity improvement include:

- reform of industrial relations arrangements to promote flexibility and workplace productivity and allow greater mobility in the labour market;
- facilitation of greater levels of investment in upgrading Australia's infrastructure;
- ensuring that employee share schemes can be used effectively by start-ups;
- ensuring Australia's intellectual property system accurately reflects changes in technology and the nature of assets; and
- improving the operation of energy markets to reduce costs and certainty of supply.

This submission lays out our view on the key policies needed to ensure the Australian economy can reposition itself as the resources boom wanes. We have also attached our submission to the concurrent Federal Government Inquiry into the Financial System, which addresses issues raised around the ability for businesses to access finance to invest in new ideas. All of these policy settings are covered in Ai Group's *Ten Point Plan*, which is attached to this submission.