



Australian Government
Department of Industry

Innovation Policy Report

November 2013

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Australian Developments

Australia Benchmark Report & Insights Unlimited

Austrade released the [Why Australia? Benchmark Report Update](#) in June 2013. The Report compares Australia's position internationally on five key investor indicators - Growth, Innovation, Talent, Location, and Business.

The Report notes that Australia ranks strongly compared to other leading innovative countries, highlighting that Australian researchers perform strongly in terms of highly cited publications and the number of publications in highly influential journals as a proportion of population.

Austrade's portal, [Insights Unlimited](#), also provides information on indexes and rankings that measure and compare Australia's global reputation. Access to Insights Unlimited is restricted to Australian State, Federal and Territory Government employees.

Sensis e-Business Report

Sensis released its annual [e-Business Report](#) in September 2013. This report tracks Small-to-Medium Enterprise (SMEs) use of technology and electronic commerce activity. The Report was primarily based on findings from the Sensis Business Index, which surveyed around 1800 SMEs.

According to the Report, 96 per cent of Australian SMEs are connected to the internet, and around 98 per cent own a computer, an increase on the previous year results. SMEs also reported that email communication was the most essential internet application, while around 66 per cent of SMEs have a website, up from 62 per cent in the previous year.

Australian Businesses R&D 2011-12 Report Released

The ABS has released the [Research and Experimental Development \(cat. no. 8104.0\)](#) report which presents summary statistics R&D undertaken by Australian businesses during 2011-12.

The report notes that business spending on R&D reached \$18.3 billion in 2011-12, an increase of 2 per cent from the previous year. The largest increase in expenditure was reported in Western Australia.

Businesses in the mining industry reported the largest growth in R&D expenditure.

Almost half of all businesses reporting R&D expenditure classified their field of research as engineering, next highest was information and computing sciences.

ABS Selected Characteristics of Australian Business 2011-12

The ABS has released its third publication in relation to the 2011-12 Business Characteristics Survey, [Selected Characteristics of Australian Business, 2011-12 \(cat. no. 8167.0\)](#).

The report presents information on business structures and arrangements, business finance, business performance, barriers to innovation and general activities or performance and skills, and on business use of information technology and innovation.

The data released shows that in the year ended 30 June 2012, 18 per cent of all businesses sought debt or equity finance. Of those, 88 per cent reported that it had been obtained.

The data also indicates that businesses with innovative activity were twice as likely to seek finance as non innovation-active businesses. The most common reason for seeking finance was to maintain the short term cash flow of the business.

Discussion Paper on Australian Crowd Sourced Equity Funding

The [Corporations and Markets Advisory Committee](#), an independent committee within the Treasury, has released a [discussion paper](#) as part of the review of crowd sourced equity funding in Australia. The paper provides an explanation of the concept of crowd sourced equity funding, outlines potential risks and benefits and describes the current regulatory structure in Australia. It also considers international developments, including the approach taken in the USA under the *Jumpstart our Business Start-ups Act 2012*, and proposals for a possible regulatory regime in Canada.

The paper raises a number of matters for consideration on whether there should be regulatory arrangements in Australia specifically designed for crowd sourced equity funding. These are framed around a range of possible options. Submissions closed on 29 November 2013.

SMEs Engagement Centre - Australian Business Award for Innovation

In 2013 the [Australian Business Awards](#) awarded the Australian Business Award for Innovation (Industry Classification) to the CSIRO SME Engagement Centre. The Centre won the award for its contribution to industry through innovative products, technologies and ideas which have resulted in commercial, environmental and/or social benefits.

The Centre works proactively with Australian SMEs to provide guidance on research and development. The Centre has expertise at linking researchers and companies to innovate and complete projects that help both the company and researcher to prosper and grow. The majority of projects with SMEs are initiated through Enterprise Connect's Researchers in Business (RiB) program. The RiB program provides funding to place a researcher within a company for a period of time to develop an idea or resolve a technical issue.

Victorian Technology Vouchers

Applications have now closed for the second round of the Victorian Government's [Technology Voucher Program](#), which is designed to drive the use of cutting edge technologies.

The program aims to support Victorian companies to compete locally and globally, through providing funding for businesses who seek to explore the use of technology to create more competitive products and processes. The Program is part of the Victorian Government's \$150 million *Victoria's Technology Plan for the Future*.

Zebedee handheld mapping system

Zebedee is a multi award winning handheld [3D mapping system](#), which consists of a lightweight LiDAR scanner with approximately 30m (100ft) maximum range and a industrial-grade MEMS inertial measurement unit mounted on a simple spring mechanism. The device loosely oscillates about the spring, thereby producing rotational motion that converts the 2D scanning plane into a local 3D field of view. Zebedee has evolved from (and alongside) general research into 3D localization and mapping for autonomous robots.

Over the last four months Zebedee has won: the 2013 Australian Nuclear Science and Technology Organisation Eureka Prize for Innovative Use of Technology, the 2013 Australian National iAward for Research and Development and, the 2013 Queensland iAward for Research and Development.

CSIRO-DAFF Memorandum of Understanding

In August 2013 the CSIRO signed a Memorandum of Understanding (MoU) with the Department of Agriculture, Fisheries and Forestry (DAFF). The CSIRO and DAFF have worked together for many years, focusing on industry development, development of national infrastructure, and delivering impact from agricultural research.

The new MoU, sets the framework for a collaborative working relationship between CSIRO and DAFF. It aims to provide a high-level of collaboration and mutual support for each organisation as they fulfil their different roles.

Department of Industry

CSIRO-Monash Superannuation Research Cluster

Researchers from CSIRO and Monash University have formed the [CSIRO-Monash Superannuation Research Cluster](#) to address some of the big challenges in managing Australia's multi-billion dollar superannuation system.

The Cluster was established with funding from the CSIRO Flagship Cluster Funding program and is inviting contributions from the broader financial services industry.

The Research Cluster was formed to:

- build confidence in Australia's superannuation systems; and
- to provide new risk-informed investment opportunities for individuals, the community and the economy.

The Cluster will examine in some detail two key themes:

- superannuation and the economy; and
- the transition and post retirement phase - Australians over 60.

CSIRO Innovation Roadmap

The CSIRO has developed an [Innovation Roadmap](#) that explores six dimensions of Innovation through a subset of 21 cultural and operational elements, presenting descriptors of five levels of innovation 'maturity' ranging from Unaware to Leading.

Innovation is at the core of CSIRO's work as a large-scale, mission-directed, multi-disciplinary science and technology research organisation, and our people and culture are fundamental to our current and future success.

CSIRO Impact Case Studies

The CSIRO has developed ten [case studies](#) that demonstrate how the organisation has applied excellent science and research to challenges, improving lives, creating wealth and ongoing benefits to society.

NSW: International Students Attraction in Sydney

[NSW Trade & Investment](#) is delivering a number of projects to support international student attraction, including the Premier's International Student Celebration. This year's Celebration took place at the Sydney Opera House in October.

The Celebration was held in conjunction with a Work Integrated Learning Forum bringing together industry, international students, education providers and government to discuss opportunities around international student internship placements.

Consultation on the New South Wales Government's 2014 priorities for industry growth

The [NSW Economic Development Framework](#) is the NSW Government's roadmap for driving growth in priority NSW industries, and the broader NSW economy over the next ten years. Released in December 2012 as part of the NSW Government's response to the [Industry Action Plans](#), the Framework outlined 40 priority actions for Government focus in 2013, with strong progress made across all actions to date.

A consultation document on the NSW Government's priorities for industry growth will be released for feedback in October.

The potential action areas for feedback in the consultation document have been developed based on recommendations of Industry Taskforces, industry workshops held in June 2013, and industry and community input provided at the NSW Government's [Business Leadership Forum](#) in September 2013.

A major focus for the October consultations will be to identify potential industry partners for co-development and co-delivery of initiatives.

Following consultation and identification of delivery partners, the final 2014 priority actions will be released in December 2013.

The consultation document will be available for comment on the NSW Government's [Have Your Say](#) Forum.

Australian Public Service Innovation Indicators project findings

Australian Public Service Innovation Indicators project's pilot survey has concluded and provided information on the state of public sector innovation. A report on the survey is available on the [Department of Industry's Public Sector Innovation](#) page, however some key findings include:

- The most commonly reported innovation types were process innovation (85 per cent), product and service innovation (47 per cent), policy innovation (44 per cent) and communication innovation (42 per cent). A total of 91 per cent of all survey respondents reported that some type of innovation had been undertaken by their branch or work unit over a two year period.
- Innovations can fail and information on why this has occurred is highly important. However, there was reluctance amongst respondents to provide information on unsuccessful innovations, with around 80 per cent survey participants stating that they "did not have a least successful innovation".

- The time spent on innovations proved to be a useful indicator of innovation activity. Sixty per cent of managers from innovative branches reported that their most successful innovation required six months or longer to develop, while only 10 per cent reported spending less than one month on this innovation.
- Many of the innovations cited by interviewees and survey respondents were minor or incremental improvements rather than major or transformative changes. The length of time taken to develop an innovation appears to be a good indicator for distinguishing between these two types. Innovation rate drops to around 60 per cent if the data are screened for major innovations only, based implementation time.

The Pilot Survey findings did not support the popular belief that the public sector is non-innovative due to risk aversion, has an anti-innovation culture and lacks innovation incentives. The Pilot Survey demonstrated that innovation exists within the public service. However, innovation appears to take longer than in the private sector.

The Changemakers Festival 2013

The [Change Makers Festival](#) has concluded. The inaugural festival ran from 1-10 November 2013 and featured 155 events nationwide with an audience of over 5000 people. The Festival was focused on social innovation and change. It was organised by the Social Innovation Exchange Australia with principle sponsorship from The Australian Centre for Social Innovation and Deloitte.

The Festival wasn't a centralised program but rather event holders from around the nation registered on the Festival's site. Events were hosted by corporations, universities, social enterprises, non-profits, community groups and individuals. Events included pitch competitions, participatory workshops, film screenings, panel discussions, and online engagements including Google+ Hangouts, twitter chats and webinars. Events were hosted in every capital city plus Geraldton, Newcastle, Alice Springs and Coffs Harbour.

The organisers are planning for a second Change Makers Festival.

Professor Christensen's visit to Australia

[Professor Clayton Christensen](#) is considered one of the world's most foremost experts on innovation and growth. Currently the Kim B Clark Professor of Business Administration at the [Harvard Business School](#), Professor Christensen has launched three successful companies, serves on Singapore's Research, Innovation and Enterprise Council and is the founder of [Innosight Institute](#), a non-profit think tank. Professor Christensen's theories include the concept of 'Disruptive Innovation' and are applicable to a broad range of business and societal challenges.

He presented [Disruptive Innovation and the Role of Management: Creating New Growth Opportunities](#), in Sydney and Melbourne on 6 and 7 November 2013. The program consisted of two morning sessions with Professor Christensen followed by an afternoon panel discussion with Professor Christensen and business leaders.

International Developments

Asia

China: The Annual Meeting of the New Champions 2013

In September, China hosted the Annual Meeting of the New Champions (also known as the “Summer Davos”). The forum brought together 1,500 participants from 90 countries to share strategies and solutions and discuss global issues and risks. This year’s theme was *Meeting the Innovation Imperative*, and focused on the following areas:

- Unleashing Innovation;
- Connecting Markets;
- Transforming Industry Ecosystems; and
- Building Societal Resilience.

The full program and further information can be found on [the World Economic Forum website](#).

Chinese and Israeli Universities to Establish Joint Research Centre

Seeking to stimulate science and technology exchange and innovation, Israel’s [Tel Aviv University](#) and [Tsinghua University](#) in Beijing have agreed, to establish the [XIN Centre](#) - a joint research centre to serve as an international hub for scientific and technical innovation. The Centre will initially focus on areas of overlapping research interests between the two countries, such as nanotechnology.

The XIN Centre will aim to recruit the highest performing researchers and students from the two countries, as well as internationally. It will promote innovation among students through the provision of optimal conditions to create, develop and leverage their ideas in various areas of technology and science. The researchers will serve as instructors and mentors to the research students, and help them develop promising projects.

Funding for the project comes mainly from the Israeli-Chinese private equity firm Infinity Group, with supplemental funding from the Beijing government and various Tsinghua University alumni. The funding includes approximately RMB100 million (A\$17.5 million) for seed ventures generated by the Centre.

India: Global Innovation Roundtable 2013

The [Government of India’s National Innovation Council](#) hosted the [Global Innovation Roundtable](#) from 18-19 November 2013. The Global Innovation Roundtable aims to create a platform for sharing experiences, best practices

and enabling collaborations around the theme of inclusive innovation for addressing the challenges of access, equity, excellence and inclusion.

The National Innovation Council has previously hosted Roundtables in 2011 and 2012, with the focus being to:

- Leverage this Global Innovation Roundtable to stimulate greater global cooperation across countries and formation of networks.
- Explore possibilities in the new century for collaborations and network creation.
- Contribute through such sharing of experiences, for making innovations a prime driver for collective solution building.
- Discuss innovations that have addressed the needs of those at the Bottom of the Pyramid and achieved scale.

Heads of Innovation policy from Governments, and global Innovation experts, have previously participated in the Roundtables.

Europe

EU: Fourth European Conference on Corporate R&D and Innovation

The [Fourth European Conference on Corporate R&D and Innovation](#) was held in Spain on 26-27 September.

The conference focussed on the financial strategies, drivers and barriers affecting the link between the innovation and growth of European companies. Organised by the European Commission's Joint Research Centre, the conference brought together researchers, policy makers and industry.

The conference also aimed to deliver messages to support relevant EU policies set in the context of the [Europe 2020 strategy](#) and its [Innovation Union](#) flagship initiative.

EU: New indicator of innovation output

A [new indicator](#) of innovation output has been developed at the request of the European Council to benchmark national innovation policies.

The indicator is based on four components:

- Technological innovation;
- Employment in knowledge-intensive activities;
- Competitiveness of knowledge-intensive goods and services; and
- Employment in fast-growing firms of innovative sectors.

The indicator will monitor the EU's performance against its main trading partners. According to the new indicator, the EU has increased its performance and Sweden, Germany, Ireland and Luxembourg are achieving better results than their EU associates.

EU: COSME to spur access to credit for small enterprises

The European Commission has launched the [COSME](#) (Competitiveness of Enterprises and SMEs) programme, which aims to facilitate better access to finance, deliver business support services and promote entrepreneurship. The programme will run from 2014 to 2020, with a planned budget of €2.3 billion; nearly €1.4 billion will be allocated to loans and venture capital.

The Programme aims to:

- Facilitate access to finance for SMEs;
- Create an environment favourable to SME creation and growth;
- Encourage an entrepreneurial culture in Europe;
- Strengthen the sustainable competitiveness of EU enterprises; and
- Support the internationalisation of SMEs and improving their access to markets.

COSME will provide a guarantee facility for SME loans up to €150 000. The programme will also facilitate access to venture capital through an equity facility, with a focus on the expansion and growth phase of SMEs. Allocation of funds will be managed by reputable financial intermediaries.

Funding will create a favourable environment for SMEs by encouraging an entrepreneurial culture in Europe and strengthening the sustainable competitiveness of EU enterprises.

COSME will work in a similar way to its predecessor, the [Competitive and Innovation Framework Programme](#). COSME is expected to commence on 1 January 2014.

EU: Action plan to promote design-driven innovation

The European Commission has released an [Action Plan for Design-Driven Innovation](#) to promote the use of design in innovation. Design is recognised as a key discipline and activity to bring ideas to market. The action plan seeks to address the gap between European countries that are world leaders in design and those that lack design infrastructure and design capability.

The plan will focus on:

- Promoting understanding of design's impact on innovation;
- Promoting design-driven innovation in industries to strengthen Europe's competitiveness; and
- Promoting the adoption of design to drive renewal in the public sector.

The development of the action plan considered recommendations of the [European Design Leadership Board](#) and consultation with stakeholders.

Finland: External evaluation of the Strategic Centres Of Science, Technology And Innovation published

An external expert group has [evaluated](#) Finland's six [Strategic Centres for Science, Technology and Innovation](#). These centres have become one of the main instruments of Finnish innovation policy and aim to create new knowledge and expertise, and accelerate innovation. The report recommends improvements and clarifications in regards to selection processes, governance and monitoring.

France: A €3.5b Strategic Industrial Plan Announced

On Thursday 12 September 2013, French President Francois Hollande [announced](#) France's new industrial policy in which the French Government will inject €3.5 billion into [34 key industrial priorities](#). Priorities include plans to develop a car that can run 100 kilometres on two litres of fuel, electric aeroplanes, driverless cars, digital hospitals and intelligent fabrics.

The 34 industrial priorities were identified as a result of an analysis of global growth markets, and France's key strengths, by the French General Directorate for Competitiveness, Industry and Services, supported by the US consultant firm McKinsey, in collaboration with committees and clusters within which business leaders, social partners, government and professional associations are active.

The move is seen as reviving a traditional approach to French industry strategy where the French Government creates the framework and puts faith in company executives to implement the state's plans. The plan is expected to create 475,000 jobs and €45 billion in revenues over the next 10 years.

Hungary: National Research and Development and Innovation Strategy

The Hungarian Government approved its [National Research and Development and Innovation Strategy 2013-2020](#), which aims to increase the level of research and development expenditures and the number of researchers over the next eight years. The Strategy focuses on knowledge creation, knowledge transfer and knowledge utilisation, and deals with the whole business sector, including SMEs and big companies.

UK: New Social Innovation Network Launched

On 16 September 2013, a new network of European organisations and communities involved in supporting or delivering digital social innovation was launched - digitalsocial.eu.

The network is part of a large research project on digital social innovation (DSI), which is funded by the European Commission and delivered by a group of partners, led by Nesta. The research project is aimed at developing a better understanding of digital social innovation, in terms of:

- how services use digital technologies to achieve a social impact;
- which organisations and communities are involved in delivering DSI services or supporting its growth; and
- what can policy makers in the EU and UK do to encourage more digital innovation for social good.

The information generated through digitalsocial.eu will help to develop findings and policy recommendations on the type of projects and activities organisations are working on in different parts of Europe, where the strong and weak networks are between organisations working on DSI, and how funders and policy makers can use this knowledge to better engage with and support DSI in Europe.

Organisations that join the network will go onto a dedicated DSI map and all data captured about organisations and organisational relationships will be made available as an open data set on the website for users to download and investigate.

Global

Helping European SMEs enter South American market

Following on from the establishment of Intellectual Property Rights (IPR) Helpdesks in [China](#) and [Southeast Asia](#), the European Commission will launch an [IPR helpdesk in South America's Mercosur region](#) as part of its ongoing efforts to help European businesses tap into emerging economies. The helpdesk will facilitate market access to Mercosur, a region including Argentina, Brazil, Paraguay, Uruguay, Venezuela and Bolivia.

As with other EC-sponsored helpdesks, the Mercosur IPR Helpdesk will offer a variety of free services, confidential advice and guidance, disseminate training materials, and liaise with local personnel, including law enforcement and legal experts who can assist with IPR protection. These services will help ensure that discrepancies in regulations and expectations do not hinder market access to EU enterprises, and will help Europe's businesses benefit from Mercosur's continued growth.

Middle East

Qatar: World Innovation Summit for Health

The first [World Innovation Summit for Health](#) will be held in Qatar from 10-11 December 2013. The event will involve heads of state, ministers, senior government officials, academics and business leaders. The summit follows on from the 2012 Global Health Policy Summit.

The Summit's working groups will focus on eight themes of obesity, mental health, integrated and accountable care, end-of-life, road traffic accidents, empowering patients, antimicrobial resistance and big data.

North America

Canada: The State of Industrial R&D in Canada

[The State of Industrial R&D in Canada](#) report was released by the [Council of Canadian Academies](#) in August 2013. The report identifies Canada's four industrial R&D Strengths as aerospace products and parts manufacturing, ICT, oil and gas extraction, and pharmaceutical and medicine manufacturing. The report suggests that industrial R&D in Canada is relatively personnel intensive and less capital intensive when compared to other countries, with industrial R&D expenditures nearly half of the US level, due largely by low industrial R&D intensity in Canadian high-tech manufacturing sectors.

US: Innovation and the City

New York's [Centre for Urban life](#) has released the [Innovation and the City Part 2](#) report which profiles 25 policy innovations from cities across the U.S. and around the globe. The policies come from a diverse group of cities and confront a variety of issues, and aims to share information and the ability for municipal leaders to learn from their peers.

US: SBA Commercialisation Benchmark for SBIR/STTR

The US [Small Business Administration](#) recently published for comment the [commercialisation benchmark](#) for 11 US government agencies participating in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

SBIR is a competitive program that encourages small business to explore their technological potential and provides the incentive to profit from its commercialisation. STTR is a competitive program that reserves a specific percentage of federal R&D funding for awards to small business and nonprofit research institution partners.

The commercialisation benchmark establishes the commercialisation results and measures small business progress from Phase II to Phase III.

US: Senators Introduce Bipartisan Manufacturing Legislation

Bipartisan legislation was introduced in August to establish a Network for Manufacturing Innovation and seek to position the US as the global leader in advanced manufacturing. The [*Revitalize American Manufacturing and Innovation Act of 2013*](#) is designed to bring together industry, universities and community colleges, federal agencies and government to accelerate manufacturing innovation in technologies with commercial applications.

US Evidence and Innovation Agenda: Using Evidence and Innovation to Improve Government Performance

On 26 July 2013, the US Government issued a [memorandum](#) on a management agenda for its second term that delivers a smarter, more innovative, and more accountable government for citizens. An important component of that effort is strengthening agencies' abilities to continually improve program performance by applying existing evidence about what works, generating new knowledge, and using experimentation and innovation to test new approaches to program delivery. This is especially important given current fiscal challenges which agencies face in meeting increased demand for services in a constrained resource environment.

The Memorandum:

- Provides guidance for 2015 agency Budget submissions and describes plans to prioritize Budget requests that strengthen the use of evidence and innovation; and
- Invites agencies to participate in a series of workshops and interagency collaborations organized to help agencies develop and strengthen proposals that catalyse innovation and learning. While much of the focus will be on proposals that can be implemented without additional resources, there will be limited funding available in the 2015 Budget for strong proposals that require some new funding.

In their 2015 Agency Budget and Performance Submissions, the agencies are encouraged to both: (1) draw on existing credible evidence in formulating their budget proposals and performance plans and (2) propose new strategies to develop additional evidence relevant to addressing important policy challenges. Agency requests are more likely to be fully funded if they show a widespread commitment to evidence and innovation.