



Australian Government
Department of Industry

Innovation Policy Report

February 2014

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Australian Developments

Industry Innovation Precincts Programme

The Industry Innovation Precincts programme is currently under review. No decision has been made, however the Australian Government is supportive of initiatives that improve the linkages between business, research organisations and government so that Australia can become more globally competitive in areas of future economic potential.

The two existing organisations established under the programme, one in the [food industry](#) (Food Innovation Australia Ltd) and one in the [manufacturing industry](#) (Meta), continue to operate and are actively engaging with their respective sectors.

Australian Government Action Agendas

Action Agendas are a key plank of the Australian Government's Policy to Boost the Competitiveness of Australian Manufacturing. They will develop a clear framework for promoting investment and jobs growth, set out reductions in red tape and identify industry-led initiatives to complement the government's intent to reduce the costs for Australian businesses. The Australian Government will work with industry to establish and implement Action Agendas in growth sectors of Australian industry.

The government has engaged in consultation with industry associations, state government representatives and other Australian Government departments in the development of Action Agendas. The government is currently considering implementation options with respect to Action Agendas.

Update on Australian Crowd Sourced Equity Funding Review

The [Corporations and Markets Advisory Committee](#) (CAMAC), an independent committee within the Australian Government Department of the Treasury, is undertaking a Review of Crowd Sourced Equity Funding and will report to the government by April 2014. CAMAC issued a discussion paper in September 2013 and invited submissions on issues raised in the paper by 29 November 2013.

[Forty submissions](#) have been received, including a submission by Innovation Australia, and are under consideration by CAMAC. It is expected that roundtables will be held by CAMAC in late February or early March 2014 to complete the consultation process prior to the report to the government in April 2014.

The [discussion paper](#) was updated in November and December 2013 to describe recent developments in overseas jurisdictions.

20 Issues on Business Innovation

The Institute of Chartered Accountants Australia has partnered with Innovation Australia to deliver their latest [Business Briefing: 20 Issues on Business Innovation](#), which was released on their website in December 2013.

This Business Briefing publication examines 20 key issues around innovating, outlines case studies and trends in innovation, and provides practical tips to guide businesses in becoming more innovative. Some of the key issues covered in the publication include drivers of innovation, fostering a culture that supports innovation, Asian economic growth and eco-innovation.

The publication also helps businesses understand why innovation is important and provides some options for businesses in encouraging and supporting innovation across their organisation, including aligning business strategy and innovation strategy, and guiding principles for encouraging staff to embrace new ideas.

National Foundation Skills Strategy for Adults

The [National Foundation Skills Strategy for Adults](#) is a 10-year framework which brings a national focus to improving education and employment outcomes for working age Australians with low levels of foundation skills (language, literacy, numeracy and employability skills). Released in September 2012, the Strategy includes four key priority areas for action, with agreed actions at the national and state/territory level.

Progress is being made by governments against a number of agreed actions with the main focus in 2013 being on actions under Priority area four, building the capacity of the education and training workforce to deliver foundation skills, through implementation of the National Foundation Skills Workforce Development Project.

As part of this project, a consultation process was undertaken in the latter half 2013 to explore options for developing professional standards for foundation skills practitioners. Feedback from the December 2013 report has revealed the need for further research of foundation skills professional job roles, delivery context and learner groups, to be undertaken as part of future collaborative action in 2014.

Victorian Government Launches Technology Innovation Fund

The [Victorian Government Technology Innovation Fund](#) was launched in

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December 2013. This \$12 million initiative provides support to collaborative projects that harness new technologies to transform government service delivery, respond to changing citizen expectations and improve productivity in the public sector. The Fund aims to support the improvement of Victorian Government service delivery through the application of new technologies. In particular, it seeks to:

- foster innovative ICT applications that improve government service delivery;
- improve service delivery in rural and regional Victoria using high capacity broadband;
- strengthen citizen engagement and access to government information using contemporary digital platforms;
- improve public sector productivity; and
- accelerate the innovative use of government data.

Applications for the fund are open throughout the year.

BRW'S 50 Most Innovative Companies in Australia

Australian business magazine BRW has released its Australia's [50 Most Innovative Companies list](#) for 2013. The list was compiled by Melbourne-based innovation consultancy firm Inventium. In order to evaluate the level of innovation, companies were required to nominate two innovations which they have implemented in the past 12 months, and were asked open-ended questions on how they have integrated and embedded innovation into their organisational structures, strategy and capability. Companies also completed an online survey designed to measure performance on the critical drivers of organisational innovation.

STEM Australia Web Portal

To promote the importance of Science, Technology, Engineering and Maths (STEM) and help individuals find relevant STEM information, the South Australian Government has developed the [STEM Australia](#) central web portal for students, teachers and businesses to contribute and share STEM resources. The web portal has been developed to be stakeholder-driven, enabling groups to share up-to-date content targeted to specific audiences such as students, parents, teachers, women and people considering changing careers into STEM.

STEM Australia aims to:

- raise awareness of what STEM is and its importance to our economy;
- highlight STEM innovators, best practice programmes and employers of choice;
- encourage individuals to take up STEM study and careers; and
- build partnerships between parents, educators, government and industry.

The design of STEM Australia invites users to submit stories, news articles and event information as they arise, keeping the content fresh and relevant to specific user groups whilst inviting engagement (collaboration) between those groups.

South Australian Innovation Voucher Programme

Launched in October 2012, the [Innovation Voucher Programme](#) primarily aims to initiate collaboration between South Australian small to medium enterprises (SMEs) and research organisations, and to facilitate innovation within the manufacturing sector. Applications for the Programme are continuously assessed throughout the year.

On a competitive basis, the Programme awards vouchers of up to \$50 000 to eligible projects by SMEs with annual revenue under \$20 million. A funding contribution is required from the SME, with the amount depending on their annual revenue.

Opening of South Australian Health and Medical Research Institute

The \$200 million [South Australian Health and Medical Research Institute](#) (SAHMRI) was officially opened on 29 November 2013 by the Prime Minister, the Hon Tony Abbott MP and the Premier of South Australia, the Hon Jay Weatherill. The total State Government investment, since it established the institute, is \$85 million.

The 25 000 square-metre facility will house a team of more than 600 researchers focusing on seven research themes. Over the next five years, the SAHMRI will be joined by the new Royal Adelaide Hospital, a proposed second SAHMRI research building and two medical research and training facilities, as part of a new \$3 billion-plus health and biomedical research precinct.

Researchers from South Australian universities will be working under the same roof – a model that is unique in Australia. The SAHMRI is bringing

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together the Australian Government, state governments, the University of Adelaide, Flinders University and the University of South Australia, which will be collaborating with organisations including the Commonwealth Scientific and Industrial Research Organisation, the Australian Cancer Research Foundation, the Cancer Council SA, the Heart Foundation and the European Molecular Biology Laboratory. The South Australian Department of Health will also play a key role in applying and delivering research outcomes within the community.

NSW Economic Development Framework 2014 Priorities Released

On 2 December 2013, the NSW Government released its [2014 priorities](#) to support industry growth under the NSW Economic Development Framework. The Framework is the NSW Government's roadmap for driving growth in priority NSW industries, and the broader NSW economy over the next ten years.

The NSW Government worked closely with industry and other stakeholders to identify and prioritise actions which were selected based on their importance and relevance for industry; degree of industry partnership and collaboration; and potential to deliver outcomes for key NSW industry sectors.

Thirty-four actions were prioritised for delivery with industry in 2014, including multi-year initiatives already underway; and targeted actions for key NSW industry sectors, Regional NSW and Western Sydney.

NSW Smart Work Hub Pilot Programme

The NSW Government has committed \$1.5 million to establish Smart Work Hub (teleworking) pilots on the Central Coast and Western Sydney.

Expressions of Interest were sought from organisations or consortia able to establish and pilot Smart Work Hubs, and closed on 28 January 2014.

A minimum of two pilot projects will be provided with financial assistance to explore how modern management practices and innovative work cultures could help grow knowledge based industries, support flexible work practices and offer commuters an alternative work location closer to home. More information on the programme and competitive public process are available at www.business.nsw.gov.au/assistance-and-support/grants/smart-work-hubs.

NSW Creative Careers Interactive Video Launched

The NSW Government launched its "[I Want In](#)" creative career information series in December 2013 to help develop the next generation of creative talent by demonstrating viable career paths to help young people make confident and informed career decisions.

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The "I Want In" video content was developed in partnership between the NSW Government, I-Manifest and NSW creative industries leaders. It showcases a range of occupations and opportunities available to young people interested in pursuing a creative career.

An additional eight videos have been produced to showcase the careers of young NSW design innovators currently making their way towards success. The content is designed to give young people the confidence to explore and better understand the opportunities and challenges of a creative career.

Innovate NSW Collaborative Solutions Networking Event

Innovate NSW Collaborative Solutions provides project consortia with grants of up to 25 per cent of project costs (to a maximum of \$100 000) to develop innovative, new-to-market B2B solutions.

The purpose of the programme is to foster collaboration between industry partners towards delivering a compelling, new-to-market solution in one of the key sectors of e-health; advanced manufacturing; energy technologies and services; online and interactive education; or transport, logistics and infrastructure.

A pitching and networking event for technology developers and the education sector (and closely related markets) was held by NSW Trade and Investment on 5 December 2013. The event was held to facilitate introductions, exchange of ideas and the formation of consortia relating to online and interactive education.

Over 170 people registered to attend the event, with a total of 24 targeted presentations from businesses, universities and government.

A tool to assist businesses navigate the regulatory landscape

Through the Standing Committee on Chemicals, industry and various government departments and jurisdictions have collaborated to create the [Chemicals Business Checklist](#) (the Checklist).

This new tool is designed to assist small and large businesses by providing whole-of-system information about chemicals and plastics regulation in a simple format. The Checklist is relevant to anyone working in the chemicals and plastics industry including those involved in importing, manufacturing, using, handling, transporting or disposing of chemical products.

The Checklist includes a comprehensive contacts list to direct businesses to the relevant regulatory body or government agency and encourages them to

consider the full life cycle of management of chemicals and plastics.

Science and Industry Endowment Fund: Advanced Resource Characterisation Facility

Under its Research Infrastructure Programme, the Science and Industry Endowment Fund has been investigating investments in activities that will increase collaboration between industry and researchers for the purpose of delivering world-class science. Its intention is to advance the development of major national research precincts in Australia that are global in scale and relevance, and as such all infrastructure activities must contribute to this vision for positioning Australian science in a global context.

The first such investment under this Programme will support the development of an Advanced Resource Characterisation Facility (ARCF) as part of the National Resource Sciences Precinct in Perth. Together, the three instruments that are included in this facility will provide a global hub for metre to-atomic scale analyses of mineral resources. It is envisaged that, combined with the four dimensional data integration provided by the Pawsey Centre, the ARCF will develop into a unique characterisation facility located in a resource-focused research precinct unmatched anywhere in the world.

Pawsey Centre Opening

The iVEC Pawsey Centre – Australia's newest supercomputer facility in Perth, Western Australia – was officially opened in November 2013. A significant portion of the supercomputing power will be dedicated to processing radio-astronomy data from major facilities, including CSIRO's Square Kilometre Array telescope. Supercomputing resources at iVEC's Pawsey Centre will also be available for data-intensive projects across the scientific spectrum, including radio astronomy, geosciences, biotechnology and nanotechnology.

CSIRO Fellow elected President of the Australian Academy of Sciences

The [Australian Academy of Science](#) has announced their new president elect, Andrew Holmes. Already a CSIRO Fellow, Laureate Professor of Chemistry at the University of Melbourne's Bio21 Institute and Distinguished Research Fellow in the Department of Chemistry at the Imperial College London, Professor Holmes will take on the top job of promoting science in Australia from May 2014.

International Developments

Asia

China: Inclusive Innovation for Inclusive Growth

[Inclusive Innovation for Sustainable Inclusive Growth](#), a report by the World Bank and the State Information Center of China, aims to help build awareness and outline the potential implementation and operationalisation of inclusive innovation policy in China.

The report, released in December 2013, introduces the concept of inclusive innovation and its relevance for China. The report further outlines the country's current landscape for inclusive innovation, presents international experience and examples, and outlines some policy options for consideration by the Chinese authorities.

The report outlines some potential options for the public policy interventions including:

- an integrated national inclusive innovation policy and required institutional systems;
- a facile regulatory system and supportive public procurement policy;
- incentives to leverage strengths and comparative advantages of all stakeholders, especially the private sector;
- dedicated support to grassroots innovators to deepen and expand their innovation capacity; and
- collaboration with national, regional and global STI organizations to leverage global talent, technology and resources.

Korea: Wireless Recharging for Moving Electric Buses

The Korea Advanced Institute of Science and Technology (KAIST) has developed an Online Electric Vehicle (OLEV) system that draws power from the road, enabling electric vehicles to not depend on large arrays of batteries.

The public transport sector in the South Korean city of Gumi is operating new OLEV buses that draw their power without wires, from electric cables in the bitumen, as they drive along the road. The electrical cables are placed just below the surface on 5 to 10 percent of the road and transfer power to the OLEV buses magnetically, keeping the buses charged, while they are moving or waiting in traffic.

The OLEV system helps to reduce costs, as an OLEV bus only requires one small battery one-third the size of the battery in a regular electric car. The

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power strip of electric cables beneath the road's surface only activates when an OLEV bus passes along, which prevents standby power consumption and electromagnetic field exposure. Other forms of transport, such as trams, trains and electric cars, can also be adapted for the OLEV system.

The World Economic Forum has nominated the OLEV Technology as one of 10 emerging technologies for 2013.

The technology is coming to Australia, as OLEV Australia has entered into a joint venture with the OLEV company in South Korea and KAIST in 2012 to commercialise the technology in Australia. The OLEV system will provide environmental benefits to Australia and will be cheaper to run compared to diesel and gas buses.

Europe

European Commission: Horizon 2020 Programme

The European Commission launched the [Horizon 2020](#) – the European Union (EU) Framework Programme for Research and Innovation – in December 2013. The Programme is the largest EU research and innovation programme with nearly €80 billion of funding available over seven years (2014 to 2020).

The Programme will fund fundamental research, applied research and innovation, and will be accessible to both small and large companies.

Horizon 2020 is built around three pillars:

1. Support for Excellent Science;
2. Support for Industrial Leadership; and
3. Support for research to tackle societal challenges.

Horizon 2020 funding is based on competitive calls that are open to everyone, including organisations and individuals outside the EU.

European Commission: Public Consultation on the review of the EU copyright rules

The European Commission recently completed a public consultation on the Review of the European Union (EU) Copyright Rules. The consultation focussed on the challenge to ensure that the EU copyright regulatory framework stays fit for purpose in the digital environment to support creation and innovation, tap the full potential of the single market, foster growth and investment in the economy and promote cultural diversity. The Commission sought feedback from stakeholders, including authors, consumers and producers. [Contributions](#) are available online.

UK: Building Tech-Powered Public Services

The Institute for Public Policy Research, a United Kingdom think tank, has released the [Building Tech-Powered Public Services](#) report which examines 20 case studies of digital innovation in public services to explore the impact of new and disruptive technologies.

The report notes that grassroots innovation is the key to creating new technologies capable of saving public services from the combination of increased demand and shrinking budgets.

The report finds that while technology in public services can save time, boost user participation and encourage users to take responsibility for their own wellbeing, innovators face obstacles such as user resistance. The report identifies five essential elements of successful innovation:

- user-based iterative design;
- public sector expertise;
- access to seed and bridge funding;
- strong leadership; and
- strong business case.

The Rise of Alternative Finance in the UK

Nesta, in association with Berkely and Cambridge Universities, have prepared a benchmarking report on the [Rise of Future Finance](#) in the United Kingdom (UK). The report, published in December 2013, presents the results from the first ever survey of the UK's alternative finance sector.

Finance intermediaries offering alternative finance models, such as crowdfunding, peer-to-peer lending and invoice trading, have been growing in size and impact in the UK in recent years. The Rise of Future Finance report offers a snapshot of the alternative finance sector in order to understand its size, growth and the fluid development of respective segments.

Key findings from the report reveal that:

- the UK alternative finance market grew by 91 per cent from £492 million in 2012 to £939 million in 2013;
- the UK alternative finance market provided £463 million worth of early-stage, growth and working capital to over 5,000 start-ups and small-to-medium-sized-enterprises (SMEs) in the UK from 2011-13; and

- in 2014, the UK alternative finance market is estimated to grow to approximately £1.6 billion and provide £840 million worth of business finance for start-ups and SMEs.

In compiling the report, primary data was gathered from more than 50 alternative finance intermediaries, including from almost all members of the United Kingdom Crowdfunding Association and the Peer-to-Peer Finance Association.

The body of research undertaken represents the first intensive, comprehensive and empirical country level study of an alternative finance market anywhere in the world.

North America

Canada Reviews Science, Technology & Innovation Strategy

The Canadian Government recently completed a Review of its [Science, Technology & Innovation Strategy](#). The Review is part of an approach to update the country's 2007 Science, Technology & Innovation Strategy. The consultation phase concluded on 7 February 2014.

US: Commerce Report on Universities and Innovation

The [Innovative and Entrepreneurial University: Higher Education, Innovation and Entrepreneurship in Focus](#) report, was released by United States Commerce Department in December 2013. The report highlights how universities are supporting innovation and entrepreneurship. The report further highlights efforts by institutions of higher education to support innovation and entrepreneurship in the following five areas:

- promoting student innovation and entrepreneurship;
- encouraging faculty innovation and entrepreneurship;
- actively supporting technology transfer;
- facilitating university-industry collaboration; and
- engaging in regional and local economic development efforts.

US: New Manufacturing Innovation Institute

On 15 January, President Obama [announced](#) that a consortium of 18 businesses and six universities has been selected to lead a Manufacturing Innovation Institute headquartered in North Carolina for next generation power electronics.

Two more of these innovation hubs are also planned to be launched. One will focus on digital design and manufacturing; another will develop lightweight metals. Three new manufacturing institutes were proposed by President Obama in last year's State of the Union address and the North Carolina one is the first of these. In May the president launched a competition for these three new manufacturing innovation institutes with a federal commitment of \$200 million from five federal agencies building on the success of a pilot institute. The next two institutes, led by the Department of Defense, are in the selection process and will be focused on Digital Manufacturing and Design Innovation and Lightweight and Modern Metals Manufacturing.

Each institute is designed to serve as a regional hub to 'bridge the gap' between applied research and product development, bringing together companies, universities and other academic and training institutions, and federal agencies to co-invest in technology areas that encourage investment and production in the United States. This 'teaching factory' approach provides a unique opportunity for education and training of students and workers at all levels, while providing the shared assets to help companies, most importantly small manufacturers, access the capabilities and equipment to design, test, and pilot new products and manufacturing processes.

Global

OECD: Commercialising Public Research

The OECD released its report [Commercialising Public Research: New Trends and Strategies](#) in December 2013. The report examines the evolution of the way in which universities and public research institutions engage with business to take science from the lab to the market. The report also provides a review of government and institutional level policies aimed at enhancing the transfer and exploitation of public research results and compares performance in OECD countries, universities and public research institutions using both traditional and new indicators.

Innovation Policy Platform

On 16 January 2014, the [Innovation Policy Platform](#) (IPP) was launched at the World Bank in Washington, D.C. The IPP is a joint initiative developed by the OECD and the World Bank. The aim of the platform is to provide policy practitioners around the world with a simple and easy-to-use tool, supporting them in the innovation policy-making process. This is done by facilitating collective learning about innovation policy, both conceptual and how-to aspects, tailored to the needs of developing and developed countries.

The IPP is expected to find a variety of users with different functional and informational needs, including:

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- policy makers who design and implement innovation policy, allocate resources, and set priorities for long-term development and growth agendas;
- policy analysts, particularly from government, universities, think tanks and consultancies, who inform policy making through concept development, analysis and advice;
- international organisations who work with countries to improve the design and implementation of innovation policies; and
- non-governmental stakeholders such as NGOs, firms, and entrepreneurs who engage in innovation policy processes.