Can Australia become the innovation nation?

Christopher Pyne

Although Malcolm Turnbull's innovation nation initiative has given way – for the time being – to an impending double dissolution, there is still the need to discuss just how such a new initiative could benefit the country. Business First spoke with Minister for Industry, Innovation and Science, Christopher Pyne about the intricacies of the federal innovation initiatives.

First, let's set the scene: with mining in a downturn, commodities slumping and the country being supported by real estate, Australia must look to other sectors to ensure its future.
Entrepreneurship and small business must carry some of that weight and to do so, it requires support.

Geoff Green MD of GRG Momentum and author of The Smart Business Exit says, "A key point made in the Innovation Statement is that Australians are renowned for their smart ideas, but often fail to commercialise them. In other words, we are very inventive but not so innovative," Green says.

"As the Innovation Statement goes on to highlight – you have to move past inventive and become innovative. It's innovative companies that go on to build and sell products and services, create jobs and drive wealth creation.

"Many of our established businesses, both public and private, have under developed innovation or good ideas capable of innovation. The Innovation Statement will provide a strong foundation for further initiatives to encourage greater levels of innovation in established businesses. The emphasis on much better collaboration

between industry, the investment community, academia, our research facilities, particularly CSIRO, and government is really encouraging as it's a key to achieving these outcomes."

- So what level of support does government intend to bring?
  The National Innovation and Science Agenda (Agenda) comprises 24 measures under the four themed pillars of:
- Culture and capital, to help businesses embrace risk, be ambitious and experiment to find solutions. An important component of these initiatives is the changes to the tax system to remove bias against risk taking and innovative businesses.
- Collaboration, to increase the level of engagement between businesses, universities and the research sector to commercialise ideas and solve problems. Measures under this theme will change incentives to encourage universities and industry to work together.
- Talent and skills, these measures will train Australian students for the jobs of the future and attract the world's most innovative and entrepreneurial talent to Australia.
- Government as an exemplar, to lead by example in the way Government invests in and uses technology and data to deliver better quality services. The Australian Government will make it easier for innovative SMEs to deliver technology services to government, and lead by example by being more innovative in how services are delivered and how data is shared with the public.

"The Agenda provides greater incentives for investors – through personal angel investments and via registered venture capital vehicles – to support new startup businesses," says Minister Pyne. "It also makes it easier for businesses to raise capital for growth through employee share schemes and crowd-sourced equity funding."

In fact, new funding will support entrepreneurial investments in biomedical discoveries with the $250m Biomedical Translation Fund. The CSIRO Innovation Fund will provide a further $200m towards commercialising new and novel ideas that are sourced from the CSIRO and other public funded research organisations.

"Measures under the Agenda also provide greater flexibility for early stage businesses in relation to their intellectual property and access to company losses allowing early stage businesses to be more flexible with their direction as they secure new opportunities and fine tune their direction."
The Global Innovation Strategy (GIS) component has been specifically designed to give new and startup businesses improved access via 'landing pads' in key markets across the globe including in San Francisco, Shanghai and Tel Aviv.

Today, these cities are the hubs of innovation from which we must learn and grow.
The Global Innovation Linkages component of the GIS will provide seed funding to assist Australian businesses collaborate with international partnerships.
The innovation initiative doesn't just cater to start-ups, existing businesses can also access many of the programmes under the Agenda.
"The Innovation Connections component of the Entrepreneurs' Programme will

facilitate greater connections between the business sector and researchers," Minister Pyne says.

The Entrepreneurs' Programme has a range of other components, including the Accelerating Commercialisation component, which provides facilitation services by Commercialisation Advisers, and grants to allow innovative businesses to successfully grow their new ideas.

Then there is the Incubator Support Programme – also a component of the Entrepreneurs' programme – that will improve access to, and capability of, existing and new incubators across Australia.
"Businesses that are seeking new markets in the US, Europe, the Middle East and Asia will be encouraged to utilise the services offered at the new landing pad sites.

"Business Programmes under the Agenda will be detailed – including guidelines and application processes – on business.gov.au once they become open for applications, which for many is from July 1 this year.
"AusIndustry State and Regional offices have a role of engaging with their local business communities in order to connect their businesses to the programmes – including from the current suite of AusIndustry programmes – that are most appropriate to needs."
What are the economic benefits that will come from these?

"A greater investment in new, innovative startup businesses will create increased employment and economic opportunity for the future," says Minister Pyne.
"Companies that embrace innovation, that are agile and prepared to approach change confidently, are more competitive, more able to grow market share and more likely to increase their employment.

"With the support of the Global Innovation Strategy, we will grow exports and increase related employment."
According to the government, The National Innovation and Science Agenda will create more innovative businesses. And compared to businesses that do not innovate, innovative businesses report[1] that they are:

- around 60 per cent more likely to report increases in income from sales and increased profitability;
- four times more likely to increase the number of export markets targeted;
- about twice as likely to increase productivity and employment;
- around three times more likely to report increases in investment in training and IT expenditure; and
- around five times more likely to increase the range of goods and services offered.

"The Agenda supports innovative businesses, which in turn creates a stronger, more vibrant economy with exciting new employment opportunities."
There are also tax and financial incentives.

Under the 'Culture and capital' pillar there are measures providing financial incentives for early stage investors (angels and registered venture capital limited

partnerships), to invest in new startup businesses seeking to commercialise new products, services and ideas.
"Amendments to tax laws are being made to make it easier for young agile companies to access company losses, and there are changes to rules that currently limit depreciation deductions for some intangible assets."

There is a range of granting programmes available under the Agenda, but providing grants to stimulate business innovation and growth, is only one part of the equation. Other measures seek to change the cultural mindset, and make it easier for new and innovative businesses to commercialise their new ideas, to access financing and funding support from investors, and to have improved access to overseas markets.

When asked about changing workforce demographics and how they will influence the rise of the Australian innovator, Mr Pyne says, "the government recognises that to maintain Australia's status as a first-world, high standard of living economy in the 21st century, it needs to focus on high value, well paid employment opportunities for young people.
"Increasingly, these jobs are found in knowledge-based service industries, including those that result from the commercialisation of new ideas. Australia has a tremendous track record of invention, but a less than stellar one of commercialisation – and this is where the focus of our innovation agenda lies.

"We need to continue to export what we produce, but increasingly what we produce will be ideas, inventions, innovations and services. The focus in the Agenda on supporting STEM and digital literacy for students will go a long way to ensuring a future generation well equipped to compete in a global environment.
"The Australian workforce has always been highly adaptable – but economic globalisation and competition means we need to work harder at ensuring they have the skills needed for the jobs of the future."

Despite some commentary that puts Australia behind other nations in ten innovation stakes, Australia does fare quite well, particularly in the field of science. Internationally, Australia's innovation and science ecosystem performs very well in some areas, like the quality of research:

- In 2013 Australia produced 3.7 per cent of the world's research publications from only 0.3 per cent of the world's population, ranking 10th in the OECD.[2]
- From 2005 to 2014, Australia significantly improved its share of the top 1 per cent of highly cited publications, going from 3.4 per cent to 6.9 per cent.[3]

However, Australia performs poorly by international standards in translating publicly funded research into commercial outcomes.
"We risk slipping further down the innovation ladder," Mr Pyne says.

- In 2012-13, only 5.7 per cent of Australian businesses generated any new-to-market innovations. This compares with up to 26 per cent in the top five OECD countries and a 14.5 per cent average across the EU in 2010.[4]

- Australia ranks 29th and 30th among 30 OECD countries on the proportion of large businesses and SMEs which collaborate with research organisations on innovation.[5]

Additionally, Australia ranks 17th out of 141 countries on the 2015 Global Innovation Index, well behind world-leaders like Switzerland, the United Kingdom, Sweden, the Netherlands and the United States.[6]

"That is why a focus for the National Innovation and Science Agenda is measured to convert more of our research into commercial opportunity, so that we don't miss out on economic and employment growth."
The question is how can Australia become a world leader in the innovation stakes.

"Australia's economy has enjoyed an unprecedented 24 years of uninterrupted growth. However, we are coming to the end of the mining investment boom and new sources of growth are needed.
"Rapid developments in technology and science are disrupting traditional jobs and industries around the world. They are changing the way we live, the way we work and the way we do business.
"The opportunities offered by these changes and by the new global economy are vast. If we are to make the most of them, we cannot rely on the old ways of doing things. We are on the doorstep of Asia – the world's economic engine room – with our new trade agreements further opening doors to Asia and beyond.

"The digital revolution means we are now part of a truly global marketplace of ideas, products and services. We must embrace an entrepreneurial and innovative mindset to build an agile economy and create the jobs and industries of the future.
"We must see technological disruption for what it is, a massive opportunity. We must embrace, not fear it. We need not just to have the ideas, but to develop a hunger to pursue them, to take a risk, to learn from failure and to profit from our high quality research."

Mr Pyne believes that several industries will rise through this initiative, but he says that the initiative is designed to boost the overall state of Australian business.
"The National Innovation and Science Agenda is a non-industry specific policy setting. And whilst it does not target specific industries, it does support new, innovative and agile businesses.

Businesses that will thrive in the 21st century, take full advantage of Australia's assets and can build on the past experience of our science and innovation sector.
"Australia's proximity to Asia will require us to deliver products and services that the Asian market demands in the 21st century.

"To remain globally competitive, we must seek to develop new industries and 'new to the world' innovations. We must also ensure that the financial benefits of our successes remain in Australia and benefit all Australians." BFM

[1] Australian Innovation System Report 2015 – Department of Industry, Innovation and Science
[2] (Source: Australian Innovation System Report 2015, Table A9 p. 127 and World

bank Database)
[3] (Source: Australian Innovation System Report 2015, Table A9 p. 127)
[4] (Source: Australian Innovation System Report 2014, Figure 2.7, p. 51 and p.3)
[5] (OK) Source: OECD (2013) Science, Technology and Industry Scoreboard. P 127
[6] (Source: Cornell University, INSEAD, WIPO (2011-2015) Global Innovation Index, GII 2015, URL: http://www.globalinnovationindex.org

http://www.businessfirstmagazine.com.au/can-australia-become-the-innovation-nation/16206/