

NOT SO CLEVER

Australia needs to radically overhaul its innovation policies to avoid becoming a bit player in global growth.

STORY • TONY BLACKIE MAIN PHOTOGRAPH • PAUL JONES

NO MATTER WHICH WAY you look at it, Australia's self-image as a smart country appears to be built on self-delusion.

Compared with countries such as Sweden, Finland, Ireland, China, India, South Korea and even New Zealand, Australia lags on almost every indicator of research and development health.

Only 2.1 per cent of Australia's gross domestic product is spent on innovation; the Organisation for Economic Co-operation and Development average is 2.25 per cent.

Each year, more than \$10 billion is wasted on research that will never be commercialised. The problem is that Australia's innovation policies are misdirected and unfocused, and the education system is failing to provide graduates with the skills required for the nation to compete.

Identifying global growth centres is not easy, but Norway, Sweden, Finland, Ireland and Israel have all done it and the rewards from their innovation and creativity are there for all to see, the dean of the Macquarie Graduate School of Management, Professor Roy Green, says.

He believes that the solution has been given

to the federal government on several occasions, most recently last November when the peak industry group, the Business Council of Australia, submitted its blueprint for the development of Australia as an innovative country.

The report listed five priorities:

- Elevating innovation to a national priority and better aligning our efforts.
- Strengthening collaboration across the many contributors to Australian innovation.
- Boosting support for research networks and institutions.
- Developing workplace skills and a culture of innovation through education and training.
- Creating a stronger business environment to support innovation.

About these priorities, the government has done little, Green says. In spite of the pre-budget announcement on industry policy funding and the allocation to universities, the innovation agenda has not moved forward.

"The view is that the government is saying, 'Let's keep this constituency quiet and throw a little bit of money at it,'" he says.

In common with most other innovation experts Green says that if Australia wants to develop a knowledge-based economy once the resources boom is over, the planning and infrastructure needs to be put in place now.

"We have to think how we can use the windfall gains to prepare for the future, like Norway has done," he says.

"Do we want to use a future fund, like Norway, to invest in infrastructure for a time when we will need it? They have a fund which is the product of the surpluses provided by North Sea oil and gas."

The fund can be used to develop education and to help Australia focus on the things it is good at, Green says. Having studied closely the way Ireland has become a leading European economic power, Australia can follow its example of assessing national capabilities and matching them with markets.

However, the time to act is now as most of Australia's near neighbours build their educational and innovation capabilities, threatening to leave the nation as a bit player in the region, if not globally.



David Gelb, a national partner focusing on innovation and R&D tax issues at professional services firm KPMG, agrees that an obvious answer to the urgent need to build Australia's innovation capability is the development of an innovation-specific future fund.

Innovation requires long-term thinking and courageous leadership, Gelb says, suggesting that the idea of a future fund for innovation offers hope for development.

"The resources boom won't last forever," he says. "The key message here is all thinking in companies is short to medium term and it is the same for governments. They are caught up in the electoral cycle.

"[Industry expects] governments to send the message that we need to think beyond the short term. If the government's message is solely short term, then industry will sense that and react accordingly. We look [for] leadership from the government for direction for our future.

"Innovation should be looked at in the same way we have embraced success in sport with the

development of the Australian Institute of Sport. That is long-term thinking.

"The current view of Australia as a smart country is clearly delusional. Our tendency to pat ourselves on the back while stagnating year after year at 16th or 17th on the OECD table of innovative countries is not good enough."

The recent federal government announcement extending the R&D tax concession to some overseas companies based in Australia failed to take in the big picture, Gelb says.

"In New Zealand, the R&D tax rebate is 15¢ rather than 7.5¢ [in Australia]. It's double," he says, commenting on innovation incentives announced by the NZ government.

"If you are a small company, there is no threshold – it's there for the taking. Why wouldn't you think of relocating to NZ if you are thinking of establishing an R&D operation?"

Gelb points out that a small to medium business in Australia spending less than \$1 million would not get a rebate, but "in NZ they will cut you a refund cheque for \$150,000 after tax. If it were

Roy Green: 'We have to think how we can use the windfall gains to prepare for the future'

my company I would be saying this is a serious amount of money."

Roger Allen is one of Australia's most successful entrepreneurs in identifying and funding start-up technology companies. Many of the businesses he has had a hand in building have been bought by leading international companies, providing funds to be invested in other start-up ventures.

Hitwise, an internet-based company in which Allen was involved, was sold recently to the London-listed Dublin technology company Experian Group for more than \$300 million. He points out that 70 per cent of the shareholders were Australian and some of the money they have made will flow into other technology start-ups.

Allen is sceptical about how successful a federal government-run future fund for innovation would be, given that other bureaucracy-run funds have failed in the past.

The top-down approach requires picking winners, which is a very difficult thing, he says. Around the world, there are people trying to do the same thing, trying to pick the next wave.

A better solution in the development of an innovative economy, he suggests, is to tackle the skills shortage and focus on education, encouraging more students into the hard sciences where the bulk of R&D is undertaken.

Australia has to recognise that it does not have companies such as Nokia and Ericsson, he says. The big-business sector is dominated by resource, property and banking and finance, which are not known for their R&D output. The concentration has been, and will remain, at the small to medium end of the market. "Publicly funded R&D at that level is healthier than it's ever been," Allen says.

The acting chairman of the CSIRO, Dr Terry Cutler, advocates a cohesive national policy to create an innovation footprint. The failure of industry issues being given priority is frustrating, he says.

"We are living on the back of the commodity exports to China. We are maintaining the employment but we have no clothes and everything is going well. It is extraordinary that we are all going along with this farce."

Australia would be well advised to look at countries such as Chile, which is re-investing its windfall benefits of their own mineral and resources boom, Cutler says.

23rd

Rank of Australia in a recent international innovation survey.

Source: Forrester Group

0.89%

Proportion of Australian GDP devoted to business expenditure on R&D in 2005.

Source: OECD/ABS

1.69%

Proportion of Australian GDP devoted to government and business expenditure on R&D in 2005.

Source: OECD/ABS

44

Number of Australian companies spending more than \$10 million a year on R&D.

Source: IBM/Intellectual Property Research Institute of Australia

\$10 billion

Amount of grants and government and private funding being wasted annually on R&D in Australia.

Source: Strategyn

23.8%

Increase in innovative activity since 2004 by the health and community sector, the best performing in the Australian economy

Source: IBM

“Chile and Finland and others have created future funds for innovations. They recognise that innovation is the future. They are being realistic about the favourable circumstances they find themselves in and using the benefits to reinvest. Failure to do that is like winning the lottery and splashing it all about.”

The Chilean model involves the development of innovation councils, which have identified important clusters in which the fund will invest. These clusters include food, energy and information and communication technology.

“They are not picking firms,” Cutler says. “They are picking sustainable parts of the economy which are a national priority and where they have the skills.”

One entrepreneur who knows what it takes to develop and commercialise successful innovation is Evan Thornley, founder of LookSmart, a one-time rival to Yahoo! and Google in the online search market.

Thornley, who is now a member of Victoria’s Legislative Council and the parliamentary secretary assisting Premier Steve Bracks on the national reform agenda, agrees that a forward-looking policy for innovation is required.

Many people are intent on building a 1/30th

sized model of the US economy in Australia, but that won’t work, he says.

Australia desperately needs to improve its sales and marketing capability because it is here that many start-ups fail to gain traction, he argues.

The chief executive of innovation management consultancy Strategyn, Bruce Barton, says Australia was ranked 23rd in a recent international innovation survey because of its focus on R&D at all costs. He points out that seven out of 10 new products fail because companies all over the world are looking at big ideas rather than the unmet needs of customers.

This results in more than \$10 billion in grants and government and private funding being wasted annually.

Successive governments are guessing what will be the next big thing and have no idea if the products being developed will meet customer needs and demand, Barton says.

“We desperately need an innovation strategy that identifies where the changes will be in consumer demand. Instead of coming up with the idea first, we need to come up with market insights and customer problems.

“If we only made a 20 per cent difference, we would save \$2 billion each year.”

The head of the school of strategy and entrepreneurship in the faculty of business at the University of New South Wales, Associate Professor Peter Murmann, says it is prudent to look at how other countries have successfully developed their approach to innovation and R&D. The winners have looked at their core competencies then built on these areas.

Finland, which is seen as an example of how to develop a sustainable national innovation policy, has invested heavily in education at the secondary and tertiary levels to ensure the country has a flow of skilled workers, Murmann says.

Focusing on a big strength, pulp and paper manufacture, Finland has built a strong domestic industry and is a leading international player in the field.

“Countries often make the mistake of allocating R&D resources into business areas which present don’t exist,” Murmann says. “The innovation strategy has to forget about flavour of the month we need to look and identify where we have the niche and then develop it. We should look at what we do well – for example, the financial services sector. If Australia can stimulate growth in this area, it can make an impact.”●