



Committee  
for  
Sydney

# Unleashing Sydney's Innovation Economy

July 2020



## About the Committee

The Committee for Sydney is an independent think tank and champion for the whole of Sydney, providing thought leadership beyond the electoral cycle. We bring people together to solve the problems of today and tomorrow.

With 150 member organisations, we work on behalf of Sydney, not the interest of any industry or sector.

If you would like to find out more about joining us, please call Hannah Jamieson, Director of Engagement and Development on +61 417 729 001.

## Acknowledgments

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We would also like to acknowledge Emeritus Professor Roy Green of UTS, who has provided crucial insights and reflections.

The Committee also wishes to acknowledge the extensive contribution and feedback from our members and our stakeholders in Sydney and across the world.

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# Foreword

**Australia is in the midst of a challenge unlike any other in living memory. Ubiquitous public health risk. Global supply networks at a stand-still. International movements of people down to a trickle. The economy exposed to a recession and mass unemployment.**

This may seem like a strange time to talk about innovation – but it is exactly these conditions that provide the opportunity to adapt, adjust and reform. This report is an opportunity to take stock of the challenge and provide wide-ranging recommendations to support Sydney and Australia’s emergence as an economically strong, fair and healthy society bursting with opportunity and world-changing ideas.

In the face of COVID-19, we must be bold in our reform and grasp the opportunity to do away with barriers to entrepreneurship, whether through start-ups, existing companies, universities and research institutions. We must also recognise the positive role that government plays in driving innovation – leading industry or economy wide projects to convert new ideas into new products and services.

We have strong foundations to build on. Sydney has an educated, globally connected population, with some of the best universities in the world and a concentration of global firms. But our ‘outputs’ are lagging, with Australia ranked in the global bottom 40% for innovation outputs.

More must be done to take advantage of these building blocks. Contained in this report are a set of detailed and specific recommendations that will help create an innovative city. We encourage you to consider these carefully, discuss them, let your thinking expand – and to take the opportunity that our current circumstances offer to do things differently.

## Research Co-Chairs



**Attila Brungs,**  
Vice Chancellor  
and President – UTS



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# Introduction

Every day, jobs are destroyed – destroyed by economic changes, new technology, global pandemics and, in the future climate change, automation and artificial intelligence. A successful economy replaces these jobs with better, more globally resilient and productive jobs.

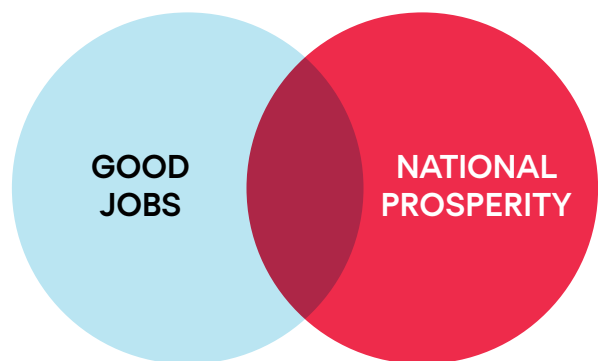
We will only be able to achieve this with a mature innovation economy: innovation to create new products, new services, new firms, and new industries that can put Australians to work as older forms of work go away.

Australia needed to make some difficult reforms in order to not be left behind by the changing world economy. There were some worrying signs of issues that had been growing for some time. Now COVID-19 has hit and driven the world's economy into the biggest loss of economic activity since WW2. Our longstanding problems take on a new urgency.

We already needed to grow our innovation economy. Now that task is intrinsically linked with recovering and rebuilding from the COVID-19 recession.

A thriving innovation economy is not an end in itself. It matters because it will be the future source of national income for Australia and it will deliver good jobs for Australians.

Two reasons we care about the innovation economy

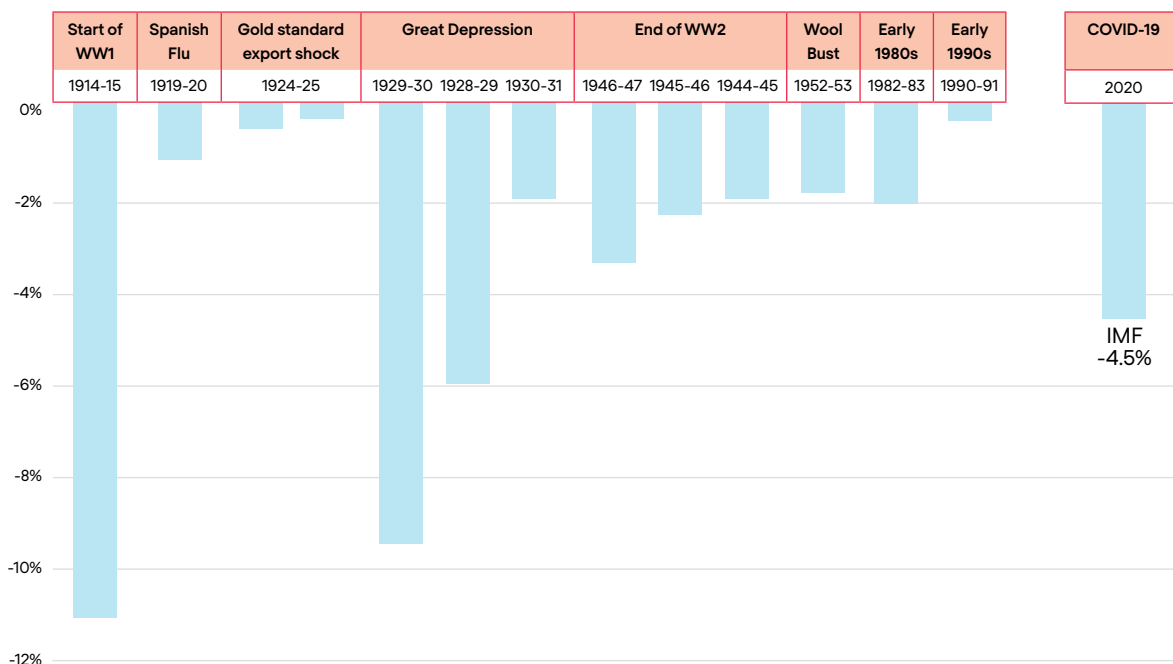


# The COVID-19 challenge

COVID-19 is the greatest disruption to the Australian economy in many generations, and its impacts have touched every single person in Australia.

## The biggest economic contraction since the Great Depression

### Australian recessions by size



Source for previous recessions: *SGS Economics and Planning*

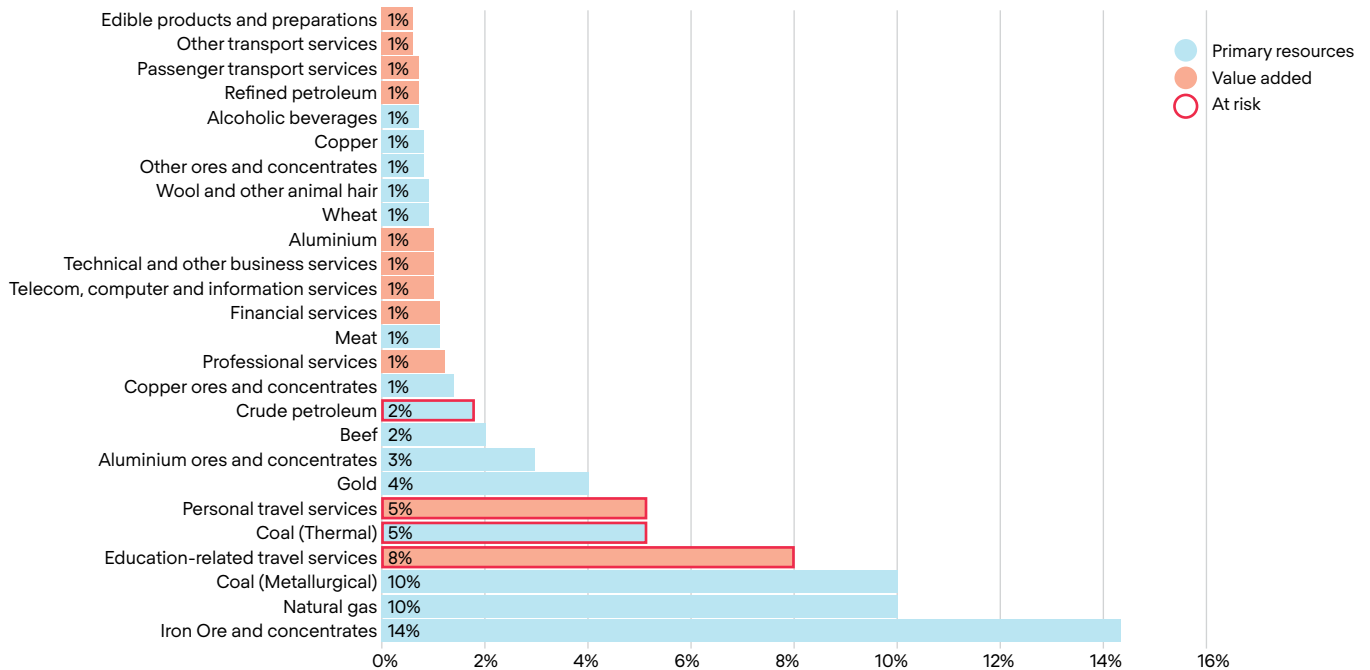
Many firms and industries will disappear forever. Many more will be changed dramatically.

The experience sector – including bars, restaurants, theatre, performance and music and sport – is likely to be devastated. Visitor and business events industries will similarly be deeply impacted. Global travel – for business, leisure or study will similarly be deeply impacted.

There is the possibility of widespread bankruptcies. Firms that no longer exist cannot re-hire. Meanwhile, underlying trends leading to long-term decline for climate exposed industries remain.

## Many key export industries are under threat from COVID-19 or climate transition

### Australian exports by percentage of total export value

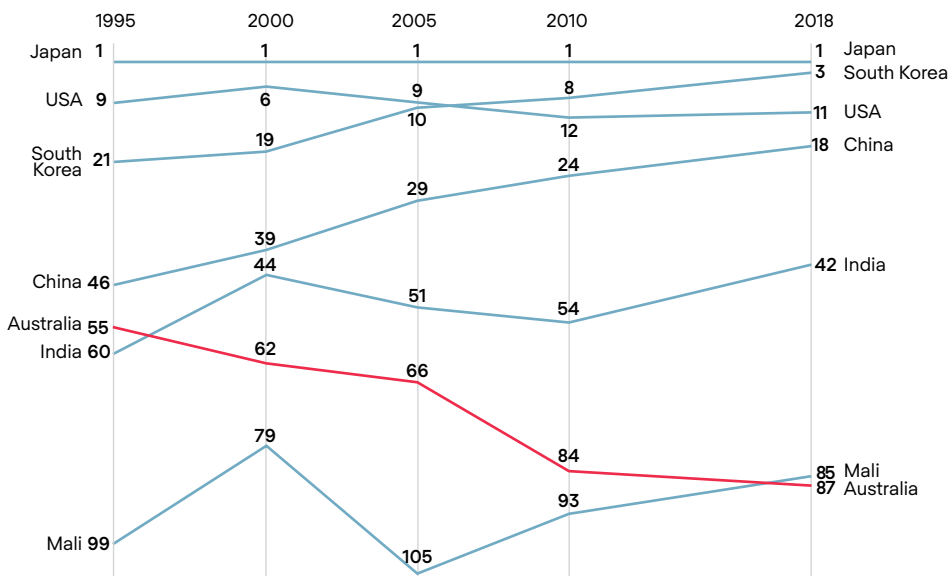


Source: Analysis by EY and CFS based on Department of Foreign Affairs and Trade

These changes will immediately reduce overall national income and the number of good jobs. Past downturns have led to, over time, a recovery where new firms, industries, sources of national income and good jobs appear to replace those that were lost. However, this process is bumpy and painful, and success is not assured.

## Australia is increasingly reliant on few dominant industries

### Economic complexity since 1995 of selected countries



Source: The Atlas of Economic Complexity

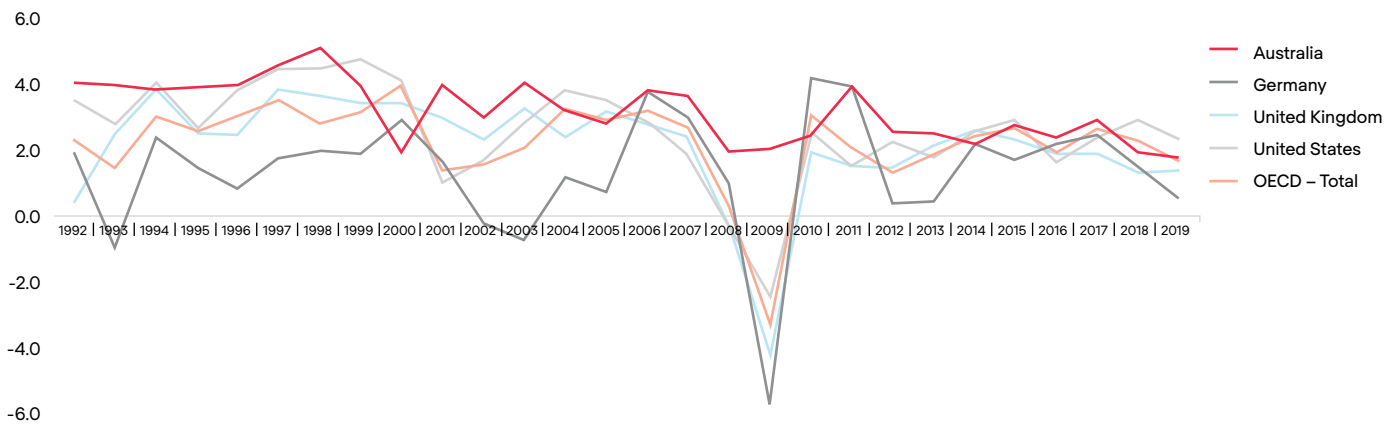
Australia's economic complexity, which measures the diversity of exports and how unique these exports are, has never been strong, and has dropped precipitously over the past 25 years, primarily reflective of our reliance on digging things out of the ground.

# Australia's luck has run out

Australia hasn't experienced a recession for 28 years.

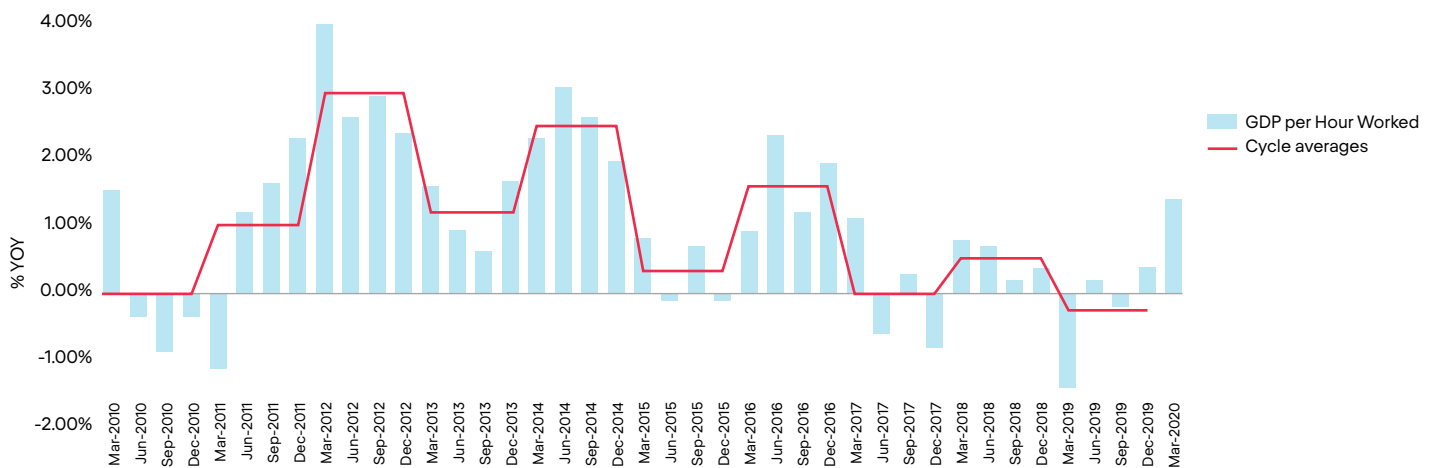
Australia hasn't needed to innovate or disrupt itself for a long time

GDP growth by country 1992-2018



While this has been fantastic for our lives over the past 28 years, it has had the unfortunate side-effect of reducing the impetus to reform our economic and social systems to nearly zero – if it ain't broke, don't fix it. Most people under the age of 50 have never experienced a recession in Australia and understandably, they have never worried about a recession. This complacency missed an underlying problem – Australia was slowly, yet surely, becoming less successful.

Labour productivity has dropped since 2012



COVID-19 has intervened in this long-term trend of slow decline. Reform is back on the agenda. However, because of our long-term lack of economic downturn and little by way of major reform over recent decades, we have further to go in terms of reform than most of countries.



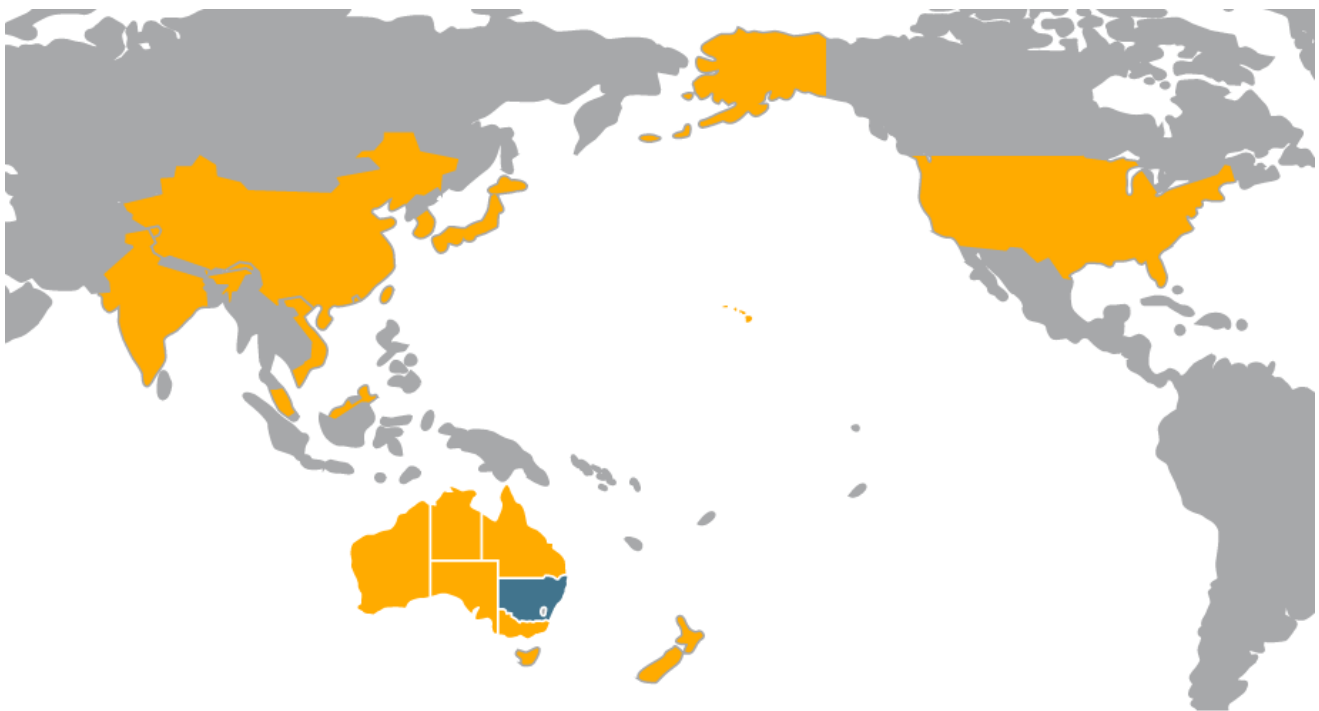
# Australia's opportunity

Australia is well placed to take advantage of this moment.

We have the right existing trading relationships – the long-term trend of Asia growing in relative economic power is more likely to accelerate than slow because of COVID-19, and 8 of NSW's top 10 trading partners are in Asia. The response from Asian countries to COVID-19 has also been more successful, increasingly the likelihood that they will emerge relatively stronger than countries like the USA.

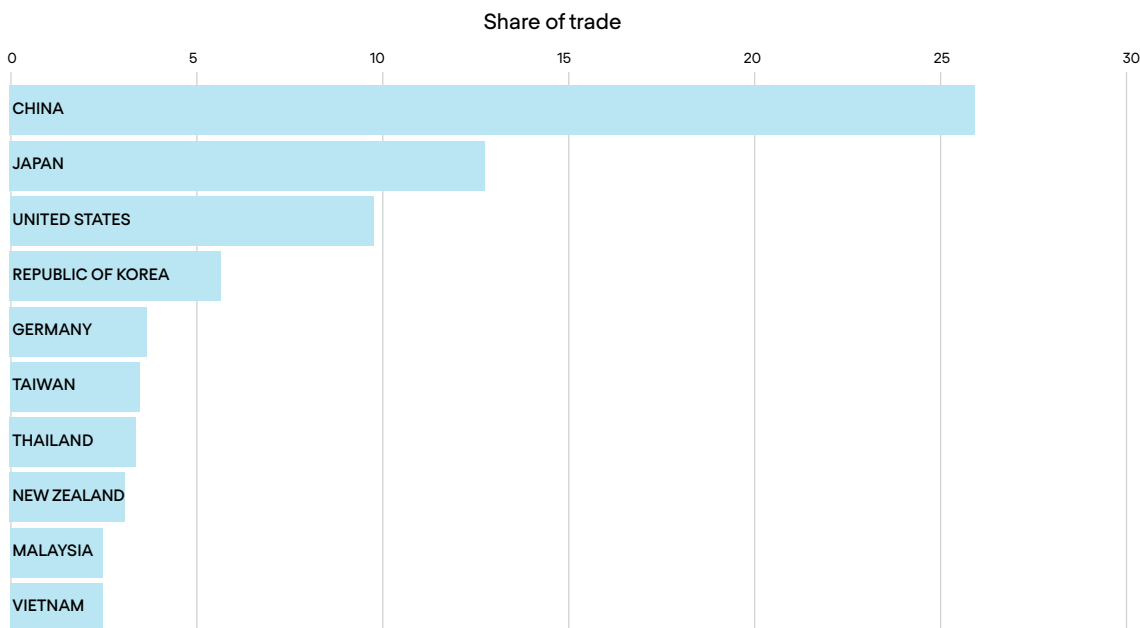
## NSW has strong existing trade relationships with Asia

Top 10 export markets for NSW goods include Japan, China, Republic of Korea, Taiwan, India, Hong Kong, Malaysia and Vietnam.



Source: Department of Foreign Affairs and Trade

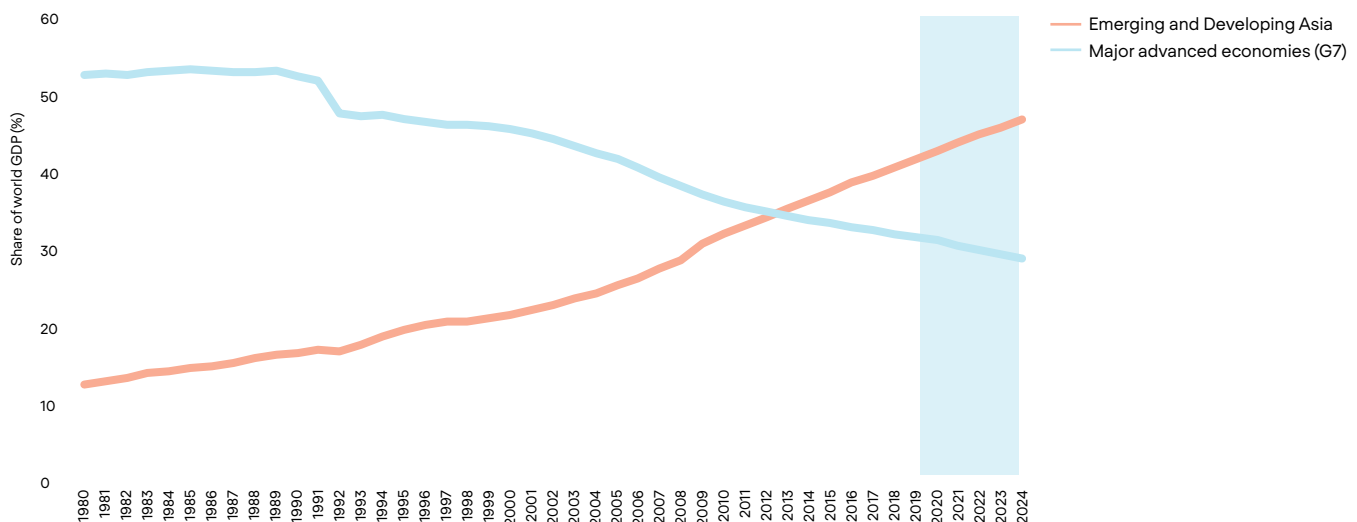
## NSW top 10 merchandise trading partners



Source: Department of Foreign Affairs and Trade (<https://www.dfat.gov.au/sites/default/files/australia-state-territory-2018-19.pdf>)

## The geographical balance of the global economy is shifting

GDP based on Purchasing Power Parity, share of world



Source: IMF

This shift in the global centre of economic gravity is not simply a matter of the expansion of manufacturing or traditional industry in Asia. Substantial knowledge-based and innovative start-ups are growing in the region.

However, to take advantage in the coming decades of this proximity to the global growth engine, transitioning our economy from resources to knowledge-intensive exports will require deep reform within our economy.

# The innovation moment

Nowhere is the need for urgent reform more true than in our innovation economy.

Sydney has had many successes, and our underlying institutions to support the success of innovation are strong.

## **Sydney's ranking in global benchmarks**

- Ranked 9<sup>th</sup> for Digital Industry Experts
- Top 10 for ecosystems conditions for innovation
- 5<sup>th</sup> highest city for density of top 200 universities
- Ranked 7<sup>th</sup> for talent concentration
- 10<sup>th</sup> best centre for global finance
- Ranked 8<sup>th</sup> for youth opportunity

However, our outputs on a number of innovation measures are below where they should be, relative to the strength of our economy and skills and education of our citizens.

Australia scores extremely well in the Global Innovation Index for our underlying institutions, talent and assets compared to other countries.

But these 'inputs' are not delivering 'outputs' in the innovation economy – with our ranking plunging from 15<sup>th</sup> to 31<sup>st</sup> out of 50.

Why is this? It is in large part because of key barriers and problems besetting our local innovation economy.

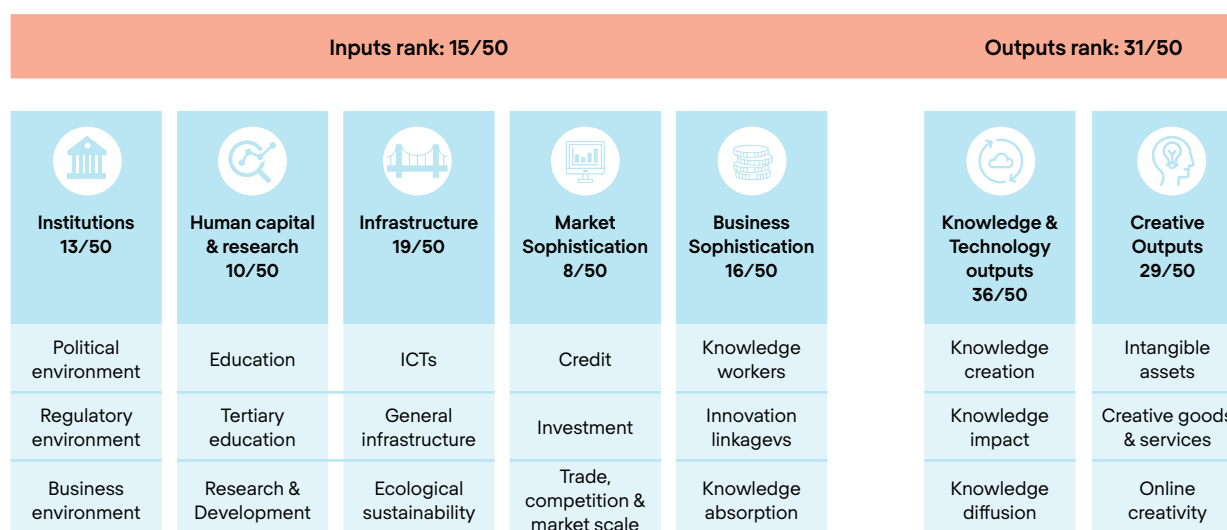
Growing the innovation economy will be the key growth area for new jobs and new sources of national income – without this Australia will not regain its living standards for many years.

Reforms to many areas will drive substantial growth of our innovation economy, providing a new source of national income and good jobs. We organise the recommendations in this report into five ideas:

1. **Invest government dollars in important R&D efforts.**
2. **Make it easy to start new companies and create good jobs.**
3. **Make Sydney's underlying economic systems more efficient.**
4. **Make it easy for talented people to come and stay in Sydney.**
5. **Give Sydneysiders the skills they need to be successful.**

## Australia's innovation outputs are poor compared to our underlying strengths.

Australia's rank in the Global Innovation Index 2019



Source: Global Innovation Index

## A sense of urgency

### Minor reform will not be sufficient in coming months and years.

The International Monetary Fund is predicting that Australia will experience a 4.5% contraction in GDP, and for unemployment to reach 7.6%, just in 2020.

Many of the reforms proposed in this paper have been considered for years, but the current crisis makes their immediate implementation necessary.

Many of these reforms have substantial costs, but the alternative – sustained economic decline – will cost much more.

# Solutions

## **1. Invest government dollars in important R&D efforts**

- 1.1. Increase R&D spending to far exceed the OECD average
- 1.2. Fund national missions led by CSIRO
- 1.3. Make government the first customer

## **2. Make it easy to start new companies and create good jobs**

- 2.1. Expand start-up incubators, accelerators and maker spaces
- 2.2. Expand access to employee share schemes
- 2.3. Broaden the Early Stage Innovation Company tax incentives
- 2.4. Improve the Export Market Development Grant program for start-ups
- 2.5. Reduce payroll tax for new innovative companies
- 2.6. Expand Venture Capital tax exemptions to domestic investors

## **3. Make Sydney's underlying economic systems more efficient**

- 3.1. Reform the taxation system
- 3.2. Speed up the internet
- 3.3. Upgrade innovation precincts

## **4. Make it easy for talented people to come and stay in Sydney**

- 4.1. Make entrepreneur visas much easier to access
- 4.2. Reform the global talent visa
- 4.3. Support international students to stay in Australia

## **5. Give Sydneysiders the skills they need to be successful**

- 5.1. Reform VET
- 5.2. Fund life-long learning through long service leave
- 5.3. Plug the funding gap for universities

# 1. Invest government dollars in important R&D efforts

## Why this is important

Fundamentally, without research and development, we will never find the solutions to the wicked problems besetting us. Researching and developing new products and services are at the heart of innovation. Every firm, university or public institution interested in maintaining or growing their impact must invest heavily in it. Without a culture of trying new things, our economy will never evolve.

But R&D is inherently risky – most ideas fail. Being comfortable with failure is crucial to a successful R&D practice, which means support from government that reduces the cost of failure is an important part of a national R&D system.

This doesn't mean that government is simply socialising the losses of private firms – there is good evidence that the spill-over effects of R&D to the broader society more than outweigh the cost to government for subsidising it.<sup>12</sup>

Australia lags on researching and developing new ideas. We sit well down in the pack, below the OECD average, and well behind the leaders like Israel and Singapore. While the Australian government already invests billions in supporting R&D, primarily through the R&D Tax Incentive, this amount is dropping, and a renewed focus is needed to respond to COVID-19.

A bold direction is needed on R&D to alert globally connected investors that Australia is a place worth investing in<sup>3</sup>, and to catalyse a shared effort to solve society's wicked problems.

## The evidence

- In a **2016 Innovation Report** by the G20, Australia is just above the median with regards to the registration of new trademarks, and below the median for the number of triadic patents.
- The Australian Bureau of Statistics has **continually shown Australia's investment in R&D dropping** as a share of the size of the economy, placing us well below the OECD average.
- Australia's expenditure on R&D is significantly less than the top OECD countries and has declined at a time when **other countries are increasing R&D spending**.

# 1.1. Recommendation: Increase R&D spending to far exceed the OECD average

## The core idea

Australia should spend more on research and development than the average country.

## Background

Australia will not be able to regain its levels of prosperity without researching and developing new products, services, and globally competitive industries. The Federal Government will need to support this objective.

Australia's total R&D spend has now dropped to just 1.79% of GDP, well below the OECD average of 2.37%. Business R&D is also poor, at 0.9% of GDP to an OECD average of 1.49%. The federal government also announced a further tightening of the R&D tax concession in December 2019, reducing funding by some \$1.8 billion. Critics have argued that the new R&D 'intensity calculation' has **disadvantaged businesses with larger cost bases**, such as those with onshore operations. The changes have also been a huge negative for software-based companies.

In analysis performed by EY we estimated the economy wide impacts of increasing R&D spending from the current level of 1.8% of GDP to the OECD average of 2.4%. The Productivity Commission suggests that an additional 0.26 percentage points of labour productivity growth can be attributed to every percentage point of higher R&D expenditure.

Our analysis<sup>4</sup> finds that increasing R&D spending from the current level of 1.8% of GDP to the OECD average of 2.4% is expected to result in an uplift of \$6.8 billion to the economy, supporting 19,000 jobs each year, due to direct expenditure alone. As increases in R&D activity and therefore productivity gains are flowed through the economy, an additional 8,000 jobs are supported, contributing \$4 billion to Australia's GDP each year. This is equivalent to a combined \$10 billion increase in Australia's GDP and 22,000 additional jobs each year.

## Research and Development Expenditure overall and by Government as a percentage of Gross Domestic Product

Country	% of GDP – total spend on R&D	% of GDP - Government support for R&D
Israel	4.94%	0.11%
South Korea	4.53%	0.13%
Sweden	3.31%	0.13%
Japan	3.26%	0.15%
Austria	3.22%	0.26%
Germany	3.13%	0.07%
Denmark	3.03%	0.06%
United States	2.83%	0.22%
Finland	2.75%	0.06%
<b>OECD Average</b>	<b>2.40%</b>	<b>0.13%</b>
France	2.20%	0.40%
China	2.19%	0.13%
The Netherlands	2.16%	0.18%
Norway	2.07%	0.23%
Iceland	2.03%	0.23%
European Union	2.03%	N/A
Singapore	1.94%	N/A
<b>Australia</b>	<b>1.79%</b>	<b>0.19%</b>
Great Britain	1.71%	0.30%
Canada	1.54%	0.23%
Italy	1.39%	0.19%
New Zealand	1.37%	0.10%
Greece	1.18%	0.02%
Ireland	1.15%	0.20%
Russia	0.99%	0.48%

Source: *OECD and OECD*

Precisely what shape Australia's R&D system should take is hotly disputed, but what is not disputed is that the current amount of spending dedicated to R&D is far below that of competitor countries. The UK, Ireland, Belgium, the Netherlands, Switzerland, Turkey and China all have introduced different forms of **"Patent Box" tax concessions**. A patent box is a tax incentive scheme that reduces the tax payable on income derived from intellectual property, particularly patents. The aim of the scheme is to provide an incentive for companies to retain and commercialise patented inventions and to pursue patent protection for new inventions in their home country. In the UK, the scheme reduces the tax rate to 10% (down from the company tax rate of 20%) for profits specifically arising from IP where the bulk of R&D is carried out in the UK. The key distinction between the two models is that Australia's system offers tax offsets for R&D spending, while a patent box offers tax reductions on profits earned from IP patents.

There is no reason that the two schemes cannot be considered together, especially since the latter is targeted at the commercialisation of research, which would assist with scaling up. Ireland has also introduced reforms that will allow small firms with up to 250 workers to claim the R&D tax credits while products are in the development stage and yet to generate sales, as opposed to having to wait until the company is turning profits before claiming an offset against company tax.

Another option to boost R&D investment would be to offer a research and development tax break for businesses that collaborate with universities and government scientists on innovation. This would be done through the introduction of a "premium rate" R&D tax break for companies partnering with the CSIRO and universities, set at 20%, as recommended by Bill Ferris in the **Australia 2030** report.

## Key actor

Australian Treasury

## How would you enact this idea

Introduce a premium rate R&D tax break for companies partnering with the CSIRO and Universities, set at 20%.

Introduce a patent box tax scheme drawing on best practice design from comparable overseas economies.

Adopt the New Zealand government's classification for allowable software development related concessions to ensure software is classed as R&D.

Provide tax credits to SMEs for R&D during the production stage.

## Expected outcomes

If Australia's investment in R&D increases to well above the OECD average, we increase the likelihood that Australia develops new globally competitive industries, while transitioning our economy away from resource extraction to value-added exports.



## 1.2. Recommendation: Fund national missions led by CSIRO

### The core idea

National missions, like the NASA Apollo program, that align massive public and private investment to solve a problem, drive incredible investment and focus. Australia must do more.

### Background

There is an extremely strong research base that demonstrates the impact that 'national missions' can have on boosting innovation. The 'leading hand of the state' has encouraged public and private investment in delivering new technological breakthroughs.<sup>5</sup> Crucially, often the new technology created has impacts in sectors unrelated to the original goal of the national mission. The original moon-shot – the NASA Apollo program – led to breakthroughs in solar panels, heart monitors, cordless drills, quartz watches, insulation and fuel technologies.<sup>6</sup> DARPA, the US Defence research agency, developed many of the underpinnings of the internet.

This is not to say the objective of the national mission isn't important, but to highlight the benefits of aligned investment and effort that a national mission drives. In an era when many of our existing economic strengths and industries are under threat, driving the next generation of industry and competitive advantages has become urgent. Led by research entities like universities, research networks or the CSIRO, the opportunity these missions present for Australian innovation should be embraced with private and public investment and action.

The CSIRO, Australia's national science agency, is currently focussed on six challenges facing Australia, and is proposing a series of national missions to solve them.

### The CSIRO challenges

- **Resilient and valuable environments:** Enhancing the resilience, sustainable use and value of our environments, including by mitigating and adapting the impacts of climate and global change.
- **Food security and quality:** Achieve sustainable regional food security and grow Australia's share of premium AgriFood markets.
- **Health and wellbeing:** Help enhance health for all through preventative, personalised, biomedical and digital health services.
- **Future industries:** Help create Australia's future industries and jobs by collaborating to boost innovation performance and STEM skills.
- **Sustainable energy and resources:** Build regional energy and resource security and our competitiveness while lowering emissions.
- **A secure Australia and region:** Help safeguard Australia from risks (war, terrorism, regional instability, pandemics, biosecurity, disasters and cyber attacks).

## The CSIRO missions

- Antimicrobial Resistance – a future where antibiotics still save lives
- AquaWatch Australia – an integrated ground-to-space national freshwater monitoring network by 2026
- Critical Metals – closed loop critical energy metals
- Drought Resistance – towards drought resilient agriculture
- Ending Plastic Waste – deliver a 90% decrease in unmanaged plastic leaking into the Australian environment by 2025
- Future Protein – provide protein security in the face of growing global population and alleviate the global burden of chronic disease
- Hydrogen Industry – deliver hydrogen industry scaleup
- Navigating Climate Change – unlocking climate intelligence for all
- Net Zero Emissions – demonstrate viable pathways for reducing and offsetting emissions
- SME Collaboration Nation – double the number of Australian SMEs that collaborate with publicly-funded research organisations by 2025
- Trusted Agrifood Exports – supply chain integrity and market access

National missions require funding. The core of this funding must come from government, which will catalyse private sector investment in achieving the mission. The funding ranges from between \$50 million and \$100 million per mission – meaning a substantial investment from government to launch a series of missions.

## Key actor

The NSW Government and the Australian Government

## How would you enact this idea

The NSW Government and Australian Government would allocate money to fund these national missions through the budgetary process.

## Expected outcomes

Australia will develop new industries based on the capabilities to deliver the national missions, and these industries can go on to be globally competitive. We cannot expect them all to succeed, in part because other countries will be trying just as hard to develop new globally competitive industries through their own national missions, but with an approach of investing in a portfolio of multiple national missions, some of them will succeed.

This recommendation is not without substantial risk – moonshots fail more often than not. But there is research on how to maximise the chance of success – most of which is captured in other recommendations in this report. For example, we should remove barriers to entrepreneurship and improve the attractiveness of Sydney as a place to invest or live for global capital and talent. However, it is important to also note a specific point in the literature – these processes take many years to bear fruit. Any investment in achieving these national missions must accept many years of few results.

# 1.3. Recommendation: Make government the first customer

## The core idea

Spending by Australian governments make up 36.2% of GDP.<sup>7</sup> By targeting their procurement at supporting innovation, they can deliver immediate and wide-ranging results.

## Background

Procurement policy is one of the most effective tools that governments have to support innovation. Governments are often reluctant to go to newer companies because it is less risky to use larger, better established firms, and the public tolerance for failures by government can be low. Nevertheless, there are ways to mitigate these risks and there are significant benefits to using the purchasing power of government to help develop and expand nascent firms.

In America, **technologies developed at federal laboratories account for roughly one third of innovative products**. The Small Business Innovation Research (SBIR) program requires US federal agencies with large R&D programs to allocate a small proportion of those budgets to pre-commercial technology development projects in firms with less than 500 employees. Innovation and Science Australia has noted that the **UK uses a similar scheme** to the SBIR, also to great effect. The United States Studies Centre has argued that such a scheme should be brought to Australia, but with **a slightly different model**.

In Canada, the government sometimes acts as a **first major customer to help small businesses scale-up** to a more commercial size. The South Australian Government has also vowed to adopt **a program of becoming the first customer** for untested businesses, products and services, in an effort to encourage commercial innovation. The NSW Government should look to these, and similar schemes, to determine whether something similar could be adopted in our state.

The NSW Government – to its credit – has already introduced a procurement innovation stream, though this differs slightly from the SBIR in that it is more specifically linked to procurement, and has a cap on contract value set at just \$1 million. Similarly, the **Business Research and Innovation Initiative** provides up to \$1.1 million for specified challenges, although the scope and scale of this program is limited. The definition of SME is also lower in Australia (200 or less), whereas in America, the SBIR is available to companies with up to 500 employees.

## Key actor

Australian Treasury

NSW Treasury

## How would you enact this idea

The Australian Government would legislate a tailored version of the US Small Business Innovation and Research program and direct departments with substantial budgets to implement it.

The NSW Treasury would adopt a government-wide commitment to SME procurement and lift the cap on the Procurement Innovation Stream to include firms up to 500 staff.

## Expected outcomes

Increased government purchasing from newer companies would provide a critical early customer for them, which should lead to new companies gaining footholds in these markets, innovative solutions to government problems being implemented, and ultimately a more competitive industry mix. If these companies are able to go on to become exporters of their products or services that would represent a net expansion of the Australian economy.

## 2. Make it easy to start new companies and create good jobs

### Why this is important

COVID-19 will change the economy in dramatic and unpredictable ways. What is clear is that many firms that existed before will shutter. We must ensure that new firms emerge to replace them and that these firms offer good jobs.

The good news is that new firms do tend to be good job creators, creating half of all new jobs while making up less than 20% of the economy.<sup>8</sup> The start-up ecosystem in Sydney is underweight, but quickly growing to reflect the cities underlying assets.

Despite this, there remains too many barriers to opening and growing a new company in Sydney. The tax burden on new firms disincentivises hiring additional staff, and restrictions stop firms from offering clever incentives like shares in the company to their staff.

If we are to respond to COVID-19 by creating new opportunities for ideas to be commercialised and for firms to grow and export, we will need to review the tax and regulatory mechanisms which penalise young firms.

### The evidence

- Capital and support for early-stage businesses is **crucial** to supporting employment growth in years to come.
- New and young firms contribute **disproportionally** to job creation across OECD countries.
- There are nearly 500 unicorns (start-ups valued at US\$1 billion) in the world. Australia has just 4 – Atlassian, Canva, Culture Amp and SafetyCulture, **ranking poorly compared to Sweden and Israel**, which have 5 and 10 unicorns respectively.

## 2.1. Recommendation: Expand start-up incubators, accelerators and maker spaces

### The core idea

Start-up accelerators, incubators and maker spaces provide crucial support, funding and guidance to start ups. Growing the capacity of these schemes to support new companies will deliver more entrepreneurial companies for Australia.

### Background

In this time of once-in-a-lifetime economic upheaval, new firms, ideas and industries will need to emerge to support continued prosperity for Australia.

Accelerators provide new firms with support to scale quickly. Incubators play a crucial role in filtering viable start-ups and supporting new firms to identify a market – often pre-scaling. Maker spaces similarly support early stage business, with a focus on advanced manufacturing at a crucial time when global supply chains are disrupted.

Sydney has numerous excellent start-up programs – of which **68 per cent are university affiliated and funded**. Western Sydney University has its **Launch Pad Business Incubator**, which also runs industry specific programs such as its Urban Futures program, which is targeted at start-ups in the property sector. The University of Wollongong has its **iAccelerate** incubator, which is also focussed on building an international innovation network. The University of Sydney has its **INCUBATE** program, which is also supported by the **Sydney Knowledge Hub**, which has been designed to help deepen connections between STEM entrepreneurs and the university. UNSW has its **Founders 10X Accelerator** Program, and UTS has its **UTS Startups** program, which also hosts industry events and workshops. Universities are also adopting a more collaborative approach, with UNSW, UTS, the Australian National University (ANU) and the University of Sydney all joint shareholders in **Cicada Innovations**, Australia's Pioneer Deep Tech Incubator. Universities are also delivering new courses, such as the new **Bachelor of Entrepreneurship** at UTS.

The Israeli Yozma co-investment model – where the government will act as a co-investor in a startup with a private sector investor, but gives their co-investing private sector partners an option to buy out its stake – is one we should use in Australia to help quickly scale accelerator programs. The low rate for borrowing means even low rates of return on this co-investment will deliver returns for government – and grow new companies. We should also consider directly co-funding the operational costs of accelerators and incubators. Under the successful **Canadian Accelerator and Incubator Program (CAIP)**, the federal government redistributes some \$100m in matched funding over five years to 16 accelerators to help them expand their programs. The CAIP also provides support services for start-ups that are looking to scale-up, or to commercialise their product.

The NSW Government does currently provide support to start-ups through the Start-Up Hub, at a relatively low cost of \$35 million, and will deliver a new start-up hub at the Sydney Innovation and Technology Precinct. However, in the current crisis, these numbers are too low. They need to be increased.

### Key actor

The NSW Treasury

### How would you enact this idea

The NSW Treasury would adopt the Yozma model of co-investment in startup accelerators, incubators and maker spaces, starting with a \$100 million funding pool to be matched by the funders of the accelerators and incubators.

The NSW Treasury would expand the operational funding provided to the Sydney Start-up Hub to other hubs.

### Expected outcomes

The expansion of programs would mean more start-ups scaling, a stronger ecosystem of entrepreneurial culture in Sydney and a clear demonstration of an increased focus on innovation to the world.

## 2.2. Recommendation: Expand access to employee share schemes

### The core idea

Employee shares allow small start-ups to offer employees stock or options, helping cash-strapped start-ups to attract, retain and motivate talented staff without paying high cash salaries.

### Background

Employee share schemes have been used to great effect overseas to grow the success of the start-up eco-system. They have been crucial to some of the most successful and innovative companies in the world – Google, Apple, Microsoft and Amazon.

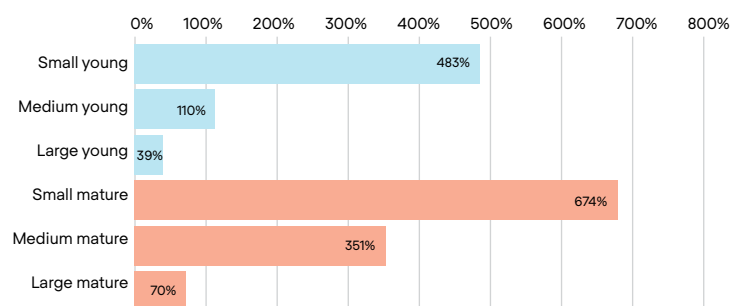
The benefits of these schemes are numerous: they help companies manage cash flow and reduce costs; they help align incentives and motivation between employees and success of the firm; they can attract a workforce more interested in a higher risk / higher potential reward of a start up than the stability of a salary; and they can also support attracting global talent, who will compare the option of actual ownership (not just a salary) in Silicon Valley against just a salary in Sydney.

In Australia fewer than 1 per cent of companies have employee share schemes and only about \$2 billion a year is paid through those, which is about 0.4 per cent of total wages and salaries. The regime is limited to a maximum share ownership proportion of 10 per cent per employee. There are hurdles for retiring owners transferring their private companies to employees and the cost for companies to issue prospectuses for employee shares. Most pressing, there is a **20/12 rule** – where a company must issue a disclosure document if it offers shares to more than 20 investors in a 12-month period. The current cap of \$5,000 per person for allowable shares is also far too low and needs to be increased substantially to be of any use for raising capital.

Employee share schemes are something that should be supported – they lead to better companies. ABS data on companies in Australia show's substantial impacts on the productivity and value of firms when an employee share scheme is implemented.

### Firms that offer employees shares are more productive.

**Mean difference of value added per employee between ESS and Non-ESS firms, by size and age, 2006-07 to 2014-15**



Source: (ABS 92016) Economic Activity Survey, 2006-07 to 2014-15

Note: Small firms have 1-19 employees, medium firms have 20 – 199 employees and large firms have 200+ employees. Young firms are less than 6 years old, mature firms are 6+ years old. Averages incorporate all industry classes.

This chart shows the average difference between ESS and Non-ESS firms in percentage terms. For example small, young firms with ESS had almost 5 times greater labour productivity than their non-ESS counterparts.

The Australian Government is currently undertaking a review into employee share schemes. This represents an ideal time to push the case for change.

### Key actor

Australian Treasury

### How would you enact this idea

Reform the 20/12 rule to allow more employees to take advantage of employee share schemes, increasing it to 40/12.

Increase the cap on allowable share value to \$25,000.

### Expected outcomes

An increase in the number of start-up companies funded through employee-share schemes.

## 2.3. Recommendation: Broaden the Early Stage Innovation Company tax incentives

### The core idea

Tax exemptions on future gains are a simple, low-risk option for providing incentives for investment in risky, but economically and socially beneficial sectors. If the investment does not generate profits, there is no cost to government, and if it does it contributes to the growth of the economy and the creation of good jobs.

### Background

As part of the National Innovation and Science Agenda, investors in early-stage innovation companies (ESICs) were given a 10-year exemption on capital gains tax (CGT) for investments held in shares for between 12 months and 10 years. But this tax break did not extend to start-up founders, whose primary source of return on investment is typically the capital gains from shares owned in the business. **The program is also onerous.** Qualifying companies must be incorporated in Australia, have total expenses less than \$1 million in the previous income year, assessable income of \$200,000 or less, and shares must not be listed on any stock exchange.

#### Tax concessions for investing in innovation by country

Country	Scheme	Eligibility	Description
Australia	ESIC	Investment in eligible company (registered in past 3 years, expenses <\$1m, assessable income <\$200k, unlisted)	Tax offset for amount invested and 10-year exemption from CGT
UK	SEIS	Investment in eligible company (<2 years old, <25 employees, <£200k assets)	50% tax and CGT relief for amount invested, CGT exemption
China		Venture capital firms investing in seed/early-stage tech startups	70% tax offset
France	SCR Financial Regime	Eligible venture capital firms	Complete tax exemption
Japan	Angel Tax System	Investment in eligible business held for more than 3 years	25% CGT offset

Other jurisdictions have made carve outs in capital gains tax schemes for startups. In the UK, entrepreneurs' relief from capital gains tax allows those selling all, or part, of a business to only pay 10 per cent on all gains, significantly lower than the normal rate. In Ireland, they are now considering further reforms that would provide a greater CGT exemption for entrepreneurs who specifically reinvest their expertise and capital in the next generation of start-ups, as part of a push to build a broader entrepreneurial ecosystem.

The **2019 Australian Computer Society Australia's Digital Pulse** recommended re-modelling ESIC to match and better the UK's Seed Enterprise Investment Scheme, which offers income tax offsets of up to 50 per cent for those investing in seed stage enterprises and generates double the return for investors compared to Australia's Early Stage Innovation Companies.

### Key actor

Australian Treasury

### How would you enact this idea

Reduce the red-tape required to qualify as an ESIC and extend the CGT discount so that start-up founders and early-stage venture capital limited partnerships can gain the concession.

Provide tax relief for investors in ESICs, either by offering a lower capital gains tax rate, or by offering income tax offsets of up to 50 per cent for those investing in seed stage enterprises, or both.

Remove the requirement for accelerators to have completed at least one previous cohort for ESIC eligibility, allowing newly-created accelerators to generate ESIC-compliant companies more easily.

### Expected outcomes

A large increase in both the number of Early Stage Innovation Companies and the investment that is available to them.



## 2.4. Recommendation: Improve the Export Market Development Grant program for start-ups

### The core idea

A key government program, the Export Market Development Grant, is underfunded, and designed for a pre-COVID-19 world. It should be reformed.

### Background

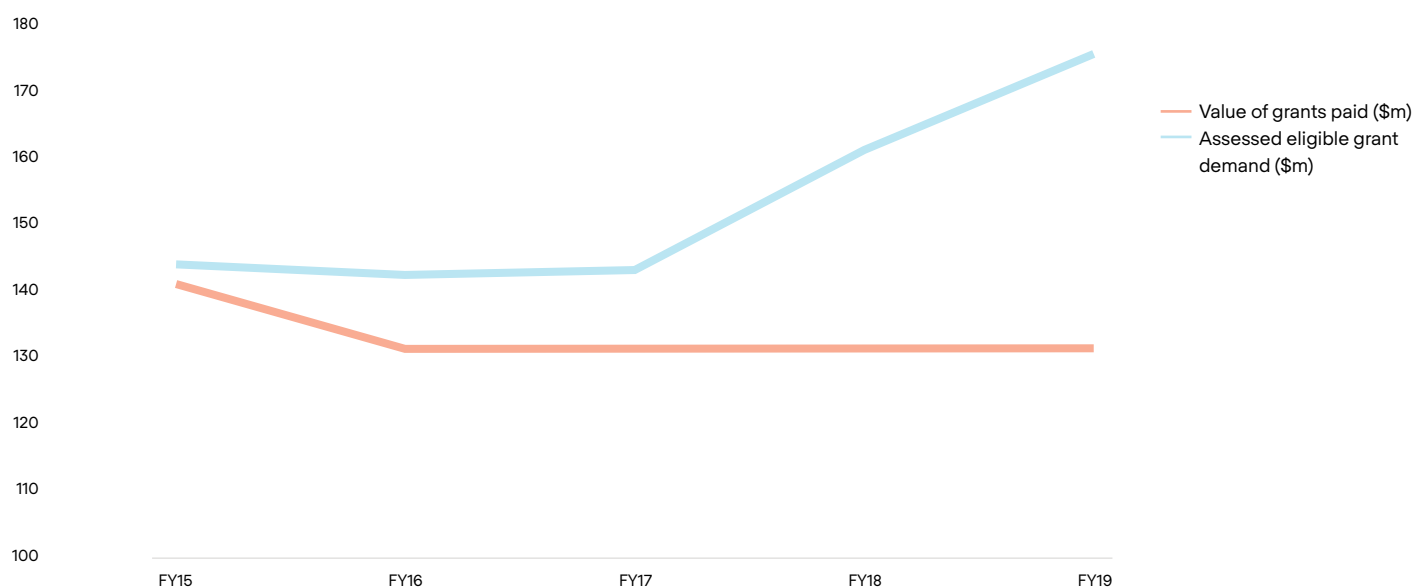
Australia needs to reform what we export. Our long-run issue has been a lack of complex and value-added exports. More recently, Australian value-added exports have been devastated by COVID-19, including the 13% of exports by value that international tourism and education represent.

The Australian Government's Export Market Development Grant (EMDG) is an important program that has been broadly helpful in supporting start-ups to globally export their intellectual property. It provides grants to SMEs to cover 50% of the cost of export promotion expenses (for example, attending trade shows to visiting potential clients overseas).

A large portion of claimable funds align with physically sending Australian companies overseas, as opposed to digital engagement with new markets, so in the current circumstances, this will need to be changed. While exporting may prove hard in the short-medium term, supporting Australian firms to gear up for exporting will be essential to help the economy bounce back from the huge loss of exports as a result of COVID-19.

The quantum of funding available through the EMDG is simply too low. Despite an additional \$50 million from the Federal Government as a response to COVID-19, the program currently provides only \$200 million per annum in grants. It has recently been oversubscribed to such an extent that qualifying firms are only receiving 29% of their entitlement. The quantum of funding for the EMDG has been reduced by successive governments despite having widespread industry support and despite being highly effective. At a minimum, it should be restored to its earlier peak of \$350 million per annum.

**The value of the Export Market Development Grant program has remained static, despite a substantial increase in eligible companies**



Source: Austrade, 2019



The EMDG program is also too complex.<sup>9</sup> The tranching nature of payments under the EMDG make it impossible for businesses to be confident of their EMDG returns at the time of submitting a claim. Cash is critical for startups, and EMDG claims often involve a long lag between submitting the claim and final payment. The combination of these factors often radically diminishes the benefit provided by the EMDG. It is likely to be preferable for startups to claim a smaller capped rebate that is paid immediately and can be reliably built into the business bottom line. An EMDG stream that allowed young businesses to make this choice would reduce the overall cost of the scheme while increasing its utility for startups.

## Key actor

Australian Treasury

## How would you enact this idea

The EMDG program should be reformed, reallocating the available funds from the following categories (to reflect the inability for companies to travel):

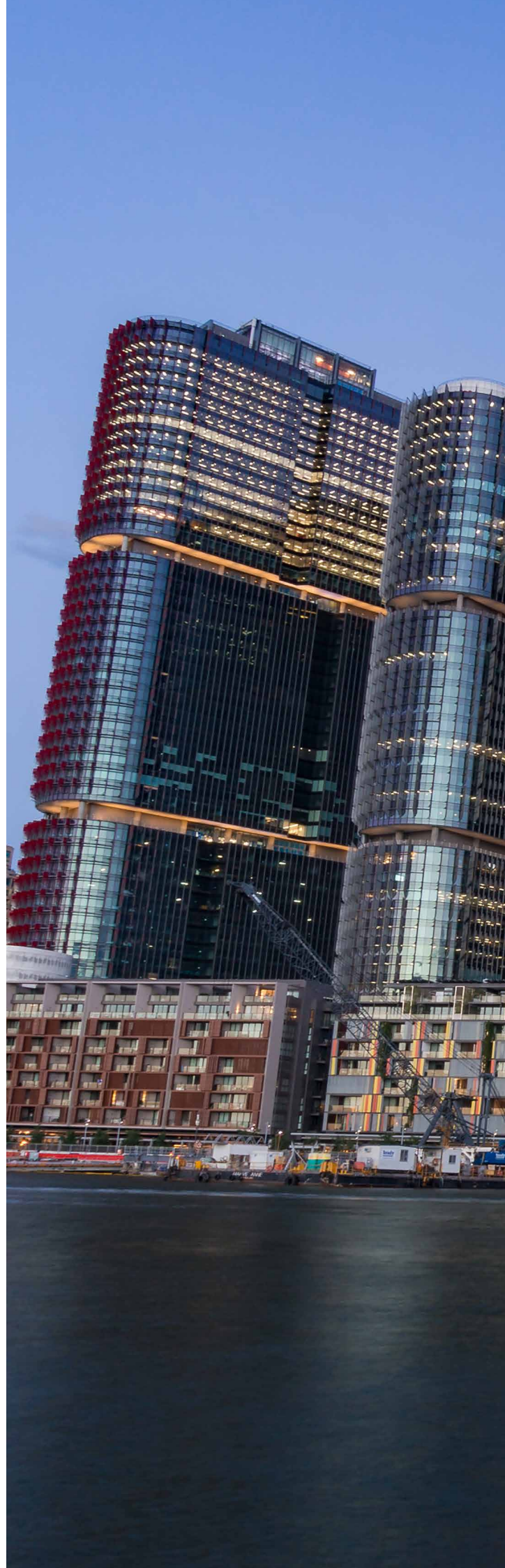
- marketing visits,
- attending trade fairs,
- bringing overseas buyers to Australia.

The Australian Government should increase the overall funding envelope for the EMDG program to at least \$350 million per annum.

The Australian Government will develop an EMDG stream that allows young high-growth businesses to opt to access a limited pool of funds immediately, with subsequent payments to be made on a quarterly basis.

## Expected outcomes

More Australian start-ups will invest in developing their export capability – building connections and a customer base overseas, growing their revenue from global sources.



## 2.5. Recommendation: Reduce payroll tax for new innovative companies

### The core idea

Twenty percent of small firms fail in their first year. Half fail within their first four years. We should increase the likelihood of young companies surviving and growing by exempting them from paying payroll tax in NSW, reducing the problem of high costs to build a new company while they grow.

### Background

The NSW Government has recently increased the payroll tax exemption threshold to one million dollars, providing important and welcome relief to start-ups and SMEs as they continue to expand their business.

However, within companies that work in the technology, platform or payments sectors, the scale of revenue that might flow through such companies is often proportionally larger, relative to profits, than would be the case in many other industries. It is no longer clear whether setting payroll thresholds based on revenue is an appropriate metric for determining the tax liable for different organisations. Such considerations fall beyond the scope of this report, but it may be worth examining whether a separate exemption category could be created which provides relief for younger businesses and organisations.

The NSW Government should introduce payroll tax exemptions for technology companies that are under three years old. While individual exemptions are not unprecedented, such a policy would be a first for NSW, where exemptions are typically only provided to government or non-profit bodies. StartupAus has suggested that the companies that qualify should be those which fall into the ATO's definition of Early Stage Innovation Companies.

Finally, it is unclear why the NSW Government removed its highly successful Jobs Action Plan, which provided rebates for companies that hired, and retained, new employees. While the Committee is cognisant of the budgetary challenges facing government, this scheme should be reintroduced.

### Key actor

NSW Treasury

### How would you enact this idea

Provide payroll tax exemptions for Early Stage Innovation Companies that under three years old.

Reintroduce the Jobs Action Plan payroll tax relief strategy.

### Expected outcomes

Early stage innovation companies are more likely to survive the pre-revenue stage of growth, leading to a greater survival rate of new companies.

## 2.6. Recommendation: Expand venture capital tax exemptions to domestic investors

### The core idea

Because Australia has enormous capital in superannuation funds, providing tax incentives to invest in venture capital will shift domestic funding into new companies.

### Background

In Australia, venture capital funds are taxed differently depending on whether they fall into one of two categories: Venture Capital Limited Partnerships (VCLPs) or Early Stage Venture Capital Limited Partnership (ESVCLPs).

There are different taxation, regulation, and lending arrangements for both categories of VC funds, with reforms undertaken in recent years to help grow Australia's VC network and, in particular, to **facilitate the growth of the Fintech sector**. VCLPs and ESVCLPs come with an **exemption from income tax on profits (capital and revenue) from the disposal of eligible investments**, however VCLP's only grant such exemptions to foreign investors, while ESVCLPs grant exemptions to both domestic and foreign investors. The rationale for more generous exemptions in the case of the latter is down to the fact that early stage venture capital partnerships typically carry a higher level of risk, but the different treatment of domestic and foreign investors reduces the likelihood of encouraging domestic capital to invest in innovation.

### Key actor

Australian Treasury

### How would you enact this idea

Provide a 50% exemption from income tax on profits (capital and revenue) from the disposal of eligible investments from VCLPs.

### Expected outcomes

Early stage venture capital limited partnerships will find it easier to access capital as they transition into venture capital limited partnerships, facilitating the scaling of up of successful entrepreneurial organisations.

# 3. Make Sydney's underlying economic systems more efficient

## Why this is important

Most recommendations in this report have focused largely on the measures that support the growth of innovative domestic firms and the connection of those firms to global markets, whether it be for exports or to engage in the free exchange of global talent. However, both Sydney and Australia more broadly suffer from a number of structural economic challenges that impact deeply on the innovation economy, even if they're not specific to it.

Our tax rates are uncompetitive. While this is obviously beneficial to fund programs that support the community, it risks having Australia passed over as a location for an international firm to situate, or resulting in a local start-up to move overseas to a more forgiving tax regime as they grow.

Solving this does not have to mean reducing overall tax revenue, but rather reorganising our tax system to focus on less disruptive revenue sources that disincentivise the behaviours we're seeking to encourage. For too long, tax reform has been something discussed but rarely achieved. With the requirement to undertake radical change in the face of the society-wide impacts of COVID-19, Australia and NSW should review how revenue is collected through taxes.

Other underlying productivity improvements will deliver benefits beyond those predicted. Speeding up the internet will deliver new ideas, firms and jobs for Australia. Identifying and supporting innovation precincts that bring experts from different disciplines together to help solve big problems are the right ways to help promote Sydney as an innovation city.

## The evidence

- Higher taxes sharply suppress innovation through observable reductions in the number of patents, citations and inventors.<sup>10</sup>
- Access to high speed internet is correlated with much stronger business growth.<sup>11</sup>
- Sydney has many of the pre-requisites for success innovation precincts.<sup>12</sup>

# 3.1. Recommendation: Reform the taxation system

## The core idea

Australia should introduce a permanent Investment Allowance regime that encourages greater investment in Australia.

## Background

Australia's corporate tax rate remains significantly higher than countries we are competing with for business and investment. This is a drag on our global competitiveness, reducing our capacity to grow prosperity and provide good jobs.

Why? Because capital goes to other countries where it can get a better return. We are in competition. We may wish that weren't true, but it is.

Australia has one of the highest corporate tax rates in the G20

*Corporate Tax rates across the G20 in 2020*

G20 Countries	Corporate Tax Rate %
Brazil	34
France	33.3
Japan	30.62
Argentina	30
Australia	30
Germany	30
Mexico	30
South Africa	28
Canada	26.5
India	25.17
China	25
Indonesia	25
Netherlands	25
South Korea	25
Spain	25
Italy	24
Turkey	22
United States	21
Russia	20
Saudi Arabia	20
United Kingdom	19
Switzerland	18
Singapore	17
Hong Kong	16.5



At the same time, lowering the corporate tax rate would have a substantial impact on the Federal budget and risk many of the other recommendations in this paper relying on funding from government. Similarly, we are currently seeing the benefits of having a strong social safety net and health care system; we will need to repay substantial debt over coming decades and we are entering a period of profound change – which will result in significant misery and hardship for many. A well-funded state is required to both provide a strong safety net and investment to support the economy to transition.

The COVID-19 pandemic presents a moment in time when broader tax reform can be considered and implemented without the disruption that would typically occur. The goals of this tax reform should be to a) make Australia more globally competitive for business investment; b) increase fiscal capacity for government and; c) do both in a way that is simple and transparent.

Recently, the Federal Financial Relations Review proposed a bold set of reforms that make sense - including reviewing state taxes like Stamp Duty and Payroll tax.<sup>13</sup> These proposals, while difficult, should be tackled now.

But there is reform the Federal Government should also undertake. An investment allowance program would help achieve greater competitiveness, while costing substantially less than an across the board tax reduction – and having the benefit of being relatively straight forward.

Currently, any asset purchased by a company is depreciated over a number of years (typically 5 years), meaning that claiming the cost of the asset is spread across a long period. An investment allowance would allow companies to, in addition, claim 50% of the total cost immediately – resulting in a total 150% reduction in tax paid. This allowance is limited to investments made in Australia, but can include tangible and intangible assets. Crucially, while time-limited investment allowances have been implemented in the past, this should be a permanent fixture of our tax system.

Introducing this tax should be considered as part of a larger suite of tax reforms that result in a *tax shift* rather than a tax cut.

Australia should also consider:

- removing tax exemptions on a variety of activities, such as capital gains on property or franking credits
- increasing the base or rate of the GST, or introducing a 'cash flow' tax to replace the GST and inefficient state taxes

NSW should consider:

- using reform as an opportunity to eliminate or substantially reform payroll taxes and all state and territory taxes on consumption, including taxes on insurance.
- replacing state stamp duties with a broad-based land tax.

Crucially, these reforms must be matched with national legislation that ensures NSW is not left worse off in GST funding allocations as a result of reforming the tax system.

## Key actor

The Australian Treasury

The NSW Treasury

## How would you enact this idea

Federal legislation to create a permanent 50% Investment Allowance regime, while reforming other taxes to balance the cost of the allowance.

NSW legislation to transform the NSW taxation system, targeting payroll and stamp duties.

The Australian Government would offer incentive payments to states to undertake reform, and to help buffer the impacts on individuals and firms during the reform process.

## Expected outcomes

A more competitive tax regime leads to Australia attracting and retaining more innovative companies that provide good jobs and develop new ideas.

## 3.2. Recommendation: Speed up the internet

### The core idea

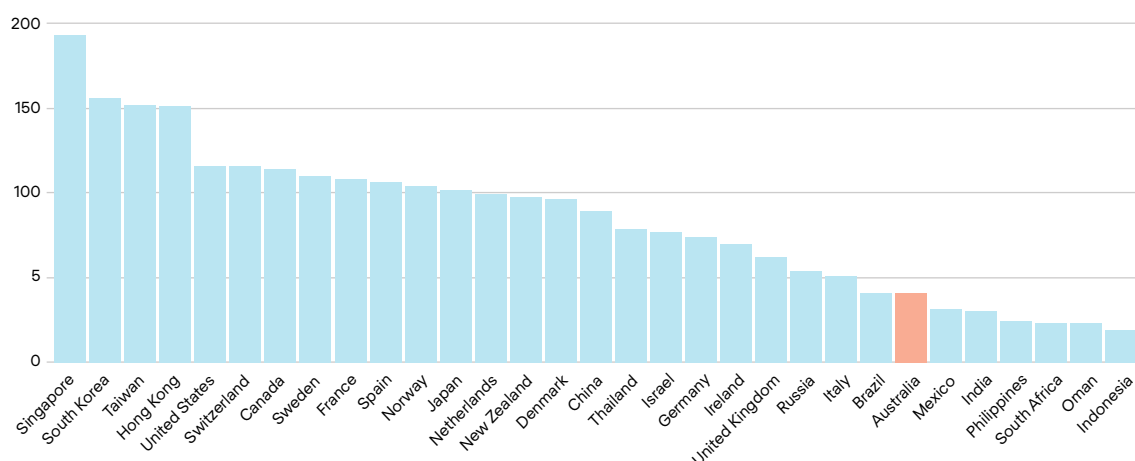
Sydney should have world-class internet speeds accessible to all.

### Background

One of the consistent features of successful innovation economies worldwide is the existence of world-leading internet infrastructure, including high speeds and bandwidth. Australia currently has **the fourth slowest broadband speed in the OECD**, with average download speeds of just 41.78Mbps, just over half the global average of 73.58 Mbps.

#### Australia's internet speeds are reducing its global competitiveness

*Average download speeds in megabits per second*



Source: Ookla

While Australia's political leaders may be unwilling to countenance further investment to advance our digital infrastructure in the wake of an expensive and arguably underwhelming NBN program, it also remains true that Australia will be able to enable a world-leading innovation economy to emerge while the country still has world-following internet. It is also true that Australia cannot afford to shun this discussion until such time as the current NBN roll-out is complete. Other countries are doubling down on their internet investments, and Australia will be left behind if it does not follow suit.

We believe that an appropriate target for the Australian Government should be to, at an absolute minimum, be in the top 50% of OECD countries for broadband speed by 2030 and in the top 25% by 2035. This will likely require substantial investment, but the cost of inaction is likely to outweigh the benefits.

### Key actor

NBN Co.

### How would you enact this idea

Legislate to give NBN Co an objective target of ensuring that Australia is able to enter the top 50% of OECD countries for broadband speed by 2030, and the top 25% by 2035. NBN Co should be empowered to provide objective and independent advice to government on what will be required to achieve this. Such advice should be made publicly available, so as to encourage the government of the day to invest appropriately to deliver on those objectives.

## 3.3. Recommendation: Upgrade innovation precincts

### The core idea

Successful innovation precincts are not just places where like-minded people work near each other – they are places where firms, government and universities collaborate to solve big problems and create new globally competitive industries. Governments will need to do more to upgrade Sydney's proposed innovation precincts.

### Background

There are well known examples of innovation precincts around the world where clusters of firms and research spin out globally competitive industries. Some of these are naturally occurring, while some are created. The NSW Government has **led the charge** on the investment in new Lighthouse Precincts across the state and identified some key locations within Greater Sydney at Central Station, Westmead and the Aerotropolis.

A lot of the spatial elements to this question are well understood, with the NSW Government having developed a strategy that drew on **international experience**. While not the only innovation precinct in NSW, the proposed Central-to-Eveleigh precinct is particularly noteworthy for having taken on many of the proposed features proposed by leading international experts, such as the Brookings Institution's Julie Wagner. The Australian Government is also leading in this space, both through its *Statement of Principles for Australian Innovation Precincts*, and also through its recent *Stocktake of Australian Innovation Precincts*.

However, while bringing people interested in the same topic together, many of these precincts lack a shared goal to actually drive collaboration. Without this shared goal, there is substantial risk that these precincts will not deliver on the promise of creating new globally competitive ideas.

The ARM Hub in Brisbane and the Catapult Centres in the UK are good examples of overlaying a shared goal over a precinct, with aligned funding from government to support it.

Some of the key factors that are likely to make Sydney's innovation precincts succeed include:

- a clear goal or challenge for the hub,
- a strong governance model that supports collaboration (e.g. IP sharing rules),

- major anchor tenants – a major, established international firm and a university with research expertise in the relevant area,
- university-led research tethered to the hub,
- shared-use facilities to support local firms and researchers,
- an ecosystem of start-ups and SMEs operating within the precinct, supported by incubators/hubs.

Given that the discussion around the spatial dynamics of good innovation precincts is already well advanced, the next stage needs to necessarily focus on the non-spatial ingredients required to make a precinct successful, such as networking assets. This will be especially crucial in the key Sydney-based precincts being built, including TechSydney at Central Station, Westmead and the Aerotropolis, but also precincts that have been emerging organically like Macquarie Park.

One potential model to supercharge innovation precincts would be to link a precinct with a specific problem and goal, aligned with a CSIRO National Mission – with government funding to drive research to achieve that goal.

### Key actor

Australian, NSW and Local Government

### How would you enact this idea

This recommendation is already the position of the NSW Government position. The key challenge is implementation, rather than changing priorities.

We include this recommendation to remind people of the importance of this topic – although we note that some of the innovation precincts in Greater Sydney do not have all the key factors for success identified, which must be remedied.



# Making Sydney liveable and affordable helps the Innovation Economy

## **Both Solutions 3 and 4 touch on the attractiveness of Sydney as a place to live and work.**

The Committee for Sydney has many proposals for making Sydney more affordable and liveable – which, while not specific to the innovation economy, are an essential underpinning to a city that is economically dynamic and successful. Because of the general nature of these recommendations, they are not included in this paper as specific recommendations, but are worth consideration:

- Housing reform to make it more affordable and deliver more affordable housing:
  - reforming negative gearing and capital gains tax;
  - transitioning from stamp duty of a broad-based land tax;
  - investing in affordable and non-market housing;
- Making Sydney a vibrant, cultural city:
  - improving the night-time economy;
  - funding the cultural sector to improve Sydney's global cultural standing;
  - promoting the existing diverse, multicultural culture across Sydney.
- Improving the liveability of Sydney:
  - encouraging high-density, well-connected communities;
  - mitigating and adapting to climate change to protect Sydney from heat, sea-level rises and natural disasters;
- Promoting Sydney to the world:
  - an attraction campaign to poach global talent looking for a stable, livable city to advance their career in Sydney, and businesses and investors looking invest in a growing city.
  - better recognition of entrepreneurship in Sydney – which has the largest startup hub in the Southern Hemisphere, but doesn't talk about it.



# 4. Make it easy for talented people to come and stay in Sydney

## Why this is important

Sydney's economy requires smart people to drive the innovation economy. While our world-class higher education institutions sit at the core of educating the workforce and inventors of our innovation economy, new ideas must also be drawn from around the world. Global talent brings new innovations and knowledge and addresses technical or niche skills gaps in our economy. This is especially true for the innovation economy, where our under-developed ecosystem requires us to import experience at all levels.

Sydney ranked 11th in the Global Talent Competitiveness Index 2019 for cities with Australia ranked 10th by country. This score is heavily reliant on Sydney ranking 7th on the "attract" sub-ranking – while our score on "retain" sits at a concerning 40th.

We're also the world's 3rd largest international student city. 120,000 students study in Sydney each year – but we have tightened the ability for these smart people to stay in Sydney and contribute to our economy and community once they graduate.

Our geographic distance and the dominance of our tourism brand means not enough people globally consider Sydney a place to advance their career or contribute to cutting-edge research and development. At the same time, many dominant innovation centres like Hong Kong and the USA are undergoing political turmoil that presents an opportunity for Australia.

Fundamentally, bringing and keeping global talent in Sydney is harder than it should be. This is in part because of a misconception that temporary migrants take jobs from Australian – when the reality is quite the opposite.<sup>14</sup>

## The Evidence

- There is wide and conclusive evidence that increased skilled migration promotes innovation.<sup>15</sup>
- StartupAus believes that "ready access to high quality visas is critical to unlocking [the] growth potential of startups."<sup>16</sup>
- First and second generation migrants make up 50% of the most successful startup founders.<sup>17</sup>

## 4.1. Recommendation: Make entrepreneur visas much easier to access

### The core idea

Make it easy for entrepreneurs to move to Australia by aligning our entrepreneur visa scheme with Canada's, reducing the funding requirements and providing a pathway to permanency.

### Background

Entrepreneurs wanting to move here find the process unreasonably difficult, relative to other countries.

### Australia is globally uncompetitive in offering visas to entrepreneurs

*Current entrepreneur visa arrangements for comparative countries*

Country	Requirements	Length of stay	Cost
Australia	AUD 200,000 in funding	4y 3mo	AUD 4,045
	AUD 800,000 in assets	Up to 6y	AUD 5,375
UK	GBP 50,000 in funding	3y (renewable indefinitely)	GBP 1,021
	None	2y	GBP 363
New Zealand	NZD 100,000 capital	Up to 3y	NZD 3,365 (free for some nationalities)
	NZD 500,000 capital and 3 jobs created	Permanent	NZD 4,140
France	EUR 18,473 – equivalent to 1 year minimum wage	Up to 4y	EUR 368
Ireland	EUR 50,000 funding	Up to 5y (option for permanent residency)	EUR 350
Canada	Enough to support family	Permanent	CAD 1,540

*Source: Home Affairs, UK Innovator-Visa, UK Start-up visa, Canada Immigration refugees, NZ Immigration, French Tech, Irish Immigration*

Entrepreneurs must have already raised \$200,000 from Australian funders before coming to Australia – this number is too high. New Zealand only requires NZ\$100,000, while the UK requires GB£50,000.

But even these amounts, far lower than Australia, are uncompetitive. Some countries have no requirement for capital raising, provided that the individual has been accepted into a start-up accelerator or incubator. France requires the individual to have €18,473 to support themselves, and Canada only requires enough to 'support your family' – starting at C\$12,960 for an individual.

The other aspect where Australia is uncompetitive is the length of stay. If an entrepreneur is coming to Australia, we should encourage them to put down permanent roots and keep their company and employment here. Our current system allows only a temporary visa. This is in stark comparison to New Zealand, Ireland and Canada, who all offer permanency.

Australia should change our entrepreneur visa, allowing for easier access and the attraction of permanency.

One other interesting opportunity emerges from South Australia. As part of the federal government's City Deal with Greater Adelaide, the Australian Government is piloting a new visa through the **Supporting Innovation in South Australia** program, which will provide access to innovators who are willing to work in South Australia, but with zero upfront capital requirement for the investor. Instead, applicants' proposals will be vetted by State or Federal Government entities, with these entities able to partner with incubators and accelerators to identify potential applicants for nomination. NSW should apply this concept for the Western Sydney City Deal.

### Key actor

The Department of Home Affairs

NSW Government



## How would you enact this idea

Reduce the required upfront capital investment requirement for entrepreneur visas to \$50,000, which would make Australia one of the most affordable countries to access.

Change the entrepreneur visa to allow an applicant to apply for permanency after their initial 4-year visa.

Provide a waiver of capital investment requirements if the business is in the science or ICT sector, or if it shows a high level of innovation or export potential.

Provide a waiver of the capital investment requirement and the application fees if the applicant has been accepted into an approved start-up accelerator or incubator.

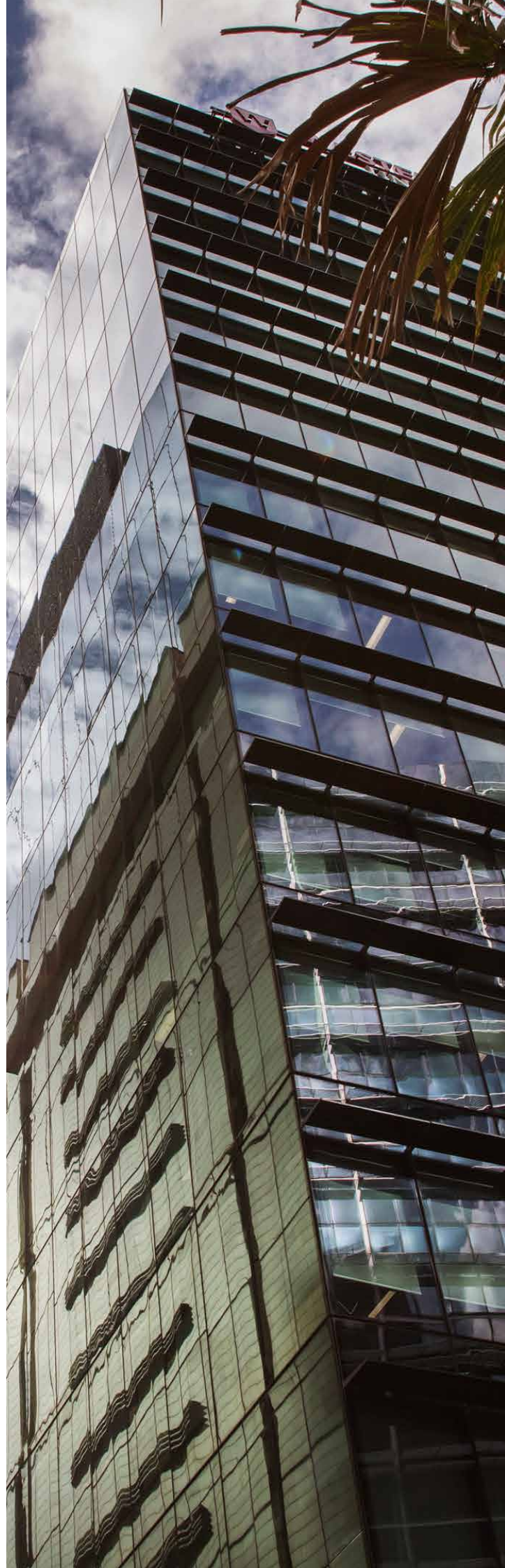
The NSW Government to apply to the Australian Government for a waiver of the capital requirements for innovators to work in the Western Sydney City Deal area.

## Expected outcomes

An increase in the number of entrepreneur visa applicants from its current low base of a few individuals per year.

## Costs

The cost to the Australian Government should be zero, given that the scheme will not cost anything to implement. Administrative fees would be recouped through the \$4,045 application fee.



## 4.2. Recommendation: Reform the global talent visa

### The core idea

Make it easier for high skilled people to work in Australia under Global Talent visas by reducing the income threshold and upfront costs for sponsoring firms.

### Background

Our visa system is complex and expensive for firms – especially start-ups. While the relatively new **Global Talent Employer Sponsored (GTES)** visa program is welcome, it has relatively restrictive criteria for businesses to meet in order to use the program, such as the turnover requirement for the Established Business Stream and the designated investment requirement for the Start-Up Stream, which has meant that many businesses are precluded from using the program.

The GTES pathway may involve significant costs for a business with nomination and visa fees, as well as having to pay into the Skilling Australians Fund Levy. **Only 23 companies signed up** during the 12-month trial before the program was made permanent late last year. Only 5 of those were start-ups and the rest were very large organisations. The scheme needs to be made more attractive and accessible for a wider range of innovation-focused organisations – so we should remove the contribution to the Skilling Australians Fund Levy – typically \$1,000 - \$2,000 per year of the visa.

The Government has also introduced a **Global Talent Independent Program (GTIP)** that is by invitation only and is specifically targeted at AgTech, Space and Advanced Manufacturing, FinTech, Energy and Mining Technology, MedTech, Cyber Security, Quantum Information, Advanced Digital, Data Science and ICT. Candidates have to prove that they will likely be able to secure a minimum income of \$148,700, based on their training and background. The Government is planning to use this to bring in some 5,000 individuals, but the income threshold is too high and should be reduced to \$100,000.

This is important, as many Australian firms are reporting increasing difficulty finding talent required to grow. While Australian firms have noticeably less issues than other jurisdictions, 34% of all firms report difficulties.<sup>18</sup>

### Key actor

The Department of Home Affairs

### How would you enact this idea

Lower the minimum salary threshold for both the GTES and GTIP to \$100,000.

Remove the contribution to the Skilling Australians Fund levy for the GTES.

### Expected outcomes

A larger number of companies will gain access to a larger pool of global talent.

### Costs

The reduced revenue from exempting the GTES from the Skilling Australians Fund levy would be offset by an increase in applications using both schemes.

## 4.3. Recommendation: Support international students to stay in Australia

### The core idea

We should provide a pathway to post-study work and permanent residency for international students who complete degrees, making Australia and NSW more attractive for students to study in, while also retaining smart, globally-connected talent in Sydney.

### Background

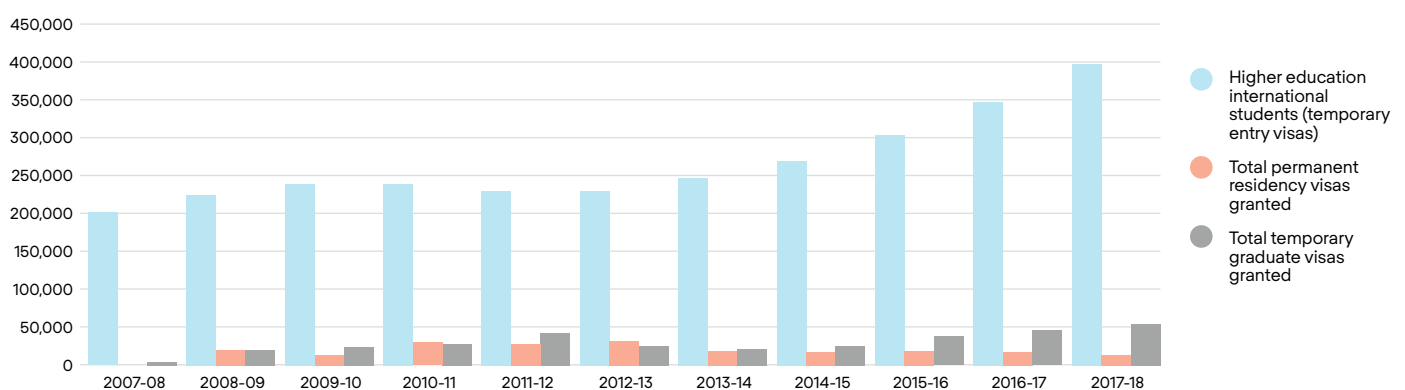
International students who study post-graduate degrees have the potential to make important contributions to our country. Their expertise, intelligence and transnational links provide talent that could be helping Australian firms to grow, adding jobs and exporting more as a result. But we don't offer these students an opportunity to make Australia their home.

At the same time, when international students are allowed to return to Australia, we will need a more competitive offer to entice students back at higher rates – something other countries will be considering.

International students have few work rights while in Australia and are restricted from staying in the country after graduation. This misses an opportunity to capture their smarts to support innovation firms in Australia. International students make up 40% of doctoral graduates in Australia, compared to 25% across OECD countries. However, in 2017, the Australian Government granted permanent visas to only 4% of foreign students and temporary graduate visas to only 16% to live in Australia after completing their study.

### Sydney is missing an opportunity to retain smart, talented, globally-connected citizens

Permanent residency and graduate visas granted to international students vs volume of international students in Australia 2008-18



Source: Department of Education and Parliament of Australia<sup>19</sup>

At present, international graduates with a bachelor or higher qualification from a regional campus of a registered institution will be eligible for an extra one or two years in Australia on a Temporary Graduate visa (subclass 485). This is only a temporary visa however.

Recently, Home Affairs announced that international students who study online as a result of being unable to come to Australia due to COVID can count this study time towards a post-study work visa. This is a welcome first step. But it is just the first step.

Australia should provide a pathway to permanency for international students who complete study and then work in key industries (e.g. computer science or advanced manufacturing). This will serve the dual purpose of making Australia a more attractive place to study while providing Australian firms with talented people to help grow their businesses.

This can be achieved by an across-the-board change by the Department of Home Affairs to the Australia education visa regime. It could also be partially achieved under existing rules by the NSW Government – using a mechanism WA currently uses. The Western Australian Government in 2018 introduced a Graduate Occupation List (GOL), under which international students who have studied at least two years in Western Australia at a Western Australian University, have an available occupation on the new Graduate occupation list, have a full-time job offer for more than 12 months and can prove ‘proficient English’ will be eligible for permanent residency under the state government’s graduate stream. This new graduate stream is available for Western Australian State nomination, namely the Skilled Nominated visa (Subclass 190); or the Skilled Regional (Provisional) visa (Subclass 489). **A similar but more limited pathway exists in NSW**, but only for international students who have studied in a designated regional area and who are qualified for a role on the NSW Stream 2 Regional Skilled Occupation List.

The NSW Government should look at adopting a dedicated visa stream, which includes a more targeted list of occupations that are deemed supportive of the growth of the NSW innovation economy.

## Key actor

Department of Home Affairs

The NSW Department of Treasury

## How would you enact this idea

Home Affairs would reform the education visa regime to:

- Give every student who completes a degree in Australia access to a 4-year post-study work visa.
- Give students who maintain work over this period in key industries like advanced manufacturing or computer science a pathway to permanent residency.

The NSW Department of Treasury will develop a Graduate Occupation List (GOL) which will be used to provide a pathway to residency for graduates as part of the Skilled Nominated Visa (subclass 190) system. The model will be based on the WA model but with a specific focus on innovation. The Department of Home Affairs will be notified about the policy upon completion. This visa class should be focused at the postgraduate level.

## Expected outcomes

A larger number of international postgraduate students across NSW and in Greater Sydney will remain in NSW and contribute to the growth of the innovation economy.



# 5. Give Sydneysiders the skills they need to be successful

## Why this is important

While Sydney's economy should be globally connected, it should also be a source of great opportunity for its existing residents and businesses. For local residents to compete with global talent, they will need to be world leading in their skill sets. A highly skilled, globally connected workforce will be more tapped into the latest technological developments as well as the emerging innovation and advancements of other countries, which in turn will provide the foundation for a more innovative domestic economy.

However, Australia is not presently as successful as it could be with regards to higher education, as well as with our capacity to commercialise our research. On the former, Information and communication technologies (ICT) and engineering, manufacturing and construction are seen in Australia as especially important for fostering innovation and economic growth. In 2019, 17% of adults with a tertiary degree had studied these fields, a lower proportion than the OECD average of 20%. This share may also be set to decline. While 12% of tertiary-educated adults have a degree in engineering, manufacturing and construction in Australia, only 8% of tertiary students graduating in 2017 had studied this field.

University is of course not the only avenue towards skills, with an important discussion also needed around the future role of TAFE. We need to prepare workers in new areas like 3D printing, robotics and other technology industries to provide the jobs of the future in places like the Western Sydney Aerotropolis and the Tech Central Hub.

Despite the need to do more in both these spaces, the NSW higher education sector is making big advancements in both research and the connection of these facilities to domestic start-ups. However, the state government's 2040 Economic Blueprint identified that NSW currently scores very poorly for the commercialisation of research relative to other countries. Supporting our universities to expand their recent advancements in this space will be critical to delivering an innovation-led economy.

An immediate issue is resolving how COVID-19 will impact on the higher education sector, with the loss of international students impacting on the education sector's funding. We need to bridge the gap between now and the return of this funding stream (while ensuring this funding stream does indeed return), to support the capability and research of the university sector.

## The evidence

- Returned expatriates bring home advanced knowledge and skills and serve as **nodes of international knowledge exchange** with access to global innovation networks.
- Australia was ranked just 21<sup>st</sup> of 29 countries for collaboration between universities and small businesses, and **27<sup>th</sup> of 27 on collaboration between large business and higher education**.



# 5.1. Recommendation: Reform the Vocational Education and Training sector

## The core idea

The Vocational Education and Training (VET) sector needs to use the COVID-19 pandemic as a catalyst to re-train and up-skill Australians for a new economy. This needs to be done using technology and flexibility to adapt to an unknown and changing economy.

## Background

The economy is undergoing drastic change and the skills required for emerging industries will be different the skill mix needed just 12 months ago. Beyond COVID-19, the economy continues to be disrupted by mega-trends like automation and AI/Machine learning.

Our current education system, especially the VET sector, requires help to adapt to this – making training delivery more flexible, and skilling up people who will need to transition to new and emerging areas of the economy.

Predicting the exact skill sets needed as Australia emerges from this crisis is premature. Our VET system needs to be updated right now to be flexible, agile and adaptable to changing patterns of economic activity and demands for skills.

Fundamentally, people losing their jobs due to industries disappearing during the COVID-19 crisis should be able to be re-trained and re-entering the workforce within 6 months.

Key changes required:

- We need to speed up the training of VET teachers in order to deliver rapid re-training post-COVID-19.

- Funding to make re-training frictionless. Currently many VET courses require significant up-front payments by students. This combined with current uncertainty associated with which skills will provide an individual with employment opportunities introduces hesitancy and friction right when we want people re-training as quickly as possible. Government funding should consider extending the existing fee-free short course program.
- Reducing the time commitment of courses. For someone looking to rapidly re-train and return to the workforce, courses should quickly deliver core competencies. This could be delivered in a couple of ways – through short modules (the “micro-credentials” model), online teaching or intensive training. Building on their success adapting the National Quality Framework during COVID-19, VET providers including TAFE NSW, should be supported to develop quick courses to help people back into work as quickly as possible.

## Key actor

TAFE NSW and the VET Sector

## How would you enact this idea

The NSW Government would set a re-training challenge to the VET sector, with funding attached, to deliver quick re-training and re-skilling before the end of 2020.

## Expected outcomes

NSW's employment rate returns to pre-COVID-19 rates quicker, and new industries are able to scale quickly as a result of having access to a large portion of the workforce who have been rapidly skilled up.

## 5.2. Recommendation: Fund life-long learning through long service leave

### The core idea

Long-service leave, increasingly unused, should be accessible for people to access life-long education and training.

### Background

People should be able to learn new things throughout their lives, but our current system is built on the idea that people get educated in their early 20s, then don't need any further education for their working life. Creating new industries and fostering innovation is rendering this outdated. It is being replaced by a new model of life-long learning.

One of the key barriers to further education is the cost – not just of the courses themselves, but the opportunity cost – of undertaking training rather than working.

Simultaneously, we have a model to reward long service for employees that is increasingly underused. Due to a suite of structural and cultural factors including increased casualisation and non-linear career trajectories, fewer and fewer workers – especially millennials – remain with a single employer for the requisite time to access long service leave, making it look increasingly anachronistic. Indeed, the Act that governs long service leave is 65 years old. While some sectors offer portable long-service leave, most do not and so this benefit – once something most workers would have had access to – has disappeared for many.

We propose matching this need with this scheme, allowing people to have long-service leave paid into a "Life-Long Learning Account" after a shorter period of 3 years with a single employer – to balance the need for earlier access with avoiding an imposition on all employers for all staff. This account would follow a person throughout their working life across multiple employers and can be accessed to take time out of the workforce to receive education.

Restrictions would have to be placed around it – only accredited courses could be accessed, and the rate of payment would be reduced to reflect the greater burden on employers of all staff receiving payments, rather than the current system of having to budget for only a small portion of staff receiving long-service leave. Any remaining funds in this account would be paid into superannuation when a person retired.

### Key actor

NSW Industrial Relations and Service NSW

### How would you enact this idea

The NSW Minister responsible for NSW Industrial Relations would amend the *Long Service Leave Act 1955* to provide the option to have long-service leave paid into a Life Long Learning Account, administered by Service NSW.

### Expected outcomes

Workers are more resilient to a changing world, and more willing to take risks, confident in their ability to access the education and training they will need in a new industry.

## 5.3. Recommendation: Plug the funding gap for universities

### The core idea

Universities are facing a funding crisis as a result of the collapse in international students. How to resolve this is not clear yet – but it must be solved.

### Background

In 2019, international students were Australia's 3<sup>rd</sup> largest export by value, providing 21,000 jobs and \$23 Billion in export income. They also make up a large proportion of university's income, with 43% of NSW universities' income coming from international students. The loss of students as a result of COVID-19 is estimated to cost universities between \$3 and \$4.6 Billion in 2020 alone<sup>20</sup>, with up to \$19 Billion in losses to 2023.<sup>21</sup>

This is a great shame – as we should celebrate our success in bringing in international students. The enormous benefit that exporting education has provided to Australia is underappreciated – but it amounts to a fantastic export – shifting Australia's economy away from carbon-intensive raw materials to a value-added product that improves both the individuals and the societies they return to, working as a powerful form of soft diplomacy for Australia.

While the Australian Government has committed to providing domestic student funding even if student numbers fall, more will be needed.

Beyond the quantum of support required, there is an open question as to whether this support will cause a long-term change in the business model of universities. At this stage, we have more questions than answers, but some starting points the Committee for Sydney believes:

- Our Universities are world-class. We must not take a step back in terms of research output or international ranking through this period. The return on investment from research can reach 10:1.

- International students should remain a long-term priority for Sydney's universities. The export income from this supports substantial investment in research and subsidises Australians' educations.
- Nonetheless, Governments should expect to pay more to universities, both in the short and long-term. National Missions through CSIRO, growing an advanced manufacturing sector and supporting key emergent industries like MedTech and AgTech will all require high-quality university capacity – which should be paid for by all Australians.

In addition to this, there are topics worth considering:

- Should Universities be collaborating more with the private sector on joint research with commercialisation potential? If so, how can government funding incentivise this?
- How can universities lead in re-skilling the workforce for a changed economy post-COVID-19?

### Key actor

Australian Department of Education, Skills and Employment

### Expected outcomes

Universities in Sydney maintain their existing status internationally, and are able to re-attract international students quickly, while pivoting in the immediate future to supporting re-skilling of Australians during the COVID-19 crisis.

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# Innovation Fund Partners

**We would like to thank our Innovation Fund Partners for their support of this report and for their broader sponsorship of the Committee for Sydney's research.**

Our Innovation Fund Partners are future focused, and outcome driven. They are leaders of change. Their combined investment underpins our annual research and policy program and together with our members, enables us to grow our impact and output – striving to create a better Sydney that offers unparalleled opportunity and quality of life for everyone.

We are proud to welcome our inaugural Innovation Fund Partners, Dexus, ICC Sydney, Western Sydney University, the Housing and Property Group from the NSW Department of Planning, Industry and Environment, Campbelltown City Council and McKinsey & Company.

Innovation Fund Partners

dexus

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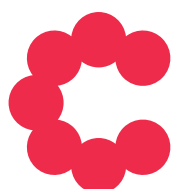
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