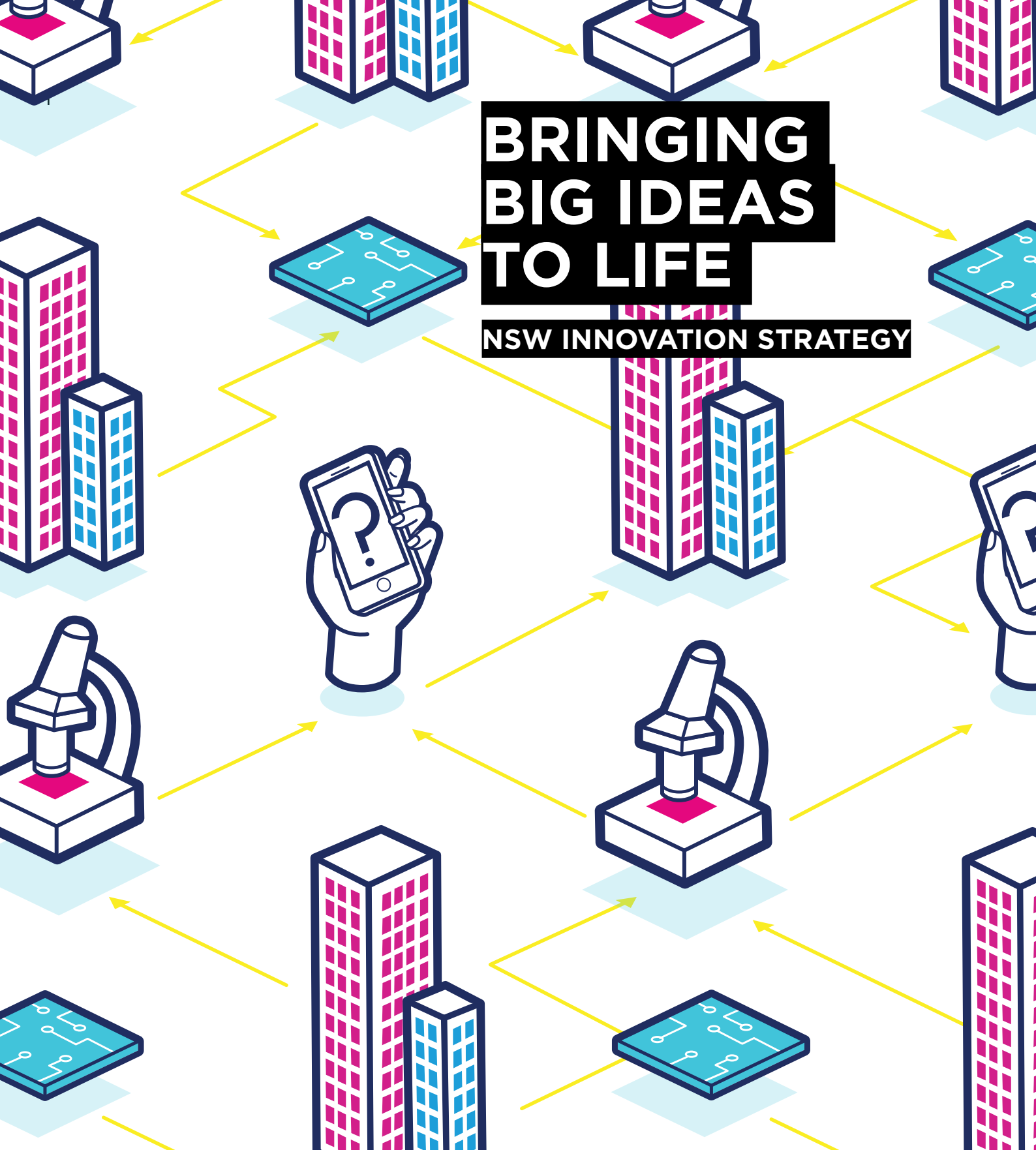


# BRINGING BIG IDEAS TO LIFE

NSW INNOVATION STRATEGY



# MINISTERIAL INTRODUCTION



**Hon Victor Dominello MP**  
Minister for Innovation  
& Better Regulation



**Hon Anthony Roberts MP**  
Minister for Industry  
Resources and Energy

**The NSW Innovation Strategy presents the NSW Government's vision to boost innovation in NSW, in the government and non-government sectors for the betterment of our State. We believe that this will help us to tackle complex economic, environmental and social challenges, stimulate economic activity and drive shared prosperity for the people of NSW. The Strategy will help ensure that NSW remains Australia's economic and innovation powerhouse.**

We know that the capacity for innovation-led growth is not just in the hands of the government, it also rests with businesses, non-government organisations (NGOs), education and research institutions, communities and individuals. Through consultation, you told us:

- Businesses and universities are eager to collaborate with government to solve challenges facing our state. We must foster a culture of innovation in government to test new ideas and be prepared to learn from failure.
- Great ideas are not enough to generate commercial success, and researchers and innovators need assistance to translate their ideas into successful products and services. This should include new forms of public investment.
- Employers and entrepreneurs need access to talent with skills in high end technology. Our priorities should be investing in education, supporting jobs-rich emerging industries, and improving access to new markets.
- NSW already leads on job creation, business investment, and tech sector maturity – but we need to leverage local networks and international opportunities to maintain this leadership. We also need to recognise the real potential of the State's regions.

The **NSW Government** has already shifted its approach to support a culture of innovation. **Service NSW** is making government services easier to access – a model now being replicated by state governments across the country. The **NSW Data Analytics Centre**, the first of its kind in Australia, facilitates better linkages across government and collaborates with the private sector and research institutions to work on complex issues facing the people of NSW. We are driving a digital government agenda to streamline government processes and provide consumers with greater access to information, for example through **FuelCheck NSW**. Through **Jobs for NSW**, we are leveraging the expertise of some of the best business minds in the nation to drive investment and continue to create jobs.

Our industry-led **Knowledge Hubs** are finding solutions to hard problems in sectors like financial services, energy, and transport and logistics, co-created between businesses, research organisations and industry associations. Through the Sydney School of Entrepreneurship, we will provide high achieving students with opportunities to learn entrepreneurial skills in partnership with universities and TAFE. The **Social Innovation Council** has been established as a genuine partnership between government and NGOs, to achieve better social outcomes for the people of NSW.

Building on this base, the NSW Innovation Strategy focuses on four areas of action:

- Government as an innovation leader.
- Fostering and leveraging research and development.
- Skills for the future.
- A home for entrepreneurs.

A Ministerial Innovation Committee will monitor the implementation of the NSW Innovation Strategy and ensure that NSW Government departments are open to the adoption of new ideas and innovations.

A world class innovation ecosystem demands that we proactively search for opportunities to improve and leverage our strengths. This strategy will help to increase NSW's productivity and position our state as a leader for the future.



# OVERVIEW

**Innovation is a process of trying things in new and different ways, often through the application of new technology and improved connections and collaboration, to derive value by meeting community, industry and consumer needs.**

Governments around the world are directing their energies to promoting innovation because it is important to their core objectives of increasing income growth, creating jobs, raising the standard of living, and providing quality services to the community.

Innovation has a place within every government department. The role of government is to also encourage and facilitate innovation in the broader economy. In doing so, governments should consider where it can make the biggest difference and concentrate its efforts accordingly. In terms of influencing innovation, the NSW Government can:

- Clear the path to allow new products and processes to flourish – such as removing unnecessary regulatory barriers to the use of technologies, which disrupt existing business practices and markets.
- Make purchasing decisions that drive change.
- Address market failures that prevent or slow innovation – for example, by helping to broker connections between the producers of research and those that could apply it in their businesses.
- Make policy decisions to help foster innovation.
- Highlight ground breaking research, innovative ideas and solutions being generated in NSW, including promoting NSW as the innovation capital of Australia.



**In the context of these levers, and drawing on the feedback from business and the community, this strategy has identified four primary areas for action:**

1. Making the NSW Government a leader in innovation, by being more open to external ideas and new approaches to the delivery of services.
2. Helping NSW research bodies capitalise on research and development to drive social and economic value.
3. Ensuring the right skills are developed, attracted and retained in NSW, equipping our current and future labour force to create their own jobs and technologies of the future, and meet technological advances and changing business and workplace models.
4. Building on the strong position of NSW as the national leader in innovation, and Sydney as the startup capital of Australia, to benefit the greater NSW regions and become a globally recognised centre of entrepreneurship. This includes promoting opportunities and success stories, to attract businesses and individuals to NSW.

This document highlights headline initiatives only. There are a number of supporting initiatives that can be viewed at [www.innovation.nsw.gov.au](http://www.innovation.nsw.gov.au).

This approach complements the Australian Government's [National Innovation and Science Agenda](#) which focuses on collaboration between researchers and industry, building talent and skills, and government leading by example.



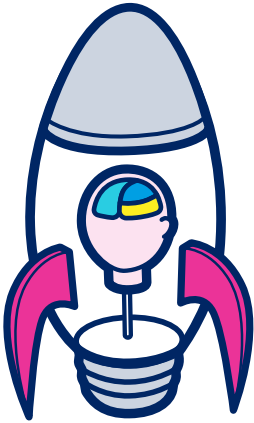
# 1 GOVERNMENT AS AN INNOVATION LEADER

**Government can play a key role in creating an enabling environment for innovation. The NSW Government employs over eight per cent of the state's workforce and delivers a budget valued at 14 per cent of the state's economy. The government is also a major customer for businesses, NGOs and other providers, purchasing almost \$25 billion in goods and services each year.**

With rapid improvements to services, products and systems throughout the economy, customers and businesses increasingly expect that these are mirrored through streamlined access to government and improved government services. This means adopting a greater 'user-centric' approach; providing more efficient channels of engagement that deliver better information, faster; making it easier to do business with government; and importantly, developing smarter, fit-for-purpose regulation.

The NSW Government will create an environment within the public sector that encourages risk taking, to explore innovative ideas in government and encourage partnerships with the private sector; including market leaders, startups, entrepreneurs, NGOs, and universities to drive improved social, environmental and economic outcomes.

We will harness data, digital technologies, diverse skills and expertise to co-design solutions around need, and provide clearer access points to government decision making. Through a digital government agenda, we will embed a culture of 'digital by default' to help streamline government processes and encourage the release of open data where appropriate. Where possible, we will collaborate across all levels of government to reduce regulatory hurdles for businesses. We will simplify our procurement guidelines, make regulators and regulation more responsive to customer requirements, and focus our efforts on making NSW the easiest state to start and grow a business.



## HEADLINE INITIATIVES:

### We will:

- Launch the **NSW Innovation Concierge (NIC)** service which includes the digital interface 'Ask NIC', to help navigate and get access to the right information and people in government. It will operate as a 'front door' for innovative ideas that align with State Priorities and have multiple touchpoints within government. NIC will operate in conjunction with the new Ministerial Innovation Committee, to ensure that opportunities are considered by subject matter experts and decision-makers across government. It will ensure that government agencies are leveraging innovative solutions and drive implementation of Innovation Strategy initiatives.
- Create **Regulatory Sandboxes** where products, services and business models can be tested while maintaining existing protections. The introduction of Regulatory Sandboxes will encourage more experimentation and allow businesses to accelerate the development of innovative solutions in NSW.

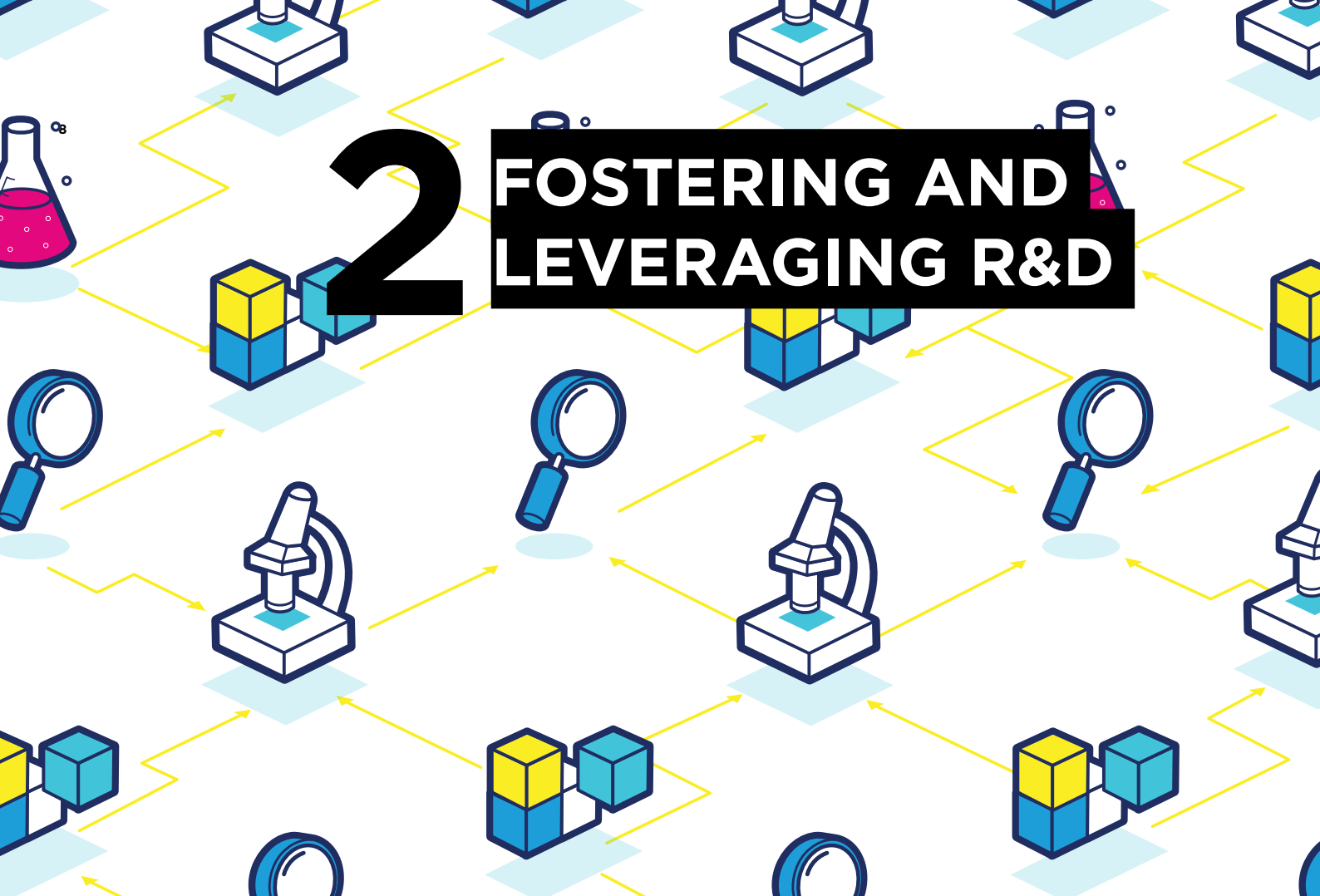
### Social Innovation Council

The **Social Innovation Council** is a strategic partnership between NSW Government and NGOs to help foster innovation in the way human services are developed, delivered and measured. The objective of the Social Innovation Council is to improve human services outcomes by:

- the use of technology and collaborative work practices to optimise service delivery
- improving the quality and accessibility of human services data for government and NGOs
- driving more strategic engagement of the NGO sector
- making it easier for NGOs and government to do business together.

More information at: [innovation.nsw.gov.au/social-innovation/social-innovation-council](https://innovation.nsw.gov.au/social-innovation/social-innovation-council)





## 2 FOSTERING AND LEVERAGING R&D

**Investment in research and development is critical for generating new knowledge required to create or improve products, services and processes.**

NSW has world class research institutions. The research undertaken in NSW has already translated into enormous economic opportunities and has transformed people's lives. Turning research into tangible outcomes is a major priority for research bodies, and for our growing economy and population.

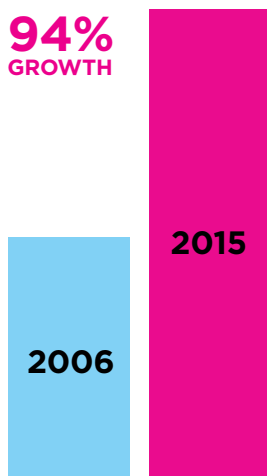
While Australia performs well in terms of private sector investment in research and development, there are some clear gaps. Government has a role to play as both a facilitator of investment and as an investor in early-stage technologies with significant growth potential.

The NSW Government wants to deepen the links between research and the broader economy. In many cases, researchers are not sure who in industry could make use of their work, and businesses are often unaware of what opportunities might be created through engagement with researchers and their facilities. Government can help broker these connections.

In particular, the NSW Government needs to play a role in fostering collaboration and creating an environment in which universities, industry and government can work together to solve business and service delivery problems.



**94%**  
GROWTH



**IN NSW PRIVATE SECTOR  
EXPENDITURE ON R&D**



The NSW Government will make this happen in many ways, such as being smarter in utilising its significant research spend and encouraging research initiatives to involve multiple universities, the private sector and NGO participation.

It will also provide direct incentives to industry and universities to work together. For example, through providing ‘technology vouchers’ that firms can redeem via partnerships with research bodies to develop specific solutions for their businesses.

## HEADLINE INITIATIVES:

### We will:

- Expand the successful **TechVoucher scheme** through the **Boosting Business Innovation Program** to drive in-depth industry and research collaboration. The program will be delivered through universities and the CSIRO.
- Establish **Universities Connect** to build more strategic relationships between the university sector and the NSW Government. This relationship management function will proactively encourage dialogue to help with problem solving and collaboration, link institutions with government for partnerships to try and solve problems.



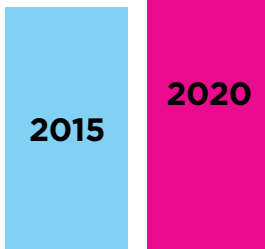
**Forty per cent of today's jobs will not exist in 10 to 15 years, and 60 per cent of the best jobs in the next 10 years have yet to be invented. The World Economic Forum predicts jobs growth in industries such as arts, engineering, artificial intelligence, robotics, nanotechnology, 3D printing, genetics and biotechnology. We can also build on our competitive strengths in quantum computing, big robotics, fintech and agtech.**

To meet the future needs of industry we must ensure the right mix of talent, with skills in diverse fields such as critical and experimental thinking, creative problem solving, managed risk-taking, management and entrepreneurship, along with science, technology, engineering and mathematics (STEM).

We will work with industry, education providers, communities and the [Australian Government](#) to actively build the skills needed for future diverse high-value jobs; by growing and re-skilling talent, encouraging business opportunities and attracting the best and brightest talent internationally.



**20%**  
PROJECTED  
GROWTH

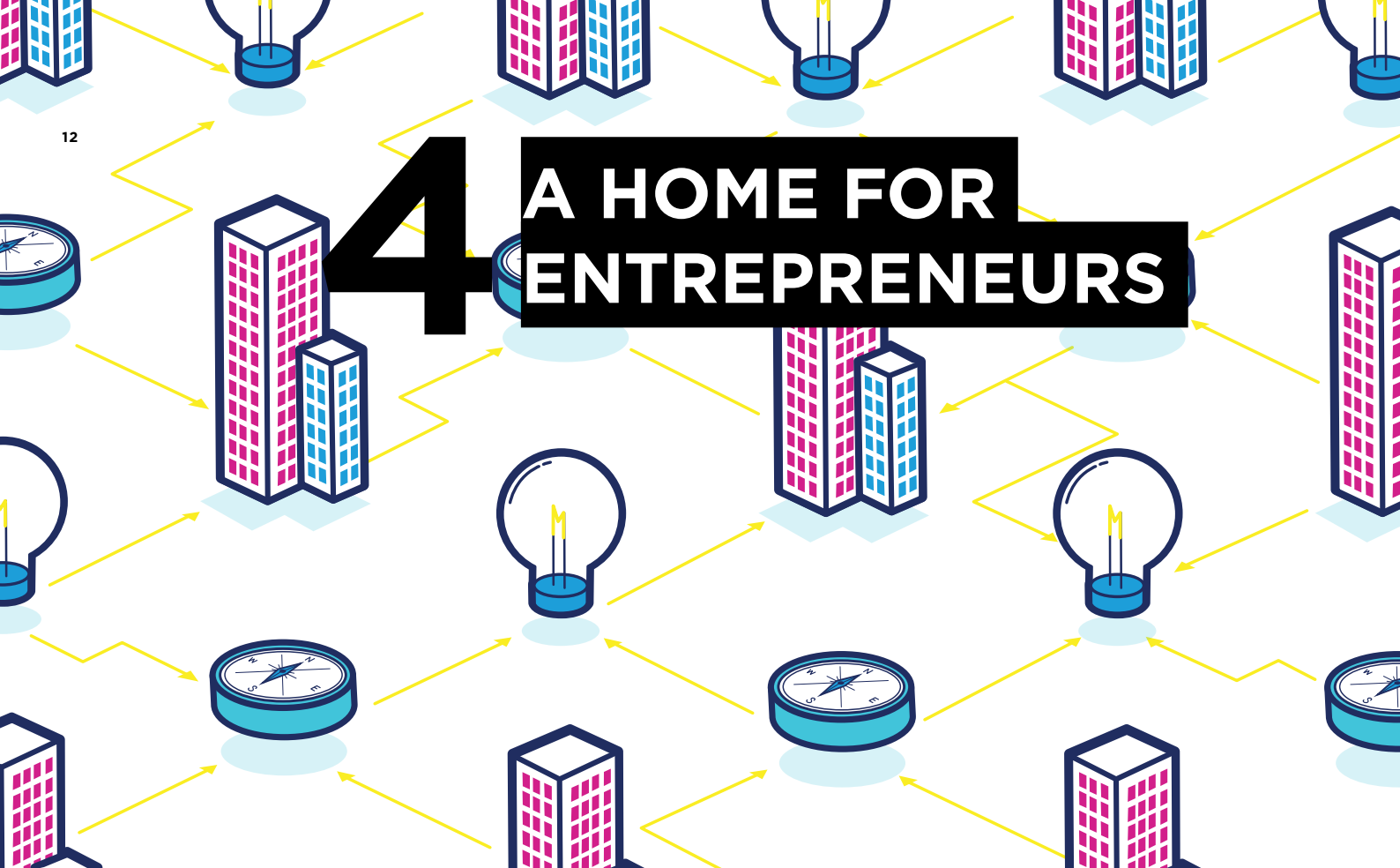


**IN NSW PROFESSIONAL,  
SCIENTIFIC AND  
TECHNICAL SERVICES  
SECTOR EMPLOYMENT**

## HEADLINE INITIATIVES:

### We will:

- Work closely with industry and education providers to develop programs that attract more diverse high-potential students into STEM higher and vocational education, and retain high-performing students in NSW STEM industries. This will be done through a suite of initiatives across NSW Government, including the establishment of a **NSW STEM Foundation** to support excellence, diversity and retention in STEM.
- Develop **NSW Future Skills**. This body of work will address the preparedness of NSW students for changing economic and workforce needs and technological changes. A scoping exercise is currently underway and will identify opportunities to increase participation in STEM subjects and support students studying Asian languages. It will also scope opportunities to better develop entrepreneurship and better understand how we can achieve improved outcomes.
- Implement the **Jobs for the Future** strategy, including initiatives for meeting the skills need for tomorrow.
- Implement **Jobs for NSW**, a \$190 million investment to drive the Premier's number one priority, creating jobs.



**As the national economy transitions towards greater digitisation, NSW has led the way as Australia's largest exporter of Information and Communications Technology (ICT) services, and holds the country's largest concentration of ICT professionals. Almost half of all Australian technology startups are based in Sydney, as are the regional headquarters of world-leading ICT multinationals.**

From this base, government can play a unique role in retaining NSW's global competitiveness. Through its high profile international engagement strategy, government can promote the state's strengths, draw in overseas talent and investment, and nurture cooperation with international firms and policy-makers at innovation's leading edge. Already in NSW, areas such as fintech and agtech are attracting international attention and investment and new sectors such as cyber-security are emerging.

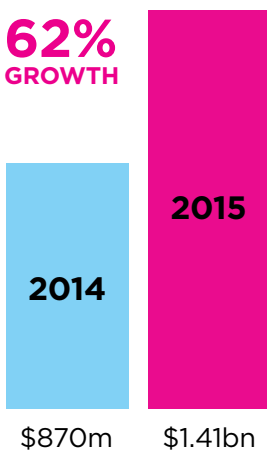
In cities and regions across the world collaborative work spaces, precincts, and adoption of new technologies, such as Internet of Things sensor technology, have created opportunities to ignite significant innovation-led growth, leading to new ideas, products and services.

The NSW Government is fostering international competitiveness through initiatives such as the redevelopment of the White Bay power station, and through fostering the growth of other innovation precincts in NSW.

Sydney is the innovation entry point for entrepreneurs and startups to access opportunities across NSW. It is also the landing pad for essential foreign investment, technology and talent. Sydney ranks in the top three startup ecosystems in Asia - a sector worth A\$70 billion to the NSW economy.



**62%**  
GROWTH



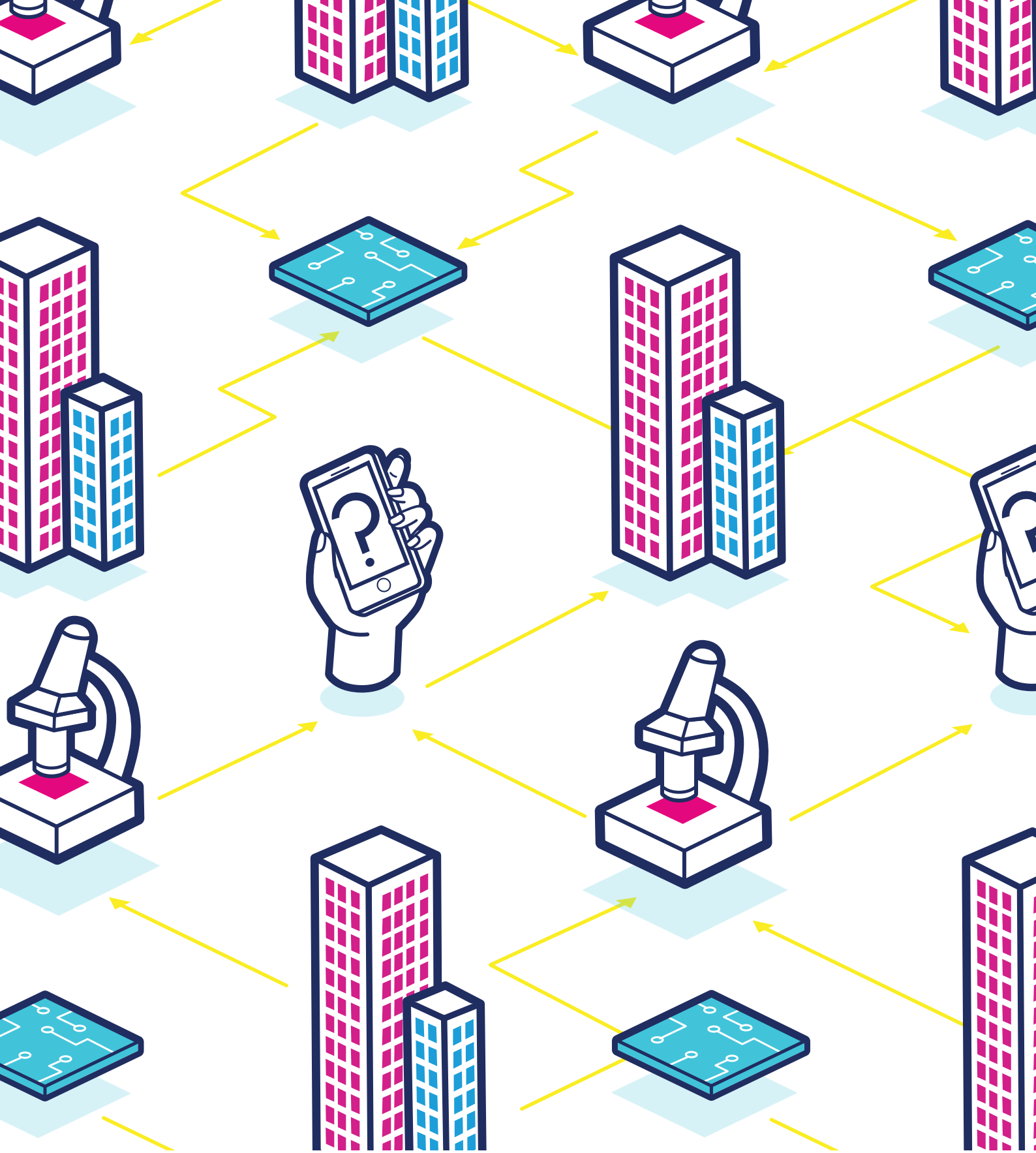
**NSW EXPORTS OF  
COMPUTER AND  
INFORMATION SERVICES**

The government is committed to putting Sydney in the top ten startup ecosystems in the world. To get there we will build on our existing network of incubators, accelerators and knowledge hubs. We will also work more closely with the City of Sydney and other local governments to build Sydney and NSW's international profile, attract entrepreneurs and funds and bring world-leading innovators to NSW.

## HEADLINE INITIATIVES:

### We will:

- Form **Strategic Partnerships** with local governments, starting with the **City of Sydney**. The Sydney CBD has a significant concentration of innovative firms and is a global competitor for attraction and retention of entrepreneurs. This partnership will include an International Visiting Entrepreneur's Program and a commitment to continue collaborating to unlock innovative solutions to harness economic and social outcomes.
- **Jobs for NSW** will assist startup companies to flourish into the gazelles of tomorrow by setting aside \$10 million to grow the state's network of incubators and accelerators, and \$3 million in 2016-17 for direct grants to startups.
- Launch the [innovation.nsw.gov.au](http://innovation.nsw.gov.au) website (which includes the Ask NIC digital interface for entrepreneurs to access the NSW Innovation Concierge) which will provide information on the Innovation Strategy and supporting initiatives. It will also promote innovation in NSW more broadly.



# INNOVATION.NSW.GOV.AU

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