



Australian Government

Australian Government response to Innovation and Science Australia's

Australia 2030: Prosperity through Innovation

May 2018

Imperative 1 – Education: Respond to the changing nature of work by equipping all Australians with skills relevant to 2030

Recommendation 1

Government education policy makers should direct their efforts towards:

- investing in quality teaching by improving the quality and content of in-service teacher professional development programs to focus on
 - a nationally agreed minimum number of annual hours in discipline-specific training
 - the teaching of 21st-century skills
 - increasing quality of and emphasis on feedback and appraisal of teacher performance
 - selecting, developing and effectively resourcing high-performing teachers and school leaders to act as mentors and instructional leaders in their school or area
- monitoring the entry standards for initial teacher education courses to ensure that they are sufficiently demanding to select students with the literacy and numeracy skills required for science, technology, engineering and mathematics (STEM) teaching
- strengthening the quality of teacher education for secondary STEM teachers through requiring the completion of a discipline-specific, non-teaching degree in addition to a teaching degree
- increasing the system-level focus on targeted interventions to improve outcomes where student learning levels are significantly below our national average through
 - providing tailored support to teachers in the form of regular tracking of student improvement, enabling rapid and evidence-based iteration of teaching practice
- instilling ‘motivation mindsets’ and a culture of high expectations including through
 - communicating to secondary students the level of school STEM study needed to enter and successfully complete STEM-related courses at university and in vocational education and training
 - reinstating prerequisites into those tertiary courses in which discipline skills are necessary
- ensuring future reviews of the Australian Curriculum for STEM subjects will continue to meet Australia’s innovation, science and research education needs and be informed of industry expectations through consultation with industry.

The Government **supports in principle** this recommendation.

The Government is committed to building a world-class education system and accepts that quality teaching and school leadership provide the foundation for a high performing and effective school system. While the Australian Government plays a leadership role in driving forward national educational reforms and provides funding for areas of national educational importance, school education in Australia is principally the constitutional responsibility of the states and territories, who are responsible for the delivery and management of schooling.

Given the responsibility for schooling rests with the states and the territories, the Australian Government works through the Council of Australian Governments (COAG) Education Council to coordinate strategic policy on school education at a national level to address issues of national significance. The Government acknowledges the state and territory work already under way and notes that further specific actions would require agreement through the COAG Education Council, or response from higher education providers.

The Government notes that in 2015 all Australian education ministers agreed to the [National STEM School Education Strategy 2016–2026](#), which focuses on foundation skills, developing mathematical, scientific and digital literacy, promoting problem solving, critical analysis and creative thinking skills, and sets clear goals to improve STEM education in Australia. The Government’s intention is to increase our STEM student population and to make sure that, after graduation, STEM graduates can work with industry to boost business growth, productivity and competitiveness.

The National STEM Partnerships Forum is a collaborative action under the National STEM School Education Strategy that aims to map out opportunities to facilitate and optimise partnerships between industry and Australian schools. In bringing together leaders from industry and education, the Forum has facilitated a more strategic approach to school-based partnerships with businesses and industry across Australia in order to develop the engagement, aspiration, capability and attainment of students in STEM. In April 2018, the Forum [delivered a report](#) to the COAG Education Council

containing recommendations for government, industry and education. Recommendations include supporting discipline-specific professional development for teachers and developing stronger partnerships between schools and industry to engage and inspire students, providing them with a better understanding of real world applications of STEM skills and related career opportunities.

In addition, the Government currently funds a number of initiatives that provide professional learning for teachers and school leaders to improve the teaching of STEM including:

- The Principals as STEM Leaders project, which will develop and pilot new approaches to support principals to provide high quality STEM leadership in schools
- The University of Adelaide's Digital Technologies Massive Open Online Courses (MOOCs), which provides free professional development for teachers on the Australian Curriculum: Digital Technologies, and free access to the latest digital technologies equipment through a National Lending Library
- Digital Technologies in Focus, which provides support for school leaders and principals in around 160 disadvantaged schools to assist them in implementing the Australian Curriculum: Digital Technologies
- The Mathematics By Inquiry program, which is designed to provide Australian schools from Foundation to Year 10 with resources to help students learn mathematics in an innovative and engaging way
- The Primary Connections – Linking Science with Literacy project, which provides professional learning to pre-service teachers and teachers in regional, rural and remote Australian communities, including those with a significant Indigenous population
- The Science by Doing project, an online science program available to all Australian students and teachers which is designed to promote engaging, guided inquiry-based learning to lift student interest and understanding in the Australian Curriculum: Science
- The Women in STEM Ambassador, who will encourage young Australian girls to engage in STEM education
- The STEM X Academy, a residential teacher professional learning program that assists teachers to develop hands-on, enquiry-based lessons and activities.

Recommendation 2

Prepare students for post-school science, technology, engineering and mathematics (STEM) qualifications and occupations, by:

- exploring opportunities to encourage participation in higher-level STEM subjects in high school
- strengthening education in skills such as hypothesis-driven problem solving, systematic enquiry and logical thinking
- improving measurement of the scope of out-of-field teaching in STEM and implementing measures to reduce the level of out-of-field teaching
- optimising the interaction of industry with schools through the work of the STEM Partnership Forum.

The Government **supports in principle** this recommendation.

The Government regards high-quality science, technology, engineering and mathematics (STEM) education as critically important to our current and future productivity, as well as for informed personal decision-making and successful community, national and international citizenship. The Government is committed to improving the quality of STEM education in Australian schools to develop curious and capable citizens and prepare students for STEM qualifications and occupations. As part of this commitment, in 2015, all Australian education ministers agreed to the [National STEM School Education Strategy 2016-2026](#), which focuses on foundation skills, developing mathematical, scientific and digital literacy, and promoting problem solving, critical analysis and creative thinking skills.

The Government notes that, in April 2018, the STEM Partnerships Forum [delivered a report](#) to the COAG Education Council which contains recommendations for government, education and industry to develop the engagement, aspiration, capability and attainment of students in STEM. The Education Council has referred the report to Schools Policy Group (SPG) for consideration, with advice to be provided to the Education Council in June 2018.

In addition, the recent report of the Review to Achieve Educational Excellence in Australian Schools: [Through Growth to Achievement](#) also highlights the importance of laying the foundations for learning and equipping every student to grow and succeed in a changing world.

The Government is exploring opportunities to encourage participation in higher level STEM subjects in high school and to strengthen education in hypothesis-driven problem solving, systematic enquiry and logical thinking through a range of initiatives, including:

- the STEM focused P-TECH pilot, an education-industry collaboration that provides opportunities for students to engage with the world of work and better understand the relevance of their learning to jobs and post-school pathways
- Creativity in Research, Engineering, Science and Technology (CREST), a non-competitive awards program managed by CSIRO and funded by the Science and Industry Endowment Fund (SIEF) that engages and rewards students for open-ended science investigations and technology projects, and includes teacher professional learning
- STEM Professionals in Schools which provides support for flexible partnerships between STEM professionals and schools to: enable students and teachers to understand how STEM is applied in the real world; introduce them to emerging STEM innovations and potential career paths; provide student mentoring opportunities; and better match industry expectations and aspirations
- the Australian Digital Technologies Challenges, a series of free online teaching and learning activities for students in Years 5 to 8 that are aligned to the Australian Curriculum: Digital Technologies
- digIT, a series of summer schools that targets Year 9 and 10 students from groups that are under-represented in STEM and engages them in digital technologies and related careers
- the Curious Minds initiative, an extension and mentoring program to ignite girls' passion in STEM education from a young age.

The Government acknowledges the importance of data in improving teaching outcomes and notes that the implementation of the nationally agreed Australian Teacher Workforce Data Strategy (ATWD) will improve the understanding of the existing teacher workforce and those entering teacher education, as recommended by the Teacher Education Ministerial Advisory Group.

Recommendation 3

Improve transparency and accountability across the system by raising the ambition of the national minimum standards in the National Assessment Program – Literacy and Numeracy (NAPLAN) and building on these with new standards focusing on higher levels of achievement.

The Government **supports in principle** this recommendation.

The Government is committed to fostering a skilled and dynamic workforce that will continue to support an adaptable and globally competitive Australian economy.

The Government is already working with the Australian Curriculum and Reporting Authority (ACARA) – the independent statutory authority responsible for developing and administering NAPLAN, and states and territories, on introducing new proficiency standards for NAPLAN. ACARA is leading work on developing proficiency cut scores and level descriptors for new, more ambitious standards for NAPLAN. ACARA was directed to consider proficiency standards for NAPLAN in 2013 by all education ministers through the former Standing Council on School Education and Early Childhood.

The proficiency standards for NAPLAN will provide a better understanding of how students are progressing and will supplement information from the existing national minimum standards, which will remain in place as a useful benchmarking measure. The Government will continue to work with the state and territory governments to agree a timeline for implementing these new proficiency standards, which will raise the bar for student achievement and provide greater insight into students' learning growth and achievements.

This recommendation will be considered in the context of the Government's response to the reports on the [Review to Achieve Educational Excellence in Australian Schools](#) and the [National STEM Partnerships Forum](#).

Recommendation 4

Task the Australian Government Department of Education and Training to undertake a review of vocational education and training (VET) and report back within 12 months on:

- a strategy to make the sector increasingly responsive to new priorities presented by innovation, automation and new technologies
- ensuring the Australian VET system will be internationally competitive in the provision of initial skills training, in supporting a life of learning and helping businesses to compete, and ensuring VET interfaces and intersects productively with other parts of the higher education system
- recommendations for metrics of VET success to be evaluated by 2022, including via surveys of employers regarding skills relevance, actual completion rates and employment on graduation
- increasing the amount and granularity of information made available to students.

The Government **notes** this recommendation.

The VET sector has a critical role to play by assisting Australians to acquire new skills, enabling them to respond as the jobs market evolves throughout their working lives. Due to constant change in technological, economic and socio-economic trends, Australian workers will need to acquire new skills more frequently, hence a healthy VET sector will be essential to ensure that the Australian workforce continues to be highly skilled and well paid.

The intention of this recommendation aligns with existing government policy and reform directions. The Government has embarked on significant reform of the VET system to ensure that it is capable of training people to meet future skills needs. The need for a review will be considered when the current reforms have been further progressed and their impact on the VET system and labour market can be assessed (see Recommendation 5).

Recommendation 5

Continue and expand current VET reforms to:

- optimise the supply-side potential of the Skilling Australia Fund, for example by encouraging industry employers and VET providers to consult with Industry Growth Centres in identifying expected skills shortages in the future work requirements of high-growth sectors
- link VET student loan funding to employment outcomes
- strengthen the powers of the regulator: Australian Skills Quality Authority
- provide improved information to students on provider quality.

The Government **supports in principle** this recommendation.

Over the past two years, the Government has introduced significant reforms to the VET sector, focussing on improved industry responsiveness, better quality and regulation, and the provision of enhanced consumer information. Key initiatives have included:

- the commissioning of an [independent review](#) of the *National Vocational Education Training Regulator Act 2011* (NVETR Act), with the final report delivered to Government on 31 January 2018
- the establishment of the Skilling Australians Fund, supporting apprentices, trainees and pre- and higher level trainees to help address skills shortages across Australia
- the creation of Industry Reference Committees to act as a conduit for industry feedback, including from the Industry Growth Centres, to the Australian Industry and Skills Committee (AISC)
- the commencement of the VET Student Loans program on 1 January 2017, which offers targeted loan support for students studying diploma and higher level vocational education and training qualifications, focusing on courses that address identified skills shortages.

The need for further reform will be considered in the context of the findings of the review of the NVETR Act and once the current reform agenda is further progressed.

Imperative 2 – Industry: Ensure Australia’s ongoing prosperity by stimulating high-growth firms and improving productivity

Recommendation 6

Adopt as the top priority of innovation policy the reversal of the current decline in business expenditure on research and development, with a headline goal of achieving a medium-term growth rate not less than that seen in 1999–2015. The contribution to this goal made by government support for business R&D should be strengthened by:

- ensuring, at a minimum, that total government support for science, research and innovation does not fall below its medium-term average of 0.63 per cent of gross domestic product
- implementing the recommendations of the 2016 Review of the R&D Tax Incentive to improve the effectiveness, integrity and collaboration impact of the program, with the following adjustments
 - the cap referred to in Recommendation 3 of the report should be set at \$4 million per year, and a maximum cumulative refund of \$40 million per company should be applied
 - the threshold referred to in Recommendation 4 of the report should be replaced with a trigger set at 1 per cent of total annual expenditure, such that all R&D expenditure is claimable (subject to any other limits) once the trigger level is reached
- prioritising new and redirected investment in stimulating business R&D to programs that directly support activity in areas of competitive strength and strategic priority (e.g. Cooperative Research Centres – CRCs, CRC Projects, Entrepreneurs’ Programme and Industry Growth Centres).

The Government **notes** this recommendation.

The Government is committed to creating an environment that enables and drives increases in business research and development (R&D) expenditure. It does this through:

- targeted direct support for business R&D – which allows us to focus our efforts on building our competitive strengths and solving specific challenges
- indirect support for R&D – that incentivises businesses to take advantage of new opportunities and respond to changes in global and domestic markets, and
- support to build R&D capability across the economy – including by fostering a favourable business environment for start-ups and existing businesses to innovate, collaborate, and grow; funding critical research infrastructure; and by ensuring our education and training systems are providing Australians with the skills they need to succeed in the future.

The overall level of Government investment in science, research and innovation is not a result of a specific decision, but rather reflects current and emerging priorities, which take account of the broader economic environment and societal challenges facing our nation. Consequently, mandating a minimum level of support, based on historical figures, is not the most appropriate way for Government to allocate funding aimed at encouraging business expenditure on R&D. The Government’s key consideration is to make smart investments that get the best overall value for the Australian public, both now and into the future.

In recent years, the Government has taken considerable steps to ensure both the stability of its funding and the strategic allocation of its investment in science, research and innovation through a range of measures, including by:

- launching the [National Innovation and Science Agenda](#) (NISA) in 2015, committing \$1.1 billion over four years to boost our economy’s capacity to innovate and harness the benefits of new technologies, processes and services. By focussing on four key pillars (culture and capital, collaboration, talent and skills, and Government as an exemplar), the NISA provides an enduring policy platform for sustained investment in science, research and innovation, including by:
 - committing \$2.3 billion over 10 years to support critical research infrastructure
 - introducing new streamlined arrangements for research block grants to provide stronger incentives for research-business collaboration, to encourage universities to increase engagement with industry and other end-users of research
 - encouraging businesses to invest in R&D through a number of measures, including the Biomedical Translation Fund, expanding the Entrepreneurs’ Programme, incentives to work with the CSIRO, and a Global Innovation Strategy.
- committing over \$700 million over the forward estimates to industry-research collaboration through the Cooperative Research Centres Program

- producing the [National Science Statement](#) in 2017, which sets strategic objectives and recognises the importance of stable and predictable funding for science and research
- introducing a number of measures to encourage R&D in the defence industries sector, including the Next Generation Technologies Fund and the Defence Innovation Hub.

As part of the 2018–19 Budget, the Government is building on these strong foundations by making a further investment of \$2.4 billion in growing Australia’s research, technology and science capabilities. This includes:

- an investment of \$1.9 billion in Australia’s National Research Infrastructure to 2028–29, ensuring our world leading researchers and innovative businesses have tools to develop and commercialise first-to-market products and services. This investment is in addition to the \$140 million funding already announced for the Pawsey Supercomputing Centre in Perth and the National Computational Infrastructure in Canberra, where research supports a range of industries from astronomy and geoscience, to health and agriculture.
- the Australian Technology and Science Growth Plan that invests in cutting edge digital infrastructure; opportunities to skill our workforce; a new space agency; and measures to boost the export potential of Australian businesses. These investments support the creation of new ideas, encourage commercial opportunities, and underpin successful businesses and new jobs.

The Government will also provide \$1.3 billion in new investment for health and medical research, as part of its National Health and Medical Industry Growth Plan. The National Health and Medical Industry Growth Plan will strengthen our global competitiveness in emerging sectors, like genomics, and improve connectivity between our talented researchers and industry to help turn their discoveries into new health innovations.

As part of the 2018–19 Budget, the Government also announced amendments to the R&D Tax Incentive, applying from 1 July 2018, in response to the recommendations of the 2016 [Review of the R&D Tax Incentive](#) and [Innovation and Science Australia’s 2030 Strategic Plan](#). These changes will better target the R&D Tax Incentive, increasing the focus on additionality for larger firms, as well as improving the integrity, effectiveness and affordability of the program.

Recommendation 7

Increase efforts to help young Australian businesses and small and medium enterprises to access export markets by:

- increasing funding for Export Market Development Grants and investigating how to target a larger proportion of the funds to high-growth businesses (e.g. consider fostering and identifying them via Industry Growth Centres)
- extending funding for international capability promotion through targeted trade missions and trade promotion activities.

The Government **supports in principle** this recommendation.

The Government is promoting jobs growth by helping existing and emerging businesses to build their export capability, so they can expand and grow into global markets. Firms participating in export markets increase their exposure to global competition, which can intensify incentives for firms to innovate, as they seek new ways to retain their points of difference and market share in the global economy.

Export Market Development Grants (EMDG), trade missions and promotion activities have an important role to play in this regard, alongside other government activities – for example, pursuing new and improved trade agreements to open up overseas markets for the benefit of all Australian businesses, and establishing Landing Pads in five global innovation hubs so that start-ups and scaleups can access new networks and markets.

As part of the 2018–19 Budget, the Government is investing in new measures to help businesses expand into new markets and create jobs. Funding of \$20 million for Supporting Australian Innovation in Asia, enhances the existing [Global Innovation Strategy](#) under the National Innovation and Science Agenda. It provides a new strategic funding stream focussed primarily on Asia and continues the successful Australia–India Strategic Research Fund. This initiative will help build relationships at a government-to-government level, smoothing the path for Australian innovators to work with leading global partners on cutting-edge R&D and commercialisation projects. It will also foster co-investment in Australian business and research by foreign governments and organisations.

In addition, the \$20 million Small and Medium Enterprises Export Hubs Program in the Government’s 2018–19 Budget will help new and existing local and regional business hubs target new export markets and global supply chains. Export Hubs will provide professional, strategic and coordination support, enabling small businesses to learn from each other, develop new products and brands together, as well as share resources and knowledge. The aim of the program is to help Australian small and medium businesses take their products to the world.

The Government has also released a [Defence Export Strategy](#) to support Australian businesses, particularly small and medium enterprises, to achieve greater export success in the defence sector. This Strategy includes a commitment of \$3.2 million per annum to expand the Global Supply Chain program to help more Australian small and medium sized enterprises access the supply chains of global primes. It also commits to provide grants to help build the capability of Australian small and medium sized enterprises to compete internationally.

The Government is targeting existing services to help better position Australia as a leader in priority sectors and markets of competitive advantage. These activities also include closer alignment between programs that support businesses to access export markets – such as the EMDG, Industry Growth Centres Initiative, and Entrepreneurs’ Programme – and coordinated promotional campaigns in international markets.

Recommendation 8

The forthcoming Digital Economy Strategy should prioritise the development of advanced capability in artificial intelligence and machine learning in the medium- to long-term to ensure growth of the cyber-physical economy.

The Government **supports** this recommendation.

The Government is developing a digital economy strategy, which will set out a forward plan to ensure Australia has an open, competitive and digitally enabled economy that is responsive to rapid technological change, and in which all Australians are able to participate. This strategy will recognise the importance of artificial intelligence (AI) and machine learning in supporting innovation.

AI and machine learning are already impacting Australia’s economy, society and globally competitive position. They are expected to underpin the next major wave of global economic change, generating new efficiencies and insights to solve existing challenges, and unlocking significant economic and social benefits for its early adopters.

There is work underway across government to improve Australia’s capability in AI and machine learning. CSIRO’s Data61 is conducting research to advance the technologies of AI in many areas of society and industry, including in machine learning to drive valuable insights into transport systems and to extend the service life of infrastructure assets, like the Sydney Harbour Bridge. As part of the 2018-19 Budget, the Government is committing \$29.9 million over four years to address gaps in Australia’s AI and machine learning capabilities. This includes funding for:

- Cooperative Research Centre Projects with a specific focus on AI, to realise opportunities and solve challenges for Australian industry
- the development of AI skills in Australia through funding of PhD Scholarships and online resources to engage students and support teachers to deliver AI content in the Australian Curriculum
- the development of a Technology Roadmap by Data61 that informs government investment in AI by identifying global opportunities in AI and machine learning, and any barriers to its adoption in Australia
- the development of a national AI Ethics Framework to address standards and ethics for adopting such technology in Australia.

Recommendation 9

Establish protocols (including consumer data rights) for maintaining healthy levels of competition in knowledge-intensive industry sectors.

The Government **supports** this recommendation.

The Government is committed to ensuring a healthy level of competition in the Australian economy, including in knowledge-intensive industry sectors. For example, agencies such as IP Australia and the Australian Competition and Consumer Commission exist to ensure that businesses are able to compete fairly in the Australian economy. This commitment extends to consideration of improvements to our regulatory system to support competition, as shown by the Government’s commissioning of the [Competition Policy Review](#) (also referred to as the Harper Review).

The 2015 Harper Review report made a large number of recommendations to improve competition in the Australian economy. The Government agreed to implement the majority of the recommendations, and continues to work to deliver on this commitment. Recently implemented reforms include strengthening the misuse of market power provision, prohibiting anti-competitive concerted practices and reforming merger approval processes.

In response to the Productivity Commission's [Data Availability and Use Report](#), the Government is investing \$45 million over four years to establish and maintain the Consumer Data Right. The Consumer Data Right will give individuals and businesses the ability to access their data and, if they choose, have it directed to a third party in a safe and secure way. This will drive competition by making it easier for consumers to shop around for the best possible deal, and to do so in a way that minimises privacy and confidentiality risks.

The Consumer Data Right will initially apply in the banking, telecommunications and energy sectors, with a later rollout to other sectors of the economy, anticipated to include knowledge-intensive industry sectors.

Recommendation 10

Build on strength in accessing overseas talent through continuing and targeted updates to skilled immigration rules and improved marketing to suitable talent, especially through Austrade (with a focus on key target markets).

The Government **supports** this recommendation.

The Government is committed to ensuring we have access to skilled workers to meet genuine skill shortages where an Australian worker is not available.

The Government's visa reforms ensure Australian workers have first priority for our jobs, providing businesses with access to the critical skills they need to innovate and grow. As part of these reforms, the Government introduced a new Temporary Skills Shortage visa in March 2018, to replace the previous subclass 457 visa.

In 2018, the Government will pilot two new visa schemes, the first from July 2018, to attract hightech skills and global talent, and the second to support overseas entrepreneurs to develop innovative ideas and launch seed-stage startups in Australia. This second scheme is being piloted in South Australia ahead of a national rollout in 2019.

The Government is ensuring that skilled occupation lists, including the new regional skilled occupation list, are regularly reviewed. These lists underpin migrants' eligibility for temporary and permanent skilled migration visas. Regular reviews ensure that the lists reflect areas of genuine skills shortage and respond to changes in the labour market.

Imperative 3 – Government: Become a catalyst for innovation and be recognised as a global leader in innovative service delivery

Recommendation 11

The Australian Government should work with states and territories to lead efforts to create a more flexible regulatory environment within Australia to foster innovation, including exploring specific areas for cross-jurisdictional collaborative regulatory reform.

The Government **supports** this recommendation.

The Government is committed to maintaining an appropriate balance between providing sufficient protections for the public with enough flexibility to allow businesses to innovate and benefit from new technologies.

Improving the quality and effectiveness of regulation is at the core of a diverse range of government activities at the Commonwealth level and through COAG. These efforts aim to ensure that regulation is fit for purpose, efficient and conducive to innovation and the adoption of new technology. For example, as announced in the 2017–18 Budget, the Government is creating an enhanced regulatory sandbox to support innovation in financial services. The FinTech regulatory sandbox will help firms overcome the initial regulatory burden and costs of licensing that may otherwise hinder innovative offerings. Legislation to implement the enhanced regulatory sandbox is currently before Parliament.

The Government is also working with state and territory governments through the COAG Transport and Infrastructure Council to provide policy leadership, develop a supportive regulatory environment and enable private sector innovation in relation to emerging transport technologies. Also, the COAG Industry and Skills Council is pursuing a series of projects to address regulatory issues in areas of disruption and to foster innovation.

Streamlining regulation is also the focus of the National Business Simplification Initiative (NBSI). The NBSI is a Commonwealth agreement between federal, state and territory governments to work together to make it simpler to do business in Australia. By working across governments, the NBSI aims to reduce regulatory burden and to create a more joined-up experience for business.

Recommendation 12

Further strengthen the policy environment to encourage investors to pursue opportunities that provide both social and financial returns.

The Government **supports** this recommendation.

The Government is taking action to encourage investors to pursue opportunities that provide both social and financial returns.

In its 2017-18 Budget, the Government announced a number of initiatives to encourage the continued development of the social impact investing (SII) market in Australia, for investments that intentionally create positive social or environmental impact as well as a financial return. The announcement included funding of \$30 million over 10 years, and noted that the Government would continue to separately consider ways to reduce regulatory barriers inhibiting the growth of the SII market.

On 8 August 2017, the Government released a [set of principles](#) to guide its involvement in the SII market. In addition, the Government has launched a \$50 million fund to encourage investment to support Indigenous economic development, and the \$40 million Emerging Markets Impact Investment Fund, to support small and medium enterprises that generate positive social and development outcomes in the Asia-Pacific region.

As part of the 2018-19 Budget, the Government committed \$6.7 million over four years to support better outcome measurement for social enterprises and notforprofits engaging in SII. The Government also announced it will support a service delivery trial and allocated \$1.6 million to support the trial's design and initial implementation.

Recommendation 13

Improve provision and use of open government data by:

- developing government capability and capacity to deliver accessible, accurate and detailed public data, balancing release of data with privacy and intellectual property concerns; this will entail sustained investment in data custodianship, maintenance and release
- developing improved mechanisms to encourage feedback to originating departments from industry and not-for-profit user groups to ensure that data released by governments is maximally useful.

The Government **supports** this recommendation.

Data is a valuable resource, with enormous potential to boost Australia's economy and improve decision making. By making appropriately treated public data available as open data, it can be used by businesses, researchers and government, leading to new and improved products and services, insights and economic outcomes. For example, in the 2018-19 Budget, the Government committed \$261.8 million to improve positioning technology and satellite imagery. Better GPS and world-class satellite imagery will contribute to strong positive growth in regional Australia, providing support to the mining, agriculture, transport and construction sectors that depend on accurate positioning. Improvements to GPS technology are vital in supporting navigation for aviation, drones, shipping and the emerging autonomous vehicle sector.

The Government is committed to improving the availability and accessibility of data, while maintaining appropriate privacy and security controls. In 2015, the Government released the [Public Data Policy Statement](#), providing a clear mandate for the Government to release non-sensitive data as open by default. On 1 May 2018, the Government announced its response to the Productivity Commission's inquiry into [Data Availability and Use](#) which includes introducing a new data sharing and release framework to improve provisions for open government data where appropriate. A National Data Commissioner will oversee the framework and provide guidance for government agencies on data use, ethical considerations and international best practice for data sharing and release. These reforms will be underpinned by legislative changes to assist in cultural and institutional changes towards better data availability and use.

Recommendation 14

Establish a small and medium enterprise (SME) procurement target of 33 per cent of contracts (by dollar value) being awarded to Australian SMEs by 2022. The Australian Government Department of Industry, Innovation and Science should report on progress towards this target annually.

The Government **supports in principle** this recommendation.

The Government recognises that SMEs make up the overwhelming majority of Australian firms, and has an ongoing commitment to making it easier for them to access opportunities to supply the Government.

The Government has a long-standing commitment, since 1996, to source at least 10 per cent of contracts (by value) from SMEs. The Department of Finance reports [procurement statistics](#) annually, including estimates of the number and value of contracts that were awarded to SMEs in the previous financial year. The Government notes that this commitment is routinely exceeded.

Also, in August 2017, the Government announced significant reforms to the way businesses can sell IT services to the Government, including targeting an increase of 10 per cent of its annual ICT spend to SMEs.

The Government has a number of other policy initiatives aimed at supporting SMEs to supply government. For example, the Government is committed to identifying ways to better support and incentivise SME innovations through various procurement strategies, as well as programs like the Business Research and Innovation Initiative (BRII). BRII was introduced as part of the 2015 [National Innovation and Science Agenda](#) to encourage SMEs to respond creatively to the procurement requirements of Government (see Recommendation 15).

The Government further assists Australian SMEs by applying Australian Industry Participation (AIP) policies and programs to large public and private sector projects through the *Australian Jobs Act 2013* and the Government's procurement policies. The *Australian Jobs Act 2013* assists Australian SMEs by requiring all major projects that exceed \$500m or more to develop and implement an Australian Industry Participation (AIP) plan. AIP plans detail how a project, and all levels of the supply chain, will provide full, fair and reasonable opportunity for Australian SMEs to bid for work.

In addition to major projects, an AIP plan may be applied to the Government's procurement contracts valued at \$20 million or more.

The Department of Defence recognises the significant contribution SMEs can make to defence capability. The Department of Defence has removed barriers to more effectively access the potential of Australian defence industry to innovate. New innovation contracting and intellectual property frameworks have been introduced with the aim of making it simpler and less costly for Australian industry to do business with the Department of Defence.

The Centre for Defence Industry Capability (CDIC) has been established to provide a focal point and single front door to Australian businesses, particularly SMEs, into the defence sector. The CDIC provides advice, assistance, and grants to eligible businesses to be better positioned to support the defence sector. The CDIC is a \$230 million initiative over 10 years.

The Department of Defence has established the Australian Industry Capability (AIC) program to promote Australian industry capability development, employment, innovation, and upskilling. The program applies to all major capital equipment projects of \$20 million and above. Prime contractors and original equipment manufacturers are required to develop AIC plans that outline clear actions that maximise Australian industry involvement—including SME and Indigenous businesses.

Given the range of Government initiatives aimed at assisting SMEs to meet the Government's procurement needs, including through the provision of innovative products and services, more work needs to be done to establish how a further broader-based procurement target would assist in this regard.

Recommendation 15

Increase the use of innovative procurement strategies to improve outcomes and optimise government operations by:

- establishing programs that promote, track and report on progress towards procurement practices that drive innovation (including identifying impediments raised by industry, and measuring participation of firms by age and stage) across all levels of government
- continuing and potentially expanding the challenge-based Business Research and Innovation Initiative and Small Business Innovation Research for Defence program, and managing their evolution to become Australian Small Business Innovation Research equivalents of the successful United States program
- developing contractual frameworks to facilitate procurement from start-ups and young firms
- creating a 'government as first customer' program designed for high-growth firms, including start-ups, to be trialled by two of the major procurement departments before a roll-out across all government departments.

The Government **supports in principle** this recommendation.

The Government is continually improving its procurement processes, particularly by increasing the use of innovative procurement strategies. The Government recognises that it is possible to leverage its purchasing power to stimulate business innovation and generate wider economic and social benefits, both from the provision of improved goods and services to government and the spillovers from business innovation.

The Government has established the [Commonwealth Contracting Suite](#) (CCS), a simple contracting framework to make it easier for businesses, including small and medium enterprises to supply to the Government. The CCS includes standard terms and conditions within contracts, and a standardised approach to suppliers. While use of the CCS is mandatory for procurements valued up to \$200,000, it can also be used for procurements up to \$1 million.

Additionally, the Government has introduced a number of programs that facilitate government engagement with innovative businesses, such as the Business Research and Innovation Initiative, Centre for Defence Industry Capability, Defence Innovation Hub and the Next Generation Technologies Fund, including the Small Business Innovation Research for Defence program, which can lead to greater opportunities for these businesses to participate in government procurement processes, and improved outcomes for both the Government and taxpayers.

The Government will continue to explore how it might identify procurement practices that could drive additional innovation, and what more can be done to facilitate procurement from high growth firms, start-ups and young businesses.

Recommendation 16

Maximise the benefit from nationally significant government programs by establishing a framework to identify, predict, encourage and evaluate spillover benefits by:

- using major Defence programs (such as submarine, continuous ship-building and land combat vehicles programs) as 'pathfinders' to establish how government can best define, deliver and measure broad national value; the 'pathfinder' should plan, collect and report on the data and insights that will help future governments and policy makers to calculate and forecast industry and innovation spillover benefits
- exploring and reporting on how other major projects and programs (information and communications technology, infrastructure) can be leveraged to deliver increased innovation and spillover returns and reskill the workforce; the Defence Science and Technology Group's engagement with innovative companies, including the provision of investments for design and prototyping via the Next Generation Technology Fund and the Defence Innovation Hub, provides a potential exemplar.

The Government **supports** this recommendation.

The purpose of defence projects and programs is to deliver the best capability for the Australian Defence Force. The Government acknowledges that, without detracting from this purpose, these projects and programs could be simultaneously supporting broader economic benefits.

For this reason, the Government is exploring ways to measure the broader economic benefits (including any innovation spillovers) associated with defence major capital equipment projects and programs aimed at delivering the best capability for our Australian Defence Force. It is also open to considering how the information and insights from this work could be used in other sectors to identify and maximise the benefits of nationally significant projects and programs.

Recommendation 17

Instruct the Digital Transformation Agency to explore opportunities to achieve half of the projected 12 per cent of savings from digitising service delivery by 2022 and the balance by 2026, while simultaneously improving citizen satisfaction with government services. The agency should be resourced to also:

- benchmark and report on the effectiveness and efficiency of the use of digital technologies and the improvement of service delivery (using automation, advanced analytics and service delivery dashboards to monitor and evaluate the impact of spending)
- set a target for citizen satisfaction as part of planned assessment of performance against key performance indicators, and track the progress of every department delivering citizen-facing services against it; for example, by considering the adoption of the Service NSW approach to benchmarking and measurement of satisfaction.

The Government **supports** this recommendation.

The Government is committed to maximising efficiency and citizen satisfaction through digital service delivery.

Established in 2015, the mission of the Digital Transformation Agency (DTA) is to guide and support the transformation of government services to better meet user needs. The DTA is also tasked with making the benefits, costs and risks of the Government's ICT and digital investments more transparent.

The DTA's [Digital Transformation Agenda](#) sets out a whole-of-government vision for transforming the way users interact with government, with several key initiatives due to be delivered in mid-2018.

The focus of the Digital Transformation Agenda is on providing better service delivery outcomes for Australians, with cost savings an additional but secondary benefit. Any specific target for savings would require careful consideration, in the context of policy priorities that have already been agreed by Government. Any additional resourcing required for the DTA to benchmark and report on effectiveness and efficiency outcomes of technology and service delivery improvements would need careful consideration in the context of budget priorities.

Recommendation 18

Conduct a review of the Australian Government Public Service with the aim of enabling a greater role and capability for innovation in policy development, implementation and service delivery. This work complements, and could be connected with, the work of the Secretaries APS Reform Committee.

The Government **supports** this recommendation.

The Government is committed to providing high quality services, delivered in real-time, at low cost and that can be accessed with minimal effort. In a fiscally constrained environment, the public sector must meet these expectations in the most efficient way possible.

On 4 May 2018, the Prime Minister announced an Independent Review of the Australian Public Service. Reporting in 2019, the Review will develop long-term reforms to ensure the public service is best placed to serve Australian governments and the Australian people into the future.

The Review complements the work of the Secretaries APS Reform Committee, which is leading work on behalf of Secretaries Board, to ensure that the public sector remains best placed to meet citizen and business expectations, while maintaining strong fiscal discipline.

Imperative 4 – Research and development: Improve research and development effectiveness by increasing translation and commercialisation of research

Recommendation 19

Introduce a collaboration premium of up to 20 per cent on non-refundable tax offset to incentivise collaboration (as part of implementing the recommendations of the Review of the R&D Tax Incentive, Recommendation 6 under Imperative 2).

The Government **notes** this recommendation.

The Government is committed to supporting business R&D expenditure to increase business productivity and competitiveness through the R&D Tax Incentive program. The Government announced in the 2018–19 Budget a package of reforms to the R&D Tax Incentive that will better target the program and improve its integrity and fiscal affordability (refer to Recommendation 6). The Government did not consider that the R&D Tax Incentive was the appropriate mechanism to address the systemic cultural and structural impediments to collaborative R&D.

In addition to the reforms to the R&D Tax Incentive, the Government is committed to directing support for greater levels of industry-research collaboration, including:

- committing over \$700 million over the forward estimates to industry-research collaboration through the Cooperative Research Centres Program
- introducing new streamlined arrangements for research block grants as part of its 2015 [National Innovation and Science Agenda](#) (NISA) – to provide stronger incentives for research-business collaboration, to encourage universities to increase engagement with industry and other end-users of research
- supporting initiatives that encourage businesses to invest in R&D through Australian Research Council Linkage grants and a number of NISA measures, including the Innovation Connections element of the Entrepreneurs' Programme, incentives to work with the CSIRO, and a [Global Innovation Strategy](#).

Recommendation 20

Evaluate the benefits of introducing an industry higher degree by research placement program at greater scale with long-term support, including assessing the merits of international examples of similar programs.

The Government **supports** this recommendation.

The Government supports increasing business-research collaboration by supporting industry higher degree by research placements. The Government notes the recent introduction of a national, industry-based PhD research internship initiative (the National Research Internships Program, NRIP) delivered through the expansion of a pre-existing Australian Mathematical Sciences Institute program that will place 1,400 new research internships into industry from 2017 to 2020.

In the 2018–19 Budget, under the National Health and Medical Industry Growth Plan, the Government committed to the \$32 million Industry Research Exchange and Training program to secure opportunities for genuine collaboration between industry and academia. It will provide researchers with a diverse range of opportunities for skills development and career progression through mentorship, exchanges and training with industry. It will focus on discovery, translation and commercialisation to help Australia lead the way in developing better methods of preventing and treating disease. Research areas that are currently lacking in industry collaboration will be identified and will align with Medical Research Future Fund priorities.

Recommendation 21

Conduct an expert review in 2022 to evaluate the effectiveness of recent changes to incentivise collaboration, and recommend options for further action. The review should cover, at a minimum:

- the engagement and impact assessment implemented through the Australian Research Council
- funding changes following the Review of Research Policy and Funding Arrangements, including to the Linkage Program and research block grants
- progress on addressing the findings and recommendations of the Review of Australia's Research Training System
- progress on ensuring that university career paths allow for mobility between academia and industry
- the recommended collaboration premium under the R&D Tax Incentive.

The Government **supports** this recommendation.

The Government continues to implement policies and programs that enhance the incentives for researchers and businesses to work together to transfer knowledge and skills and ensure that our good ideas can be translated to economic and social outcomes.

The Government is committed to reviewing these policies and programs to determine their effectiveness in incentivising collaboration. Performance frameworks are in place to drive the evaluation of relevant activities across government. The need to conduct a review of the collaboration incentive measures will be considered under those frameworks, where appropriate.

Recommendation 22

Increase commercialisation capability in research organisations by establishing a new stream of funding for translational activities.

The Government **supports in principle** this recommendation.

The Government recognises that increased translation of outcomes from our research organisations is important in boosting business productivity and developing new economic and social opportunities. Overall, the Australian research sector is recognised globally for research excellence and we can further capitalise on our research investment by improving the translation of publically funded research into commercial outcomes.

In response to the 2015 [Watt review](#), the Government introduced reforms to Research Block Grant arrangements for the university sector under the National Innovation and Science Agenda, to incentivise researchers to collaborate with businesses and better support commercialisation of new ideas.

Research organisations are implementing new ways to improve their commercialisation capabilities. For example, CSIRO has implemented the CSIRO Innovation Fund to support early stage commercialisation opportunities from the public research sector. The CSIRO ON accelerator program, which has been opened up to the broader university community, aims to build capability within organisations to validate and develop high potential innovative ventures.

The Government announced a \$1.3 billion National Health and Medical Industry Growth Plan in the 2018–19 Budget that is centred on the translation of research for commercial impact. The National Health and Medical Industry Growth Plan will inject an estimated \$18 billion into the Australian economy, and cement Australia's place as a world leader in health and medical research and technology development. We estimate it will provide 28,000 new skilled jobs, result in a minimum of 130 new clinical trials, lead to a 50 per cent increase in biotechnology, medical devices and pharmaceuticals exports, drive expansion into new markets and demonstrate global market leadership in biotechnology, medical devices and pharmaceuticals.

Recommendation 23

Develop and release an Australian Innovation Precincts Statement to shape Australian Government involvement in emerging localised innovation ecosystems in cities and regions.

The Government **supports** this recommendation.

The Government is committed to strengthening industry-research collaboration that will contribute to improving Australia's productivity, international competitiveness and innovative capacity. The Government funds a range of initiatives to facilitate and foster collaboration which contribute to establishing innovation ecosystems across the nation in cities and regions. Examples of existing measures include the Cooperative Research Centres Program, the Industry Growth Centre Initiative, and various Australian Research Council programs. In addition, the Australian Nuclear Science and Technology Organisation is establishing an Innovation Precinct, which will connect Australian industry with researchers and engineers, and provide unparalleled access to Australia's landmark and national research infrastructure.

To guide in the development of future localised innovation ecosystems, the Government established the University Precincts Advisory Committee to develop a Statement of Principles for Australian Innovation Precincts. The Government is considering the advice of University Precincts Advisory Committee on the Statement of Principles.

State and territory governments play a role in identifying and supporting localised innovation ecosystems. Principles for Australian Innovation Precincts have been endorsed by Commonwealth, state and territory industry ministers at the COAG Industry and Skills Council.

Recommendation 24

Establish secure, long-term funding for national research infrastructure, in accordance with the recommendations of the 2016 National Research Infrastructure Roadmap.

The Government **supports** this recommendation.

The Government recognises the importance of a robust system of national research infrastructure to Australia's ongoing prosperity, and has carefully considered the needs of this system, both for maintaining existing facilities and developing new capabilities.

The [2016 National Research Infrastructure Roadmap](#) (the Roadmap) was commissioned by the Government under the [National Innovation and Science Agenda](#) (NISA). The development of the Roadmap was led by the Chief Scientist, Dr Alan Finkel AO. It was released on 12 May 2017.

The Government considered the recommendations in the Roadmap and has made a \$1.9 billion commitment to strengthen and support the national research infrastructure system in the 2018-19 Budget. This funding will support existing facilities, allowing them to continue to deliver cutting edge research capabilities and, in some cases, expand operations and capacity to allow greater access by researchers and industry. It will also support scoping for eight new or significantly expanded capabilities.

The funding acknowledges that national research infrastructure underpins science and research and therefore is critical to Australia's prosperity and its economic, social and environmental future. It drives advances in technology and knowledge that boost productivity, create jobs, and deliver economic growth.

The Government will deliver the funding through the established National Collaborative Research Infrastructure Strategy (NCRIS) program. Together with the NISA commitment of \$150 million per annum (indexed, ongoing from 1 July 2017) for operational costs of NCRIS facilities, the new commitment provides long-term funding security for national research infrastructure. Funding will be reviewed through regular investment plans and roadmaps to ensure the highest priority and most timely investments are made across the system.

The funding adds to the recent, significant Government investments in Australia's High Performance Computing (HPC) infrastructure and optical astronomy, outlined as priorities in the Roadmap since its release: \$70 million for the National Computational Infrastructure supercomputer at the Australian National University in December 2017, \$70 million for the Pawsey Supercomputing Centre in Western Australia in April 2018, and \$119 million for Australia's Strategic Partnership with the European Southern Observatory (ESO). The HPC commitments were made in direct response to the urgent need identified in the Roadmap.

Recommendation 25

Maintain a long-term policy commitment to achieving greater gender diversity in the science, technology, engineering and mathematics workforce, including by raising awareness of gender diversity in government programs.

The Government **supports** this recommendation.

This recommendation aligns with existing government policy to increase female participation in science, technology, engineering and mathematics (STEM). In the 2018–19 Budget, the Government has committed an additional \$4.5 million over four years to support women in science. Through this, the Government will develop a Women in Science Strategy to provide greater coordination to the Government's efforts to increase women's participation in science education and careers. The Strategy will be supported and informed by a Decadal Plan for Women in Science, developed for and by the science sector to help coordinate and drive transformation in gender equity more broadly across Australia's science system. Together these will provide the blueprint for addressing gender equality in science.

The Government also recently announced it will appoint a Women in STEM Ambassador, who will act as an advocate for gender equity in science, raising awareness of issues and prosecuting the case for change. The Government will also support the development of a toolkit to help school-aged girls understand the possibilities offered by a science education. These new activities build on the initial \$13 million under the National Innovation and Science Agenda to support several measures to encourage women into STEM, including the Women in STEM and Entrepreneurship Grants Program, the expansion of the pilot Science in Australia Gender Equity (SAGE) project to address the under-representation of women in publicly funded research organisations, and the establishment of a new Male Champions of Change (MCC) group for STEM.

[Towards 2025: An Australian Government Strategy to boost Women's Workforce Participation](#) also outlines the Government's commitment to achieving gender equity in the workplace and recognises the need to encourage more women into STEM study and careers.

Recommendation 26

Task Innovation and Science Australia to monitor emerging sectors of high growth in the economy and report annually to the Australian Government on the adequacy of risk capital supply.

The Government **supports** this recommendation.

Innovation and Science Australia (ISA) is an independent statutory board that was established in 2015 under the National Innovation and Science Agenda. It provides strategic whole-of-government advice on all innovation, science and research matters. The Board is made up of 12 members, and includes high-profile entrepreneurs, investors, researchers and educators, all with extensive local and global experience.

The Government is currently undertaking a post-commencement evaluation of ISA. This will inform the development of a revised Statement of Expectations from the Government regarding ISA's future role and specific tasks.

As the independent advisory body responsible for providing strategic whole-of-government advice on all science, research and innovation matters, the remit of ISA should not be constrained to matters relating to the supply of risk capital. Rather, ISA's advisory capacity should encompass all aspects of the national innovation system, including regulatory and skills barriers, and factors that may inhibit growth in emerging sectors of the economy, such as the availability of risk capital or enabling infrastructure.

Imperative 5 – Culture and ambition: Enhance the national culture of innovation by launching ambitious National Missions

Recommendation 27

Establish a National Mission to help make Australia the healthiest nation on Earth, with a step-change investment in our national genomics and personalised medicine capability and its integration into our medical research and healthcare system.

The Government **supports** this recommendation.

The Government is committed to driving innovation in our health system, to improve the health outcomes of all Australians. Genomics will transform healthcare to tailor treatment, monitor and manage risk and potentially cure disease. It will help shift Australia's health system from one of crisis management to health management.

As part of the 2018–19 Budget, the Government's National Health and Medical Industry Growth Plan commits \$500 million over 10 years from 2017–18 to the Genomics Health Futures Mission funded from the Medical Research Future Fund. This significant, step change investment will save and transform the lives of more than 200,000 Australians and help find cures for currently untreatable and deadly cancers and diseases through precision medicine and research into better testing, diagnosis and treatment. The Genomics Health Futures Mission aims to bring together Australia's research talent, business capability, and genomics workforce, to engage in the global race across multiple nations and consortia that is already well underway.

This effort will be guided by an expert advisory group led by Professor Ian Frazer AC and will build on the [National Health Genomics Policy Framework](#), agreed by all Australian health ministers in November 2017.

A framework will be developed to scope and assess the feasibility of National Missions, as set out in Recommendation 28.

Recommendation 28

Adopt a framework to continue to identify and implement additional National Missions.

The Government **supports in principle** this recommendation.

The Government supports efforts to incentivise Australian businesses, researchers, governments and citizens to work together to find innovative solutions to complex national challenges. This will help to build the innovative spirit and culture of our nation, to spur economic growth and create jobs.

The Government will develop a framework to scope out the intent of a National Mission policy platform – including how they will be defined, implemented and evaluated. The framework will be informed by work currently underway to scope out a 10 year Great Barrier Reef restoration and adaptation R&D program. Insights emerging under programs in the Health portfolio, specifically with respect to the Genomics Health Futures Mission, could also support this work (see Recommendation 27).

Recommendation 29

Invest in developing a more effective framework to evaluate the performance of Australia in the innovation race in an effective and timely manner by:

- introducing a requirement that new government funding programs and policies aimed at supporting innovation dedicate approximately 2 per cent of their budget for the evaluation of outcomes that should be clearly identified in advance
- tasking the Australian Government Department of Industry, Innovation and Science with developing a stronger longitudinal evidence base for program effectiveness, to improve the longevity of high-impact innovation programs, inform cessation of ineffective programs, and underpin iterative improvement of all programs.

The Government **supports in principle** this recommendation.

The Government is committed to effective evaluation of the performance of innovation policies and programs, and is supportive of ensuring budgets for all new innovation policies and programs include sufficient funding for effective evaluation.

The Government is committed to identifying appropriate evaluation funding models for innovation policies and programs. In doing so, consideration will be given to models used in other comparable countries.

The Government has robust frameworks in place that drive evaluation activities across government. For example, the Business Longitudinal Analysis Data Environment (BLADE), funded through the 2017–18 Budget measure, Data Integration Partnership for Australia, uses government-owned data to conduct robust program evaluations and inform the development of future innovation and industry policy.

Recommendation 30

Support the development of a suite of innovation metrics and methodologies to fully capture innovation and link it to economic, social and environmental benefits. In particular:

- request the Australian Bureau of Statistics (ABS) and the Department of Industry, Innovation and Science (DIIS) to review business and research and development data collections to ensure they are fit for purpose and take full advantage of all available data sources
- commission an independent body, such as the Australian Academy of Technology and Engineering, in consultation with the ABS and DIIS, to review existing innovation metrics and report on a set of recommended metrics within 18 months, including new innovation metrics to track other areas of our innovation economy with a view to promoting these for use by the broader international community.

The Government **supports** this recommendation.

The Government supports ongoing improvements to innovation metrics and methodologies. This creates a robust evidence base that provides us with a clear picture of our performance on innovation and will help pin-point issues in the system that may be limiting our capacity to innovate. This enables the Government to design cost-effective and robust policies to best address such issues.

As part of the 2018–19 Budget, through its Australian Technology and Science Growth Plan – Better Data to Track Innovation in Australia initiative, the Government commits to a review of innovation metrics. The adequacy of the current innovation data collections and methodologies will be reviewed with a view to refining existing methods and developing new ways of measuring innovation performance.