



**Australian Government**  
**Department of Industry,  
Innovation and Science**

# Submission to the Joint Standing Committee on Trade and Investment Growth

Inquiry into supporting Australia's exports and  
attracting investment.

September 2019

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# Inquiry Terms of Reference

The Joint Standing Committee on Trade and Investment Growth shall inquire into and report on:

1. understanding Australian businesses' ambitions to grow via export and attracting investment;
2. identifying local regulatory barriers to businesses being able to realise their ambitions; and
3. identifying best practice regulation that evidence shows supports export and investment growth, whilst protecting the national interest.

# Introduction

The Department of Industry, Innovation and Science (the department) welcomes the Joint Standing Committee on Trade and Investment's inquiry into supporting Australia's exports and attracting investment. The department recognises business exports and investment are linked to improved productivity and competitiveness, and works to implement the government's economic agenda by enabling the growth of globally competitive businesses to support job creation and a strong economy. As part of this agenda, we also promote the global competitiveness of our resources sector, which remains one of the foundations of our economy.

This submission outlines the importance of exports to the Australian economy, with a focus on the resources sector. It then presents how the department helps Australian businesses navigate market disruptions and seek new opportunities presented by digital transformation, with a focus on Artificial Intelligence (AI). It also highlights the department's role in supporting a regulatory environment that enables more businesses to take advantage of exports, including addressing barriers to trade and supporting broader government's commitment to Free Trade Agreements (FTAs). Finally, specific government initiatives that support business exports are presented in Annex 1.

## Importance of exports to the economy

Exporting is a key mode of internationalisation for many businesses. It is associated with many benefits at the business level, such as higher sales, economies of scale, insurance against weak domestic demand, knowledge and technology diffusion and export-led innovation and productivity growth.<sup>1</sup> At the macroeconomic level, export-led growth has been an important element of economic development in many countries. In Australia, exports have also contributed significantly to our nation's prosperity. Australia's GDP more than doubled in the 25 years to June 2018. Over this period the value of our exports has increased from 14 per cent of GDP to 21 per cent.<sup>2</sup> One in every five jobs in Australia now involves trade related activities, with approximately 1.5 million jobs connected with exporting and 670,000 jobs in connection with importing.<sup>3</sup>

## Traits of Australian exporters

The majority of Australian businesses only trade domestically with most businesses only trading in their local area.<sup>4</sup> According to latest ABS statistics, in 2017–18 there were 53,015

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1 Giles, J. & Williams, C. (2000) Export-led growth: A survey of the empirical literature and some non-causality results, Part I, *Journal of International Trade & Economic Development*, 9(3), pp. 261–337; López, R. (2005) Trade and Growth: Reconciling the Macroeconomic and Microeconomic Evidence, *Journal of Economic Surveys*, 19(4), pp. 623–648

2 ABS cat. no. 5204.0, 2017–18, table 2

3 DFAT (2018) How trade benefits Australia — September 2018

4 ABS cat.no. 8167.0, table 1

exporting businesses in Australia.<sup>5</sup> Exporters therefore account for a very small proportion of the total business population. However, official ABS figures underestimate the true number of businesses that benefit from exporting given that they only take into account direct exports. There are many businesses that also benefit indirectly as upstream suppliers to exporters. Moreover, the ABS excludes businesses with export sales below \$2,000 per year. In terms of size distribution, small businesses make up 58.8 per cent of exporters, followed by medium businesses (28.4 per cent) and large businesses (12.8 per cent)<sup>6</sup>

Australian exporters are concentrated in the Mining, Manufacturing, Wholesale Trade and Information Media & Telecommunications industries.<sup>7</sup> In terms of value of total exports, in 2017-18 Australia's top five exports were iron ore and concentrates (15.2 per cent), coal (15.0 per cent), education related travel services (8.0 per cent), natural gas (7.7 per cent), and personal travel services (tourism) at 5.4 per cent.<sup>8</sup>

There are various export barriers to facing business and performance. Results from the ABS Business Characteristics Survey (BCS) provide insight into these barriers — the type and magnitude of which greatly depends on business size. Smaller businesses in particular experience challenges in terms of lack of access to additional funds and skilled persons. While the decision by a business to export is a function of many factors such as their growth ambitions, market opportunities, experience and management — the aforementioned barriers for small businesses can act as a deterrent to participating in trade.

While there are costs associated with entering export markets, there is a group of relatively new exporters that defy this trend, namely born global businesses (businesses that export from birth). The department's research estimates that around 3,000 of these businesses are born each year. This illustrates that there are some young businesses with high growth aspirations that find exporting crucial for their growth plans. One quarter of these businesses rely solely on international markets for their revenue. Evidence shows that Australian born global businesses are on average more likely to be home-based businesses, have greater access to high speed internet, and be more likely to target additional export markets compared to other small exporters.<sup>9</sup>

Given the remoteness of Australia, distance and transportation costs present a large burden for some exporters. The process of international division of labour opens up opportunities for Australian businesses to specialise in different slices (tasks) of global value chains. This provides opportunities for small businesses that want to scale up.

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5 ABS cat. no. 5368.0.55.006, Table 3.1

6 ABS cat. no. 5368.0.55.006, Table 3.1

7 DIIS Tuhin, R. & Swanepoel, J. A. (2016) Export behaviour and business performance; Evidence from Australian microdata. Office of the Chief Economist, Staff Research Paper 7/2016

8 DFAT (2018) *Australia's goods and services by top 25 exports 2017-18*

9 DIIS Bruno, A. & Swanepoel, J. A. (2019) *International entrepreneurship: evidence on Australian born global businesses*, Office of the Chief Economist Research Paper (forthcoming)

## Why businesses benefit from exporting

Previous research from the disciplines of economics and marketing identifies notable business-level benefits from exporting ranging from:

- Generation of higher sales and revenue, given the availability of a larger market. This is particularly important in the context of maturing domestic markets for good and services
- Economies of scale effects from spreading of costs over a larger production volume
- Diversification of markets that can insure against risks and seasonality associated with economic fluctuations in the domestic market
- Extending the life of older products by providing them a new lease on life in developing export markets
- Exposure to newer and more efficient technologies, business and managerial practices and other forms of knowledge diffusions in the host market
- Improvements in business-level productivity, efficiency and product quality as heightened competition in overseas markets leads to more innovation.

There are additional benefits from exporting for the economy. Innovation, managerial know-how and newer technologies have the potential for spill-over in domestic markets helping improve the fundamentals of Australian businesses and the economy.

## Recent departmental evidence on the performance of exporters

Access to business-level administrative tax data from the ABS Business Longitudinal Analysis Data Environment (BLADE) has enabled the department to quantitatively test the presence and magnitude of some of these business-level benefits from exporting. Notably, a business decision to export and innovate is interrelated. Innovative Australian businesses are 4 to 8 per cent more likely to be exporters, while exporters were 7 to 10 per cent more likely to be innovators.<sup>10</sup> This research also determined that larger businesses, collaborating businesses, and businesses with a web presence are more likely to both innovate and export. Australian businesses that are partly owned by foreigners, that received government assistance, that receive orders over the Internet, and that import are more likely to be exporters relative to Australian businesses that do not possess one or more of these traits.

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<sup>10</sup> DIIS Tuhin, R. (2016) *Modelling the relationship between innovation and exporting: Evidence from Australian SMEs*, Office of the Chief Economist, Staff Research Paper 3/2016

**Table 1: Average performance premium for exporters, selected performance indicators, 2004–05 to 2013–14**

Performance Indicator	Premium in exporter performance over a non-exporter (per cent)
Employment	23.8
Value-added	40.2
Labour productivity	13.4
Average wage	11.5
Capital expenditure	7.6

Source: Tuhin, R. and Swanepoel, J. A. (2016)<sup>11</sup>

On average exporters are larger than non-exporters in terms of metrics such as employment, value-added and capital expenditure.<sup>12</sup> Labour productivity and average wages paid are also higher for exporters. Furthermore, exporting is associated with a higher probability of business survival. An exporting business is about 8 per cent more likely to survive to the following year than a non-exporting business with similar characteristics.

Importantly it is found that this export premium decreases as a business grows older. Therefore, policy interventions targeted at exporters should not ignore the role of business age, encouraging businesses to export from an earlier age can pay dividends for Australian businesses and the economy.

Departmental research also shows that there are complementarities between improvements in a business's strategic management capability and exporting. The management capability score of exporting businesses is 13 percentage points greater than that of a non-exporting business.<sup>13</sup>

The departmental evidence also points to continuous — but not intermittent — exporters that perform significantly better in all performance measures than non-exporters. This result highlights the importance of exporting persistence in improving performance: the performance advantage experienced by exporters may diminish relatively quickly unless businesses can export in a persistent manner.<sup>14</sup>

<sup>11</sup> Op. cit.

<sup>12</sup> DIIS Tuhin, R. & Swanepoel, J. A. (2016) *Export behaviour and business performance; Evidence from Australian microdata*, Office of the Chief Economist, Staff Research Paper 7/2016

<sup>13</sup> DIIS calculations based on ABS Management Capabilities Module (2019)

<sup>14</sup> DIIS Tuhin, R. & Swanepoel, J. A. (2016) *Export behaviour and business performance; Evidence from Australian microdata*. Office of the Chief Economist, Staff Research Paper 7/2016



## Other drivers of business performance and growth

In addition to exporting there are other known drivers of business performance and growth. There is evidence that the quality of management plays an important role in maximising organisational performance and growth. Around 18 per cent of Australian businesses fail each year due to poor strategic management. Management capability is important at both the start-up stage (i.e. it is crucial for business survival) as well as later stages when the business matures and has to ensure that it remains competitive (by innovating, exporting, healthy human resource management practices etc.) There is therefore a clear positive relationship between management practices and business performance.<sup>15</sup>

Numerous sources from the Organisation for Economic Co-operation and Development (OECD) point to a strong link between the adoption of digital technologies (digitisation) and higher business-level productivity.<sup>16</sup> Digitisation enables a business to transform its operations and reduce costs, improve collaboration opportunities, have broader access to skills and greater access to technologies. These enablers help support a business's growth ambitions.

The department's research also shows that persistently innovating businesses significantly outgrow their less persistent and non-innovator counterparts in terms of sales, value added, employment and profit growth.<sup>17</sup> This result is particularly strong for young small and medium enterprises (SMEs), suggesting that government innovation policy assisting young SMEs in overcoming the risks of investing in the human and organisational capital would be effective supporting lasting innovation capability.

## Resources Sector

### Resources exports overview

The resources sector makes a significant contribution to the Australian economy. The sector accounts for 8.8 per cent of Australia's GDP<sup>18</sup>, 58 per cent of Australia's goods and services exports (or 78 per cent of Australia's goods exports)<sup>19</sup>, and 14 per cent of private capital investment in the Australian economy.<sup>20</sup>

In 2018-19, the value of resource and energy commodity exports reached a record \$275 billion and is forecast to hit \$285 billion in 2019-20<sup>21</sup>. Three of the top five Australia's

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<sup>15</sup>ASIC and DIIS calculations (2019)

<sup>16</sup> This is also corroborated by independent reports from AlphaBeta and Data61

<sup>17</sup> DIIS Hendrickson, L et al. (2018) The impact of persistent innovation on business growth, OCE staff research paper 2/2018,

<sup>18</sup> DIIS Resources and Energy Quarterly, June 2019

<sup>19</sup> Ibid.

<sup>20</sup> ABS (2017), Australian System of National Accounts 2016-17, Cat. no. 5204.0

<sup>21</sup> DIIS Resources and Energy Quarterly, June 2019

exports are resources—iron ore and concentration, coal and gas.<sup>22</sup> The latest economic growth figures (for June quarter 2019) show that the mining industry has contributed 0.6 per cent toward Australia's 1.4 per cent annual growth—the largest contribution. This was driven by growth in oil and gas extraction (7.2 per cent), exploration and mining support services (5.1 per cent), coal mining (3.9 per cent), and iron ore mining (1.2 per cent).<sup>23</sup>

The industry directly employs over 247,000 people<sup>24</sup> in predominantly high-wage, high- skilled jobs, mostly in remote and regional Australia where 58 per cent of its workforce is located outside of major cities<sup>25</sup>. The average earnings for full time workers in the mining sector is \$2,684.50 per week, which is around 40 percent higher than the average for all other industries<sup>26</sup>.

While there are risks and uncertainties around global growth, the demand for resources and energy commodities remains robust<sup>27</sup>. This is why the government has released the National Resources Statement outlining our longer-term reform agenda for the Australian resources sector to remain the world's most attractive destination for resources investment. Implementation of the National Resources Statement is being progressed including with state and territory governments through the COAG Resources Roundtable.

Australia has a hard won reputation as an attractive destination for resources investment. The department will continue to work across government to build this reputation and engage bilaterally and multilaterally with our established and emerging trading partners to seize new opportunities as they arise. The government is positioning Australia to grasp future opportunities, including through the release of the Australia's Critical Minerals Strategy outlining government actions to deliver investment, innovation and infrastructure for the Australia's critical minerals sector.

Technological advancements and climate change solutions are driving new demand for critical minerals and battery commodities from various sectors such the renewable energy, automotive industries (especially electric vehicles), agricultural technology, defence and telecommunications. While the development of critical minerals value chain in Australia is still at its infancy stage the potentials for growth and moving up the value chain beyond mining cannot be understated.

For example, export revenue for lithium is forecast to reach \$1.4 billion by 2020–21<sup>28</sup>, up from \$117 million in 2012. This represents an eight-fold increase over the course of a decade. Despite being the world's largest lithium exporter, it has been estimated that Australia only captures 0.53 per cent of the global lithium value chain<sup>29</sup>.

While Australia is moving towards capturing more of the critical minerals and battery value chain — for example moving to downstream lithium processing, refining and battery

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22 DFAT, <https://dfat.gov.au/about-australia/australia-world/Pages/trade.aspx> (access on 2 September 2019)

23 ABS, Australian National Accounts: National Income, Expenditure and Product, June 2019, Cat. no. 5206.0

24 DIIS, Resources and Energy Quarterly, June 2019

25 National Resources Statement, February 2019

26 ABS (2018), Average Weekly Earnings, Australia, November 2017, Cat. no. 6302.0

27 National Resources Statement, February 2019

28 DIIS, Resources and Energy Quarterly, June 2019

29 Austrade, The Lithium-Ion Battery Value Chain, 2018

manufacturing — there is strong international competition in this space and Australia would need to be cost competitive.

### **Hydrogen: an emerging sector of growth**

The COAG Energy Council agreed to develop a National Hydrogen Strategy in December 2018 and established a Hydrogen Working Group to deliver the strategy by the end of 2019. The working group is led by Australia's Chief Scientist, Dr Alan Finkel AO, and comprises a senior official from each jurisdiction. The vision set forth by Energy Council Ministers for the strategy is to support the development of a clean, innovative and competitive hydrogen industry that benefits all Australians and is a major global player by 2030.

A wide variety of stakeholders have been consulted to inform the development of the strategy. These consultations have highlighted that regulatory clarity and a clear approvals pathway for hydrogen projects will help create an enabling environment for industry development and attract investment. As a result of the feedback received to date, the working group has started assessing the legislative framework, regulatory environment, and standards required for a national industry. This work will determine how Australian legal and regulatory frameworks may better support a large-scale Australian hydrogen industry and set out regulatory priorities for implementation from 2020 onwards.

## **Regulation and the resources sector**

Regulation plays a critical role in ensuring that resources projects across Australia meet community and environmental management expectations. However duplicative, inefficient or burdensome regulation can create impediments for businesses operating, or seeking to operate and invest, in Australia.

For capital-intensive and highly competitive industries like mining, costly delays to major projects are a significant barrier to attracting international capital and investing in additional productive capacity.

For Australia to continue having a world-class resources industry, it is imperative that policy and associated regulatory frameworks are conducive to, and support long term investment in this sector while upholding robust environmental standards and ensuring good outcomes for local communities.

Under the Australian Constitution, state and territory governments have primary responsibility for administration and regulation of onshore mineral and petroleum exploration, production, closure and site rehabilitation. The Commonwealth has a role in approving projects for onshore resources, mainly under the Environment Protection and Biodiversity and Conservation Act 1999 (EPBC Act), and regulating the offshore resources projects and some taxation matters relating to offshore resource projects.

According to the 2018 Annual Survey of Mining Companies undertaken by the Fraser Institute, Australian jurisdictions are declining in attractiveness as potential mining

investment destinations, in part the result of delays in the approval processes. The survey noted that in three of the six Australian jurisdictions, 50 per cent or more of the respondents indicated that the time for permit approvals had either lengthened somewhat or considerably.

Furthermore, the 2017 Productivity Commission (PC) inquiry into Non-Financial Barriers to Mineral and Energy Resource Exploration estimated that implementing the findings from this report would generate a 10 per cent reduction in delay costs for announced projects. While the Minerals Council of Australia (MCA) has publically stated that a one year approval delay can reduce the net present value of a major mining project by up to 13 per cent and cost up to \$1 million every day.

## Harnessing innovation and technological advances for global competitiveness

Innovation helps businesses improve the way they work, solve everyday problems and drive long-term job creation. It is also a key driver of productivity growth and economic renewal. Encouraging greater innovation is a central theme of the government's support for industry. The government's \$1 billion National, Innovation and Science Agenda (NISA), launched in December 2015, set a vision for the Australian innovation and science ecosystem by encouraging industry to embrace new ideas to support growth and productivity.

Since NISA, the government has announced nearly \$5 billion in new innovation measures, including the \$500 million Advance Manufacturing Fund, the \$1.5 billion Skilling Australians Fund, a \$260 million investment in world-class satellite positioning capability, \$1.9 billion in Australia's National Research Infrastructure over 12 years, and kick starting a space industry in Australia through the establishment of the Australian Space Agency and the \$15 million International Space Investment Initiative.

## Digital Economy and Technology Policy

Digital technologies are becoming ever more embedded in the economy and society. Australia's ongoing success depends on our ability to embrace the benefits of technological advances and use them to improve existing businesses, create new products and markets, and enhance daily life.

The Data61 2018 Digital Innovation report<sup>30</sup> estimates that digital innovation could deliver \$315 billion in gross economic value to Australia over the next decade by improving output and productivity of existing industries, and by spurring the growth of entirely new industries.

The department leads on digital economy and technology policy and led the development of the government's digital economy strategy, 'Australia's Tech Future', in December 2018<sup>31</sup>.

Australia's Tech Future highlights the significant work already underway, detailing how Australia can lead and shape the digital economy. It provides an umbrella for more than 150 existing programs and policies worth billions of dollars, which contribute to achieving our vision in this space.

It represents a blueprint for delivering a strong modern economy, enabled by technology. It is a starting point for further conversation with industry and the general public on these important issues.

A crucial aspect of Australia's future economic growth and securing jobs for the future will be a strong technology sector. From new start-ups to large multinational businesses, the tech industry underpins Australia's ability to create and harness technological advances and remain competitive in a global economy.

The department works to support the development of Australia's technology sector and enable the development and application of emerging technologies in Australia. This includes working to ensure Australia's enabling environment supports development of and investment in new technologies through balanced regulatory, governance and other policy settings.

One area of focus for the department is the development of the government's National Blockchain Roadmap, which will help Australia seize the opportunities of our rapidly expanding blockchain sector.

The roadmap will focus on a number of policy areas including regulation, skills and capacity building, innovation, investment, and international competitiveness and collaboration. The department is working closely with blockchain and technology experts from industry and academia to develop the strategy.

The department also leads the government's international work to influence emerging technology standards and norms and enhance Australia's global standing as an investment destination for emerging technology.

The department engages closely with businesses, the community and the tech sector to build consensus and informs sound policy to achieve the best outcomes for Australia. There is also significant engagement across government to ensure we can influence tech issues

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<sup>30</sup> Data61 Digital Innovation Report, 2018, <https://www.data61.csiro.au/en/Our-Work/Future-Cities/Planning-sustainable-infrastructure/Digital-Innovation>

<sup>31</sup> DIIS Australia's tech Future Report, 2018, <https://www.industry.gov.au/sites/default/files/2018-12/australias-tech-future.pdf>

which are the responsibility of other portfolios (Internet of Things, 5G, autonomous vehicles) and cross cutting issues (skills, data, visas, infrastructure, regulation and cyber security).

A significant amount of the department's technology work is related to the development and use of AI.

## Artificial Intelligence (AI)

AI is a powerful technology that can boost the economy, raise incomes and improve our quality of life. Building Australia's capability to develop, adopt and apply AI solutions will be key to ensuring our businesses remain globally competitive.

For Australia to recognise the full benefits of AI, we will need to ensure that the development and use of AI is in line with the expectations of the Australian community and international best practice.

Australian citizens need to be assured that their privacy and data are protected, and that AI products and services are safe, reliable, and fit-for-purpose. Developing public trust will also provide businesses with the confidence to develop and implement AI technologies, and encourage further investment.

There are various departments and agencies currently contributing to the government's work in AI. The department leads a senior executive AI Interdepartmental Committee to share information and develop collaborative approaches across government on AI work.

The 2018–19 Budget announced \$29.9 million over four years for a range of initiatives to strengthen Australia's AI capability. The measures that the department leads, or has substantial involvement in, are detailed below.

- \$0.51 million was allocated to CSIRO's DATA61 to develop an AI Ethics Framework to help guide businesses and governments. On 5 April this year the government released a discussion paper on an AI ethics framework for Australia. The government is developing updated AI ethics principles for release later in 2019.
- \$0.36 million was allocated to CSIRO's Data61 to develop an AI technology roadmap that would identify barriers to building Australian capability and highlight areas of opportunity to focus future government policy. The AI Technology Roadmap is expected to be released later this year and will inform government policy on AI.
- \$110,000 for allocated to Standards Australia to develop an AI Standards Roadmap for government consideration. The AI Standards Roadmap will outline areas where Australia could benefit from leading or influencing the development of international AI standards. Standards Australia are due to report back to government in the latter half of 2019.

- \$25 million was allocated for Cooperative Research Centre Projects (CRC-P) with a specific focus on AI. Successful projects for Round 6 of the CRC-P grants were announced in December 2018.

The department also leads Australia's international engagement on AI in the Organisation for Economic Co-operation and Development (OECD), the G20 digital economy taskforce and the European Union's expert group on AI. In particular, Australia has been supportive and active in the development and adoption of the OECD's Principles on AI.

## An emerging sector of growth: Australia's space industry

The space industry is worth US\$350 billion globally, and is forecast to grow rapidly to over US\$1 trillion by 2040. Further, the relevance of space technologies is vast, assisting and enabling a broad range of sectors including finance and banking, agriculture, communications, mining, weather and environmental monitoring, location services, health and tourism.

To realise the growth potential this global industry holds for Australia, the government established the Australian Space Agency (the Agency) on 1 July 2018. The Agency is tasked with tripling the size of the space sector to \$12 billion and creating up to another 20,000 jobs by 2030. The Advancing Space: Australian Civil Space Strategy 2019-2028 (the Strategy)<sup>32</sup> sets the pathway to achieving this goal.

To support the delivery of the Strategy, the government has now committed over half a billion dollars to grow the space sector, \$629 million to the Agency since 2018-19. This includes \$150 million towards NASA's inspirational plan to return to the Moon and on to Mars, the \$15 million International Space Investment for Australian industry to build relationships with international space agencies, and the \$19.5 million Space Infrastructure Fund for seven infrastructure projects. These programs help grow the Australia's space sector and open doors to international markets and supply chains.

The partnership with NASA over five years, focuses' on three integrated elements that will lift Australian engagement in the global space sector:

- Demonstrator and pilot projects which showcase investment-ready Australian capabilities to NASA and the U.S.'s international space supply chains (e.g. in the areas of robotics, automation, Artificial Intelligence, and earth observation);
- Working with NASA to identify how Australia can support a significant part of NASA's 'return to the Moon and on to Mars' program, leveraging Australia's key strengths (e.g. drawing on the demonstrator and pilot projects); and

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<sup>32</sup> DIIS Australian Civil Space Strategy 2019-2028, 2019 <https://www.industry.gov.au/data-and-publications/australian-civil-space-strategy-2019-2028>

- Supporting access to international space supply chains that support NASA, including capability building to help the Australian space sector meet the stringent requirements of supplying products and services in the global space industry.

To keep pace with the global space sector, the government reviewed the regulatory framework to ensure it remained appropriate for the Australian context. From 31 August 2019, the Australian space industry was provided with an improved, streamlined process for launching to space and returning to Earth. The updated framework provides greater clarity and flexibility for the Australian space industry, and considers the removal of barriers to participation, the safety of space activities, and international obligations.

Australia's international reputation as a trusted supplier, its technological strengths, and unique geographic location to access space, will help grow the Australian space industry, its exports, and the broader Australian economy

## Science, technology, engineering and mathematics (STEM) skills for innovation and economic growth

The department has a leading role in supporting science and commercialisation in Australia, through investing in innovation, science awareness and international engagement, and by increasing business R&D and commercialisation.

Several recent reports have pointed to STEM skills being essential for a majority of the jobs of the future, not just in the STEM sector. In particular, the need for high level transferable skills such as problem solving and critical thinking is estimated to increase by 40 per cent across all sectors.

STEM skills also play a crucial role in innovation, which is a key driver of economic growth. Businesses that innovate are twice as likely to use STEM skills. Research by the Australian Council of Learned Academies has found that the integration of STEM skills is important to the success of leading businesses and organisations across a wide range of industries.

The department invests in a number of initiatives to promote STEM and STEM skills development under the previously mentioned NISA. This includes initiatives that are part of the Inspiring Australia-Science Engagement Program such as National Science Week, the Prime Minister's Prizes for Science, and grants to support students participation in STEM events and competitions.

The department also has a number of initiatives that are designed to support the STEM educational participation and skills development of groups traditionally underrepresented in STEM such as women and girls. Specific initiatives to increase participation of women and girls in STEM include the Advancing Women in STEM Strategy, the Girls in STEM Toolkit and the appointment of a Women in STEM Ambassador.



# Supporting the government's deregulation agenda

Inefficient regulation can impose a significant cost burden on business. Reducing unnecessary compliance costs and improving the delivery of programs and services will reduce the cost of doing business in Australia. It also has the potential to boost productivity, enhance Australia's international competitiveness, facilitate innovation and support job creation.

The government has renewed its focus on regulatory reform. It seeks to tackle the costs of regulatory compliance and processing of cumulative regulation, and disincentives to invest and innovate. An important element of this is working with business to identify and remove unnecessary barriers. The agenda aims to reduce barriers to business to enable them to grow and increase their productivity. As part of this, a Deregulation Taskforce has been set up within Treasury to lead cross-government work on this to identify and address the most significant regulatory barriers to investment for selected industries.

The department is also currently engaged in several regulatory review processes. These are presented in Annex 2.

## Role of the department

The department plays an important role in the government's deregulation agenda. It has a strong track record in removing impediments for business and making it easier for business to interact with government. Since October 2013, the department has contributed over \$500 million in net regulatory savings<sup>33</sup>. The department is working with businesses to identify and address regulatory obstacles which impose unnecessary costs in both their time and effort.

### **Supporting regulatory approvals through the Major Projects Facilitation Agency (MPFA)**

The department's Major Projects Facilitation Agency (MPFA) supports regulatory approvals for project proponents with a capital expenditure of more than \$20 million. Projects that are recognised as having national strategic significance are awarded Major Project Status (MPS). MPS can help elevate awareness about strategically significant projects within the government and across state and territory governments, particularly those projects seeking to introduce new technologies, or new industries. The Office of Drug Control has recently started using the MPS as means to prioritise approvals of medicinal cannabis projects in Australia.

<sup>33</sup> DIIS, Annual Report 2017-18, <https://www.industry.gov.au/sites/g/files/net3906/f/2018-10/annual-report-2017-18.pdf>

# Facilitating free and open trade

The department has an important role in helping to facilitate trade and address inappropriate regulatory and other trade barriers for Australian businesses. This work feeds into coordinated cross government- efforts, aiming to increase the ease (and reduce the cost) of doing business, while reinforcing Australia's commitment to free and open trade under the rules-based multilateral trading system.

## 'Non-Tariff Barriers' (NTBs)

'Non-Tariff Barriers' (NTBs) in particular are a growing issue for Australian businesses, by some estimates costing as much as three times the cost of formal trade barriers such as tariffs<sup>34</sup>.

They include both technical (for example standards, regulations, testing and certification) and non-technical (for example quantitative restrictions and price measures) barriers. In essence, NTBs are measures that may be inconsistent with WTO rules, overly restrictive to trade, and/or applied arbitrarily. They are distinct from measures that address legitimate policy objectives, for example in relation to areas such as national security, the prevention of deceptive practices, and the protection of human, animal, plant and environmental health or safety. As with other parties to the WTO Agreement on Technical Barriers to Trade, Australia has range of these legitimate measures in place.

## Australia's standards and conformance infrastructure

The department works closely with Australia's technical infrastructure organisations to ensure that fewer trade barriers arise, while ensuring the safety and wellbeing of Australians. This work is often pre-emptive and works to align systems, processes, and standards and conformance rules to mitigate barriers, or to resolve and harmonise existing rules to facilitate better trade outcomes.

The maintenance of a world class, internationally-recognised technical infrastructure supports the internationalisation of the Australian economy by aligning with international standards and promoting the acceptance of conformity assessment data, thereby helping to facilitate trade. It provides the framework to maintain domestic and foreign confidence in our goods and services, and is crucial to enhancing our global competitiveness, attracting investment while encouraging and supporting innovation.

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<sup>34</sup>DFAT Action Plan to Address Non-Tariff Barriers (2018), <https://tradebarriers.dfat.gov.au>

Recognising this, the department manages the government's relationship with our four peak standards and conformance bodies:

- *The National Measurement Institute (NMI)* — a division of the department, responsible for metrology and biological, chemical, legal, physical and trade measurement;
- *Standards Australia* — a membership-based, independent, not-for-profit national standards development body;
- *The National Association of Testing Authorities (NATA)* — a membership-based, independent, not-for-profit national accreditor of laboratories and testing facilities; and
- *The Joint Accreditation System of Australia and New Zealand (JAS-ANZ)* — a bi-national, government-owned accreditor of conformity assessment bodies involved in certification and inspection.

The department delivers the Support for Industry Service Organisations (SISO) program, which provides funding of approximately \$4 million per year for international representation and national interest activities undertaken by Standards Australia and NATA. This allows Australian businesses to influence and keep pace with international standard-setting that directly impacts their trade. Representation in international forums, including of the International Organization for Standardization (ISO) and the International Laboratory Accreditation Cooperation (ILAC), is a key market access and trade facilitation tool – particularly given nearly 40 per cent of Australia's domestic standards reflect agreed international standards.

Businesses can get a more detailed sense of the important role our technical infrastructure plays from the department's 2016 publication 'Australia's Standards and Conformance Infrastructure: An Essential Foundation', which is available on our website<sup>35</sup>.

## Domestic, regional and international engagement

The department also has a role in multiple domestic, regional and international forums – and under our free trade and mutual recognition agreements – in trying to reduce and minimise the number and effect of unnecessary trade barriers facing Australian businesses.

Domestically, this includes a role in the Australian Government's 'Action Plan to Address NTBs' – jointly launched by Ministers in December 2018 and coordinated by the Department of Foreign Affairs and Trade<sup>36</sup>. The Action Plan allows Australian exporters facing barriers overseas to report them directly to government for appropriate consideration and action. In

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<sup>35</sup>DIIS, Australia's Standards and Conformance Infrastructure (2016), [www.industry.gov.au/regulations-and-standards/australias-standards-and-conformance-infrastructure](http://www.industry.gov.au/regulations-and-standards/australias-standards-and-conformance-infrastructure)

<sup>36</sup>DFAT, Action Plan to Address Non-Tariff Barriers (2018), <https://tradebarriers.dfat.gov.au>

addition to the department, other key players include Austrade and the Department of Agriculture.

This complements the Export Council of Australia's online Trade Barriers Register, which has already been covered in this submission and was developed in conjunction with the department's Industry Growth Centres.

Both initiatives offer direct points of contact for businesses of all sizes to report on the trade impediments they are facing, contributing to a vital evidence base for industry and government decision making, planning and appropriate action.

Beyond this, the department is a member of ongoing cross-government forums such as the Non-Tariff Measures Working Group (convened by the Department of Agriculture), and the National Committee on Trade Facilitation (convened by the Department of Home Affairs).

Internationally, the department is engaged in a range of regional and global forums to facilitate trade with key partners. Important examples include the standards and conformance sub-committees of APEC and the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA), where collective efforts seek to harmonise differing technical standards and conformance arrangements to aid trade and investment flows. Similarly, the department plays a central role in Technical Barriers to Trade (TBT) Committees and FTA TBT Chapter negotiations, including with China and at the WTO.

As mentioned above, the department manages the government's relationship with Australia's four peak standards and conformance bodies. These are referred to as Australia's Technical Infrastructure Alliance (TIA). Over 40 per cent of Australia's standards reflect or are based upon international standards. Participation in international standards setting increases compatibility and alignment with Australia's own systems and standards. Australian businesses gain a competitive advantage if their interests are represented early in the development of these standards and this results in greater access to overseas markets.

Negotiating, implementing and updating Australia's Mutual Recognition Agreements (MRAs) on conformity assessment with partners such as New Zealand, the European Union and Singapore plays an important supplementary role. In January 2019, the government signed a new MRA with the United Kingdom to ensure that existing arrangements with the EU would continue to apply post-Brexit. These arrangements allow Australian goods in specific sectors to be exported without the need for duplicative retesting or recertification on arrival.

## Good regulatory practice

To facilitate trade and meet Australia's obligations under the WTO Technical Barriers to Trade Agreement, the government has adopted the principle that if a system, service or product has been adopted under a trusted international standard, regulators should not impose additional requirements for approval in Australia unless it can be demonstrated that there is a good reason to do so. This means that if a standard is to be mandated by

regulation, the regulation should first consider adopting an appropriate international standard if one exists.

This approach is central to the work of the department, including in its role managing the government's relationship with the technical infrastructure organisations and enabling their strategic international engagement (outlined earlier in this submission). It complements the efforts undertaken to achieve greater regulatory alignment in our FTAs and engagement through regional and global forums such as APEC and the WTO (also covered earlier), with a focus on reducing costs and delays for Australian exporters.

Good regulatory practice is a prominent feature of discussions in these forums, with the department one of several active government contributors. Good regulatory practice also underpins the department's 'Best Practice Guide to Using Standards and Risk Assessments in Policy and Regulation', which was published in July 2016 to offer advice to officials and regulators and is available on our website<sup>37</sup>.

## Supporting the government's commitment to Free Trade Agreements

Free Trade Agreements (FTAs) represent a key pillar to the government's trade policy agenda to help drive export growth and create new jobs. The government is committed to ensuring that around 90 per cent of Australia's two-way trade is covered by FTAs by 2022.

FTAs contribute to greater economic activity and job creation in Australia, and deliver opportunities for big and small Australian businesses to benefit from greater trade and investment. FTAs don't just reduce and eliminate tariffs, they also help address behind-the-border barriers that would otherwise impede the flow of goods and services; encourage investment; and improve the rules affecting such issues as intellectual property, e-commerce and government procurement. FTAs give Australian businesses and consumers improved access to a wider range of competitively priced goods and services, new technologies, and innovative practices.

A PWC Report on Free Trade Agreement Utilisation<sup>38</sup> noted that:

- Australia's FTAs contribute to Australian business confidence and impact positively on business activity.
- There is evidence that businesses are integrating FTAs into their business processes and planning.
- Australian businesses engaged in trade are generally aware of FTAs and the agreements are being used to support their trade and investment activities across a range of sectors.

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<sup>37</sup>DIIS, Australia's Standards and Conformance Infrastructure (2016), [www.industry.gov.au/regulations-and-standards/australias-standards-and-conformance-infrastructure](http://www.industry.gov.au/regulations-and-standards/australias-standards-and-conformance-infrastructure)

<sup>38</sup> PWC, Free Trade Utilisation Study, 2018

- The greatest impact of Australia's FTAs has been in merchandise trade with generally high two-way utilisation rates for Australia's FTAs across both imports and exports.

While FTAs provide a central pillar in Australia's trade policy agenda to open new export markets and allow Australian businesses to grow their business, they are inherently complex. As such, SMEs tend to face greater challenges than larger business in entering foreign markets and taking advantage of FTAs. SMEs account for 99 per cent<sup>39</sup> of Australian employing businesses, yet their contribution to Australia's exports is disproportionately low<sup>40</sup>. Assisting SMEs to export represents an important avenue to boost job creation and economic growth.

The department works with other relevant agencies to ensure that these challenges are taken into consideration throughout the negotiation, implementation and review of FTAs.

### **Australia's Free Trade Agreements**

Australia has entered into FTAs with 11 countries or groups of countries, including with New Zealand, Singapore, the United States, Thailand, Chile, ASEAN, Malaysia, Korea, Japan, China and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CP-TPP). The government is increasing FTA coverage by bringing into force concluded but not yet in force FTAs with Hong Kong, Indonesia, Peru and the Pacific Island countries. Australia is negotiating FTAs with the European Union, India and the Pacific Alliance (Chile, Colombia, Mexico and Peru).

Concluding the Regional Comprehensive Economic Partnership (RCEP) is a priority for Australia. An RCEP Agreement has the potential to deliver significant opportunities for Australian businesses, with 16 RCEP participating countries accounting for almost half the world's population, over 30 per cent of global GDP, and quarter of world exports.

Australia is also discussing options with the United Kingdom on a prospective Australia-UK FTA when the time is right.

Australia is also negotiating the Environmental Goods Agreement and the Trade in Services Agreement under the auspices of the WTO.

<sup>39</sup> ABS (2016) Innovation in Australian Business, Cat. No 8158.0

<sup>40</sup> For the purposes of export data, the definition of SMEs is not solely based on the number of employees. See explanatory notes catalogue 5368.0.55.006 - Characteristics of Australian Exporters.

# Conclusion

This submission has highlighted how the department is supporting Australia's exports and attracting investment by maximising opportunities presented by the potential of science, innovation and competitive businesses to drive growth and jobs across the economy.

The breadth of our portfolio and the range of departmental policies and activities we undertake show the role we play in ensuring Australian businesses are well positioned to grasp the opportunities presented by technological change and global economic growth. However, these changing dynamics also come with challenges. Australia's ability to harness future opportunities is key to our continued economic success, and more work will be required to keep pace with broader international trends and opportunities to ensure all Australians can thrive in a global economy.

The department is looking forward to the Committee's findings. We are committed to continue to work on driving Australian growth and job creation.

# Appendix 1

## Helping Australian businesses grow: key departmental initiatives Entrepreneurs' Programme

The Entrepreneurs' Programme (EP) delivers advice, networking and grants to help Australian businesses grow, innovate and commercialise nationally, and globally through trade and export. This helps to drive economic growth and jobs, improving broader community outcomes.

EP has helped over 14,000 businesses access tailored advice from a national network of over 140 industry experts, connections and networking opportunities, and approved \$327.7 million in matched grant funding to help these businesses implement this advice.

EP is delivering outcomes for business and supporting them in accessing international markets, creating jobs and growth. A survey sample of over 2,200 businesses that have participated in EP have increased their turnover by \$3.1 billion, created 10,100 jobs, and generated a \$235 million increase in export revenue.

EP also collaborates with the Landing Pads program. The Landing Pads, delivered by Austrade, provides market-ready start-ups and scale ups the opportunity to land and expand in global innovation hubs, including San Francisco, Tel Aviv, Shanghai, Berlin and Singapore. Accelerating Commercialisation grantees under the Entrepreneurs' Programme can obtain automatic entry to Landing Pads, to help with expanding into new markets.

For example, AgriDigital is making global agricultural supply chains simple and easy by connecting all parties to ensure the integrity of the trading, tracing and finance involved. With help from the Entrepreneurs' Programme, AgriDigital has grown from 22 to 47 staff after receiving a \$1 million Accelerating Commercialisation grant in July 2017. AgriDigital now has 37 customers and more than 3,000 active users, operated in 30 different countries.

AgriDigital is working on capturing customers in North America and Canada. To support this strategy, they undertook a three month residency at the San Francisco Landing Pad. AgriDigital is building on this residency by setting up a Chicago office to establish an in market presence, and growing its team and brand in North America.



## Small and Medium Enterprises (SME) Export Hubs Initiative

The \$20 million SME Export Hubs Initiative will help Australian businesses to grow, export and increase local and regional jobs.

Export hubs are collaborative business networks that help small and medium businesses harness opportunities in global marketplaces. They boost the export capability of local, regional and Indigenous businesses, through supporting activities such as developing collective brands, leveraging local infrastructure to scale business operations, and positioning regional businesses to participate in global supply chains.

The Initiative funds new and existing export hubs in the Growth Centre sectors: advanced manufacturing; cyber security; food and agribusiness; medical technologies and pharmaceuticals; mining equipment, technology and services; and oil, gas and energy resources.

The competitive program provides matched grants of up to \$1.5 million until 2021–22. Matched funding can come from sources other than the Commonwealth, such as state and local governments and industry.

It complements existing initiatives including the Industry Growth Centres Initiative and the Entrepreneurs' Programme presented in this Appendix, as well as services and initiatives delivered by Austrade, including the Export Market Development Grants scheme.

In Round 1 of the Initiative, nine hubs shared in grants totalling \$5.7 million across sectors including food and agribusiness, advanced manufacturing, and mining equipment, technology and services.

Round 2 was opened for Expressions of Interest on 23 August 2019, and closes on 19 September 2019. More information, including how to apply, is available from [www.business.gov.au/SMEEH](http://www.business.gov.au/SMEEH).

Toowoomba and Surat Basin Enterprise (TSBE) received a grant of \$839,416 under Round 1 of the SME Export Hubs Initiative to establish the Southern Queensland Innovation in Export Hub. The Hub will increase market opportunities and globalisation of food and agribusiness and oil and gas SMEs in southern Queensland. It will encourage SMEs to develop a collaborative export culture within the region to promote the premium products and services available. TSBE will provide professional support services, networking opportunities and stakeholder engagement.

## Industry Growth Centres Initiative

The government's Industry Growth Centres Initiative drives productivity and competitiveness in Australia's areas of competitive strength and strategic priority. The Initiative is helping Australia transition into smart, high value and export focused industries.

It is working with industry sectors to build stronger futures for themselves through a collaborative, industry-led process – to grow excellence, not dependence, and create an economy that ensures Australia's ongoing prosperity.

Under the Initiative, six Growth Centres have been established in high priority sectors:

- Advanced Manufacturing (known as AMGC);
- Cyber Security (known as AustCyber);
- Food and Agribusiness (known as Food Innovation Australia Ltd (FIAL));
- Medical Technologies and Pharmaceuticals (known as MTPConnect);
- Mining Equipment, Technology and Services (known as METS Ignited); and
- Oil, Gas and Energy Resources (known as National Energy Resources Australia (NERA)).

Each Growth Centre is an independent not-for-profit company with an industry-led Board, recognising that industry is best placed to drive cultural change and overcome barriers to productivity and growth.

Growth Centres are leading cultural change in their sectors by focusing on key areas, including increasing collaboration and commercialisation, and improving access to global supply chains and international opportunities. Growth Centres are actively engaging in international markets and looking for potential export and investment opportunities for Australian businesses.

The Growth Centres, in partnership with Austrade, develop trade and investment promotion strategies for each of their sectors. They have supported business participation in Austrade's Landing Pads in Tel Aviv, Singapore and San Francisco. The Growth Centres have also coordinated a "Team Australia" presence that has supported over 900 Australian organisations at 40 international trade shows and outbound trade missions, resulting in at least 150 businesses either securing their first export or expanding their sales.

Growth Centres are working to optimise industry standards and harmonise regulation in their sectors to increase the alignment between Australian and international standards. The uptake of international standards helps eliminate technical barriers to trade and allows Australian businesses access to global supply chains. For example, the Growth Centres have supported the development of a Trade Barriers Register with the Export Council of Australia. The register provides businesses with a platform to report barriers to doing business overseas. This will help the government to understand challenges faced by Australian businesses doing business internationally and how to prioritise responses.

Officially launched on 5 September 2019, to date 11 barriers have been registered, three have been actioned and 14 insights have been shared.

## Industry Growth Centres

### Advanced Manufacturing Growth Centre (AMGC)

AMGC is supporting the advanced manufacturing sector to facilitate a new breed of 'advanced manufacturers' who are linked into global supply chains by specialising in value-added activities. Australian manufacturers are more competitive when they embrace innovative design features and technology leadership. To achieve this, a key focus of AMGC has been to boost collaboration, commercialisation, skills and capability within the sector.

For example:

- Brisbane-based iOrthotics expects to grow its exports of customised orthotic devices by harnessing opportunities in the US market, thanks to support from AMGC. AMGC has helped the company digitise and scale up manufacturing to increase productivity and deliver cost savings. AMGC's support could help generate up to 13 skilled jobs and assist the company to grow its sales revenue from an estimated \$940 000 in 2018 to \$2.82 million in 2019.
- With support from AMGC, Victorian-based Water Source has commercialised its portable water purification unit and is now exporting units to East Timor. Over the medium term, the company has the potential to generate \$20 million in new export revenue, leading to the creation of 15 high-skilled jobs.

### The Australian Cyber Security Growth Network – AustCyber

AustCyber is working to grow Australia's cyber security sector and secure export pathways for Australian products and services. AustCyber, in partnership with Austrade, is delivering a suite of programs to equip businesses with the contacts, skills and business acumen and target key international markets, including the United States and Singapore. For example:

- The United States program, now in its second year, combines a trade mission to major US cities like Washington, New York and San Francisco and supporting a cyber security sector specific cohort of businesses at the San Francisco Landing Pad. This approach is delivering results for Australian businesses.
  - Security Colony, which provides security advisory and assurance services for a competitive price, has subscribed several high-profile US organisations.
  - Furthermore, the contacts that Australian-based business, Cog Systems, developed with SIEMonster during this mission led to a new partnership and the development of a new product range of affordable Micro SIEM appliances, the Redback appliance. This device, which combines innovative solutions from both businesses, helps users secure the growing number of Internet of Things devices in the users home or business.

- Melbourne-based IT security business, Datasec Solutions Pty Ltd (Datasec) has secured a development agreement with tech giant, HP Inc.
- Similarly the Singaporean program, combined a trade mission and a specific inmarket- program with a cyber security sector specific cohort of businesses at the Singapore Landing Pad.
  - The in-market program saw the 15 Australian companies learn about the latest issues, opportunities and solutions in the ASEAN region, stay abreast with new regulations, demonstrate innovative and cutting-edge products, and network with potential customers, investors and partners in Singapore.

## The Oil, Gas and Energy, Resources Growth Centre – National Energy Resources Australia (NERA)

NERA, through its Smart Australia program, has developed customised workshops and mentoring programs to help businesses identify in-market opportunities, scope relevant commercial and financial strategies, and develop the skills, language and tools required to translate these opportunities into tangible commercial outcomes. As part of its international engagement strategy, NERA supported 10 innovative small businesses from Australia's energy resources sector to form the inaugural Team Australia Delegation at Gastech 2018 in Barcelona, delivering a showcase of local innovation and future capability to the 30 000 attendees. All participants identified leads from companies in markets as diverse as Canada, Poland and India.

NERA has established strategic partnership with the Oil & Gas Technology Centre's (OGTC) TechX, Station Houston to link three global energy ecosystems of Aberdeen, UK; Houston, USA; and Perth, Australia to accelerate the international growth of technology innovators and start-ups. The Tech Xchange program will facilitate access to new markets by allowing businesses to undertake field trials, customer validation activities and market analysis. It will also increase exposure to early stage investment markets, which is critical for fast-growing high-potential businesses. The program also involves a three stage energy technology tour: (i) in May 2019, four Australian technology innovators showcased their technology at the Offshore Technology Conference (OTC) in Houston; (ii) in early September 2019, four Australian technological companies undertook a 10-day tour to Aberdeen and SPE Offshore Europe Conference & Exhibition to showcase their technology , to build international relationships, and establish valuable supply chain connections; and (iii) in March 2020, NERA will host visiting tech innovators from the USA and UK at Australian Oil and Gas (AOG) 2020.

## Mining Equipment, Technology and Services – METS Ignited

The Mining Equipment, Technology and Services (METS) Growth Centre works with Australian mining industry suppliers, global miners, researchers and capital providers to improve competitiveness and productivity.

Through the METS Ignited Collaborative Project Funds, the Industry Growth Centre is supporting career pathways in STEM, including the highly successful Austmine Women in STEM Career Pathway Program (Program). This program has provided female PhD students the opportunity to receive on-the-job experience, online training mentoring and soft skills training through a ten week paid internship at a company in the mining equipment, technology or services sector. In 2017, 36 students were placed into 27 industry partner businesses; 11 of these students were offered ongoing employment with host organisations.

The Program significantly grew in size in its second round in 2018, expanding to provide over 40 male and female STEM student internships with Austmine members. In 2019, the Program will place undergraduate university students studying STEM subjects into METS companies around Australia, increasing the interest level and uptake of graduates into the METS sector. Ongoing training and coaching is provided to the students to help support them through their internship, whilst upskilling them and ensuring they are adding value to their host employers.

METS Ignited, along with MTPConnect and NERA are also supporting the national expansion of the Industry Mentoring Network in STEM (IMNIS) program which aims to prepare a new generation of diverse, inclusive and industry-ready PhD graduates. IMNIS connects motivated PhD students (mentees) in science, technology, engineering and mathematics (STEM) with outstanding high level industry leaders (mentors) in a one year industry mentoring program. The program has expanded in 2018 to match 485 PhD students with 300 industry leaders across all the states and territories. Mentees have highlighted the value of having access to professional industry networks as being crucial to their post-research employment.

## Medical Technologies and Pharmaceuticals Growth Centre – MTP Connect

MTPConnect's goal is to make Australia the Asia-Pacific MTP hub, and to achieve this goal, it is partnering with Austrade and Australia's peak industry bodies, such as AusBiotech, to drive international engagement and market access for the MTP sector. For example:

- MTPConnect has led and supported 18 inbound and outbound trade missions with 600 participating companies. Over 50 international companies have also joined MTPConnect-supported- inbound investment missions.
- MTPConnect led a delegation of 19 Australian businesses to the 2018 MedTech Conference in Philadelphia and USA. This enabled the businesses to connect with thousands of medical technology professionals and investors from across the globe.
- MTPConnect accompanied over 21 Australian companies to the 2017 and 2018 Global Investment Series, organised by AusBiotech as part of the MTPConnect-funded Global Investment Program for Life Sciences. Events were held in Singapore, Hong Kong, and Shanghai. The program was delivered to 39 companies and 673 participants.

## Food and Agribusiness Growth Centre – Food Innovation Australia Limited (FIAL)

FIAL's key goal is to grow the share of Australian food in the global marketplace. To do this, it is helping businesses export for the first time through ongoing tailored services, and takes businesses along the journey to becoming a successful exporter. FIAL assists businesses to develop and implement export plans, to better understand international market opportunities, to undertake product differentiation to meet market demand, and to navigate IP and brand building. Once export ready, FIAL helps represent the products and brands at international trade shows and in and outbound missions and roadshows.

FIAL's suite of online tools, export workshops, export plans, product catalogues and market insight reports are collectively building capability around product innovation and differentiation and assisting businesses access new markets.

For example:

- FIAL's 'Are You Ready to Export' workshops help businesses to incorporate export into their growth strategies and to become export ready.
- With the help of "Are You Ready for Export?" series of workshops, at least 55 companies are now exporting to new markets and hundreds more are active in investigating international opportunities.
- FIAL's 'IP Protection and International Branding' workshops have helped businesses increase capability in branding and market entry.
- FIAL's 'Win-Win Negotiations' workshops equip businesses with the tools to negotiate successfully with international buyers.
- FIAL's 'Winning Export' workshops provide currently exporting businesses with a refresher and opportunity to learn new skills.
- FIAL's Market Insights and Information reports provide up-to-date information that support businesses to enter into new export markets. Over 350 automatically updated reports have been produced covering 35 product categories providing businesses with tailored advice and guidance for 8 ASEAN countries.

The Australian Food Catalogue is an online platform to connect Australian companies with international buyers without the need to travel overseas. The Food Catalogue has over 100 product categories and over 550 buyers from over 60 countries.

FIAL is taking Australian businesses to the world and actively working to improve access to global supply chains and international opportunities. For example:

Over 200 companies have attended a FIAL international tradeshow in collaboration with Austrade, state governments and industry associations at the Australian stand.

Another 100 businesses have showcased an additional 200 brands at international trade shows. These businesses connected with over 6500 buyers, distributors & importers at

either during and/or post shows. This resulted in more than \$4 million in estimated sales since 2017.

FIAL has hosted out bound trade missions to key markets including China and Thailand to leverage the benefits of the Free Trade Agreements; and to the Middle East to take advantage of this emerging market for food and beverages. The Middle East region has emerged as a powerful spending economy with consumers having greater access to a wide range of foods and beverages. In fact, food imports make up 70 per cent of the market in the Gulf region, which presents a significant opportunity for Australian exporters.

These trade missions are delivering results for Australian SMEs:

- Luxe Brew coffee from Knoxfield in Victoria secured orders at Thaifex.
- Morlife based in Gold Coast which manufactures over 300 health food products has worked with FIAL to access new export markets. Morlife's export journey was started when it attended an "Are you ready to export workshop". After developing an export plan, Morelife has worked with FIAL to gain access to many international markets by going to several trade shows with FIAL. Following its trade shows in the Middle East and China, Morlife's business sales have grown by 75 per cent in the Middle East in the last 12 months alone.

FIAL also recently piloted a program with the UK Grocery Accelerator to help Australian businesses access the UK market. The pilot involving five Australian companies has already delivered results, with SalDoce Fine Foods, a pioneer in manufacturing allergen sensitive and gluten free Food products been available to buy in the UK via online supermarket, Ocado.

## Appendix 2

# Department's engagement in current reviews of regulatory processes

## Proposed Productivity Commission review

A 12-month Productivity Commission (PC) study has been commissioned to examine regulatory settings across the resources sector to highlight best-practice examples from across Australia and against our global peers.

In particular, improving the efficiency of environmental approvals would reduce the regulatory burden on business. This work will complement the statutory review of national environmental protection law — the EPBC Act — due to commence in October 2019. The aim is to ensure that resources projects are transparently and efficiently assessed while upholding robust environmental standards.

The study will also examine as a priority community engagement practices and principles across jurisdictions, including best-practice community engagement, land access- and benefit-sharing practices by industry, governments and other bodies.

The study is an important part of the government's regulatory reform agenda in tackling a range of barriers to investment in key industries and activities, with the aim of boosting efficiency, productivity and job creation.

The study also delivers on a commitment in the government's National Resources Statement to assess regulatory settings across the Australian resources sector, and delivers on a joint commitment by the COAG Resources Ministers to examine best practice- resources sector regulation across Australia and develop a benchmarking framework.

## EPBC Act review

In accordance with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), an independent statutory review is scheduled to commence in October 2019, which will take up to 12 months to complete. The department will actively engage in this review process. The terms of reference and independent reviewer are yet to be announced. Questions around the proposed consultation process for the review should be directed to the Department of Environment and Energy.



## NOPSEMA review

The audit by the Chief Scientist seeks to provide assurance of the National Offshore Petroleum Safety and Environmental Management Authority's (NOPSEMA) assessment and decision making- process for the current proposed exploration activity in the Great Australian Bight.

The Chief Scientist undertook targeted consultation with a range of stakeholders to inform his audit. The audit examined:

- how environmental impacts and environmental risks, including Australian Marine Park values and EPBC Act protected matters, and other relevant information such as that received through consultation and public comment processes, are taken into account; and
- the relevancy, sufficiency and completeness of scientific and technical information used to support assessment and decision-making in relation to the current exploration proposal.