



Submission to the Senate Select Committee on the Future of Work and Workers

**Inquiry into the impact of technological
and other change on the future of work
and workers in Australia**

February 2018

About AMMA

AMMA is Australia's resources and energy industry group and has provided a unified voice for employers on workforce and other industry matters for 100 years.

AMMA's membership spans the entire resources and energy industry supply chain, including exploration, construction, commercial blasting, mining, hydrocarbons, maritime, smelting and refining, transport and energy, as well as suppliers to these sectors.

AMMA works to ensure Australia's resources and energy industry is an attractive and competitive place to invest and do business, employ people and contribute to our national well-being and living standards.

The resources industry is, and will remain, a major pillar of the national economy. Its success will be critical to what Australia can achieve as a society in the 21st Century and beyond.

The Australian resources industry directly generates more than 8% of Australia's GDP, with around 50% of the value of all Australian exports coming from the resources industry. In 2015-16, the value of Australian resource exports was \$157.1 billion. This is projected to increase to \$232 billion in 2020-21¹.

AMMA members across the resources and energy industry are responsible for a significant level of Australian employment. The resources extraction and services industry directly employs 222,300 people. Adding resource-related construction and manufacturing, the industry directly accounts for 4% of total employment in Australia. Considering the significant flow-on benefits of the sector, an estimated 10% of our national workforce, or 1.1 million Australians, are employed as a result of the resources industry.

First published in 2018 by

AMMA, Australian Mines and Metals Association

Email: policy@amma.org.au

Phone: (03) 9614 4777

Website: www.amma.org.au

ABN: 32 004 078 237

© AMMA 2018

This publication is copyright. Apart from any use permitted under the Copyright Act 1968 (Cth), no part may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the Chief Executive, AMMA, GPO Box 2933, BRISBANE QLD 4001

¹ Office of the Chief Economist – Resources and Energy quarterly publication.

Executive Summary

Australia's resources and energy industry group, AMMA, provides the following submission to the Senate's Select Committee on the Future of Work and Workers. AMMA submits that there are two broad trends well underway in the resources and energy industry which provide clear indications of where the future of work in these sectors is heading:

1. **Development of high technologies** is creating a large-scale demographic shift in the skills and expertise required in the resources and energy industry. For example, remote operating centres (ROCs) are increasingly centralising operational and technical expertise in CBD hubs, with direct connectivity to remote mine sites where fewer personnel remain on site.

Automation technologies, including advanced robotics and unmanned vehicles and machinery, is another broad area revolutionising skills needs in the industry. Such technologies are increasingly removing human beings from the front line in the resources extraction process, resulting in enormous improvements in safety, productivity and efficiency.

These technology developments are not leading to job losses in the industry, but are rather creating a different type of 'future resources worker' – one based on computing, robotics, digitisation and other technical skills, and less reliant on traditional blue collar manual labour roles located on-site. This trend requires government responses on multiple levels, including policies to support regional economies through the transition away from having large numbers of blue collar workers located in their townships, towards new high tech skills and expertise more centrally located in major cities.

2. **Increasing desires for flexible work** of new generations of Australians is similarly shaping the future of work. The resources and energy industry is not immune to broad generational and societal trends towards more dynamic and fluid ways to engage in employment. This includes contracting, working across multiple employers, job sharing and ideas-based collaboration across the internet.

While the resources and energy industry is very diverse and traditionally has involved many different modes of work, the aforementioned technological advancements are seeing the industry even further able to modernise and meet the evolving needs of the modern day Australian who seeks non-traditional employment arrangements. This has also seen the Australian resource industry diversify its workforce demographics to better reflect broader society, especially in the area of female employment.

AMMA submits to the Committee that while technology trends and desires of new generations are aligning to provide valuable employment opportunities to broader demographics of Australians, businesses and workers are being let down by Australia's workplace relations system. Australia's workplace system is overregulated, over-complex and better suited to the technologies, working patterns and societal demands of the 1970s than 2018 and beyond.

To assist with the transition to 'the future of work' and deliver on the needs and desires of 'the worker of the future', Australia's national policy makers need urgently to consider and address the rigidity and complexity of our workplace relations system, and seek to remove the significant red tape and regulatory burdens that are impacting on business growth and thus future employment opportunities.

AMMA is available to elaborate on any information to which the committee takes interest.

Contents

Executive Summary	2
1. Introduction	4
2. Technological Innovation	5
Remote Operating Centres – Centralising work in CBDs	5
Automation.....	7
Technology driving new skills demands	8
3. Flexibility and the Future of Work	10
4. Barriers to the future of work – Australia’s workplace system	12
5. Summary of Recommendations	16
Supporting Technological Innovation	16
Flexibility and the Future of Work.....	16
Australia’s Workplace System – Removing the Barriers.....	16

1. Introduction

1. AMMA, Australia's resources and energy group, welcomes the opportunity to make this submission to the Select Committee on the Future of Work and Workers in relation to the impact of technological and other change on the future of work and workers in Australia.
2. AMMA notes the inquiry seeks to address a number of terms of reference. These are addressed throughout the submission.
3. With an estimated 10 per cent of our national workforce, or 1.1 million Australians employed as a result of the resources and energy industry, the impact of technological and other change on the future of work and workers is an area of great interest to AMMA.
4. While an important time to hold such an inquiry, this period is certainly not unique in that it is not the first time technology and other social and economic developments have had an impact on the evolution of work and workers.
5. Resources and energy employers have indeed faced and worked through various transformations for as long as the Australian resources and energy industries have existed.
6. In AMMA's 100 years of operating, our organisation has been at the forefront of assisting employers to manage impacts of technology and other changes at their projects, and such changes have proven overwhelmingly positive for our industry and led to significant improvements in safety, productivity, efficiencies and growth – both economic and employment.
7. These positive impacts have only been made possible by governments that have been willing to embrace change and support industries through the adoption of new technologies and management of changes in the desired working patterns and behaviours of new generations of Australian workers. History has shown there is little to be gained in governments resisting or taking a fearful or protectionist approach to global and domestic economic and social trends.
8. AMMA is of the view that the future of work in the resources and energy sector will be characterised by further technology developments leading to demographic changes in the skills, education and technical abilities of future workforces. This will coincide with increased demands from 'the worker of the future' for flexibility in their employment arrangements.
9. Supportive government policies which enable individuals and their employers to embrace and take advantage of such change will ultimately enable the resources and energy industry, and indeed the broader Australian economy, to continue to evolve, grow and secure Australia's future prosperity.

2. Technological Innovation

10. Historically, the resources and energy industry has been a driver of technological innovation and development in Australia. Perhaps the best modern example of this has been the recent growth in Australia's mining equipment, technology and services (METS) sector which has seen our nation develop "a global reputation for being innovative – successfully developing and commercialising high quality, cutting edge technologies for the mining sector, both within Australia and internationally."²
11. Embracing and implementing new technologies in the workplace has led to significant gains in the mining sector. According to Deloitte Access Economics, innovative applications of new technologies have been a significant driver of growth in the Australian mining and METS sectors over the most recent mining boom.³ These sectors combined generated more than 15 per cent of GDP and \$198 billion of export revenues for nation in 2016-17, accounting for 54 per cent of Australia's total export revenues. This has a significant impact on the livelihoods of all Australians.
12. In addition, technological developments have led to significant improvements in health, safety and environmental impacts in the Australian resources and energy industries – saving lives, reducing injuries, lowering emissions and waste and overall leading to cleaner, safer and more productive workplaces compared to years gone by.
13. While Australia's resources and energy industry has long been at the fore of developing and adopting new technologies, particularly those which create efficiencies in the resources extraction process, current innovation is particularly acute as the industry enters an era where traditional manual labour is almost entirely removed from front-line extraction and processing activities.
14. Such technologies are becoming more abundant and include remote operating centres, automated trucks and loaders, advanced robotics, fibre optic sensing, unmanned aerial vehicles (drones), continuous drilling, 3D mapping, real-time remote monitoring and more.
15. The following sub-sections explain two major areas of technological innovation and the broad areas of change in which they are driving: remote operating centres and the impact regarding increased centralisation of work; and automation resulting in the eventual removal of humans from front-line resources extraction processes.

Remote Operating Centres – Centralising work in CBDs

16. One of the biggest areas of technological development in the resources and energy industry leading to changing working patterns is the advent of remote operating centres (ROCs).
17. A ROC is essentially a centralised, connected control room for mining projects that allows technicians and operators to undertake mine management functions from a remote location. Made possible by advanced connectivity and telecommunications technology, ROCs are increasingly seeing mines in remote parts of the world being majority managed and operated from a major metropolitan 'service hub', with senior technicians in the ROC either operating unmanned machinery on-site or instructing manual technicians on the ground – often thousands of kilometres away.

² CSRIO, [Mining Equipment, Technology and Services: A Roadmap for unlocking future growth opportunities for Australia](#), May 2017, p 6.

³ Deloitte Access Economics, [Mining and METS: engines of economic growth and prosperity for Australians](#), report prepared for the Minerals Council of Australia, 2017, p iii.

18. This technology is rapidly revolutionising the resources and energy industry globally, however the best examples of this occurring to date in Australia is in the Pilbara's major iron ore mines. Examples are as follows:
- Rio Tinto launched its "Mine of the Future" in 2008. This includes a remote operations centre in Perth that enables all of its mines, ports and rail systems to be operated from a single location. The company describes its Perth ROC as "mission control" for the entire Pilbara iron ore network. It contains more than 400 operators who analyse data and synchronise an integrated system in real time, managing 15 mines, four port terminals and 1,700km connecting rail network. Rio Tinto lists the benefits as "increases efficiency, improves reliability, decreases variability and allows the business to better identify and improve performance across the supply chain".⁴
 - BHP introduced its Integrated Remote Operations Centre (IROC) in Perth (for iron ore) in 2013 and in Brisbane (coal) in 2016. The company will soon open a third IROC for its Olympic Dam mine in South Australia. A BHP spokesman has described the ROC strategy as "bringing a sharper focus to the application of technology to help us lift performance right across the group".⁵
 - Australia's newest iron ore 'mega-project' in the Pilbara, Roy Hill, has been operated by a Perth-based ROC since its inception in 2015. The company says its ROC "provides end to end integration of its operations, marketing and corporate services functions" which "is driving productivity improvements and continuous improvement across the business".
19. This trend is fast increasing to the point where before long all mines may operate from major city ROCs. Deloitte research indicates that 69 per cent of mining companies globally are looking at introducing remote operations and monitoring centres, 29 per cent robotics and 27 per cent unmanned drones, with technologies enabling work to be moved to more central locations.⁶
20. Increasing use of ROCs to relocate the bulk of technical and operational expertise from remote mine sites to CBD locations will be overwhelmingly positive for the industry. The World Economic Forum has done specific research into this development at the global level with the following findings:
- Industry value addition:** ROCs can deliver approximately \$65 billion in industry value to mining (assuming an adoption rate of 50% by 2025) and about \$12 billion to metals (25% adoption rate by 2025).⁷
 - Safety:** ROCs can improve safety by reducing the number of personnel who need to be present on site in potentially hazardous environments. The World Economic Forum estimates this could save approximately 250 lives and avoid more than 12,000 injuries between 2016 and 2025.⁸ Further, control rooms in centrally located cities will allow more mining sector workers to commute daily to work, switching from FIFO to log-in-log-out (LILO) models which reduces societal impacts and fatigue risks associated with FIFO.
 - Employment:** As the current mining workforce ages, ROCs allow mining and metals companies to increase their appeal by offering long-term and more flexible career options to workers without having to spend extensive periods in often remote and harsh locations. The hope is that this will encourage younger, more urban and female workers

⁴ Rio Tinto, [Mine of the Future](#).

⁵ Crozier, R, 'BHP to build remote ops centre for Olympic Dam', *iT News* (online), 28 November 2018.

⁶ Deloitte, [The digital revolution: Mining starts to reinvent the future](#), February 2017, p 11.

⁷ World Economic Forum, [Digital Transformation Initiative: Mining and Metals Industry](#), January 2017, p 17.

⁸ World Economic Forum, [Digital Transformation Initiative: Mining and Metals Industry](#), January 2017, p 17.

who traditionally have not been highly represented to consider joining the industry. (Further explored in next section).

- d) **Environmental:** ROCs reduce the land footprint of mining sites and lower the number of people required on site. This contributes to reductions in emissions and waste that would be generated to supply those people in remote regions. Lower fuel use and increased logistical efficiency could reduce the mining sector's emissions by about 7 million tonnes (a benefit valued at roughly \$300 million). Over the same period, the metals industry's CO₂ emissions could come down by an estimated 9 million tonnes (\$400 million).⁹
21. According to Deloitte Australia, a number of mining companies have moved to utilise remote operations centres “where they can monitor and operate various aspects of mining activities from a city base, which is changing the workforce dynamics by having less people on remote mine sites and more in CBD locations”.¹⁰
22. Despite the many positive outcomes of increasing centralisation of workforces in CBD locations, there will be some demographic challenges that may require a policy response from government to manage. This particularly relates to regional communities which have traditionally relied on large numbers of transient mining employees to sustain their local economies.
23. While the resource industry will always require large-scale on-site workforces in remote areas during the new project construction phase, the development and take-up of ROCs will undoubtedly result in much less on-site personnel during the long-term operations phase.
24. This may adversely impact remote communities which may require a policy response from government, namely to support communities through this transition by assisting with diversifying their economies.

Automation

25. Automation is among the best-known and most heavily invested-in mining technology trend. Leading examples include driverless dump trucks used by Fortescue Metals Group, BHP and Rio Tinto across various Pilbara iron ore mines, however there is a far broader range of minerals extraction and processing activities becoming automated.
26. For example, Queensland-based mining technology research centre Mining3 – a collaboration between the University of Queensland and the CSIRO – is developing automation technologies for bulldozers, shovel loaders, collision avoidance and draglines. Mining3 describes the benefits of such technologies:

*Quite often automation of mining equipment is seen as a negative thing to some people, however automation technologies are not about replacing operators, what you're trying to do is assist the operators to do the job better. Automation is really important to achieve operator performance levels at optimum levels and to keep that consistent by removing the human variability factor from the mining process. It takes a lot of the demands off the operators and enables them to carry out and perform higher value tasks. The particular technology we've been working on, automation of surface digging equipment and semi-automation tools to assist operators of draglines, will dramatically improve both safety and productivity.*¹¹

⁹ World Economic Forum, [Digital Transformation Initiative: Mining and Metals Industry](#), January 2017, p 17.

¹⁰ Harrison, J (2016) “The Innovation Imperative”, Resource People Magazine.

¹¹ Greenwood, K (2016) “The Innovation Imperative”, Resource People Magazine.

27. While operational productivity and efficiencies are significant benefits of automation, these technologies are making the most significant improvements to safety that the global mining industry has ever seen. This is achieved by allowing humans to communicate with and control machinery remotely, without exposure to hazardous mining environments and safety risks.
28. Rio Tinto has stated on the record: “Automation has gone further and faster than we’d ever have imagined. Not only is it reducing costs and raising efficiency, it’s also improved our health, safety and environmental performance.”¹²

Technology driving new skills demands

29. One of the biggest challenges for Australia’s resources and energy industry is meeting the skills demands arising from the rapid development and adoption of high-technology in mining, oil and gas and related operations. There is a common acceptance that while the ‘age of high technology’ is well and truly upon us in the resources and energy industry, the sector’s human resourcing response is lagging.

30. Deloitte has stated:

*The skills required to work effectively in the mining industry now have changed quite considerably from what we’d traditionally call ‘hard core mining skills and knowledge’ to a much greater emphasis to technology-based skills centred on things like data analytics and autonomous machinery. The idea of an ‘open talent economy’ will also play a much greater role as organisations...engage more contractors, point solution consultants and even concepts such as ideas-based collaboration across the internet.*¹³

31. Similarly, Austmine has stated:

*The new breed of miner is different, they’re sitting in offices thousands of kilometres away from where the mine site is, and they’re going to need a different skill set that miners haven’t had in the past. They will have computer skills, data analytics skills, technical and coding skills. They’ll even have gaming skills. There are drones and robots that are collecting information that could be better analysed, and there’s a lot of applications to look at equipment and see how it is performing.*¹⁴

32. Government to date has been involved in some important and valuable initiatives to support the resources and energy industry in this skills transition, and to help speed up the training and development urgently required to satisfy employer demands for the ‘new breed of miner’.

33. One of the best examples of a positive government policy response to this challenge has been the establishment of ‘growth centres’ focusing on developments in the Mining, Equipment Technology and Services (METS) sector. This initiative, known as ‘METS Ignited’ formed part of a \$225 million funding program to drive innovation, productivity and competitiveness in key export sectors.

34. In launching this initiative, the Minister for Industry, Innovation and Science stated:

The resource sector’s continual drive to increase efficiency and productivity means there is a demand for improved equipment, technology and services. The future prosperity of the mining equipment, technology and services sector will depend on its ability to remain globally competitive and seize these global opportunities. The METS Growth Centre, like the other Growth Centres, will unite business acumen with the intellectual rigor of scientists, researchers and universities. Improving and

¹² Sriram, V, Andrews, S and Kearney, D, [Remote Operations Centre Stage 2 Project Final Report](#), IPACS, October 2016, p 3.

¹³ Harrison, J (2016) “The Innovation Imperative”, Resource People Magazine.

¹⁴ Gibbs, S (2016) “The Innovation Imperative”, Resource People Magazine.

encouraging the engagement between business and researchers will drive innovation across the sector and ensure it maintains its competitive edge.¹⁵

35. AMMA submits to the Committee that further government support towards research and development on new innovative technologies, as well as training for the skills and expertise required by Australian workers to operate and maintain such technologies, is required to assist Australia's resources and energy industry in remaining globally competitive.
36. Such attention and support will enable Australian resources and energy employers to seize opportunities to continue to diversify and grow employment in-line with the broader industry evolution both locally and abroad.
37. It will further contribute to the broader upskilling of the Australian workforce as the nation continues to move towards establishing its niche in the global economy as a hub for high-technology skills, innovation and development.

¹⁵ Pyne, C (Ministers and Assistant Ministers for the Department of Industry, Innovation and Science), [Building on Australia's strengths in mining technology and innovation](#), Media Release, October 2015.

3. Flexibility and the Future of Work

38. The rapid onset of new technologies in the resource industry is occurring at the same time as broad societal and generational trends towards more dynamic, fluid and flexible modes of work.
39. Traditionally, the resources and energy industry has been home to highly varied models of work often depending on operational requirements, location of projects, specific industry sub-sector needs, strict health and safety rules impacting employee movements, and many other factors.
40. With new technological advances, resource operations and the broad range of working options within are even further evolving, providing unprecedented opportunities for flexibility in how and where people work.
41. For example, the uptake of technologies such as remote operation centres is seeing the mining industry move towards future methods of work that do not necessarily require a fly-in fly-out (FIFO) or drive-in drive-out (DIDO) workforce.
 - a) The Productivity Commission highlights that mining, once an employer of mostly blue collar workers, now requires white collar employees with the ability to interact with remotely managed or computer directed equipment.¹⁶
 - b) Globally, 69% of mining companies are exploring options for remote operation and monitoring centres.¹⁷ Remote operations are just one example of advancements in technology that will result in fewer people in hands-on operational roles, and therefore contribute towards an increase in flexibility in the workplace.
42. While there will still be a need for a FIFO and/or DIDO workforce at times throughout a project's lifespan, the shift away from the use of FIFO and DIDO means there is more choice for individuals in the way they work. Individuals are afforded greater flexibility in their hours of work, whether they choose to work full time, part time or otherwise, and whether they choose to work for one employer or contract across multiple employers.
43. Fortescue Metals Group, for example, has noted that new ways of thinking about work and breaking down traditional models has assisted the company in its great advances to improve female representation in its workforce:

*In the resources sector, location is a particular barrier that comes to mind. If we continue to apply new ways of thinking to the way we work and overcome those barriers, including through the use of communications technology, there is a massive opportunity to change the way roles are done within an organisation, who can do them and where they do them.*¹⁸
44. Numerous global and Australian studies have highlighted that flexibility is highly valued and sought after by employees of all ages and genders, and that individuals are demanding greater choice and flexibility in the world of work. Examples include:
 - a) A 2016 Ernst and Young Global Employment (all ages) Survey where 74% of survey respondents put flexibility in the top three factors when considering a new job.
 - b) A 2016 Deloitte Millennial Employment Survey (those entering the workforce post 2000) which found 68% of Millennials put flexibility in the top three factors when considering a new job.

¹⁶ Productivity Commission, *Shifting the Dial: 5 Year Productivity Review*, Report No. 84, Canberra, 3 August 2017, p. 85.

¹⁷ Deloitte, *The digital revolution: Mining starts to reinvent the future*, February 2017, p 11.

¹⁸ Warburton, S. (2017) Fortescue's female board directors lead cultural change, Resource People Magazine.

- c) A 2016 Lawson Delaney Flexibility Survey which found 78% of women in senior leadership roles would only consider new opportunities that offered flexibility.¹⁹
45. For individuals, the benefits of flexible working arrangements can include significantly improved work-life balance, increased satisfaction at work and enhanced wellbeing. Recent research has highlighted the importance of work flexibility to job satisfaction. A University of Chicago study of 4,500 workers found that job satisfaction was materially higher for workers who had some discretion over their hours and place of work. In fact discretion of the timing of one's work matters more for satisfaction than the overall hours of work or income.²⁰ Such global trends are increasingly making their way to Australia including in the resources and energy industry.
46. Increased flexibility can also lead to greater opportunities for under-represented workers to participate in the labour market, leading to a more diverse and inclusive workforce. The Organisation for Economic Cooperation and Development (OECD) predicts that in the future, workers are likely to have more say about who they work for, how much they work as well as where and when they work, which will provide greater opportunities for women, senior workers and those with disabilities to participate in the workforce.²¹ These trends are broadly being experienced by AMMA's members in the resources and energy industry.
47. Specifically in relation to the resources industry:
- a) Deloitte has noted that the increased flexibility in the location of work has enabled "a more diverse workforce to become involved in what traditionally would have been considered core mining."²²
- b) Deloitte further notes: "technologies will enable work to be moved to locations which can support a more diverse and inclusive workforce, including primary carers and people with physical disabilities."²³
48. The increased flexibility that an uptake in new technologies can bring not only benefits individuals who value the opportunity to be engaged in meaningful work on terms that suit them, but also employers and the Australian economy.
49. One such example relates an opportunity connected with one of the changing demographics in Australia – Australia's ageing workforce. According to a PwC Australia report, better harnessing the power of an older workforce could deliver gains of up to \$78 billion for the Australia economy. Increased flexible working practices, made possible as a result of technological and other changes, is one factor which will allow us to better leverage the skills of older workers and achieve these gains.
50. The positive impact of technological change insofar as it relates to opportunities for flexibility in how and where people work is clear. It is important that any policy response from government encourages and facilitates the greater flexibility that the workers of today are seeking.
51. This will enable employers to better meet the evolving demands of the modern day Australian worker, sustain higher levels of permanent employment, and achieve productivity gains associated with working outside the boundaries of traditionally rigid employment arrangements.

¹⁹ Lawson Delaney, [Workplace Flexibility Report 2016](#), p 2.

²⁰ 25 Golden, L., Henley, J. and Lambert, S. (2013) "Work Flexibility: A Contributor to Happiness" as cited in Foundation for Young Australians, [The New Work Order](#), p 19.

²¹ Organisation for Economic Co-operation and Development (OECD), [Future of Work and Skills](#), February 2017, p 2.

²² Deloitte, [The digital revolution: Mining starts to reinvent the future](#), February 2017, p 8.

²³ Deloitte, [The digital revolution: Mining starts to reinvent the future](#), February 2017, p 14.

4. Barriers to the future of work – Australia’s workplace system

52. AMMA urges the Committee to consider how regulatory reform across various areas can better support the future of work and workers in Australia. In particular, a targeted and appropriate deregulation agenda seeking to reduce and remove unnecessary complexities and red tape in Australia’s regulatory system will better support resource employers in their bid to attract investment, create new jobs and contribute to Australia’s economic success.
53. In the resources and energy industry, the decision on where to invest capital and create employment largely rests on costs versus returns, political and policy stability and the right policies for doing business and employing people. With new and increasingly sophisticated mining and energy markets opening up globally, coupled with the technological advancements and societal trends explored in this submission, Australia’s decision-makers must work harder to improve key determinants of productivity and competitiveness, including fundamental workplace relations reform.
54. Australia’s workplace relations system continues to prove to be a major barrier to competitiveness and employment growth. Importantly, our workplace legislation has been left virtually untouched since drafted by the Rudd Labor Government in 2007/8 and implemented in 2009.
55. As Australia’s workplace relations legislation continues in a vain attempt to hold Australia back to an outdated vision of working practices, the rest of the world has long moved on. Significant conflict exists between Australian employers and employees seeking to evolve with the rest of the world on ‘the future of work’ and a regulatory system that simply does not allow it.
56. This is recognised on an international level, with restrictive labour regulations pegged as the most problematic factor for doing business in Australia, according to the World Economic Forum, Executive Opinion Survey 2017.²⁴ There are currently 20 other nations rated higher than Australia on the WEF’s competitiveness index, including the United States, Germany, the UK, New Zealand and Canada. Even France is ranked as a more competitive place for business than Australia, and that nation is “sadly famous for its rigid work practices”.²⁵
57. There is further evidence of this at ground level, with the majority of respondents to AMMA’s 2016 Federal Election Survey indicating that our current workplace relations system is creating unnecessary barriers to employment and making it difficult for Australian business to compete globally and respond to changing market conditions.²⁶ These same barriers are making it difficult for businesses to effectively respond to changing conditions brought about by technological advances and changing individual preferences concerning the way they work.
58. This survey followed KPMG research, commissioned by AMMA, which showed that even modest workplace relations changes could create 36,000 jobs in the resources industry and supporting supply chain, and add \$30.9 billion of value to Australia’s GDP.²⁷
59. To be clear, nothing significant has been changed in Australia’s workplace relations system since this research was conducted, yet the rest of the world continues to leave Australia behind.
60. Australia’s workplace relations system is overregulated, over-complex and better suited to the technologies, working patterns and societal demands of the 1970s than 2018 and beyond. It is creating barriers to future working patterns and opportunities rather than supporting them.

²⁴ Schwab, K, World Economic Forum, [The Global Competitiveness Report](#), 2017-2018.

²⁵ Albrechtsen, J, [Big business schmoozes while small business loses](#), *The Australian*, 24 January 2018.

²⁶ AMMA 2016 [Federal Election Survey](#).

²⁷ KPMG Report, [Workplace relations and the competitiveness of the Australian resources sector](#), prepared for AMMA, 12 March 2015.

61. Australia cannot afford to remain complacent on key areas of national policy and regulation that impact on our productivity and competitiveness, and our ability to respond to 'future of work' trends such as technological advancements and new preferred ways of working of future generations. In the interests of the nation's economic resilience and ability to create and sustain jobs, Australia's policy makers can no longer afford to ignore such fundamental problems with our workplace relations laws.
62. With the advancement and application of new technologies and skill sets, the way we regulate work needs to be far more agile and responsive to change from what it has been in the past.
63. AMMA urges the committee to recommend a re-examination of the recommendations of the Productivity Commission report for improving Australia's workplace relations system.²⁸ This report arose from the most comprehensive review of the system in the millennial years, but remains entirely untouched and unresolved by the government.
64. AMMA has consistently made clear that the Productivity Commission's review had delivered 21 pages of recommendations that contained positive ideas that would improve our workplace relations laws and that would be supported by employers.
65. This remains AMMA's subsequent message – that the government should implement the vast bulk of what the Productivity Commission recommended to it in 2015, and adopt its 69 recommendations to improve Australia's workplace relations framework. This should also be the message that this Committee reiterates and sends to government.
66. AMMA would further urge the government to implement the wider body of recommendations our organisation made to the Productivity Commission during the course of its review of Australia's workplace relations framework.²⁹
67. To ensure Australia is equipped to appropriately respond to the changing nature of work and future workers, AMMA submits that the following must be addressed as a priority:
 - a) **Awards should be abolished in favour of a simpler, clearer and more standard/appropriate safety net of minimum terms and conditions of employment in Australia.**

Australia has an unnecessarily complicated safety net under the *Fair Work Act 2009* (FW Act); featuring a confused hybrid of both awards and National Employment Standards (NES). An employer seeking to understand and comply with their employment obligations needs to discern their responsibilities and obligations from a NES which is more than 16,000 words, in addition to the more than 2 million words contained across 122 awards. Even where the employer knows which award applies to them, the employer has to deal with perhaps a 17,000 word plus document in addition to the NES.

The rest of the developed world sets an employment safety net that is not only simpler, shorter and more straightforward, but in almost all cases there is one safety net for the community, not a safety net that differs markedly from industry to industry. To our knowledge, no other industrialised economy attempts to have a dedicated industry safety net for each major industry (i.e. 122 modern awards) in addition to statutory minimum standards.

To begin solving this significant issue, AMMA endorses the recommendation in ACCI's submission to this Committee, namely:

²⁸ Productivity Commission, [Final Report into the Workplace Relations Framework](#), 2015.

²⁹ AMMA, [Getting Back on Track: Delivering the Workplace Relations Framework Australia Needs. The resource industry's submission to the Productivity Commission Review of the Workplace Relations Framework](#), 13 March 2015.

Longer term consideration needs to be given to ensuring there is a safety net regulating work that it is flexible enough to be relevant to and appropriate for all who rely on it and must apply it – and to doing so in the context of changing markets and work technologies. This cannot entail simply grafting on more regulation and restrictions on what we already have – which is a phonebook sized Act of such complexity as to be completely unfathomable to most employers and employees.

Such a solution is not to cut or undermine a strong safety net in Australia's employment system, but is rather to create a far more practical set of minimal standards that apply to all industries, are more productively and efficiently implemented, and more easily understood and complied with.

b) **Agreement making options should be expanded to facilitate employment arrangements, both individual and collective, directly between employees and employers.**

Australian employers and employees have become too restricted in the choices they can make when it comes to agreeing on employment arrangements. These restrictions are ultimately incompatible with the desired flexibilities of modern day workers and employment trends in relation to 'future of work' considerations.

Much of this could be solved by allowing greater freedoms and options for employees to negotiate directly with their employer without restrictive and complex regulations and unnecessary third party intervention.

Direct agreements between employers and individual employees were widely used in the resource industry before the Fair Work Act replaced them with 'Individual Flexibility Arrangements' (IFAs). Despite their name, IFAs have failed to deliver genuine individual flexibility which meets the needs of both employers and employees.

Although less than 11% of private sector employees choose to join a union, the ability for employers and groups of employees to enter into genuine non-union collective agreements was also removed by the Fair Work Act. Now, employers who wish to bargain directly with their own employees must also negotiate with a trade union, even if the majority of employees are not union members and/or do not want unions involved.

The lack of any option for statutory individual bargaining is a significant flaw in our workplace relations system, is a retreat from a proven and effective approach, and a significant bar to freedom of choice and self-determination for working Australians.

Fixing this would lead to a more flexible system that makes it easier, faster and less costly to establish agreements and thus employ people as our economics and workplaces continue to evolve.

c) **Our workplace relations system must be modernised to ensure it is adaptive to increasingly diverse forms of employment.**

As already noted in this submission, flexibility is highly valued and sought after by employees of all ages and genders. Individuals are demanding greater choice and flexibility in how and where they work.

It is clear that Australia's current model of employment regulation is poorly suited to the employment demands of modern day businesses, employees and economies. Work is no longer built around fixed hours and fixed work locations, and has as its value proposition greater flexibility, convenience and freedom of choice for the individual.

In its *Future of Work and Skills* report³⁰, the OECD states that a key priority for G20 countries seeking to take advantage of 'mega-trends shaping the world' is to:

Design labour market institutions (e.g. minimum wages; employment protection; health and safety regulations) which encourage employers to seize the opportunities offered by technological change and globalisation, while making sure that the risks are not borne disproportionately by workers in the form of low pay, precariousness and poor working conditions.

It is important that policy settings support the broadest possible range of options for workforce participation to meet our diverse workforce needs and that flexible work forms such as casual and part-time employment, temporary/agency work and independent contracting/self-employment be allowed to play a critical role in achieving this.

Competing economies will unquestionably ensure their work options are as flexible and adaptable as possible, and that they are able to harness the contributions of the diversity of their communities. Arrangements that limit flexibility in management and work practices hinder productivity growth, employment (especially in the area of future skills needs) and the ability to adapt to changing market conditions.

Australia cannot allow itself to be placed at a further competitive disadvantage by trying to shoehorn new and emerging work options into century old work models.

³⁰ Organisation for Economic Co-operation and Development (OECD), [Future of Work and Skills](#), February 2017, p 3.

5. Summary of Recommendations

Supporting Technological Innovation

1. Investigate how the Australian Government can ease the impact on regional economies from having less resources and energy industry employees permanently based in regional communities, and respond accordingly.
2. Review the Australian Government's funding and other support mechanisms for 'future of work' skills particularly in the areas of science, technology, engineering and mathematics (STEM).
3. Review the current funding model and effectiveness of METS Ignited and other 'new technology' training and development initiatives to ensure the future skills demands of industry are being supported.
4. Commit further government support for research and development on new innovative technologies, as well as training for the associated skills and expertise, required to keep Australia's resources and energy industry globally competitive.

Flexibility and the Future of Work

5. Ensure any future government approaches to "future of work" matters seek to encourage and support the greater flexibility that modern day Australian workers are seeking.
6. Provide a greater range of options in employment arrangements that enable business to achieve productivity gains associated with working outside traditional rigid employment arrangements.

Australia's Workplace System – Removing the Barriers

7. Implement the vast bulk of improvements to Australia's workplace relations system recommended by the Productivity Commission following its comprehensive 2015 review.
8. Abolish Australia's awards system – the only one of its kind in the world - in favour of a simpler, clearer and more standard/appropriate safety net of minimum terms and conditions of employment in Australia.
9. Expand agreement making options to facilitate the making of employment arrangements, both individual and collective, directly between workers and employers.
10. Modernise Australia's workplace relations system, including through targeted de-regulation and increased flexible work options, to ensure it is adaptive to increasingly diverse forms of employment arising from current and future work trends.