National Resources Sector Workforce Strategy: Addressing the Skills and Workforce Needs of the Resources Sector

December 2013
Executive Summary

Since the National Resources Sector Workforce Strategy was launched in March 2011, industry, governments and the tertiary education sector have worked to address the skills and workforce needs of the resources sector by implementing the Strategy’s 31 recommendations. The implementation of these recommendations has led to improvements in the way that the sector works to meet its skills and workforce needs. This report details the implementation activities undertaken by industry, governments and the tertiary education sector as part of the Strategy between March 2011 and November 2013. In addition to this work, industry has undertaken action outside of the Strategy to address its workforce needs.

The recommendations were identified in the National Resources Sector Employment Taskforce’s final report; *Resourcing the Future*. The Taskforce was established in November 2009 to help secure the more than 70,000 additional skilled workers predicted to be needed for major resources projects over the following five years.

The Strategy took a collaborative approach to addressing skills and workforce needs with responsibility for the implementation of the 31 recommendations shared between industry, governments and the tertiary education sector. The recommendations fall across seven key priority areas: promoting workforce planning and sharing of information; increasing the number of trade professionals; graduating more engineers and geoscientists; meeting temporary skills shortages with temporary migration; strengthening workforce participation; forging stronger ties between industry and education; and addressing the need for affordable housing and community infrastructure.

Under the Strategy, industry and governments have trialled new, collaborative, sector-wide approaches to workforce planning for projects. These approaches aim to create a more cohesive and pro-active sector that can better predict skills and workforce needs for the sector, Australia-wide. Different case management approaches have been shared between government and approval bodies, regional workforce plans have been prepared that include strategies to manage the impacts of resources projects and resources sector skilled needs that are reported annually by the Australian Workforce and Productivity Agency. A multi-year trial is also underway to determine predicted workforce needs for large projects through the use of workforce impact statements provided by projects during their planning stage.

Recommendations under the Strategy have established a range of approaches to increase the skilled workforce for the resources sector. Industry-led initiatives have worked to increase the skilled workforce for the sector by providing fast-track adult apprenticeships for experienced workers to gain a full trade qualification and by attracting workers to become fully qualified members of the sector’s workforce. The Australian Government has also partnered with industry through a co-contribution model to meet the costs of re-skilling and up skilling workers. Regions have also worked to address the individual skilling needs of their region through the establishment of regional strategies, and training providers are working with resources and construction employers across the country to build pathways into the sector for job seekers. Universities and industry have also established closer links under the Strategy, working collaboratively to improve industry engagement for engineering students and investigate para-professional roles in the engineering sector.

The sector has also worked to create a flexible, mobile workforce through strengthening workforce participation. Under the Strategy, the information and processing times for skilled worker visas have been improved to enable resource projects to better meet their workforce needs through the use of temporary migration. Industry and governments have also worked collaboratively to help engage more women and Indigenous people in the resources sector to connect new workers to projects through Fly-in, Fly-out arrangements. A National Foundation Skills Strategy has been agreed by governments to create a framework to improve the education and employment outcomes for adult Australians with low levels of foundation skills.

Industry and the education sector have also worked together to improve pathways between study and employment in the sector, including the development and promotion of kits which provide career advice. Work has been undertaken to improve employment pathways for school students through partnerships between schools, education providers and industry, and the integration of recognised vocational learning and improved work-readiness has been integrated into the proposals for the Australian Curriculum, which, when fully implemented, will also support an increase in school students participation, attainment and engagement in mathematics and science.
The Strategy has worked to address the needs of resource communities and worksites, with work being undertaken to implement a number of national and state-based initiatives. Research has also been undertaken to examine the export outlook for Australia’s bulk resource commodities to assess the potential needs for large scale infrastructure investment in resource regions.

Through implementing the Strategy, the resources sector has trialled new, innovative and alternative approaches to skilling and training, investigated more productive workplace planning processes and explored new mechanisms for tracking and future-planning its workforce.

This report details how each of the 31 recommendations have been implemented, information about additional projects being implemented across the sector, and the achievements that have been reached over the past two and a half years.
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Conclusion

Appendix A

Project Workforce Demand Template (Recommendation 1.1)

Appendix B

National Apprenticeship Program (NAP) (Recommendations 2.1, 2.2 and 2.4)

Appendix C

Minerals Industry National Associate Degree (MINAD) Project and Enhancing Industry Engagement in Engineering Degree Programs Project (Recommendation 3.2)

Appendix D

MCA-Australian Government Memorandum of Understanding on Indigenous Employment and Enterprise Development (Recommendations 5.2, 5.6 and 5.7)

Appendix E

Industry-based Fly-in Fly-out (FIFO) Coordinators (Recommendation 5.4)

Key Acronyms
National Resources Sector Workforce Strategy Overview

The National Resources Sector Workforce Strategy was a sector wide plan to address the skills and labour needs of the resources sector. The Strategy aimed to assist the resources sector to meet its increasing demand for skilled labour, maintain national momentum on addressing skills shortages, and further build Australia’s productive capacity.

The National Resources Sector Workforce Strategy comprised 31 specific recommendations across 7 key areas:

1. Promoting Workforce Planning and Sharing of Information
2. Increasing the Number of Trade Professionals
3. Graduating More Engineers and Geoscientists
4. Meeting Temporary Skills Shortages with Temporary Migration
5. Strengthening Workforce Participation
6. Forging Stronger Ties between Industry and Education
7. Addressing the Need for Affordable Housing and Community Infrastructure.

Implementation of the 31 recommendations has progressed significantly over the past two and a half years. Since the Strategy was announced in March 2011, implementation activities that address all of the Strategy's recommendations have become part of standard business practice for industry and the tertiary education sector.

In addition to implementing the 31 recommendations, the Strategy has led to increased collaboration between, and within, governments, industry bodies and the tertiary education sector. Further, additional projects have been undertaken across industry and government to assist the resources sector to address its changing skills and workforce needs.

While continued action will be required in each of the seven key areas to build on the specific activities under the Strategy, the gains made under the Strategy have laid a solid foundation for helping the sector meet its current and future skills and workforce demands.

History of the National Resources Sector Workforce Strategy

The National Resources Sector Workforce Strategy comprised all 31 recommendations made by the National Resources Sector Employment Taskforce in its final report, Resourcing the Future.

The National Resources Sector Employment Taskforce was established in November 2009 to help secure the more than 70,000 additional skilled workers needed for major resources projects over the upcoming five years.

The Taskforce's aim was to develop a comprehensive plan to meet the skills needs of more than 75 major resources projects expected to commence in Australia over the five years from 2009. The Taskforce was chaired by the Hon Gary Gray AO MP, then Parliamentary Secretary for Western and Northern Australia. The Taskforce’s report, Resourcing the Future, was released publicly on 17 July 2010.

On 15 March 2011, Senator the Hon Chris Evans, then Minister for Tertiary Education, Skills, Jobs and Workplace Relations announced that the Australian Government had accepted the report and that the National Resources Sector Workforce Strategy would implement all 31 recommendations.

Implementation of Recommendations

Each of the 31 recommendations that form the Strategy had an identified lead organisation which managed the recommendations’ implementation in collaboration with stakeholders.

An implementation plan for the 31 specific recommendations was developed by industry and governments and endorsed by the National Resources Sector Workforce Strategy Steering Committee. This plan articulated how stakeholders would work together to achieve each recommendation.

The following pages articulate how each recommendation has been implemented and has become part of standard business practice for the sector.
Governance and Management

The National Resources Sector Workforce Strategy Steering Committee had responsibility for overseeing the implementation of the Strategy. The Steering Committee comprised senior officials from government agencies, industry and training sector organisations.

The Steering Committee was chaired by the then Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE) and membership comprised: the then Department of Resources, Energy and Tourism (DRET), Queensland Government, Western Australian Government, Minerals Council of Australia (MCA), Australian Petroleum Production and Exploration Association Ltd (APPEA), Australian Constructors Association (ACA), Australian Council of Trade Unions (ACTU), Civil Contractors Federation (CCF), TAFE Directors Australia (TDA), DIICCSRTE.

While the official role for the National Resources Sector Workforce Strategy Steering Committee has now come to an end, members will continue to act as champions for addressing the skilling and workforce needs of the resources sector both within their own organisations and cooperatively as need arises.

Secretariat and coordination of the Strategy was undertaken by the then Department of Industry Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE).
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1. Promoting Workforce Planning and Sharing of Information

Recommendation 1.1 – Workforce impact statements for large projects

That resources companies be required to provide a workforce impact statement using a standard template to outline the workforce needs of projects ($40 million+) at the same time as they apply to the relevant state or territory government for project approval. Companies should then provide the relevant state or territory government with more detailed workforce information at the time of the Final Investment Decision, prior to the construction of the project and before the project commences operations. This information should include proposed sources of labour and training plans. This approach should be trialled in Queensland, Western Australia and one other state with a view to being implemented nationally from 1 January 2012. This is recommended as an information requirement, not a further approval requirement.

Lead: Department of Industry (formerly the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE))

Implementation: Together with industry and state and territory governments, the Australian Government has developed a nationally consistent Project Workforce Demand Template (at Appendix A) incorporating best practice from state and territory governments. The Template assists new resources projects to articulate their skills and labour needs so that actions can be taken to attract and train the skilled workers required to meet project development timelines. Practical workforce information for large resources projects will help to inform industry, regional, state and national workforce planning, and assist the national training and education system to respond to labour and skills demands as they arise.

The Template is being trialled in South Australia to assist in articulating labour and skills needs across resource projects, as demand for skilled labour in specific occupations changes over time. The pilot is expected to run for three years (2012-2015), to allow sufficient projects to move from the initial application stage through to construction commencement. By collecting standard workforce planning data from major projects, industry and education providers together with governments will be better informed to respond to areas of skills shortages and take action to ensure momentum is maintained on addressing skills gaps and building production capacity. The trial period allows for state and territory governments to collect sufficient data to inform the future roll-out of the Template.

Further Information

The Project Workforce Demand Template was developed by the Queensland, Western Australian, South Australian, Northern Territory and Australian Governments. Industry consultations were undertaken in 2011-12 and included discussions and forums with large and small resource sector companies, industry organisations and peak bodies, unions and the training and education sectors, to determine the most useful industry information to be collected.

The Workforce Demand Template seeks to standardise and capture the core information that participating jurisdictions currently gather through their existing mechanisms. The Template is designed to replace existing practices, not be an additional burden on industry.

The Template outlines year-by-year, the total number of workers involved, represented by fulltime equivalents, in the project and a detailed breakdown at the 'Occupation' level (6-digit code Australian and New Zealand Standard Classification of Occupations (ANZSCO) code). ANZSCO provides uniform descriptors of occupations that ensure data collected is comparable and cumulative demand can be assessed across jurisdictions and with Australian Bureau of Statics (ABS) data. Information on ANZSCO codes is available from the ABS.

To avoid duplication and increase the quality of data provided, the Template captures workforce demand information on a per project basis, as part of existing planning and approval processes. This approach ensures that the workforce needs of resources companies operating across multiple states are captured accurately. In order to capture accurate data as a project evolves, the Template is updated by resources project owners at the following three decision stages of a project’s lifecycle:

- Environmental Impact Statement (EIS);
- Financial Investment Decision (FID); and
- Appointment of major (tier one) contractors such as Engineering, Procurement, and Construction Management (EPCM) companies.
These three stages were identified through the industry consultation process and were broadly agreed to be points in a project’s lifecycle where workforce information was already available for key project decisions. In some cases information was already provided to jurisdictional governments and other bodies. There are a number of benefits resulting from the selection of lifecycle-based triggers for data collection including:

- data is already available at these points;
- a reduction in compliance cost and burden on industry; and
- data provided at EIS, FID and appointment of contractors will capture changes as a project evolves through its lifecycle.

The Template is available at Appendix A.

**Recommendation 1.2 – Regional workforce plans to manage the impacts of major resources projects**

That regional development organisations lead the development of regional workforce plans that include strategies to manage the impacts of major resources projects on the community and maximise opportunities for local people. Resources companies, education and employment service organisations, relevant local, state and Australian Government departments could be consulted in the development of such plans. A ‘region’ should be as defined by the state or territory government.

**Lead:** Department of Infrastructure and Regional Development (formerly the Department of Regional Australia, Local Government, Arts and Sport (DRALGAS)) and the Western Australian Department of Training and Workforce Development (DTWD)

**Implementation:** Regional Workforce Development plans that include strategies to manage the impacts of resources projects have been developed for many regions.

**Western Australia** – The Western Australian State Government together with its regional workforce development alliances have released regional workforce development plans for six of the State’s nine regional areas for the period 2013-2016 (i.e. the Goldfields/Esperance, Kimberley, South West, Great Southern, Pilbara and Wheatbelt regions). Plans for the remaining three regional areas (the MidWest, Gascoyne and Peel) are scheduled to be finalised during 2014.

The regional workforce development plans outline key challenges to workforce development in each of the nine regions of the State and provide industry, government and community sector strategies at a local and State level to address them. These strategies are aligned to the five strategic goals of Skilling WA.

To generate regional ownership of the plans, regional workforce development alliances have been established for each of the State’s nine regions. Membership on the regional alliances includes representation from local business, industry groups, local governments (representing community aspirations), relevant government agencies and the local State Training Provider. The role of each alliance is to provide leadership and oversight for the development and implementation of regional workforce development plans. The role of the Department is to provide planning support (including funding) for the development and updates to regional workforce development plans.

**South Australia** – The Resources and Engineering Skills Alliance (RESA) was established in 2007 to collaborate between industry and the SA State Government as a strategic response to skills shortages in the resources sector. RESA has joined forces with stakeholders to address skills and training needs, workforce planning, workforce development and retention strategies. RESA has undertaken the Workforce Study for the Resource Sector in the Eyre Peninsula which considered the availability of a skilled and qualified workforce to meet the requirements of the resources sector in response to significant increase in mining activity in the region. Following this, RESA was also scoping a broader state-wide workforce project to build on the initial study.

**New South Wales** – The Resources & Infrastructure National Industry Skills Council (SkillsDMC) is strongly committed to engaging industry to improve the capacity and capability of the workforce at regional, community and enterprise levels. SkillsDMC established a number of networks comprising representatives of the five industry sectors across NSW which provide the basis for gathering information and feedback on workforce development matters and as an avenue to provide information.
Queensland – Implementation of workforce development initiatives is ongoing in the Surat Basin following the completion of a detailed analysis of labour demand over the period to 2031. A key project has been the development of initiatives to respond to the growth in the community services and health sector workforce required as development across the region proceeds.

Energy Skills Queensland has launched the 2013 Queensland CSG to LNG Workforce Plan which has revealed peak workforce estimates have more than doubled original assessments into future industry growth in Queensland. The Workforce Plan outlines the operations and maintenance workforce needed in Queensland from 2014 to 2034. More information about the Plan is available at: www.energyskillsqld.com.au/.

A workforce plan has been developed for Gladstone to identify the major skills and workforce needs of the region. A key project underway is the Gladstone Workforce Development Strategy.

In the Bowen and Galilee Basins a number of targeted skills development initiatives have been undertaken by Skills Queensland with the industry to build the supply of skilled workers in key occupations.

Northern Territory – In the Northern Territory, the Major Industries Training Advisory Council is working, with support from the Australian Government, to strengthen the capacity of small to medium sized enterprises in the Northern Territory to engage in new resources and construction projects. As part of the project, the Council has established a workforce planning advisory service for small to medium size enterprises in the Northern Territory, intended to assist these businesses to capitalise on new resource and/or construction projects in the Territory. The Council is also working in partnership with the Chamber of Commerce Northern Territory, to deliver workshops on workforce planning and one-on-one sessions covering employment fundamentals with businesses. Indigenous workforce planning specialists are also developing Indigenous engagement strategies with the businesses.

Department of Infrastructure and Regional Development (formerly DRALGAS) has worked closely with Regional Development Australia (RDA) committees to promote the importance of regional workforce planning, including the incorporation of the issue into regional planning activities such as RDA Regional Plans and Roadmaps. In addition, a small number of RDA committees conducted regional workforce coordinator forums in June and July 2012 on behalf of the Department of Employment (formerly DEEWR).

The approach to Regional Plans for implementation in 2013-14 which reinforces the importance of including coverage of regional workforce planning. RDA committees are also using the key determinants on long-term regional economic growth, as agreed by the Council of Australian Governments (COAG) Regional Australia Standing Council, to inform their activities. The key determinants are:

- Human capital, particularly education and skills;
- Sustainable (economically, environmentally and socially) communities and population change;
- Access to international, national and regional markets;
- Comparative advantage and business competitiveness; and
- Effective cross-sectoral and intergovernmental partnerships (including through place-based approaches) and integrated regional planning.

Recommendation 1.3 – Skills Australia to report annually on the status of skills shortages in the resources sector


Lead: Australian Workforce and Productivity Agency (AWPA)

Implementation: AWPA (formerly Skills Australia) has published three annual reports on skills shortages in the resources sector and provided them to both Ministerial Councils:

- a 2011 interim report on the resources sector skills needs, released in July 2011;
- the Resources Sector Skill Needs - Report 2012, published in October 2012; and

All of these reports are available at http://www.awpa.gov.au/publications/Pages/default.aspx.
Recommendation 1.4 – High priority placed on training as a means of addressing skills needs

That resources and construction companies place a very high priority on training as a means of addressing their current and future skills needs and consider adopting a training culture similar to their approach to safety.

**Lead:** Minerals Council of Australia (MCA), Australian Petroleum Production Exploration Association (APPEA) and Australian Constructors Association (ACA)

**Implementation:** Peak industry bodies including MCA, APPEA and ACA have worked to quantify skills and workforce development needs, and to initiate actions to meet labour and training demands. The MCA contracted the National Centre for Vocational Education Research (NCVER) to undertake a detailed study into Apprenticeships/Private Training Spend. This study quantified the full scope of apprenticeship take-up by the minerals sector and its contractors, and the extensive private training spend undertaken by the sector. The report, *Training and education activity in the minerals sector* is available at [http://www.minerals.org.au/news/training_and_education_activity_in_the_minerals_sector](http://www.minerals.org.au/news/training_and_education_activity_in_the_minerals_sector).

Recommendation 1.5 – Case management approach by state and territory governments to provide a single point of contact for companies

That state and territory governments consider adopting a case management approach, such as that provided in South Australia, which involves the appointment of a senior, experienced government employee to provide companies with a single point of contact for all of their government approvals and regulatory requirements, including workforce planning.

**Lead:** South Australian Department of Further Education, Employment, Science and Technology (DFEEST)

**Implementation:** State and territory governments have investigated adopting a case management approach to provide companies with a single point of contact for government approvals, regulatory requirements and examples of best practice approaches for skills and workforce development.

South Australia employs a ‘One stop shop’ Lead Agency Framework which includes a case management approach aimed at advancing resource exploration and mining developments in the State. Underpinning this industry approach is the PACE 2020 initiative which focuses efforts on four key work programs specifically designed to drive forward mining development. It acts as the primary mechanism in building South Australia’s international profile and strengthening investor confidence in the state’s resources sector. PACE is premised on established core principles of economic stimulation, accessibility to land, development of sustainable exploration and mining, increasing cultural awareness and balancing development with the environment. Information and materials on PACE can be found at [http://minerals.dmitre.sa.gov.au/pace2020](http://minerals.dmitre.sa.gov.au/pace2020).

In addition, the SA Government has established the Resources and Engineering Skills Alliance (RESA) [http://www.resa.org.au/about.aspx](http://www.resa.org.au/about.aspx) to develop and deliver innovative responses to meet the current and future workforce and skills demands of the resources sector in South Australia. RESA plays a key role in highlighting and promoting industry best-practice case studies, including case management approaches used by state and territory governments across Australia, to facilitate the sharing of current practices Australia-wide. Materials will be published and updated on RESA’s Hot Rubble website [www.hotrubble.com.au](http://www.hotrubble.com.au) to ensure currency of information available to industry.


The NSW Government provides a single point of contact within the Resources and Energy Group of the Department of Trade and Investment, to facilitate the planning and development of new mining projects, including access to infrastructure, mining leases and development approval. Potential exists to expand this role to include workforce planning.
2. Increasing the Number of Trade Professionals

Recommendation 2.1 – Increasing the number of apprentices in the resources sector

That the resources sector significantly increase the number of apprentices it employs. The sector currently employs considerably fewer apprentices than would be expected given its share of trade employment.

**Lead:** MCA and APPEA

**Implementation:** Industry peak bodies are working collaboratively with employers and governments to develop innovative trade training solutions, including by using new digital technologies.

The MCA commissioned the NCVER to undertake a study investigating the contributions of minerals operators to training. The study found that the minerals sector spent just over $1.1 billion on training during the financial year ending 30 June 2012, equivalent to almost 5.5% of total payroll. The study also found that almost 98% of this training expenditure is industry-funded. The report is available at: [http://www.minerals.org.au/news/training_and_education_activity_in_the_minerals_sector](http://www.minerals.org.au/news/training_and_education_activity_in_the_minerals_sector).

The National Apprenticeships Program (NAP), supported by the MCA, ACA, APPEA and other industry and education stakeholders and Australian Government, recognises the existing skills of experienced workers, and through a robust recognition of prior learning process and additional training, provides the sector with experienced workers with a full trade qualification within 18 months. To September 2013, the NAP has received 9,183 applications from talented and experienced Australians each looking for the opportunity to upskill and join the resources and energy sector and willing to work anywhere in Australia under FIFO arrangements. Of these numbers, 5,526 have been identified as eligible to proceed through the selection process, the first 186 adult apprentices have already started work, and sixteen NAP participants have graduated. To the end of September 2013, NAP has conducted intakes for Anglo American Metallurgical Coal, McMahon, Bechtel LNG, John Holland Group and Leighton Contractors. The NAP will continue being funded by the Australian Government to 2014 at which point industry will assume management and funding of this initiative.

Additional information about the NAP is available at Appendix B.

Recommendation 2.2 – Trial of alternative apprenticeship models

That the Australian Government work with industry, unions, training providers, state and territory governments, Industry Skills Councils, state skills bodies and industry associations to trial alternative apprenticeship models with a view to increasing the number of trade-qualified people in occupations and locations where a shortage is expected (e.g. electricians and welders). These could include any or all of the following:

- accelerated competency-based training with greater industry investment in workplace supervision and mentoring
- improved induction to apprenticeships through stronger pre-apprenticeships, including partnerships with Trade Training Centres
- the use of onsite and mobile training centres at mining sites
- companies entering into a commercial arrangement with other companies to train apprentices on their behalf

**Lead:** Department of Industry (formerly DIICCSRTE)

**Implementation:** Industry, governments and the training sector have worked to implement competency-based apprenticeships more widely across the resources sector. Industry and Government are working in partnership to support the delivery of high quality, competency based apprentice training through initiatives such as Accelerated Australian Apprenticeships and the National Apprenticeship Program (NAP). Industry-led partnerships to to develop and implement innovative strategies that embed competency-based progression and completion are supported through the Accelerated Australian Apprenticeships initiative. The initiative works to support a systemic shift to competency-based progression and completion in vocational education and training with a focus on Australian Apprenticeships.
The NAP provides a fast-track apprenticeship for workers with demonstrated skills and experience and is helping industry to meet its need for fully qualified tradespeople. SkillsDMC, under a project funded by the Australian Government, has also engaged industry brokers to work with employers from the resources and related industries across Australia to help reach the NAP target of 1000 experienced workers placed in fast-track adult apprenticeships. This project is aimed at supporting industry to realise the cost-benefit of advanced adult apprentices compared to traditional four year apprentices, with industry organisations continuing to encourage the promotion of the program amongst their members.

Additional information about the NAP is available at Appendix B.

The Trade Training Centres (TTCs) in Schools Program has adopted a wide range of training, so centres can align with local skills needs, including resources occupations in the appropriate regions. TTCs in a number of regions are now offering resource sector qualifications and have established partnership models with the sector. Further information about TTCs can be found under recommendations 6.2 and 6.3.

A number of projects have been undertaken by industry and the training sector and supported by the Australian Government, to further the implementation of the Strategy. These projects have a focus on assisting workers to improve their skills and training through the development and trial of new, innovative and alternative approaches to training, including the use of mobile devices. Through these projects, industry is building the capacity of its training sector to increase the number of trades people and professionals, and to better connect skilled workers with the sector.

The Challenger Institute of Technology has undertaken a project to develop a real time interactive training model that allows geographically dispersed students to access and operate the ACEPT process plant. Through the project, the throughput of students studying remotely in the oil and gas sector was clearly demonstrated and proved that this innovative approach to training delivery is a viable option for the sector. The project, funded by the Australian Government, also demonstrated the feasibility in allowing emergency response scenarios to be managed remotely.

TAFE NSW, North Coast Institute has undertaken a project to develop the m-Learning Tools for Tradespeople project, which developed an ‘app’ framework to deliver learning content for three units of competency to construction trainees on the job. The project, with support provided by the Australian Government, demonstrated the potential of this tool to provide flexible learning when it is needed, and to utilise construction ‘downtime’ productively. As well as providing access to the two apps that were developed, the ‘app’ framework developed under this project includes a ‘how to guide’ which instructs users on how to create their own app using the model, and provides for learners and their training facilitators to upload evidence of a learner’s competence for assessment purposes when linked to a learner management system.

The Australasian Drilling Institute is piloting alternative training utilising blended delivery strategies, in order to address labour shortages of drillers in the coal, mineral and on-shore gas operations. The project, supported by the Australian Government, has commenced piloting four drilling qualifications which has provided valuable feedback to inform further development and production of the units. Successful adoption of this mode of training delivery which incorporates online learning, a face to face workshop and a practical component will result in increased retention by the learners, less time away from work, and greater opportunities for drillers to move between the minerals mining and the on-shore oil and gas mining sectors.

EE-Oz Training Standards is developing digital support tools for skill sets in new technology and processes for the electrical/electronic trades. The project is identifying training that is conducted by original equipment manufacturers and vendors, and mapping it to national competencies as well as mapping nationally and internationally available support materials to unit/qualification outcomes. The project is also delivering professional development for VET trainers. By addressing skills shortages in the emerging technologies of the electrical/electronic trades areas, the project, with funding provided by the Australian Government, will contribute to increased flexibility and productivity in the resources sector.
Recommendation 2.3 – Coordinated workforce development strategy to boost the number of apprentices in the Gladstone region

That a program be developed in the Gladstone region as part of a coordinated workforce development strategy to boost the number of apprentices, including in electrical trades that will be in high demand in the liquefied natural gas, coal seam gas and construction industries. If successful, this approach could be replicated in other appropriate regions.

Lead: Queensland Department of Education, Training and Employment (formerly Skills Queensland)

Implementation: Additional apprenticeship commencements have been targeted through the Gladstone Workforce Skilling Strategy, Joint Group Training Program (JGTP) and through the Strategic Investment Fund. Skills Queensland commissioned research into the skills and workforce needs of the Gladstone region and has worked with all levels of government represented in Gladstone – local, state and Australian – to implement a workforce action plan to better coordinate the government engagement process for industry and business around skills and training.

Over 170 people have been trained through the Gladstone Workforce Skilling Strategy through Energy Skills Queensland (ESQ). Of these, approximately 25% are Indigenous with a high proportion of those trained having gained employment.

The Queensland Government has also partnered with a number of stakeholder groups to address the skills needs of Gladstone’s industry and is investing in apprenticeships through its User Choice Program and funding of the Central Queensland Institute of TAFE. A number of key employers in the region have committed to innovative apprenticeship programs to grow the number of apprentices in Gladstone.

SkillsTech Australia (STA) in partnership with Santos, opened an Australian-first specialised coal seam gas (CSG) Training Facility at STA’s Acacia ridge Training Centre, in December 2011.

Central Queensland Institute of TAFE has scoped the establishment of a “Gladstone Energy Training Centre”. If established, the facility would have a central role in providing training to support the LNG industry. In the interim the four major CSG/LNG proponents in Queensland are proceeding with their own training arrangements.

ESQ has successfully completed the first year of its three year partnership with Australia Pacific LNG under the Queensland Workforce Skilling Strategy, with 72 per cent of enrolled job seekers achieving successful employment outcomes. Under the Queensland Workforce Skilling Strategy, EQS is working to connect job seekers with regional employment opportunities for the CSG and LNG industry to help address skills shortages in this part of the resources sector.

Recommendation 2.4 – Assistance for workers to achieve full trade status

That relevant Industry Skills Councils (ISCs) work with industry, education and training providers and unions to develop a model to assist people in the construction and resources sectors to achieve full trade status through better access to recognition of prior learning and recognition of current competencies and gap training (where required).

Lead: ISCs

Implementation: Industry and the training sector have worked together to promote strategies to improve the uptake of recognition of prior learning (RPL)/recognition of current competencies (RCC) tools by enterprises and training organisations, and the Australian Government has supported enterprises to help meet their training and workforce needs through the suite of Australian Government Skills Connect initiatives, including projects under the National Workforce Development Fund (NWDF).

Governments and industry have worked together to support the delivery of high quality, competency based apprentice training. Initiatives such as the industry-led NAP have developed comprehensive RPL and selection processes and competency-based gap training to enable suitable experienced workers to gain a trade qualification in 18 months, to address a shortfall in skilled workers within the Minerals and Energy sectors. The NAP provides an advanced entry adult apprenticeship program to up skill talented Australians and offers an alternative employment pathway into an extremely sought-after and competitive sector.
Additional information about the NAP is available at Appendix B.

Industry and Government partnerships are also supported through the Accelerated Australian Apprenticeships initiative and the NWDF. The Accelerated Australian Apprenticeships initiative provides for industry-led partnerships to develop and implement innovative strategies that embed and further the reach of competency-based progression and completion. The initiative works to support a systemic shift to competency-based progression and completion in vocational education and training with a focus on Australian Apprenticeships. Under the NWDF, organisations can identify their current and future business and workforce development needs and work with Registered Training Organisations to tailor the training of existing workers and new workers to address shortages. The NWDF is an innovative, industry-driven model that enables businesses to co-invest with the Government to train, reskill and up skill workers in areas of skills need.

Recommendation 2.5 – Priority placed on up-skilling existing workers

That industry place a priority on up-skilling existing workers in the construction and resources sectors. As a first step, the Australian Government should provide seed funding to relevant Industry Skills Councils (ISCs) to develop workplace learning capacities on major projects.

Lead: ISCs

Implementation: ISCs play a key role in providing workforce development advice to businesses and bring together industry, educators and governments and unite them on a common industry-led agenda for action on skills and workforce development. ISCs have worked to highlight good practice on-site training models and have engaged with industry champions to promote the uptake of workplace learning models across the sector.

Skills Connect, within the Department of Industry, is working to ensure Australia has an appropriately qualified workforce both now and into the future. It does this by working with Australian employers and industries to help them improve their productivity by building and recognising the skills of their workers. Funding is available to enterprises to help them train their workers or to encourage them to take on apprentices and trainees. Job seekers can access assistance with their literacy, numeracy and language skills, while those who have undertaken training overseas can seek to have this recognised.

Skills Connect has relationships with a range of stakeholders including industry and industry peak bodies, employee representative organisations, Australian Government departments and agencies, state and territory governments, training organisations and program delivery brokers. Through these relationships, Skills Connect is reaching out to Australia’s 2.1 million businesses to provide assistance and opportunities to skill their workforce. For more information on the range of Government skills and workforce development programs and funding visit Skills Connect at www.skillsconnect.gov.au

The National Workforce Development Fund, one of the Skills Connect initiatives, provides another avenue through which the Government is partnering with industry through co-contribution to meet the cost of training in industries that need to re-skill or up-skill their workers with the aim of increasing productivity. Another important aspect of the fund is that as training involves workers attaining nationally recognised qualifications it also aims to increase the mobility of labour within the resources sector.

Every year, each of the 11 Industry Skills Councils and Auto Skills Australia prepares an Environmental Scan of their respective industries. Based on real-time industry views and evidence from across Australia, the Scans operate as ‘early warning systems’ and give readers a clear understanding of the factors currently shaping and impacting on workforce development and how well the products and services of Australia’s tertiary system are responding. SkillsDMC and EE-Oz produce Environmental Scans every year for the Australian Government on the resources and infrastructure industry and electrocomms and energy utilities industry, which reflect on the substantial changes to the world economic climate and the subsequent impact on the skills pool. Skills DMC Environmental Scans are available at: http://www.skillsdmc.com.au/skillsdmc_reports/environmental_scans. EE-Oz Environmental Scans are available at: http://www.ee-oz.com.au/index.php/publications/21-reports-publications/121-environmental-scans.
Industry has trialled the development of new, innovative and alternative skilling and training opportunities to up-skill existing workers. These approaches include the use of new technologies to facilitate training, thereby reducing the need for workers to be ‘off-site’ in a traditional training centre, instead being able to train and up-skill during periods of flux and downtime.

Maritime Employees Training Limited (METL) have undertaken a project aimed at developing and implementing a strategy to upgrade the competence of deckhands working in the offshore oil and gas sector to attain a Certificate III in Transport and Distribution (Maritime Operations – Integrated Rating). The project has also resulted in the development of a research tool that has created a database of information about the cohort participating in the project, including the number of deckhands that are working in this sector. This will permit greater utilisation of this cohort, allowing them to move between the offshore oil and gas sector and the blue water shipping sector. Seed funding for this project was provided by the Australian Government.

**Recommendation 2.6 – Employment services providers to work with unemployed tradespeople and technicians to link them with employment in the resources or construction sectors**

That employment services providers work with unemployed tradespeople and technicians to gauge their interest in working in the resources or construction sectors, assess their skills and aptitude for employment in these sectors in conjunction with industry and facilitate any up-skill required to link them to a job.

**Lead:** Department of Employment (formerly the Department of Education, Employment and Workplace Relations (DEEWR))

**Implementation:** Job Services Australia has worked with resources and construction employers to build pathways into the resources and construction sectors for job seekers. As part of their delivery of employment services, Job Services Australia providers have worked, and will continue to work, closely with employers to identify employment opportunities and the skills employers need to fill vacancies including in the resources and construction sectors. Job Services Australia providers have also worked with job seekers, including unemployed tradespeople and technicians, to provide them with the right skills, training and other support to assist them to take up these employment opportunities. In addition to linking job seekers to local jobs, where jobs are in other locations including regional and remote areas Job Services Australia providers can, where appropriate, use the Employment Pathway Fund or the Connecting People with Jobs or Move 2 Work. Connecting People with Jobs was available from 1 January 2011 to 30 June 2013 and Move to Work became available from 1 July 2013 to assist job seekers to relocate to take up an employment opportunity.

Employment opportunities, including those in the resources and construction sectors, can be advertised on the Australian JobSearch website by either Job Services Australia providers or employers. Australian JobSearch, which can be found at [www.jobsearch.com.au](http://www.jobsearch.com.au), is the Government’s free public website that assists job seekers with finding employment and employers with finding workers.

Jobs in the resources sector can also be placed on the Resources Sector Jobs Board ([www.jobsboard.gov.au](http://www.jobsboard.gov.au)) which provides a dedicated internet page for jobs in or supporting the resources sector. This jobs board is a co-branded site that is managed by the Australian Government in partnership with SEEK Australia.

AMMA Skills Connect is working to connect workers to the resources sector, with a focus on connecting unemployed tradespeople and technicians, displaced workers and workers looking to transition into the sector. Under the project, funded by the Australian Government, AMMA has developed an industry-led model to connect labour and skills supply and demand in the sector, including partnering with Job Services Australia, Registered Training Organisations (RTOs) and recruitment and employment organisations to identify and realise opportunities for workers to engage with the sector.
**Recommendation 2.7 – Assistance to unemployed, unqualified construction workers with significant experience to achieve full trade status or an adult apprenticeship**

That construction workers with significant experience but without trade qualifications who lose their jobs be provided with recognition of prior learning and recognition of current competencies assessments, training needs analysis and gap training to assist them to achieve full trade status or an adult apprenticeship.

**Lead:** Department of Employment (formerly DEEWR)

**Implementation:** As part of their delivery of employment services, JSA providers have, and will continue to, work with job seekers to identify the assistance required to enable them to gain sustainable employment. This assistance can, where appropriate, include use of the Employment Pathway Fund for skills assessments, training and recognition of prior learning to assist job seekers achieve full trade status or an adult apprenticeship. Job Services Australia provides job seekers with access to a range of education and training opportunities to help them get the qualifications they need to participate in the workforce, including in the construction industry.

AMMA Skills Connect is also working to develop linkages between the resources sector and other sectors undergoing structural adjustment to provide opportunities for displaced workers to transition into the resources sector. In Victoria, AMMA is working with Jobs Services Australia, recruitment agencies and outplacement services to connect with displaced workers seeking opportunities in the resources sector, and is engaging with industry to identify areas of skills and employment demand.

**Recommendation 2.8 – Identifying tradespeople for further vocational education and training qualifications**

That the Australian Government and state and territory governments work with industry and education and training providers to broker tradespeople with an interest and aptitude for training, assessing, mentoring and supervising into Certificate Level IV or Diploma in Training and Assessment, or other relevant vocational education and training qualifications.

**Lead:** Department of Industry (formerly DIICCSRTE)

**Implementation:** The Australian Government is providing access through co-funding initiatives to up-skill workers through Australian Government’s Skills Connect, including training of mature aged workers. The Master Builders Association of Victoria (MBA Vic) has developed the Building Leadership Simulation Centre (BLSC) to enhance construction management and safety training. The BLSC has created simulated training exercises that are based on authentic situations, with companies providing issues and challenges faced on commercial sites, which have been filmed and included in the courses. A cloud-based CITRIX program has been deployed, which has generated the ability for worldwide collaboration in the project’s delivery, allowing multiple parties to store, share and work on live documents simultaneously. The BLSC will engender innovative delivery of training and provide scope for its use in professional development, talent identification, staff development and retention for the construction sector. This project was supported by funding from the Australian Government.
3. Graduating More Engineers and Geoscientists

Recommendation 3.1 – Ties between universities and the resources and construction industries to be formalised and strengthened

That universities with a teaching profile that delivers professionals to the resources and construction sectors formalise and strengthen their ties with each other and industry, and articulate their role and strategic intentions in their mission statements.

Lead: Department of Education (formerly led by DIICCSRTE)

Implementation: The Australian Government has worked with higher education providers and industry to more closely align course delivery profiles with skills shortages. Through mission-based university compacts, several universities have articulated strategies for meeting the needs of the resources sector. A number of Compacts also note their intentions to further develop their engineering offerings, including engaging with the wider community to ensure work-ready graduates. Compacts are available on the Department of Innovation website.

Recommendation 3.2 – Structured, work-integrated learning opportunities for all first and second-year engineering students

That the Australian Council of Engineering Deans (ACED) work with the MCA, APPEA and ACA (taking into account work being done by the Australian National Engineering Taskforce) to encourage their members to provide structured, work-integrated learning opportunities, such as internships and mentors, for all first and second-year engineering students.

Lead: MCA and ACED

Implementation: Industry and universities have agreed to actions to increase numbers of engineering and geosciences graduates and offer work integrated learning opportunities earlier in the course of study. These actions will encourage a more flexible, demand driven education system that helps to meet the needs of the sector.

The MCA is working with industry and the tertiary education sector to develop new, nationally consistent Associate Degrees in Mining Engineering and Mining Geoscience through the Minerals Industry National Associate Degree (MINAD) project. Associate degrees in mining engineering and geoscience will provide the industry with efficient, appropriately skilled para-professional workers as part of their workforce profile. Two year Associate Degree graduates will complement the work of traditional 4 year university graduate engineers and geoscientists, facilitating a more flexible yet targeted approach to engineering in the resources sector. The University of Southern Queensland have agreed to pilot the Associate Degree in Mining Engineering as of October 2013 for delivery in first semester 2014. Additionally, Central Queensland University will pilot both the Associate Degree in mining Engineering and the Associate Degree in Minerals Geoscience in first semester 2014. Professor Ayers is currently developing the marketing materials for industry and education. The MINAD Model will be piloted and evaluated throughout 2013-2014.

The ACED is working with universities and industry to ensure formative engineering degrees are more authentic with respect to industry, and better reflect employment needs. Through its Enhancing Industry Engagement in Engineering Degree Programs project, ACED is working with stakeholders to develop and trial engagement strategies and curriculum interventions that improve students' knowledge and experience of industry practice. Through the project, ACED aims to increase engineering student retention, increase the number of graduates, and improve their employment-related skills.

Industry-based projects are under development for deployment in the middle years of the professional engineering degrees at six universities across the country. These projects complement current teaching methodologies and present practical alternatives for large numbers of students, to extended work placements. Examples include deep water port expansion, water systems configuration and operation for a regional council, and power system design. After trial and evaluation, information about these projects will be disseminated more widely amongst all 35 ACED member universities.

Additional information about the MINAD and Enhancing Industry Engagement in Engineering Degree Programs projects is available at Appendix C.
4. Meet Temporary Skills Shortages with Temporary Migration

Recommendation 4.1 – Improving information and support available for employers wishing to use the subclass 457 visa program

That the Department of Immigration and Citizenship (DIAC) improve the information and support available for employers wishing to use the subclass 457 visa program and agree to finalise applications within five working days of a complete application being lodged with the Department.

**Lead:** Department of Immigration and Border Protection (formerly DIAC)

**Implementation:** The Department of Immigration and Border Protection (formerly DIAC) has introduced fast-tracked visa processing of complete applications for Subclass 457 visas for the resources sector. The department seeks to identify mining industry cases at time of application and process these as a priority. As a result, the median processing time for subclass 457 primary visa applications granted in 2012-13 where the sponsor was operating in the ‘mining industry’ was 9 days. In contrast, the median processing time for subclass 457 primary visa applications (regardless of sponsor industry) granted in 2012-13 was 15 days.

There has been some impact on processing times over the first three months of 2013-14. This was the result of legislative changes on 1 July 2013 which led to a spike in applications. It has taken clients some time to adjust to the requirements and lodge complete applications. While ‘mining industry’ related applications remained a processing priority, challenges in readily identifying related applications has been an issue. Systems changes are being implemented over the next 12 months which will help with identifying groups of employers within the overall caseload. In the meantime, grant timeframes are rapidly returning toward the 2012-13 ‘mining industry’ averages.

In addition, the Department has regional and industry-specific outreach officers located in each State and Territory who are able to provide information to employers around the requirements for using the subclass 457 visa program.

Recommendation 4.2 – Introduction of Enterprise Migration Agreements (EMAs)

That the Australian Government introduce and promote the appropriate use of EMAs for ‘mega’ resources projects. As part of these agreements, the Australian Government should provide for pre-qualification of skilled occupations to create greater efficiency and certainty to project proponents during the critical construction phase.

**Lead:** Department of Immigration and Border Protection (formerly DIAC)

**Implementation:** The Department of Immigration and Border Protection (formerly DIAC) released guidelines for EMAs to streamline temporary migration arrangements after local recruitment and training strategies are exhausted. EMAs are a custom-designed, project-wide migration arrangement suited to the resource sector. EMAs help major resource projects to access labour from outside of Australia to cover genuine skill vacancies that cannot be filled from within the Australian labour market. Further information on EMAs is available at www.immi.gov.au/skilled/enterprise-migration-agreements.htm.
5. Strengthening Workforce Participation

Recommendation 5.1 – National strategy to enhance language, literacy and numeracy skills of job seekers

That the Australian and state and territory governments develop a national strategy to enhance language, literacy and numeracy skills of job seekers to maximise workforce participation.

**Lead:** Department of Industry (formerly DIICCSRTE)

**Implementation:** All jurisdictions collaborated to develop the National Foundation Skills Strategy for Adults, which was endorsed by the Standing Council for Tertiary Education, Skills and Employment (SCOTESC) in November 2011. The Strategy aims to support more Australian adults to develop the foundation skills needed to participate fully in the modern Australian economy and society. It underpins the achievement of the broader COAG educational attainment target of halving the proportion of Australians aged 20 to 64 years without qualifications at Certificate III level and above between 2009 and 2020.

The National Foundation Skills Strategy for Adults, a 10-year framework built around a shared vision for a productive and inclusive Australia, has been developed in a joint initiative by the Commonwealth and state and territory governments, in consultation with key stakeholders, through the COAG SCOTESC.

Australian governments have agreed the following aspirational performance measure for the National Strategy: By 2022, two thirds of working age Australians will have literacy and numeracy skills at Level 3 or above.** Refers to the levels in the Adult Literacy and Life Skills Survey (ALLS), undertaken in 2006 by the Australian Bureau of Statistics. Skill Level 3 on the ALLS scale is considered by COAG to be the minimum level required by individuals to meet the complex demands of work and life in modern economies.

The Strategy brings a national focus to improving education and employment outcomes for working age Australians with low levels of foundation skills (language, literacy, numeracy and employability skills). The Strategy is centred on the needs of the adult learner and includes four key priority areas for action (Raising awareness and commitment to action; Adult learners having high quality learning opportunities and outcomes; Strengthening foundation skills in the workplace; and Building the capacity of the education and training workforces to deliver foundation skills), with agreed actions for each at the national, jurisdictional and systemic level. The Strategy can be viewed and downloaded from the SCOTESC website (http://www.scotese.natese.gov.au/publications).

Recommendation 5.2 – Sustainable job outcomes for local people in the Pilbara and Bowen Basin

That the MCA, with support from the Australian Government, Western Australian and Queensland Governments, relevant Industry Skills Councils and state skills bodies, Job Services Australia providers and unions, work with employers in the Pilbara and Bowen Basin on programs that lead to sustainable job outcomes in the mining sector for local people not currently in the workforce.

**Lead:** MCA

**Implementation:** The MCA-Australian Government Memorandum of Understanding on Indigenous Employment and Enterprise Development (MoU) has been working to increase Indigenous participation in the resources sector. Regional Coordinators have been appointed under the MoU in six designated regions, to identify and progress employment and enterprise development opportunities at the local level. These regions are: the Pilbara, East Kimberley, Gnaala Kaarla Booja, Wiluna, Western Cape York and Central Australia.

In the Pilbara, the Coordinator has been active in the following areas:

- Facilitating the roll out of the drivers license program. There are guaranteed employment opportunities for graduates with 183 enrolled in Roebourne alone.
- Developing functional literacy projects that are provided in the workplace.
- Establishing an Indigenous Natural Resources Management (NRM) hub to enable Indigenous enterprises to further develop &/or be established to undertake NRM contracts in the region.
- Workforce development plans for the Bowen and Galilee Basins are underway with key stakeholders engaged in various elements of the plan.
The WA Reference Group (WARG) provides strategic oversight of activities under the MoU in Western Australia. Membership of the WARG includes representatives of relevant Commonwealth and Western Australian Government departments, the resource industry and local Indigenous organisations.

Additional Information about the MCA-Australian Government MoU on Indigenous Employment and Enterprise Development is available at Appendix D.

Under the MCA-National Farmers Federation (NFF)-Commonwealth Government Skills MoU, signed in 2007, which formalises a partnership to develop collaborative cross-sector skills and employment initiatives, the Regional Agriculture and Mining Industry Training (RAMIT) project pilot was carried out in a partnership between the MoU signatories plus the Skills DMC and AgriFood Industry Skills Councils (ISCs). The RAMIT Project piloted a successful model for provision of tailored cross-industry skilling for mining, agriculture and related industries. The RAMIT project was piloted at two regional locations – Morawa (WA) and Emerald (QLD). Participant outcomes were outstanding: 86% (25 of 29) of the original participants graduated with certificates and 93% (27 of 29) gained employment or returned to advance their studies.

Recommendation 5.3 – Meet workforce needs of resources projects based near regional population centres

That the Australian and state and territory governments consider funding a pilot program for employment brokers to help meet the workforce needs of resources projects based near regional population centres and maximise opportunities for unemployed people. The brokers could work with resources companies, their contractors and service industries to develop recruitment plans and then coordinate the efforts of employment services providers, training organisations, Indigenous organisations and other service providers to meet project needs.

Lead: Department of Employment (formerly DEEWR)

Implementation: 34 Regional Education, Skills and Jobs (RESJ) Coordinators have worked together with other coordinators, regional communities and local businesses to develop integrated RESJ Plans for each of the 46 non-metropolitan Regional Development Australia (RDA) regions that identify opportunities and challenges that impact on the region’s ability to participate in education, skills training and the labour market, and also outline local strategies to improve education, skills and job outcomes. These Plans are available on the [www.employment.gov.au/resj](http://www.employment.gov.au/resj) website.

The RESJ Coordinators have engaged with local businesses, education and training providers, RDA Committees, local and state government, government service providers and community organisations to link programs and projects to achieve maximum benefit for regional Australia.

Recommendation 5.4 – Industry based Fly-in Fly-out (FIFO) coordinator in Cairns

That the Australian Government funded an industry-based FIFO development coordinator in Cairns for two years from July 2010 as a pilot, to develop links between resources projects in remote locations and skilled workers, including local unemployed job seekers. If successful, this measure could be replicated in other appropriate locations, jointly funded by the sector and governments.

Lead: Department of Industry (formerly DIICCSRTE) - Skills DMC and Advance Cairns

Implementation: A pilot project was carried out in the Cairns region, to help connect suitable workers in regional areas with available mining and construction jobs in remote locations via FIFO operations. SkillsDMC, in partnership with Advanced Cairns, worked with resources and construction companies as well as employment and training organisations to pilot the role of a FIFO Coordinator in Cairns.

To further connect skilled workers in other regions of Australia with FIFO work in the resources sector, four additional FIFO Coordinators have been supported by governments and established in priority regions to further link job seekers with FIFO opportunities in the resources sector. Following consultations with state and territory governments, it was agreed that the additional FIFO Coordinators would be based in Queensland (Wide Bay Burnett and the Gold Coast), the Northern Territory and New South Wales and would work to link suitable workers with jobs in the resources and construction sectors.
The role of each of the FIFO Coordinators is to:

- develop links between mining, construction and infrastructure projects in remote locations and skilled workers in order to capitalise on the fly-in, fly-out job opportunities in our growing resources and infrastructure industries;
- assist companies attract and connect potential employees to available work on mining, construction and infrastructure projects in remote areas;
- establish training and employment pathways for skilled workers, unemployed job seekers looking to work in the industry and workers affected by industry restructuring; link companies operating remotely with airline and airport services, to facilitate the connection of FIFO workers; and
- work with local Job Services Australia providers, training organisations and employers operating in remote parts of Australia to ensure job seekers have the skills they need to work in FIFO arrangements.

Additional Information about the FIFO Coordinator projects is available at Appendix E.

Recommendation 5.5 – Attracting and retaining women in the resources and construction sectors

That DEEWR or the Equal Opportunity for Women in the Workplace Agency work with the MCA, APPEA, ACA, unions and education and training providers in appointing a consultant to develop a strategy for attracting and retaining women in the resources and construction sectors.

Lead: Department of Industry (formerly DIICCSRTE) – Australian Mines and Metals Association (AMMA)

Implementation: In recognition of the need for an industry wide approach to increase the number of women working in the resources and construction sectors, AMMA is undertaking a project, funded by the Australian Government, to assist companies to overcome barriers that affect women's participation in these sectors.

There are a range of proven actions to overcome barriers to female participation, including improving working conditions at remote worksites, flexible work practices, supporting return to work, and pay equity. Embedding successful practices into management processes will help tap the pool of women workers.

The Australian Women in Resources Alliance (AWRA), which forms part of this project, was launched on 9 November 2011. The Alliance is implementing processes to assist companies to overcome barriers that affect the attraction, retention and participation of women in the resources and construction sectors. AWRA is working with existing networks and is providing advice and support materials for enterprises, to help them overcome barriers that affect women's participation in the resources and construction sectors. AWRA is also working with stakeholders to develop resources, including tools and services, for enterprises to implement strategies to attract and retain more women in the resources and related construction sectors.

By working with enterprises to embed successful practices into management processes, the valuable pool of untapped female labour will provide an additional solution to the demand for skilled workers in the construction and resources industry sectors. The AWRA website is a repository for research, case studies and tools to assist with increased attraction and retention of women in resources employment. AWRA also provides an advisory service for employers. For further information visit http://www.amma.org.au/.

AMMA has also been engaged to support women using best practice mentoring recommendations and software that can be accessed anywhere in Australia utilising existing networks. AWRA e-Mentoring, sponsored by the Australian Government, is pairing mentors from 36 organisations with mentees, including students, from 41 organisations. The mentoring includes training on the use of the software, support and online materials. The Women in Resources Victoria network and the National Association of Women in Construction are working with AMMA to market the program and the partnership with MMG and the Queensland Government will see graduates of MMG mentoring female scholarship holders studying resource related degrees.
Recommendation 5.6 – Stronger links between employers, training providers and employment services providers in the Pilbara and Rockhampton

The Australian or relevant state government should fund brokerage roles in the Pilbara and Rockhampton to forge stronger links between employers, training providers and employment services providers. The brokers should develop region-specific and industry-specific Indigenous workforce development plans that build on the objectives of the memorandum of understanding between the MCA and the Australian Government, and seek to match Indigenous people to sustainable jobs in the resources sector in the region.

**Lead:** Department of Employment (formerly DEEWR)

**Implementation:**
- **Pilbara:** The Pilbara RESJ Coordinator has developed the Pilbara RESJ plan which is linked to Pilbara Workforce Development Plan, which is being led by the WA Government. The Pilbara RESJ Coordinator is also working in conjunction with the coordinator of the MCA-Australian Government MoU on Indigenous Employment and Enterprise Development on a range of place-based projects and localised strategies.

Bowen Basin: A Partnership Facilitator and Assistant Partnership Facilitator have been appointed in the Bowen Basin. A Regional Action Plan was also approved by the Queensland Resources Council MoU Steering Committee.

Recommendation 5.7 – Better integrate Indigenous businesses into major projects in Western Australia

That the Australian Government, in conjunction with the Western Australian Government, explore the possibility of expanding the capacity of brokers and mentors, and better use existing business support programs in the Pilbara (as a priority area) to work with existing small-to-medium sized Indigenous contracting businesses and resources companies to better integrate Indigenous businesses into the supply chain for major projects. If successful this model could later be replicated in other regions.

**Lead:** National Steering Committee of the MCA-Australian Government

**Implementation:** GHD has been appointed by the MCA and the Australian Government under the MCA-Australian Government MoU on Indigenous Employment and Enterprise Development to prepare a handbook titled “Getting it Right: Indigenous Enterprise Success in the Resources Sector”. Production of the handbook is well underway and will showcase success stories of both companies and Indigenous enterprises across the procurement supply chain and identify, and demonstrate key elements required for successful Indigenous enterprise in the resources sector. The handbook is expected to be completed in late 2013 and when published, will be available on the MCA website: [www.minerals.org.au](http://www.minerals.org.au).

Additional information about the MCA-Australian Government MoU is available at Appendix D.

Industry is also partnering with the Australian Government to connect Indigenous people with the resources sector. In the Northern Territory, Major Industries Training Advisory Council (MITAC) has engaged Indigenous workforce planning specialists to work with businesses to develop Indigenous engagement strategies. In Queensland, AMMA Skills Connect is working with resources companies to upskill Indigenous candidates in the sector. AMMA is working with companies and Indigenous employment organisations to identify suitable Indigenous candidates with a desire to work in the sector, who are then assisted to train for specific roles through a combination of soft skills training, pre-employment screening and connections to real jobs.
6. Forging Stronger Ties between Industry and Education

Recommendation 6.1 – Marketing kit to promote career pathways and jobs

That the MCA and APPEA work with governments, unions, Industry Skills Councils and education and training providers to develop a marketing kit to promote agreed career pathways and short and long-term jobs in the resources sector.

**Lead:** MCA and APPEA

**Implementation:** Industry has worked to develop a number of marketing kits to promote career pathways and jobs. AMMA has launched a ‘career centre for the resources industry’, available at www.miningoilandgasjobs.com. APPEA supports the Resources Channel, http://www.theresourcechannel.com.au, a jobs site that also offers career information.

The People for the Future website (www.peopleforthefuture.com.au) became operational in March 2012 and operates as a national resources sector careers portal. It is a collaborative project of the Chamber of Minerals and Energy of Western Australia (CME), the Queensland Resources Council (QRC) and the MCA. The portal assists those interested in resources careers in finding exciting and diverse job opportunities offered by the Australian resources sector. Basic training qualifications are attached to each job role and there are linkages to key national and state based training providers.

Consultation began on a National Career Development Strategy in early 2011 and has involved the government and non-government education sectors, the career development industry, business, schools, teachers, young people, parents and carers. This has informed the development of the Green Paper, which outlines options for the new National Career Development Strategy. The Green Paper was circulated for public comment in June 2012, with a finalised Strategy released in June 2013. The Strategy will assist more Australians to build careers which are not just meaningful, but which support our economy. It recognises that all Australians should have the support they need to make informed choices about education, training and work.

The Australian Government launched the Resources Sector Jobs Board to highlight the significant number of employment opportunities in the resources sector and to connect Australians looking for a job with employers in the resources sector who are seeking workers. The Resources Sector Jobs Board is at: http://jobsearch.gov.au/resourcesectorjobs/.

The AMMA Skills Connect project is working to increase the number of up skilled and employed workers in the resources and construction industries. The project focuses on developing a model to connect the supply side and the demand side of labour and skills within the relevant industries, with a focus on attracting unemployed, displaced workers, women and Indigenous workers with training pathways and employment in the sector. AMMA Skills Connect is an industry-led model which connects employers, Job Services Australia brokers, training organisations and job-seekers with work in the sector through improved work workforce planning and facilitating connections between employers and job-seekers. AMMA Skills Connect has published a Jobseeker Guide to the Resources Industry. The Guide provides information for unskilled, semi-skilled and skilled jobseekers looking for opportunities within the resource, related construction and allied services industries and includes information about engaging in both training and employment pathways. The Guide is available at: http://www.amma.org.au/amma-skills-connect/amma-skills-connect-the-project/the-guide.
Recommendation 6.2 – Employment pathways for students

That state and territory governments and employer associations work to further develop connections between schools, Trades Training Centres (TTCs) and the resources sector in major resource regions to support employment pathways for secondary school students.

Lead: Queensland Department of Education, Training and Employment (formerly Skills Queensland)

Implementation: The Queensland Government has collated examples of partnership models between schools, TTCs and the resources sector and has identified key success factors in the current models for industry-education cooperation. The Australian Government's TTC in Schools Program has adopted a wider range of training, so TTCs can align with local skills needs, including providing training for resources occupations in the appropriate regions. The range of activities and programs in place is relevant to the prominence of the resources sector in specific States and Territories.

In Queensland, the Queensland Minerals and Energy Academy (QMEA) is a partnership between the Queensland Government and the Queensland Resources Council and is part of the Gateway to Industry Schools (GIS) Program in Queensland. The Gateway to Industry Schools Program provides opportunities for young people to undertake structured workplace learning, industry contextualised school learning, school-based apprenticeships and traineeships, full-time employment or further study through industry-school partnerships. Effective industry-schools partnerships have been established as have a range of strategies industries involved in the program are employing to support school-based engagement strategies which compliment broader workforce development activities. Stakeholders can visit www.qmea.org.au for ongoing progress of the Gateway to Industry Schools Program in Queensland.

In Western Australia, the WA Department of Education supports public schools applying for Trade Training Centre initiatives.

The South Australian Department of Further Education, Employment, Science and Technology, in partnership with RESA, has launched Hot Rubble, www.hotrubble.com.au, a web portal that provides a gateway to a career in the SA mining sector, including information for students, school leavers and options for post-school training and education options.


In the Northern Territory, industry and the Department of Education are developing more mature and closer relationships, replacing the traditional “sponsorship” approach with direct engagement in the development of employment pathways through schools to jobs. The Participation, Pathways and Engagement Business Unit has been created and the Industry, Engagement and Employment Pathways Team has been formed. Part of the responsibility of this Team is the negotiation and formation of clear industry agreements. An MoU already exists with a number of companies and industry leaders including the Minerals Council of Australia (MCA) to work on specific projects; individual company agreements are in place such as the MRM Xstrata- Borroloola School Strong Start Bright Futures Partnership, which provides significant training resources to the Borroloola School. Agreements and working arrangements are also in place with the key pastoral properties, the Indigenous Land Corporation and the Central Land Council as part of the Indigenous Rural Workers Project and with more than 425 businesses who take students for structured work placement.

Key success factors identified in the current models for industry-education cooperation are:

- Industry involvement in resource development
- Industry involvement providing structured work placements
- Genuine partnerships with agreements in place
- Identifying and establishing pathways with industry
- TTCs in Schools Program

MCA has launched the OresomeResources web portal, available at: www.oresomeresources.com, which provides information for teachers to engage students with pathways to employment in the sector.
The Civil Contractors Federation is developing digital tools and systems to enable online interactive training and assessment to increase the supply of skilled workers for the civil construction sector in Queensland. The project, with funding provided by the Australian Government, is developing and trialling a digital learning management system, and piloting the digital pathways model with two schools. New tools and systems are being developed that will enable more efficient and accurate training delivery, assessment and administration. This will have the potential to increase the supply of skilled workers for the construction sector. Through the project’s pilot engaging with school students, the sector is connecting with an important segment of its target market.

Recommendation 6.3 – Trades Training Centre funding to take into account anticipated strong demand for skills in the resources sector

That the Australian Government work with education authorities to ensure future rounds of TTC funding take into account the anticipated strong demand for skills in the resources and construction sectors. Schools with strong links to the resources and construction sectors could be targeted as they should have the greatest capacity to graduate Year 12 students into those sectors.

Lead: Department of Education (formerly DEEWR)

Implementation: Opportunities for schools to direct training priorities to the resources and construction sectors were promoted in Round Four of the TTC in Schools Program. This assisted with forging stronger links between TTCs and the resources and construction sectors, and enabled industry interest group perspectives to be incorporated into the future rollout of the Program.

A number of TTCs have established partnerships with resources companies and are now offering resource sector qualifications, including certificates in resource and infrastructure operations, surface extraction operations and resources infrastructure work preparation, as well as certificates in engineering and construction.

- Desert TTC (SA) has a partnership with BHP Billiton to contribute funding support over 3 years.
- Central Queensland Highlands Cluster TTC (Qld) had partnership arrangements with BHP Billiton Mitsubishi Alliance to provide financial support over a three year period and the Rio Tinto Community Development Fund which has provided financial assistance to support the operations of the TTC.
- Whitsunday Regional TTC (Qld) has a partnership arrangement with Abbot Point BulkCoal Pty Ltd to contribute funding support for three years and provide Australian School Based Apprenticeships and on-the-job training. A number of other resource companies also offer support through work experience opportunities, site visits and skills training.
- Pilbara TTC (WA) has partnership arrangements with BHP Billiton Iron Ore, Rio Tinto and Woodside which are all contributing funding to support the TTC’s operations.
- Newman Senior High School TTC (WA) has partnership arrangements with BHP Billiton Iron Ore which has provided financial support for capital infrastructure development and structured workplace learning placements.
- Tom Price Senior High School TTC (WA) has a partnership arrangement with Rio Tinto to provide structured workplace learning placements and training support.
Recommendation 6.4 – Full recognition of vocational training undertaken in a school context, or as part of a pre-vocational training course

That school and vocational education and training officials and stakeholders continue work to ensure that vocational training undertaken in a school context, or as part of a pre-vocational training course, is fully recognised for quality and relevance by employers and training organisations.

**Lead:** Department of Education (formerly DEEWR)

**Implementation:** An expert Advisory Panel has been established to guide the development and implementation of the National Trade Cadetship (NTC) initiative. The NTC initiative aims to deliver a school-based program that provides opportunities for students to undertake vocational learning and develop work readiness skills in preparation for a skilled occupation after leaving school. The NTC will be an industry-endorsed option under the Australian Curriculum. The Advisory Panel has undertaken targeted consultations with industry, education and training stakeholders and recommendations put forward have been accepted for incorporation into the NTC initiative. The recommendations represent the underpinning principles which will guide the development of the NTC curriculum. Information on the recommendations is available on the Department of Education’s website.

Both elements require new curricula to be developed, consistent with the Australian Curriculum. Education Ministers referred the development of curriculum for both the Year 9-10 (in July 2011) and Year 11-12 elements (in August 2012) to the Australian Curriculum, Assessment and Reporting Authority (ACARA). Work commenced in July 2012. ACARA has established governance and consultation processes for the curriculum development for the Year 9-10 and Year 11-12 elements of the NTC, consistent with their existing practices for developing the Australian Curriculum.

It is expected that the Year 9-10 curriculum will be ready for endorsement by SCSEEC in December 2013 and December 2014 for the Year 11-12 cadetship. Implementation timeframes will then need to be agreed with state and territory education ministers.

Recommendation 6.5 – Increase senior school students’ participation, attainment and engagement in mathematics and science

That the Australian and state and territory governments continue to work together on strategies to urgently increase senior school students’ participation, attainment and engagement in mathematics and science, noting these subjects open the door to careers in the resources and construction sectors.

**Lead:** Department of Education (formerly DEEWR)

**Implementation:** Phasing in of the Australian Curriculum from Foundation to Year 10 in has commenced. The Standing Council on School Education and Early Childhood has endorsed the curriculum content and achievement standards for senior secondary Australian Curriculum maths, science, English and history as the common base for state and territory courses. The Australian Curriculum, Assessment and Reporting Authority (ACARA) is working with states and territories to explore the curriculum content that will be integrated into their respective courses, the timelines and processes for this integration, and details related to the validation of achievement standards.

The Teach for Australia program provides career change opportunities for high-calibre, non-teaching graduates from specialised subject areas, including mathematics and science, placing them into disadvantaged schools through an intensive training program that leads to a post-graduate diploma in teaching, where they can make the most difference. More information about Teach for Australia is available at: http://www.teachforaustralia.org/.

Industry and Government are also supporting a range of initiatives, such as the UNE Quicksmart and Quicker Smarter program in school clusters that are contributing to the advancement of science and maths education in schools.
7. Addressing the Need for Affordable Housing and Community Infrastructure

Recommendation 7.1 – Housing shortages in regions affected by resources operations and feeder cities

That state and territory governments urgently address housing shortages in regions affected by resources operations and in feeder cities such as Darwin and Perth.

Lead: Department of Social Services (formerly the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA))

Implementation: The COAG agreed to the recommendations of the Housing Supply and Affordability Reform (HSAR) Report and released it on 30 August 2012 (http://www.coag.gov.au/node/451), with individual jurisdictions being responsible for implementing their HSAR commitments. All jurisdictions have been requested to provide the Select Council on Housing and Homelessness with an update on their progress in housing supply reforms, whether linked directly to HSAR recommendations and findings, or additional measures. Input has been received from a number of jurisdictions to date, with jurisdictions continuing to work on the collation of the report to COAG.

The HSAR recommendations, if implemented by all levels of government, will help enhance housing supply and affordability by: helping ensure more efficient use of existing land and housing stock; reducing unnecessary costs and charges for developers and home owners; decreasing the time and expense of bringing new dwellings to market; and reforming policies that impede supply or that artificially stimulate demand.

Housing shortages in regions affected by resources operations and feeder cities are being addressed by state governments individually and in partnership with the Australian Government under the National Affordable Housing Agreement (NAHA). The NAHA is aimed at ensuring housing issues of supply and demand are addressed with progress being annually monitored through COAG. In addition to the work under the COAG Housing Supply and Affordability Reform (HSAR) agenda, the NAHA provides funding for state and territory governments to implement programs and strategies to help address housing shortages. In jurisdictions where housing shortages are affecting regional operations, strategies have been developed to improve the delivery of affordable housing opportunities in these areas.

In addition, the National Rental Affordability Scheme (NRAS) is a long-term commitment by the Australian Government, in partnership with the states and territories, to provide financial incentives to the business sector and community organisations to increase the supply of more affordable rental housing across the country. Successful applicants are eligible to receive annual financial incentives for a period up to 10 years for each approved home that is rented to eligible low or moderate income households at a rate that is at least 20 per cent below the prevailing market rate. As at September 2013, over 1,700 new NRAS affordable rental dwellings are scheduled to be delivered across remote and very remote areas of Australia over the next few years. Further, the Social Housing Initiative has delivered over 1,980 new social housing dwellings, has refurbished another 10,500 dwellings in Western Australia, and in the Northern Territory, has funded the construction of 208 new dwellings and the refurbishment of another 297 dwellings.

Additionally, state and territory governments have implemented a number of programs and strategies that help to address housing issues.

The Western Australian Government’s Affordable Housing Strategy 2010-2020: ‘Opening Doors to Affordable Housing’, aims to harness the efforts of the public, private and non-government sectors to increase the supply of affordable housing for low to moderate income earners with an additional 20,000 affordable dwellings by 2020. The Western Australian Government has also committed $373.1 million over six years (2011-12 to 2016-17) from the Royalties for Regions ‘Housing our Workers’ Program to deliver affordable housing opportunities for key workers in regional Western Australia. These funds are targeted at housing projects that enable key workers to affordably rent or purchase homes in regional Western Australia and support the continuation and expansion of critical services to regional communities. Of the $373.1 million, $195.6 million has been approved for six projects located in Port Hedland, Karratha, Newman and the Avon Valley. These six projects are expected to provide 596 dwellings for up to 890 regional key workers, with most dwellings scheduled to be delivered by the end of 2013-14.
The Northern Territory Government is committed to support Territorians to own their own home; to support Territorians in social housing; and to support Territorians in remote housing through the Framing the Future Blueprint that sets out the objectives and priorities in achieving these across the whole of the Territory.

The Northern Territory Government’s Real Housing for Growth Plan will help to alleviate pressures placed on the local housing market during the construction of the Territory’s most significant resource project, the $34 billion INPEX Ichthys LNG project. Through the Reals Housing for Growth Plan the Territory Government aims to facilitate the constructions of 2000 new affordable rental and affordable homeownership dwellings for Territorians by 2016-17. The focus on increasing the supply of new affordable dwellings will ease housing cost pressures to help support the attraction and retention of key workers right across the Territory.

The Queensland Government's Housing 2020 Strategy (the Housing Strategy), outlines the Queensland Government's plan for creating a flexible, efficient and responsive housing system by 2020. The plan features a boost to the role of community housing providers, urban renewal projects and a focus on increasing the capacity for households to transition to other housing tenures. One the key objectives of the Housing Strategy is to facilitate five major urban renewal projects (Logan, Gold Coast, Townsville, Mt Isa and Gladstone), including revitalising areas which have a high concentration of social housing. Another objective is to deliver 820 new Indigenous properties for rent and to transition at least 200 Indigenous families to home ownership in remote communities to reduce overcrowding and take the pressure off social housing.

Recommendation 7.2 – Infrastructure needs in regions affected by resources operations

That the Australian Government gives consideration to funding infrastructure needs in regions affected by resources operations.

Lead: Department of Infrastructure and Regional Development (formerly DRALGAS)

Implementation: The Bureau of Resources and Energy Economics (BREE) has assessed that the capacity of planned infrastructure projects progressing through the approval process exceed the projected volumes of exports for all four commodities out to 2025. The risk of Australia not having sufficient export infrastructure is assessed as ‘manageable’ for all commodities in 2020 and 2025 and all market share scenarios. The exception is LNG in 2020 under a high market share scenario, where although planned infrastructure capacity exceeds projected export volumes, BREE judges there is insufficient time to build this additional capacity by 2020.

Port capacity utilisation rates are a key factor in the risk analysis and BREE assumes that current utilisation rates can be maintained into the future. Analysis of the regions within Australia best placed to support the growth in exports of coal (both thermal and metallurgical), iron ore and LNG are those areas that are already major producers or where export capacity is already under construction.

Conclusion

Since the Strategy was announced in March 2011, the resources sector has witnessed a peak in investment and is now moving from the construction to operational production phase, with output growth expected to continue for a number of years\(^1\).

Under the Strategy, industry and governments have demonstrated the successes that can come through government-industry partnerships. Through the work of the Strategy, the sector has trialled new approaches to knowledge sharing and workforce development, trialled and implemented innovative approaches to improving the skills of its workforce, including alternative and innovative training and apprenticeship approaches. Work has been undertaken to help address the unique challenges faced by the sector, particularly for projects operating in remote regions, including the need for a flexible and mobile workforce and addressing the impacts on local and source communities.

Projects and initiatives have been undertaken by governments and industry and new partnership models developed to help the sector to meet its skills and workforce demands. The work undertaken as part of the Strategy will help the sector continue to play a major role in Australia’s future global economic success and has provided opportunities to help prepare the sector to meet its future skills and workforce demands. The Strategy has assisted the resources sector to meet its demand for skilled labour, maintain national momentum on addressing skills shortages, and has further built Australia’s productive capacity.

Appendix A
Project Workforce Demand Template (Recommendation 1.1)
Sample Template

PROJECT WORKFORCE DEMAND
Template for completion

### A Construction Phase Workforce Profile

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### B Operational Phase Workforce Profile

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### C Training and Recruitment Plan

Notes:

1. Please only report posts based for this project only and all subsequent workforce data supplied.
2. Please report the individual Occupation (ANZSCO 6-digit code) level that make up the projected workforce requirement and forecast demand profiles by full time equivalent and calendar year.
3. If jobs are not able to be fully captured at the ANZSCO 6-digit level please use the closest ANZSCO 6-digit category available and provide additional job information under the category as required.
4. Please provide your projected workforce requirement to the nearest whole full time equivalent post. For example, if you have 20 full time workers on site for 10 weeks of the year, the full time equivalent posts would equal (20 x 10)/ 48 = 4.16 or 4 full time equivalent posts. If these were 20 part time workers only working 30 hours a week, the full time equivalent posts would equal (20 x 30 x 10)/ (38 x 48) = 3.2 or 3 full time equivalent posts.
5. Please provide information on how your organisation plans on attracting and retaining the required staff and any special strategies targeting workers in high demand and short supply.

For any queries and advice on how to complete this template please contact: <STATE CONTACT>
**A Construction Phase Workforce Profile**

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**B Operational Phase Workforce Profile**

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**C Training and Recruitment Plan**


**Notes:**
1. Please only report posts based for this project only and all subsequent workforce data supplied.
2. Please report the individual Occupation (ANZSCO 6-digit code) level that make up the projected workforce requirement and forecast demand profiles by full time equivalent and calendar year.
3. If jobs are not able to be fully captured at the ANZSCO 6-digit level please use the closest ANZSCO 6-digit category available and provide additional job information under the category as required.
4. Please provide your projected workforce requirement to the nearest whole full time equivalent post. For example, if you have 20 full time workers on site for 10 weeks of the year, the full time equivalent posts would equal \((20 \times 10)/48\) = 4.16 or 4 full time equivalent posts. If these were 20 part time workers only working 30 hours a week, the full time equivalent posts would equal \((20 \times 30 \times 10)/(38 \times 48)\) = 3.2 or 3 full time equivalent posts.
5. Please provide information on how your organisation plans on attracting and retaining the required staff and any special strategies targeting workers in high demand and short supply.

For any queries and advice on how to complete this template please contact: <STATE CONTACT>
Appendix B
National Apprenticeship Program (NAP) (Recommendations 2.1, 2.2 and 2.4)
The National Apprenticeship Program (NAP) is an innovative advanced entry adult apprenticeship project which assists experienced workers by having their existing skills recognised and then completing all the competencies required to obtain a full trade qualification within 18 months.

This adult apprenticeships project will help employers get new fully qualified trades workers in a shorter time, without compromising quality. The net effect is that the Australian minerals, petroleum and resource sectors will have greater capacity to meet the growing demand for skilled labour.

The project is working with employers to meet their demands for appropriately qualified and experienced staff. Participants are being selected from both the existing resources sector workforce as well as anyone with the appropriate experience interested in moving to the resources sector.

To be eligible for selection, participants need to undertake recognition of prior learning (RPL) assessment for at least 40% of competencies for a relevant trade. Participants also undertake aptitude assessment and have individual training plans developed to ensure an effective and well-tailored apprenticeship.

East Coast Apprenticeships is managing the project in association with training organisations in Queensland, Western Australia, New South Wales and South Australia, together with resources sector enterprises, and the Minerals Council of Australia. Skills Tech Australia, a large public provider of trade and technician training, has accepted a role to coordinate nationally all state and territory training providers for this project. The Australian Government is providing co-funding of $2 million to support this industry-led project. The NAP will continue being funded by the Australian Government to 2014 at which point industry will assume management and funding of this initiative.

To September 2013, 9,183 applications to participate in the NAP have been received, with 5,526 having passed the desk-top audit stage to be deemed eligible to undergo the next stages of assessing their RPL. 186 adult apprentices have started work with sixteen NAP participants having graduated with a recognised apprenticeship.

To September 2013, NAP has conducted intakes for Anglo American Metallurgical Coal, McMahon, Bechtel LNG, John Holland Group and Leighton Contractors.
Appendix C

Minerals Industry National Associate Degree (MINAD) Project and Enhancing Industry Engagement in Engineering Degree Programs Project (Recommendation 3.2)
The Minerals Industry National Associate Degree (MINAD) Project aims to help address the shortage of mining engineers and geoscientists by developing, piloting and evaluating nationally consistent Associate Degrees to be delivered in VET, dual sector and Higher Education institutions. The Project seeks to be a true partnership between industry, government and academia to reshape minerals education in Australia, and will provide the minerals industry with efficient, appropriately skilled paraprofessional workers as part of their workforce profile.

The Minerals Council of Australia (MCA) has undertaken extensive consultation with industry, recent graduates, operational supervisors and technical experts from a broad range of commodity groups and mining operations to develop and disseminate a piloted Associate Degree program model. Industry participants in the Project are defining new workforce roles for paraprofessionals, including the requisite generic qualities and technical knowledge required of engineering para-professionals. The Project Education Management Consultant, Professor Ron Ayers, through this extensive consultation exercise, has developed the MINAD Pilot Model document, which outlines the graduate capabilities framework and fields of knowledge to be gained within the Associate Degree program. An education sub-committee and industry sub-committee have been established to move the project to the Pilot stage.

The education sub-committee includes course leaders, department heads and pro-vice chancellor from the University of Southern Queensland, Central Queensland University, Hunter Valley Institute, Ballarat University, TAFE SA, Central Institute of Technology, Polytechnic West, and Charles Darwin University. This committee, chaired by Professor Ayers, is prosecuted with establishing the course framework, common courses, mode of delivery, and curriculum development. The Education Sub-committee have successfully developed the course structure, agreed on the common areas of study, and are currently developing the course content.

The industry sub-committee includes technical corporate personnel from BMA Coal, BHP Billiton, MMG, Thiess, AMC Consultants, Anglo Coal, and Downer EDI Mining. Other organisations are actively being updated via the MCA Workforce Committee. This committee, chaired by Dr. Gavin Lind, is prosecuted with working through workforce redesign issues, and, given the structural changes that have occurred within the last 12 months, develop a business case for (or against) uptake of Associates in industry, and by dint their respective organisations. The Industry sub-committee have developed a raft of workforce redesign options developed a business case which was approved by the Industry Advisory Panel on 31 October 2013, and endorsed by the MCA Workforce Standing Committee on 20 November 2013.

The information gathered during the Project’s consultation, research and investigation phase has provided valuable input into the development of the MINAD Associate Degree Model. The Education sub-committee are working towards delivering the structural requirements to be able to raise an Associate Degree program in their respective organisations. The Industry sub-committee are working towards delivering a final document that provides options to MCA member companies on Associate workforce redesign issues and a considered appraisal of the Associate vis-à-vis its long-term goal in view of current realities. The University of Southern Queensland have agreed to pilot the Associate Degree in Mining Engineering as of October 2013 for delivery in first semester 2014. Additionally, Central Queensland University will pilot both the Associate Degree in mining Engineering and the Associate Degree in Minerals Geoscience in first semester 2014. Professor Ayers is currently developing the marketing materials for industry and education. The MINAD Model will be piloted and evaluated throughout 2013-2014.
Enhancing Industry Engagement in Engineering Degree Programs Project

The Australian Council of Engineering Deans (ACED) is working with twelve universities and industry to establish best-practice models for industry-university engagement, and to develop corresponding guidelines for engineering faculties, employers, and regulators, including the professional accreditation body, Engineers Australia. The guidelines are based on wide consultation with faculties, representatives from industry, the profession and students, together with the international literature. Industry-University Forums have been held across Australia with more than 140 academics and others actively discussing how to ensure improved engagement. Participating universities are trialling some of the proposed improvements.

Industry-based projects are under development for deployment in the middle years of the professional engineering degrees at six universities across the country. These projects complement current teaching methodologies and present practical alternatives for large numbers of students, to extended work placements. Examples include deep water port expansion, water systems configuration and operation for a regional council, and power system design. After trial and evaluation, information about these projects will be disseminated more widely amongst all 35 ACED member universities.

Stakeholder feedback has been positive, with industry organisations keen to see engineering graduates with increased practical skills and experience. The final guidelines for effective industry engagement are expected to be agreed upon by the partner universities, endorsed by industry and ACED, and disseminated nationally in early 2014.
Appendix D

MCA-Australian Government Memorandum of Understanding on Indigenous Employment and Enterprise Development (Recommendations 5.2, 5.6 and 5.7)
Indigenous Employment and Enterprise Development - Improving partnership outcomes in the resources sector

The Memorandum of Understanding on Indigenous Employment and Enterprise Development (MoU) between the Australian Government and the Minerals Council of Australia (MCA) recognises that significant value can be achieved from developing regional partnerships between Indigenous communities, the minerals industry and government.

The Australian Government is working collaboratively with the MCA, local service providers and local communities to help create employment pathways and support mechanisms for enterprises and Indigenous people.

In 2005, the Australian Government and the MCA first agreed to an MoU on Indigenous Employment and Enterprise Development. In early 2009, the MoU was revised to focus more closely on Indigenous economic development goals and to better align with the then Government’s Closing the Gap policy agenda.

Under the MoU, strategies are being implemented at both the national and regional level until its current agreement ends in 2014.

Regional coordinators are working in those places specifically covered by the agreement. These include:
- the Pilbara, the Wiluna Shire and part of the south west of Western Australia;
- the southern half of the Northern Territory; and
- western Cape York in Queensland.

The Coordinators are helping to guide long-term action, bringing together stakeholders at the local level to identify and progress employment and enterprise development opportunities for Indigenous Australians in mining and related industries.

At the national level priority actions include:
- Strengthening employment outcomes in the mining and related sectors for Indigenous Australians with high level employment preparation needs; and
- Identifying and extending leading practice models to support the engagement of Indigenous businesses in the minerals industry and Government supply chains.

The MoU provides a pathway to bring together the mining industry and Indigenous and community representatives in a collaborative and coordinated way to look at Indigenous employment, training and business development opportunities.

Actions under the MoU will help ‘Closing the Gap’ commitments to increase Indigenous economic development and address Indigenous disadvantage.
Appendix E

Industry-based Fly-in Fly-out (FIFO) Coordinators (Recommendation 5.4)
Industry-based Fly-in Fly-out (FIFO) Coordinators

The Cairns FIFO Coordinator model leveraged national contacts and local knowledge to build training and employment pathways to connect unemployed skilled workers to jobs in the resources sector. Since being appointed in August 2011, the FIFO Coordinator worked to develop links between resources projects in remote locations and potential employees in the Cairns region, and to capitalise on FIFO job opportunities in Australia’s growing resources and related construction industries. The Coordinator also worked to develop training and employment pathways for local job seekers and skilled workers to move into jobs through FIFO.

Over the course of the Cairns FIFO Coordinator project, Cairn’s domestic FIFO workforce grew by approximately 250 people. Based on the average wage of a FIFO worker this equates to $31.2m per year of direct wages being brought to the region. Further success of the project is evidenced by BHP Billiton Mitsubishi Alliance’s announcement to direct hire 250 workers from Cairns from mid-2013. BMA have estimated that once fully operational, this will give rise to an additional $40 million in wages brought into Cairns each year. With multiplier effects, this will take the total economic contribution of their operations to the Cairns region to over $60 million each year for two mine sites which have a life expectancy of 20-25 years – a total of over $1.2 billion over 20+ years.

The Wide Bay-Burnett FIFO Coordinator Project has established an MoU with Hancock Coal Pty Ltd and Hancock Galilee Pty Ltd, which is a prime example of FIFO coordinators connecting with industry to establish long-term, sustainable solutions for the sector.

The Northern Territory FIFO Coordinator Project is focused on providing skilled Indigenous people living in remote areas with an opportunity to participate in employment on major infrastructure projects in Darwin and on mining and related projects throughout the NT. The Coordinator is working to identify potential workers across five remote Indigenous Communities: Tiwi islands, Wadeye, Maningrida, Galiwinku and Gunbalanya; and has secured in principal commitment for 25 FIFO employment positions from Tier 1 & 2 contractors within the Ichthys LNG Project.

The Gold Coast FIFO Coordinator Project, in collaboration with the Gold Coast City Council, is working with mining and resources companies, using the Gold Coast as their FIFO base, to identify specific training needs and coordinate and implement skills-based development projects. The Coordinator has a specific focus on providing FIFO employment opportunities for those people who are long term unemployed, older workers aged 45 years and older, women and people who are underemployed.

The NSW FIFO Coordinator Project is working to build sustainable connections between job seekers and employers experiencing skills shortages in regional NSW. The project is providing comprehensive support to NSW job seekers, primarily those affected by structural readjustment, by helping them to connect to the growing workforce demands of industry, with a focus on connecting workers with FIFO and drive-in, drive-out (DIDO) arrangements in the resources sector, in NSW. The project uses a multiple broker plus coordinator model, consisting of three Regional Workforce Brokers and a Regional Programs Coordinator, with the brokers based in the Hunter, Illawarra and New England.

The five FIFO Coordinators are part of the FIFO Coordinator Network, established by the Australian Government. The FIFO Coordinator network aims to help facilitate open communication between coordinators and encourage knowledge transfer and the sharing of key learnings. The FIFO Coordinator Network allows FIFO Coordinators to be better placed to deal with common challenges and achieve better outcomes for industry and job seekers.
## Key Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACA</td>
<td>Australian Constructors Association</td>
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<td>ACED</td>
<td>Australian Council of Engineering Deans</td>
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<td>ACTU</td>
<td>Australian Council of Trade Unions</td>
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<td>AMMA</td>
<td>Australian Minerals and Metals Association</td>
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<td>ANZCO</td>
<td>Australian and New Zealand Standard Classification of Occupations</td>
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<td>APPEA</td>
<td>Australian Petroleum Production and Exploration Association Ltd</td>
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<td>AWPA</td>
<td>Australian Workforce and Productivity Agency</td>
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<td>CCF</td>
<td>Civil Contractors Federation</td>
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<td>COAG</td>
<td>Council of Australian Governments</td>
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<td>DEEWR</td>
<td>Former Australian Government Department of Education, Employment and Workplace Relations</td>
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<td>DFEEST</td>
<td>South Australian Government Department of Further Education, Employment, Science and Technology</td>
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<tr>
<td>DIAC</td>
<td>Former Australian Government Department of Immigration and Citizenship</td>
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<tr>
<td>DIICCSRTE</td>
<td>Former Australian Government Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education</td>
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<tr>
<td>DRALGAS</td>
<td>Former Australian Government Department of Regional Australia, Regional Development and Local Government</td>
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<tr>
<td>DRET</td>
<td>Former Australian Government Department of Resources, Energy and Tourism</td>
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<td>DTWD</td>
<td>Western Australian Government Department of Training and Workforce Development</td>
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<td>EMA</td>
<td>Enterprise Migration Agreement</td>
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<td>FaHCSIA</td>
<td>Former Australian Government Department of Families, Housing, Community Services and Indigenous Affairs</td>
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<td>FIFO</td>
<td>Fly-in Fly-out</td>
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<td>ISC</td>
<td>Industry Skills Council</td>
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<td>Job Services Australia</td>
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<td>MCA</td>
<td>Minerals Council of Australia</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>NAP</td>
<td>National Apprenticeships Program</td>
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<td>NCVER</td>
<td>National Centre for Vocational Education Research</td>
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<td>NRSET</td>
<td>National Resources Sector Employment Taskforce</td>
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<td>National Resources Sector Workforce Strategy</td>
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<td>NWDF</td>
<td>National Workforce Development Fund</td>
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<td>Regional Development Australia</td>
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<td>Resources and Engineering Skills Alliance</td>
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<td>Registered Training Organisation</td>
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<td>Trade Training Centre</td>
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<td>TAFE Directors Australia</td>
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<td>SkillsDMC</td>
<td>Resources and Infrastructure National Industry Skills Council</td>
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<td>VET</td>
<td>Vocational Education and Training</td>
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The National Resources Sector Workforce Strategy:
A Government and Industry strategy to address skilling and workforce development for the resources sector