



MINERALS COUNCIL OF AUSTRALIA

SUBMISSION TO SKILLS AUSTRALIA:
WORKFORCE FUTURES

NOVEMBER 2009

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EXECUTIVE SUMMARY

The Minerals Council of Australia (MCA) is pleased to have the opportunity to comment on the Skills Australia Discussion Paper on *Workforce Futures: Towards an Australian Workforce Development Strategy*, dated September 2009.

The MCA represents Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society. MCA member companies produce more than 85 per cent of Australia's annual mineral output.

The minerals industry supports Skills Australia's initiative to develop an Australian Workforce Development Strategy. This is a well overdue initiative. The minerals industry is rapidly re-approaching the employment levels of the super-cycle of demand for commodities in 2008 and expects to be experiencing skilled labour capacity constraints in the very near future.

The Australian minerals industry operates almost exclusively in remote and regional Australia with a workforce that is a mixture of local employees and fly-in, fly-out employees. The specific features of operating in these remote and regional communities, in particular workforce development in remote and regional Australia, differentiates the minerals industry from the bulk of other Australian industries. The industry has a relatively small workforce that is highly productive, producing more than 42 per cent of all export revenues for the nation.

The MCA has consistently advocated for change to the tertiary education and training sector to meet the minerals sector's needs for a highly skilled workforce. The current approach is failing the nation, with significant resources being applied in a sub optimal manner.

The MCA agrees that there is a need to rethink the demand-supply model for skills and workforce planning and supports the proposed criteria and risk based approach to planning. However, we are weary of the plethora of plans to streamline workforce planning and believe there is a need to focus on building workforce development plans from the bottom up at enterprise level to ensure enterprise demand drives the education and training sector, not push to deliver Government programs. The difficulty of achieving this outcome should not be underestimated.

The case for Federal Government intervention in ensuring that the entire tertiary sector (VET and Higher Education) is delivering adequate supplies of strategic skills is clearly illustrated in the minerals industry where skills shortage capacity constraints have not been adequately addressed, resulting in lost production and higher costs.

MCA agrees with Skills Australia that there is a need for:

- greater emphasis on development of generic skills that provide adaptability within the workplace and can be built on in future learning, although these will require strong support for continual learning on the job; and
- identification of broad national priorities, particularly in lifting national levels of literacy and numeracy so as to avoid a greater gap between the skilled and unskilled (and unemployed) sections of the community.

The national framework for workforce development must evolve around the fundamental of linking enterprise level workforce development plans with the education and training sector. The training must be linked to real jobs with real prospects of utilising the new skills. The education and training system must be genuinely demand driven.

There is a plethora of publicly funded education, training and employment initiatives that are not effectively used by the minerals industry. There is an identified need to make them relevant for enterprises.

The importance of skilled migration must also be recognised as a means of filling the gap arising due to the ageing workforce and slowing national population growth. The minerals industry is dominated by multinational companies who have an international workforce. The skilled migration program needs to accommodate ready movement of workers into and out of Australia.

Whilst the correlation between higher level skills and productivity presents a clear case for deepening the skills pool, the need for continued investment in developing base level skills, particularly for those disengaged from the workforce, must not be neglected. It is only by broadening the base level skills (including general employability skills, literacy and numeracy) of people with low levels of education and training that we can equip them to enter

the workforce or, subsequently, to gain higher level skills. This is particularly important for workers who live in remote communities. It appears that the discussion paper has missed the significance of this point.

Whether demand is for higher or base level skills, the critical factor is that there must be real job outcomes for course completers that make optimum use of their newly gained skills.

The quality variability of the VET sector is an issue not explored by the Papers, but reform in this regard is needed if there is to be a push for higher level skills. Examples such as a VET diploma in commerce acquired in 12 days generate lack of confidence in the quality of the VET product when compared with a thorough training program that takes 2 years and rigorous assessment around quality training resources to complete.

1 INTRODUCTION

The Minerals Council of Australia (MCA) is pleased to have the opportunity to comment on the Skills Australia Discussion Paper on *Workforce Futures: Towards an Australian Workforce Development Strategy*, dated September 2009.

The MCA represents Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society. MCA member companies produce more than 85 per cent of Australia's annual mineral output.

The availability of an adequate supply of skilled workers for the minerals industry is a critical ingredient to the productivity and future growth of the industry and its ability to grow or even maintain its market share of world commodity trade. During the recent commodity market surge the minerals industry workforce grew by 90% in the five years to November 2008. At the onset of the Global Financial Crisis (GFC) the minerals industry workforce declined by more than 15% but has since rebounded and is rapidly approaching the peak employment levels of 2008. Throughout the GFC period, despite the short term decline in workforce numbers, the minerals industry continued to experience shortages of skilled labour in the key minerals industry professions and trades at many remote and regional mining sites.

It is anticipated that, as the economy continues to strengthen, the minerals industry will again experience the skilled labour capacity constraints of the recent past. In addition, the labour needs of the recently announced multi-billion dollar Liquefied Natural Gas (LNG) projects will generate significant heat in the skilled labour market. Consequently, the work of Skills Australia will be very important in the medium and longer term to the Australian minerals industry.

The Skills Australia Overview Paper and two background papers (*What does the future hold? - Meeting Australia's skill needs*; and *Powering the workplace - Realising Australia's skill potential*) have made an important contribution to the national debate on the form and skills of the workforce that Australia will require in the medium and longer term. It asks some very pertinent questions that go to the root of all tertiary education and training and the future structure of the national workforce. The papers are by their very nature broad and take a national rather than sectoral perspective.

This MCA submission comments on the national perspectives and examines the issues in the context of the minerals sector.

2 AUSTRALIAN MINERALS INDUSTRY

2.1 Contribution to the National Economy

Mining has been the powerhouse of the Australian economy since the turn of the current century. Yet on account of capacity constraints to growth income surged more than production. As an indicator of this, mining company profits rose by over 200 per cent between 2003-04 and 2006-07, while minerals production rose by only 7 per cent over the same four year period. Building absolute capacity – and getting extra product to market – proved to be a frustrating process for the Australian mining sector. The GFC has been but a brief respite from the pressure of capacity constraints to growth.

Congested and poorly functioning export corridors, failing social and physical infrastructure, long delays in approvals and shortages of both materials and skilled workers, meant that growth in mining output was slow to respond to increased global demand. World prices rose strongly prior to the onset of the GFC but so did the costs faced by Australian producers, including labour costs due to lack of skilled workers.

In financial year 2008-09 the mining sector earned total export revenues for the nation of \$118B or 42% of all export revenues¹. In fact the mining sector exports were greater than all manufacturing exports. Export income is forecast to decline in 2009-10 due to commodity price reductions, although production levels are expected to be maintained.

The minerals sector direct contribution to the nation's GDP was 8 percent in 2008-09 and when indirect impacts are included the contribution rises to 18 per cent². When GDP data is compounded for the years 2006 to 2009 the mining sector's contribution to GDP growth was 4 per cent compared to the contribution from all other sectors of only 2.4 per cent.

2.2 Commodities

Australia is ranked as the number one nation for reserves of bauxite, uranium and nickel. We are ranked number two for gold reserves, number three for iron ore reserves and number 6 for coal reserves. In terms of production we are the number one producer of bauxite, alumina, rutile, ilmenite, zircon and tantalum. We are the second largest producer of uranium, lead, zinc and lithium. Third largest producer of gold, diamonds, iron ore, manganese, nickel and niobium; fourth largest producer of black coal and silver; and fifth largest producer of aluminium, brown coal and copper.

During 2008-09 metallurgical coal was our largest commodity export with a value of \$34.5B closely followed by iron ore at \$33.7B.

Supply is the great unmentioned in the current debate about the prospects for the Australian and global minerals industry. New supply takes a long time to develop, but not all that long to slow down, especially at the margins, as we have witnessed. As global demand reaches or exceeds supply, prices are likely to move rapidly and Australia needs to ensure it does not get caught in a supply vacuum. This is the foundation of the MCA's very strong focus on and drive in remedying capacity constraints to growth.

The underlying fundamentals to the "super-cycle" of minerals demand are checked in the current financial environment, not compromised and thus underlying demand for minerals products remains sound. This position is supported by:

- Rebalancing of global economic development and strategic power is no short term phenomenon and is unlikely to be derailed over the medium to longer term.
- Rapid industrialisation and urbanisation of developing economies will continue – centres of industrial production and associated developments increasingly shifting to the emerging economies – especially China, India, Indonesia and Vietnam.

The substantial "trickledown effect" from the US to South America and to Asia over the coming decade; that is, as capital moves from the very low unproductive returns of the US housing sector (and its securitised mortgages) to more productive investments with higher rates of return is expected to further aid the continuance of the super-cycle of demand for mineral commodities.

¹ Don Argus, Presentation to Melbourne Mining Club, October 2009.

² Don Argus, Op. cit.

2.3 Sustainability

The minerals industry's approach to sustainable development starts with *Enduring Value*³—the Australian Minerals Industry Framework for Sustainable Development. This framework provides a program of continuous improvement and encourages companies to achieve social and environmental standards beyond the minimum standard set by regulation. The philosophy of *Enduring Value* is consistent with the COAG regulatory principles.

Signature to *Enduring Value* is a condition of membership for the MCA. However, all exploration, mining and minerals processing companies and contractors are eligible to become signatories to *Enduring Value*, provided that they commit to meeting the *Enduring Value* obligations.

As part of the obligations under *Enduring Value*, signatories are required to publicly report site level performance, on a minimum annual basis. These reports address performance across the full scope of social, environmental and financial aspects of the business.

The minerals industry has continued to improve its transition from managing the present environmental impact through rehabilitation and reclamation to environmental stewardship addressing longer-term considerations for maintenance of sustainable ecosystems beyond life of mine.

In addition, the Australian minerals industry has shifted its focus beyond the immediate impact on local communities to contributing to building sustainable regional communities – centred on employment opportunities and enterprise development.

To this end, the industry has recognised:

- that corporate social responsibility is not an adjunct to our business, it is our business - our core function is to convert natural endowment to societal capital, and that can only be achieved sustainably when there are meaningful, mutually beneficial considerations of the environment, our host communities, and the rights and interests of Indigenous peoples; and
- that the intergenerational benefits to communities and the nation as a whole of natural resource development should extend beyond the life of mine.

In this the industry has positioned itself as the largest private sector employer of Indigenous Australians, with 5% of current employees identifying as Indigenous – this figure is as high as 20% at some sites and the industry has targets for employment levels comparable to the surrounding community. The industry has moved from adversarial discussions around native title claims to partnering to build sustainable Indigenous communities, with a focus on enhancing employment opportunities, enterprise facilitation and mutually beneficial partnerships.

³ MCA, *Enduring Value: The Australian Minerals Industry Framework for Sustainable Development*, www.minerals.org.au, June 2005.

3 MINERALS INDUSTRY WORKFORCE

3.1 Current Workforce Structure

The minerals industry workforce almost exclusively comprises employees, as only 1.6 per cent is self employed, compared to the all industries figure of 11.7 per cent⁴. Similarly, almost the entire workforce is full-time; 97.7 per cent compared to 71.6 per cent for all industries. However, only 15 per cent of the workforce is women compared to 45 per cent for all industries.

Minerals industry jobs are high value jobs. The average annual income of mining employees was \$85,400 pa in 2006-07, whereas the corresponding income of manufacturing sector employees was only \$47,900 pa⁵.

Contrary to common belief, mining sector jobs are highly skilled jobs. Almost 20 per cent of the workforce has a bachelor or higher qualification and 28 per cent have a Certificate III or IV qualification, compared to only 17 per cent for all industries⁶. Employees with no post schooling qualification comprise 36.7 per cent of the workforce compared to 45.3 per cent for all industries. However, apprentices are under-represented in the workforce numbers. In the highly specialised occupations of the mining sector there is a high correlation between qualification gained and jobs.

The minerals industry continues to make a substantial investment in training, with figures showing that, on average, the industry spends three times the national average per employee on training and is the largest investor in training of all industries⁷. However, the vast majority of the minerals industry's training activity is outside the government training system due to the inability of the publicly funded VET sector to meet the minerals industry's needs.

Mining sector projects are located in all regions of Australia, in remote, rural and regional centres. Western Australia and Queensland are the two largest mining States. In addition to mining project sites, a large number of people are employed at mining companies' corporate offices in capital cities. The service industries to the mining sector are also mostly located in capital and large regional centres.

The mining industry workforce mostly operates on a domestic commute basis with a growing number of the newer mining projects located in remote rural parts of Australia working on a fly-in fly-out basis. Projects operating in remote Australia have a small but growing number of employees recruited from local Indigenous communities.

The occupations engaged in mining projects range from mining professionals, technicians, trades people, mine and plant operators and entry level workers. There are also finance, HR, administration, infrastructure and catering and housekeeping personnel. The employees can be engaged directly by the mine operator, by contract mine operators, contract service providers and consultant service providers.

Within the mining sector there are at least 350 different rostering arrangements – including special shift arrangements for women and men with principal care for children, fly-in and fly-out shifts and 12 hour shifts.

The provision of education and training in these remote and regional mining sites differentiates the minerals industry training needs from that of most other industry sectors.

3.2 Skills Shortage Capacity Constraints and Wages Pressure

At the peak of the super-cycle the minerals industry experienced chronic, and in some areas severe, shortages of mining industry professionals, trades people and experienced miners. However, there was never a universal shortage of entry level employees, although this may not continue to be the case in the face of heightened competition for labour from resource sector construction projects.

In 2007-08 skilled migrants comprised more than 3 per cent of the minerals industry workforce, with the sector accounting for 8 per cent of all primary temporary skilled migrants (457 visa holders) in Australia.

⁴ NCVER, *Mining Industry and Training 2007: Exploring the relationship between industry and the VET system*, 2007.

⁵ Don Argus, Op cit.

⁶ NCVER, Op. cit.

⁷ NCVER, Op. cit.

Over the past two decades the Australian minerals industry transformed its workplaces from a culture of confrontation and divisiveness where workplaces were battlegrounds of a “them and us” conflict to a workplace culture of collaboration and direct relationships. The mining industry has been a leader in introducing greater flexibility in the workplace. Wages, employment, and workplace education and training are significantly higher than the national averages. Total minerals sector employment has risen significantly in response to the super-cycle of demand for minerals commodities and is currently almost back to the peak numbers prior to the onset of the GFC.

Wages have also increased during the rapid growth in employment due to shortages of skilled employees. Earnings for employees in the minerals industry are more than 60 percent higher than the Australian all-industry average. The GFC has offered little relief to wages pressure. In fact full-time adult wages in the minerals industry rose 5.6 per cent in the 6 months to May 2009 compared with all industries’ rise of 2 per cent.

3.3 Future Labour Needs

The MCA has consistently argued that the economic policy in Australia over the past five years has been tilted too far towards consumption over investment – overlooking the need to expand industrial and community infrastructure to enable the Australian economy to maximise its export potential.

A significant capacity constraint for the industry is access to human capital, and minerals industry employers continue to experience difficulty in recruiting sufficient numbers of appropriately skilled workers in both mining specific and traditional trades such as fitters, electricians, and diesel mechanics.

The MCA commissioned a series of comprehensive studies to ensure that both as a nation and as an industry we do not repeat the mistakes of the past, which ill-equipped Australia to respond to burgeoning global demand for minerals products. The MCA *Vision 2020* project, conducted in 2008, included the modelling of global mineral commodity demand and Australian supply to 2020. The Access Economics study showed Australia had lost market share in 8 key commodities, including coal and iron from 2002 to 2007. The study also showed that to maintain market share, production of iron and coal would have to increase three times as much by 2020 as it had increased from 2002 to 2007.⁸ Some of that needed expansion has been underway, although its progress has been disrupted by the GFC.

A companion study of labour, also released in 2008, showed that an additional 86,000 workers would be required by 2020 to produce the commodities required simply to maintain market share.⁹ This study was an update of an earlier comprehensive study undertaken by the National Institute of Labour Studies in 2005 which projected that the minerals industry would require an additional 70,000 workers by 2015¹⁰. These additional worker projections make no allowance for training and replacing those workers lost due to attrition.

The labour forecast shows the greatest demand will be in skilled trades with an additional 31,000 people required. Demand for skilled operators will increase by 30,000 and demand for mining industry professionals will grow by 9,000 or 70 per cent on current numbers by 2020.

⁸ Access Economics, *Global Commodity Demand Scenarios*, Report prepared for MCA, May 2008, www.minerals.org.au

⁹ Molloy & Tan, *Labour Force Outlook in the Australian Minerals Sector: 2008 to 2020*, Flinders University, National Institute of Labour Studies report prepared for MCA, June 2008, www.minerals.org.au

¹⁰ Lowry, Molloy & Tan, *The Labour Force Outlook in the Minerals Resources Sector 2005 to 2015*, Flinders University, National Institute of Labour Studies report prepared for MCA, May, 2006.

4 THE WORKFORCE DEVELOPMENT PROPOSAL

4.1 The Case for Change

The MCA has consistently advocated for change to the tertiary education and training sector to meet the minerals sector needs for a highly skilled workforce. The current approach is failing the nation with significant resources being applied in a sub optimal manner, as evidenced by:

- minerals sector continuing disconnect from the publicly funded Vocational Education and Training (VET) sector due to its inability to meet the sector's needs for quality, flexibility and responsiveness;
- minerals sector direct funding of the Minerals Tertiary Education Council (MTEC) initiative to ensure an appropriate supply of specialist occupations where current funding models have failed;
- the small number of productivity training places allocated to the minerals industry in contrast with the numbers allocated to service industries and less technical occupations;
- the lack of universally respected high quality training outcomes for many (non-trade) VET qualifications; and
- the disconnect between acquisition of skills and qualifications and job outcomes.

The demographics of the working population has changed through factors including the ageing workforce and greater participation by women: the national economy has changed from its traditional reliance on agriculture and manufacturing and continues to change. The tertiary education and training sector needs to adjust to these changes, especially in its ability to respond to the needs of remote and regional Australia.

The Bradley Review has identified the changes required to the higher education sector. An effective strategy for reform of the vocational education and training system is yet to be identified and implemented.

4.2 Identifying Skills and Workforce Demands

The MCA agrees that there is a need to rethink the demand-supply model for skills and workforce planning and supports the proposed criteria and risk based approach to planning. However, we are weary of the overabundance of plans to streamline workforce planning and believe there is a need to focus on building workforce development plans from the bottom up at enterprise level to ensure enterprise demand drives the education and training sector, not push to deliver Government programs. The difficulty of achieving this outcome should not be underestimated.

The case for Federal Government intervention in ensuring that the entire tertiary sector (VET and Higher Education) is delivering adequate supplies of strategic skills is clearly illustrated in the minerals industry where the previously mentioned skills shortage capacity constraints have not been adequately addressed at state or local levels, resulting in lost production and higher costs.

Many minerals industry occupations, such as mining engineers, geologists, and specialist operator positions, are small in terms of overall numbers, but severely constrain production if not available in adequate numbers. Specialist mine maintenance personnel and mechanical trades are not small in terms of numbers across all industries, but will also constrain production if not available to minerals sites in adequate number. It is critical that the proposed Federal Government intervention is based on valid data, particularly for small number occupations where variations are not always statistically reliable.

MCA also agrees with the need for:

- greater emphasis on development of generic skills that provide adaptability within the workplace and can be built on in future learning, although these will require strong support for continual learning on the job; and
- identification of broad national priorities, particularly in lifting national levels of literacy and numeracy so as to avoid a greater gap between the skilled and unskilled (and unemployed) sections of the community.

4.3 Establishing a Shared National Framework for Workforce Development

A shared national framework for workforce development must be based on accurate and valid forecasts of medium and long term labour market demand for skills together with the ability to prepare accurate workforce development plans.

The ability to model the Australian labour market in its broadest context is reasonably sound and it should be possible to make valid forecasts of industry growth, occupation growth and domestic skills supply. However, current forecasts by the Department of Education, Employment and Workplace Relations (DEEWR) for minerals sector occupations have not been consistent with the sector's experience, indicating an inability of the model to project demand in small occupation groups. An improved model is required to accurately forecast small segments of the labour market that are critical to the economy such as the minerals industry. In these instances it will be necessary to validate the modelling with qualitative and quantitative industry information.

In addition, the difficulty in producing accurate, integrated national workforce development plans should not be underestimated. It would be a huge undertaking to do this from the bottom up; that is, aggregating enterprise, industry and regional workforce development plans into national plans. However, if the education and training effort is to be responsive to industry needs, this is a fundamental pre-requisite.

The national framework must evolve around the fundamental of linking enterprise level workforce development plans with the education and training sector. There is no point in training more "under-water basket weavers" simply to ensure RTO's fill government training quotas. The training must be linked to real jobs with real prospects of utilising the new skills. The education and training system must be genuinely demand driven.

While it is manifest that greater investment in education and training is required to achieve the reforms required to meet the skilled workforce needs of the economy, there is equally a need to ensure that the existing programs of the public system are strategically directed where they will be most effective in meeting the national workforce development strategy.

The plethora of publicly funded programs for education, training and employment initiatives need to be made relevant to enterprises, which in many cases will require a complete review and reduction of red tape if they are to be utilised by industry.

The importance of skilled migration must also be recognised as a means of filling the gap arising due to the ageing workforce and slowing national population growth.

4.4 Promoting Demand For and the Full Use of Higher Level Skills

Whilst the correlation between higher level skills and productivity presents a clear case for deepening the skills pool, the need for continued investment in developing base level skills, particularly for those disengaged from the workforce, must not be neglected. It is only by broadening the base level skills (including general employability skills, literacy and numeracy) of people with low levels of education and training that we can equip them to enter the workforce or, subsequently, to gain higher level skills. This is particularly important for workers who live in remote communities.

Whether demand is for higher or base level skills, the critical factor is that there must be real job outcomes for course completers that make optimum use of their newly gained skills.

Strategies to increase the capacity of enterprises to develop a better match between skill levels and work organisation must be developed in consultation with industry; and, to encourage uptake, must involve minimal red tape. Without this the potential productivity gains will be negated.

A recent DEEWR study cited in *Campus Review* has identified a 10.5 per cent slump in VET graduates' progression to further study, and under-representation of low socio-economic status students in higher level VET courses.¹¹ While these figures may be, in part, a reflection of a booming economy and high employment, they point to underlying issues in the VET sector that must be addressed to encourage individuals to progress to higher level skills.

In addition, the quality variability of the VET sector is an issue not explored by the Papers, but reform in this regard is needed if there is to be a push for higher level skills. Examples such as a VET diploma in commerce acquired in 12 days generate lack of confidence in the quality of the VET product when compared with a thorough training program that takes 2 years and rigorous assessment around quality training resources to complete.

¹¹ Ross, John. *Worsening VET results prompt call for rethink*. Campus Review, 20 October 2009.

4.5 Focusing on Workforce Participation

The issue of low levels of literacy and numeracy in over 40 per cent of the workforce, whilst identified, is not really effectively addressed in the Paper, which provides considerable discussion on increasing workforce participation but little emphasis on the need to lift literacy and numeracy skills and fundamental job readiness skills of Australians who are in the workforce, let alone those disengaged from the workforce and the mainstream economy.

The case for heightened effort to improve literacy and numeracy is highlighted in the recent COAG Reform Council Report, which notes that 'Relatively high proportions of working-age Australians have literacy and numeracy skills below the minimum level COAG considers is required to meet the complex demands of work and life in modern economies – 43.5 per cent for literacy and 49.8 per cent for numeracy'.¹² This is an alarming statistic and underlines the critical state of literacy and numeracy in remote Indigenous communities.

It seems rather pointless to pursue a policy of increasing higher level skills in the population if we leave 40 per cent behind. There must be an equally resourced endeavour to lift the literacy and numeracy of the nation. This is especially so for Indigenous Australians where job readiness skills are critical. Whilst it is realised that Skills Australia cannot be accountable for solving the endemic problems of Indigenous disadvantage, the problem of job readiness skills must be addressed at all levels of education - preschool, primary school and secondary school levels and tertiary education and training, as well as health and housing stability. Addressing the widespread and continued low levels of literacy and numeracy are a huge problem that must be part of the national workforce development strategy.

¹² Council of Australian Governments. Reform Council. *National Agreement for Skills and Workforce Development: Baseline Performance Report for 2008. Report to the Council of Australian Governments.* September 2009.

5 GROWING THE POOL OF SKILLED WORKERS IN REMOTE AND REGIONAL AUSTRALIA

5.1 Workforce Participation in a Minerals Sector Context

The minerals industry workforce principally comprises males (85.6 per cent); and is aged 25-44 years old (54.8 per cent). Women comprise 18 per cent of the total workforce, however at mine sites this drops to 3 per cent¹³. 15 per cent of the minerals industry sector identifies as Indigenous and 3 per cent are temporary skilled migrants (457 visas).

In rural and regional areas where the minerals industry principally operates there is a recognised opportunity to grow the pool of available labour through increasing participation by women and Indigenous people.

Recruiting local labour is profoundly more successful than trying to relocate people from the East Coast capitals. A recruitment program conducted by MCA in 2007 and 2008, targeting tradespeople in capital cities where there were high levels of redundancy occurring failed to attract any new workers to remote locations. Recruiting works from capitals to work on fly-in, fly-out (FIFO) rosters is much more successful.

5.2 Local vs FIFO Employment

Whilst there is a strong business case for mining companies to employ local labour, FIFO employment is a feature of some remote mining operations. This is due to both the lack of suitably skilled local people and the desire of mine personnel and their families to live in areas with greater amenity, such as the coastal areas.

As mentioned above, there is significant potential to grow the pool of locally available labour through increased participation of groups including Indigenous people, women and others disengaged from education and the workforce. However, increased participation of these groups is dependent on their having appropriate skill levels, which can only be achieved through provision of education and training opportunities in the remote and regional areas where they are located. In many cases base level skills are required before potential employees move into employment and the development of higher level skills.

In providing education and training for remote and regional areas we must not lose sight of the fact that the models that are appropriate for metropolitan areas and major centres are not necessarily appropriate for remote and regional areas that have thin markets, may lack efficient ICT connections, and are constrained by distance. New models for funding and education and training delivery must be considered.

5.3 Indigenous Employment

5.3.1 Work Readiness Skills

All major mines are keen to employ local Indigenous people, however some of the key barriers to increased participation of local Indigenous people in mainstream employment are lack of basic work readiness skills (literacy, numeracy, teamwork, punctuality, etc.) and fitness for work (drug and alcohol free, good health, etc.)¹⁴.

In addition, the MISC report found that the training models being used in many remote Indigenous communities were inappropriate to the needs of Indigenous people and that many schools lacked the capacity to deliver low level VET courses that would provide base level skills.

A third factor is the extensive range government training initiatives that have provided Indigenous people with course after course, but no real job outcomes other than CDEP jobs..

¹³ University of Queensland. Women in Social & Economic Research Unit. *Unearthing New Resources: Attracting and Retaining Women in the Australian Minerals Industry. Report prepared for the Australian Government Office for Women and the Minerals Council of Australia.* Minerals Council of Australia. 2006.

¹⁴ Mining Industry Skills Centre. *Identifying Opportunities for Enhanced Training Pathways in Remote Indigenous Communities in the Northern Territory: Report prepared for the Minerals Council of Australia.* MISC, 2008

Whilst fitness for work issues are outside the remit of Skills Australia's workforce development strategy, initiatives to develop work readiness skills in remote Indigenous communities are an essential component of an holistic workforce development model.

5.3.2 Career Advancement

The minerals sector is the largest private sector employer of Indigenous Australians (ABARE's 2002 estimate was 4.6 per cent of the minerals sector workforce). However, the vast majority are employed in entry level or low level support jobs due to their lack of qualifications, as identified above. Career advancement for this group is dependent on their having access to appropriate training opportunities to develop and enhance their skills. Very few have the opportunity to advance due to their limited literacy and numeracy skills. There is a critical need to advance these workers to trades, supervisory and management roles. This will require a significant effort for companies and Governments to achieve.

5.3.3 The Role of Mentors

While Indigenous employment levels within the minerals industry are still relatively low; and to promote mutual understanding of Indigenous cultural issues and the culture of the workplace, mentors play a critical role in maintaining and developing Indigenous participation. The availability of suitably qualified mentors is also a critical aspect of workforce development strategies.

Work is required in identifying and training appropriate Indigenous employment mentors. Mentors for entry level employees, trainees and career advancement are all different roles and require different skills. The MCA has recently applied for an Industry Training Strategies Program (ITSP) grant from DEEWR under the Indigenous Regional Project Program to advance the understanding of the role of mentors, identify the skills they require and to develop a suitable training program for mentors in the minerals industry.

5.4 Collaboration with the Agriculture Sector

Cross-sectoral collaboration to grow the pool of available skilled labour is an additional avenue to address current and looming skills shortages. For example, both the mining and agriculture industries work principally in rural and regional areas of Australia, and often compete for people with similar skills in the workplace.

The MCA has a Memorandum of Understanding with the National Farmers' Federation (NFF) and the Australian Government to work collaboratively to grow the pool of skilled labour available to the two industries in regional and rural Australia. The recently completed Australian Regional Agriculture and Mining Skills (ARAMS) Project Report¹⁵ made a number of recommendations aimed at achieving this goal. MCA and NFF are currently implementing the recommendations, including development and implementation of a common training program for entry level workers in the two industries, the aim being to facilitate movement from one industry to the other during local cyclical downturns.

5.5 Demystifying the Plethora of Commonwealth and State Education, Training and Employment Initiatives Available to Employers and Individuals

A common theme identified in a number of reports prepared for the MCA is the lack of uptake of Government education, training and employment initiatives by minerals industry employers.¹⁶ A number of barriers to uptake have been identified, including:

- the difficulty employers have in sourcing information about the programs that are available;
- the difficulty in identifying which initiatives are appropriate to their needs;
- the amount of red tape involved in applying for, managing and reporting on these initiatives; and
- the difficulty in sourcing training appropriate to the needs of their enterprise.

Whilst the Government initiatives are to be applauded, many are being overlooked or are too administratively complex for employers to consider. It is also critical that such initiatives, to be fully effective, are linked to real job outcomes, and not just training to meet Government and Government agency performance targets.

Work is required to make these programs more readily accessible, so that they are taken up by the minerals sector.

¹⁵ Australian Government. Department of Education, Employment and Workplace Relations, National Farmers' Federation and Minerals Council of Australia. *Australian Regional Agriculture and Mining Skills Project (ARAMS) Final Report*. 2009.

¹⁶ Mining Industry Skills Council Report. Op cit. ARAMS Report. Op.cit.

6 SKILLS DEVELOPMENT OF EXISTING WORKERS TO IMPROVE PRODUCTIVITY IN REMOTE AND REGIONAL AUSTRALIA

6.1 Higher Level Skills in a Minerals Sector Context

As previously mentioned, the minerals industry is a highly skilled industry, with nearly 20 per cent of the workforce having a degree or higher qualification, 28 per cent having a certificate III or IV level qualification and only 37 per cent having no post-school qualification (compared with an all-industries average of 45 per cent). The minerals industry is constantly advancing technologically, for example, the remote operation of mining equipment underground is a current reality that requires miners to have fine-tuned IT skills.

As also mentioned previously, access to education and training is often difficult in the remote and regional areas of Australia. However, on the job training is fundamental to productivity in the minerals industry as each operation has different site criteria, such as geology, and operating equipment.

The minerals sector invests significant funds to develop its existing workers. However, for the VET sector, this investment is almost exclusively in the privately funded VET sector due to the publicly funded VET sector's inability to meet the needs of the industry for quality and flexibility, including on the job training.

In the Higher Education Sector, the MCA directly invests over \$2M per annum to ensure an adequate supply of professional workers. This is in addition to the direct funding of universities by mining companies.

To meet its immediate productivity requirement, minerals industry training is often aimed at developing specific skills sets rather than full qualifications, and due to the on the job nature is not always accredited nationally recognised training.

All of these factors point to a need for reform of the VET sector and review of funding models across the entire tertiary sector to ensure that the current and future skilled workforce needs of the industry are met.

6.2 Skills Development to Lift Productivity

To achieve the skills development required to lift productivity of the Australian workforce it is essential that the quality of education and training continues to improve. In the VET sector this includes improvement in the quality and consistency of training outcomes. Examples such as a mid level diploma being gained in 12 days impact on employers' and individuals' confidence in the quality and value of VET qualifications. This issue must be addressed if continuing skills development and productivity improvements are to be achieved.

The Industry Skills Council for the minerals industry, SkillsDMC, has had access to very few of the Productivity Places Program (PPP) positions. Those that have been received have been enthusiastically taken up by companies through their workforce development processes. The PPP positions being made available through the States for existing workers are failing in many cases to meet the demand of industry and we are aware of at least one example of a state calling tenders for courses that are not directly related company needs (the old supply push model). Access to more of the PPP positions directly linked to enterprise workforce development plans would be a great benefit to the minerals industry to boost skills levels and productivity of existing workers.

In the Higher Education sector, the relatively small numbers of graduates required, for example 200 mining engineers per annum is regarded as the appropriate number, collaborative initiatives such as the Mining Tertiary Education Council (MTEC) initiative, in which universities work collaboratively to produce high quality graduates, are a good solution.

In addition, emerging education and training requirements such as advancing technologies and sustainability skills demand high quality, consistent education and training delivery.

In all, then, the message must be to have a demand driven system with training on the job directly related to current jobs in specific enterprises.

6.3 Workforce Retention

During the recent 'mining super-cycle' turnover in some enterprises reached 30 per cent or more, leading to ever increasing salary costs and reduced productivity. Skills acquisition, particularly the acquisition of nationally recognised and respected qualifications is one tool that enhances the retention of workers, especially if associated with career advancement and greater rewards. However, in the VET sector, the inconsistent quality and lack of recognition of many VET qualifications referred to above has meant that they have not been regarded as transferrable between employers, thus negating their value as a retention incentive and, incidentally, leading to repeat training and consequent loss of productivity.

Skills Australia needs to address the quality of training outcomes issues in the VET system.

6.4 Mining is a Global Industry with a Global Workforce

The mining industry is a global industry, with many multinational companies having workforces in several countries; hence, mining industry skills are internationally transferrable. Skilled migrants, particularly in critical professional roles are a key component of overcoming skills capacity constraints and maintaining the minerals industry's productivity. A skilled migration program with integrity that doesn't compromise the working conditions of the migrants, nor work opportunities for Australians; and which is not overly bureaucratic and facilitates employer participation must be maintained within the workforce development strategy.

In addition in a global industry, many Australian minerals industry workers leave the country, for both career advancement and to gain additional experience. These Australians are often involved in training mine workers in the other countries. A workforce development strategy needs to factor in this global movement of employees.

6.5 Matching Training to the Needs of the Enterprise (Workforce Development Planning)

As previously highlighted, a successful workforce development strategy must be developed from the ground (enterprise level) up. SkillsDMC, the Industry Skills Council has made significant inroads into trialling workforce development plans at mine sites. The program is having significant success in gaining employer buy-in, identifying skills gaps and using a small allocation of PPP positions to fill the identified skills gaps.

This is a truly enterprise-driven workforce development model, which provides the fundamental building blocks for the development of an industry-wide workforce development strategy.

7 ACCESSING EDUCATION AND TRAINING IN REMOTE AND REGIONAL AUSTRALIA

7.1 Availability and Quality of Public VET Services in Remote and Regional Australia

The availability and quality of VET sector provision in remote and regional Australia are issues critical to the minerals industry. Low population density results in 'thin markets' these areas and the majority of VET delivery is through public VET providers who have little or no competition and do not meet the needs of the minerals industry for quality and flexibility. Therefore, rather than use the public provider, minerals industry employers either use private providers brought in directly by the individual company to train their workforce, or companies establish their own enterprise registered training organisation. This is not an option for local residents who must continue to experience sub optimal education and training.

While recent State and Federal Government initiatives to increase quality through increased competition within the VET sector may be successful in raising quality of public VET provision in metropolitan areas and large regional centres, they are far less likely to be successful in remote areas where there is little competition and small numbers of students.

The minerals industry's need for a high level of on the job training also points to a need for high quality training and assessment to be available at location.

Alternative strategies will be needed to improve quality and consistency of VET provision in remote and regional areas to meet the minerals industry's current and future requirements for skilled local workers.

7.2 Availability and Sustainability of Minerals Sector Higher Education

The Australian minerals industry relies heavily on Australian trained graduates, as they receive excellent training/education and have the attributes required to ensure success when working in remote and regional Australia.

A comprehensive examination of minerals industry professionals in 1998, *Back from the Brink*¹⁷, concluded that the delivery of minerals industry higher education courses had to change if the industry was to maintain the quality and supply of technical professionals needed to grow its international competitiveness.

This report, highlighting market failures due to the complex and confused state of the higher education sector; the uneconomic size of the market for universities; and inadequate Government funding that has not been indexed to meet the needs of highly technical courses, led to the establishment of MTEC.

Since 1999, over \$18 million of industry funds have been allocated through MTEC to overcome this gap. This funding has assisted in building some elasticity into the system (ready to capitalise on the next boom, able to sustain busts) and to support programs and projects to assist with attraction, retention and upskilling of minerals industry professionals.

A national workforce development strategy must have the ability to meet the needs of the minerals industry for university graduates through both Government intervention to ensure that adequate numbers of these strategic occupations are maintained and by ensuring that provision of higher education meets the needs of minerals industry professionals located in remote and regional areas.

7.3 Demand Driven Models in Thin Markets

As highlighted above, thin markets in regional and remote areas or for occupations with small numbers of employees do not respond to demand driven models in the same way as the broader market. This is where the need for appropriately targeted Government intervention is critical.

Whilst MCA supports a risk-based approach to identifying the need for intervention, it is critical that the risk criteria accommodate intervention to meet in thin markets; and that the data on which the criteria are assessed is current, robust and valid.

¹⁷ Minerals Council of Australia National Tertiary Education Taskforce. *Back from the Brink: Reshaping Minerals Tertiary Education*. MCA 1998

8 CONCLUSIONS

The minerals industry supports Skills Australia's initiative to develop an Australian Workforce Development Strategy. This is a well overdue initiative. The minerals industry is rapidly re-approaching the employment levels of the super-cycle of demand for commodities in 2008 and expects to be experiencing skilled labour capacity constraints in the very near future.

The MCA has consistently advocated for change to the tertiary education and training sector to meet the minerals sector needs for a highly skilled workforce. The current approach is failing the nation with significant resources being applied in a sub optimal manner.

The MCA agrees that there is a need to rethink the demand-supply model for skills and workforce planning and supports the proposed criteria and risk based approach to planning. However, we are weary of the plethora of plans to streamline workforce planning and believe there is a need to focus on building workforce development plans from the bottom up at enterprise level to ensure enterprise demand drives the education and training sector, not push to deliver Government programs. The difficulty of achieving this outcome should not be underestimated.

The case for Federal Government intervention in ensuring that the entire tertiary sector (VET and Higher Education) is delivering adequate supplies of strategic skills is clearly illustrated in the minerals industry where skills shortage capacity constraints have not been adequately addressed, resulting in lost production and higher costs.

MCA agrees with Skills Australia that there is a need for:

- greater emphasis on development of generic skills that provide adaptability within the workplace and can be built on in future learning, although these will require strong support for continual learning on the job; and
- identification of broad national priorities, particularly in lifting national levels of literacy and numeracy so as to avoid a greater gap between the skilled and unskilled (an unemployed) sections of the community.

The national framework for workforce development must evolve around the fundamental of linking enterprise level workforce development plans with the education and training sector. The training must be linked to real jobs with real prospects of utilising the new skills. The education and training system must be genuinely demand driven.

There is a plethora of publicly funded education, training and employment initiatives that are not effectively used by the minerals industry. There is an identified need to make them relevant for enterprises.

The importance of skilled migration must also be recognised as a means of filling the gap arising due to the ageing workforce and slowing national population growth. The minerals industry is dominated by multinational companies who have an international workforce. The skilled migration program needs to accommodate ready movement of workers into and out of Australia.

Whilst the correlation between higher level skills and productivity presents a clear case for deepening the skills pool, the need for continued investment in developing base level skills, particularly for those disengaged from the workforce, must not be neglected. It is only by broadening the base level skills (including general employability skills, literacy and numeracy) of people with low levels of education and training that we can equip them to enter the workforce or, subsequently, to gain higher level skills. This is particularly important for workers who live in remote communities. It appears that the discussion paper has missed the significance of this point.

Whether demand is for higher or base level skills, the critical factor is that there must be real job outcomes for course completers that make optimum use of their newly gained skills.

The quality variability of the VET sector is an issue not explored by the Papers, but reform in this regard is needed if there is to be a push for higher level skills. Examples such as a VET diploma in commerce acquired in 12 days generate lack of confidence in the quality of the VET product when compared with a thorough training program that takes 2 years and rigorous assessment around quality training resources to complete.

ENDS