



# **PRE-BUDGET SUBMISSION 2010-11**

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The AusIMM  
Level 3  
15-31 Pelham Street  
Carlton Victoria Australia 3053  
Postal Address:  
PO Box 660 Carlton South  
Victoria Australia 3053  
Telephone: +613 9662 3166  
Facsimile: + 613 9662 3662  
Web Page: <http://www.ausimm.com>

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## **A. THE AUSIMM**

The Australasian Institute of Mining and Metallurgy ('The AusIMM') is the leading organisation representing minerals sector professionals in the Australasian region, primarily in the disciplines of geosciences, metallurgy and mining engineering. The AusIMM has more than 10,000 members who work across academia, operations, mining technology services and Government.

Our members are bound by a Code of Ethics to put the interests of the community ahead of personal or sectional interests, and are strongly committed to ensuring the sustainability of the industry in which they work. Given their technical expertise and first hand practical experience of the sector, they are uniquely placed to comment on the policy settings to achieve this goal. Thank you for giving our organisation the opportunity to provide input to the 2010-11 Budget.

## **B. SUMMARY OF RECOMMENDATIONS**

### **1. Goal: Increase the level of greenfields exploration activity in Australia**

- 1.1 *Policy: Implement a Flow-through shares scheme to facilitate access to finance for junior explorers***

**Policy Recommendation:**

**1.1.1 Implement a Flow-through shares scheme as outlined in the joint industry submission to the Minister for Resources as a matter of urgency**

### **2. Goal: Encourage R&D that will make the difference to Australia's competitiveness as a destination for exploration and mining investment**

- 2.1 *Policy: Maintain support for world class minerals related public research infrastructure within Australia***

**Policy Recommendation:**

**2.1.1 Provide strong support for CSIRO Minerals Down Under Flagship, relevant CRCs and mining research focused university departments**

- 2.2 *Policy: Ensure changes to the R&D tax incentive eligibility criteria do not adversely affect mining R&D investment***

**Policy Recommendation:**

**2.2.1 R&D outputs to be excluded from the operation of the feedstock rule.**

### **3. Goal: Support the attraction and retention of a critical mass of highly skilled mining professionals**

- 3.1 *Policy: Provide support for sustainable quality minerals-related higher education courses***

**Policy Recommendations:**

- 3.1.1 Establish mission-based compacts with minerals higher education providers in the areas of geoscience, metallurgy and mining engineering**
- 3.1.2 Review the funding formula established by the *Higher Education Funding Act 2003* (Cth)**
- 3.1.3 Maintain ongoing dialogue with relevant industry, university and professional associations through the mechanism of the Australian National Engineering Task Force (ANET)**

**3.2 Policy: Provide access to affordable, quality child care options for professionals in the mining industry**

**Policy Recommendations:**

- 3.2.1 Support the creation of child care centres in rural and regional Australia, with operating hours that reflect the actual needs of local employees**
- 3.2.2 Extend fringe benefits tax exemption to all forms of employer sponsored child care**

**3.3 Policy: Ensure that the free movement of Australian professionals between countries in a global industry is not inhibited**

**Policy Recommendations:**

- 3.2.1 Restore section 23AG of the Income Tax Assessment Act to the previous status quo to ensure that the free movement of professionals across countries is not inhibited**

**4. Goal: Advance nationally consistent and comprehensive approach to health and safety that will advance the goal of zero harm for our industry**

**4.1 Policy: Commit to clear timelines for the implementation of all strategies of the National Mine Safety Framework**

**Policy Recommendations:**

- 4.1.1 Ensure that the strategies outlined in the NMSF are progressed as a matter of priority within the broader plans for a model National OHS Act**
- 4.1.2 Progress all strategies of the NMSF with a national commitment to clear, staged timelines and a firm commencement date**

## **C. POLICY CONTEXT – RECOVERY FROM THE GLOBAL FINANCIAL CRISIS**

The Australian minerals sector is a mainstay of the Australian economy,<sup>1</sup> and has moreover played a major role in insulating Australia from the worst effects of the global financial crisis. A better than anticipated recovery by our major trading partners, such as China and countries in South East Asia, coupled with a high demand for mineral commodities, has been the key factor underpinning Australia's economic resilience.

On the demand side, economic indicators are promising. Economic growth in China continues to rebound strongly from the slowdown in late 2008 and early 2009. In addition to increased consumption, there is the potential, outside China, for a return to inventory rebuilding. During the global economic slowdown, many consumers drew down stocks, which reinforced the sharp weakening of underlying demand. The rebuilding of stocks will provide additional support for minerals and energy commodity demand.

In the longer term, the continuing and accelerated growth of economies such as China and India, as these countries seek to match the standards of living in the OECD, is anticipated to generate an increasing demand for mineral resources. For example, China alone intends to build a staggering 50,000 skyscrapers before 2030.

With 74 advanced projects defined as being under construction or committed, with a value of \$112.5 billion, Australia is well placed to reap the rewards of the forecast increase in minerals demand.<sup>2</sup> However, despite significant mineral endowments and the impressive committed projects, market share in this competitive global industry is not something that our nation can take for granted.

In a highly globalised industry, multinational companies are able to shift their attention to those regions that offer the best resources at the highest profit margins, and proactive policy settings are critical to remaining competitive.

The extent to which multinational companies are able to alter their investment strategies in response to key conditions (such as commodity price) was evident in the dramatic response to the initial crash in the price of some commodities in 2008:<sup>3</sup>

- In the case of black coal and iron ore, the initial impact of the world crisis caused some mining operations to scale back production, others delayed plans for expansion and some mines closed.
- In the case of nickel, some multinational companies have recently closed sulphide and lateritic nickel mines in WA and Tasmania and have consolidated their operations at larger, low cost mining operations – not necessarily in Australia.

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<sup>1</sup> According to Chris Richardson of Access Economics, the “commodity boom” has contributed to increases in national income of between 10 and 14% over the last few years, and these increases are over and above income levels had prices stayed at 2002-03 levels.

<sup>2</sup> ABARE, *Minerals and energy: major development projects – October 2009* (November 2009) at [http://www.abare.gov.au/corporate/media/2009\\_releases/18nov\\_09.html](http://www.abare.gov.au/corporate/media/2009_releases/18nov_09.html)

<sup>3</sup> Geoscience Australia, *Australia's Identified Mineral Resources 2009* (15 December 2009) at [https://www.ga.gov.au/products/servlet/controller?event=GEOCAT\\_DETAILS&catno=69951](https://www.ga.gov.au/products/servlet/controller?event=GEOCAT_DETAILS&catno=69951)

- By late 2008 almost all zinc-lead mines in Australia had scaled back, usually with a focus on higher grade ore, and several operations moved to care and maintenance as a result of low zinc and lead prices.
- Lower copper prices, particularly in the last quarter of 2008, contributed to several of Australia's smaller copper mines moving to care and maintenance with three recently established low-grade copper mining companies being placed in administration.

On the demand side, the industry will always be subject to cyclical factors due to the fluctuation of commodity prices. On the supply side, in a competitive industry that can make rapid decisions based on location and scale of existing operations, policy settings that optimise Australia's competitiveness as a supplier are dependent on the following:

1. **The quality of Australia's *known resources***, viewed in light of current processing techniques, and the efficiency with which the ore can be extracted
2. **Our ability to minimise the impact of capacity constraints**, in the form of skills shortages, infrastructure deficiencies, and regulatory burden

As a learned Institute, members of The AusIMM are equipped to comment primarily on the former – exploration, R&D and professional capability are the key elements to increasing our stock of known attractive resource. We are also knowledgeable to comment on the latter, in relation to professional skills shortages and OHS regulation.

Our policy recommendations for budget policy in 2010-11 therefore relate to policy settings that will:

- Increase the level of greenfields exploration activity in Australia
- Facilitate R&D that will make the difference to our competitiveness as a destination for exploration and mining investment
- Support the attraction and retention of a critical mass of highly skilled mining professionals
- Put in place a nationally consistent approach to health and safety that will advance the goal of zero harm across our industry

### **3. POLICY RECOMMENDATIONS**

#### **1. Goal: Increase the level of greenfields exploration activity in Australia**

Greenfields exploration, the search for new deposits, is the lifeblood of industry. Greenfields exploration is carried out primarily by junior explorers. These are companies, typically with a capitalisation of less than \$AUD 30 million, which engage in exploration rather than production activities. They have limited income and are highly dependent on continuing capital raisings through IPOs. It is unsurprising that during the global financial crisis junior explorers were particularly hard hit, and many plans for IPO raising were shelved. The problem of access to finance for junior explorers is a persistent one. Given their critical role in finding new deposits, policy settings that will assist junior explorers in raising capital have long been argued for as essential by the minerals industry.

#### **1.1 Policy: Implementation of a Flow-Through Shares (FTS) Scheme**

The intention of a Flow-Through Shares (FTS) policy is to improve access to finance for junior explorers by rectifying a tax asymmetry. Under current taxation arrangements, exploration expenditure gives rise to a tax deduction under the Australian taxation system, but junior explorers are unable to claim this deduction by virtue of having no assessable income. Consequently, the after tax net present value of exploration projects is reduced, and indeed, may become negative. Accordingly, an inability to deduct exploration costs makes it difficult for junior companies to obtain external exploration finance.

An FTS scheme would address this anomaly by allowing junior explorers to pass on these deductions to shareholders to claim against their own tax liabilities. Such a scheme has been operating successfully in Canada for over a decade, and has provided significant stimulus for investment in exploration. Canada's share of world exploration spending surpassed Australia's for the first time the year that the current FTS scheme was implemented there in 2000. Meanwhile according to recent MEG surveys (the leading global survey on exploration spending), Australia's share of global exploration spending has gradually fallen from around 20% in the 1990s to around 11% today.

The Federal Government made an election commitment to implement a Flow-Through Share Scheme during its first term of Government as part of its *Plan for a Stronger Resources Sector*. Subsequently, industry was invited to put forward a consensus model of a FTS scheme.

On 5 November 2008, The AusIMM, in conjunction with other mining associations and the ASX and Australian Shareholders Association, made a submission to the Government outlining plans for a Flow-Through Share scheme that was particularly suited to the Australian context. The recommended policy differs somewhat from the Canadian scheme in that the deductions for investors are generated through the act of exploration rather than the act of revenue-raising. That is, under the proposed Australian scheme the act of incurring exploration expenditure will create 'Exploration Tax Credits' that can then 'flow through' the investor in certain circumstances and can be used against their tax liability. The Canadian scheme attached a "flow through" property to a class of shares that were designated capital raisings for exploration. Any capital raised as a result was required to be used for exploration purposes. Clearly the Australian scheme leaves more flexibility for the junior explorer as to how and when they spend their capital, leading to more effective discovery.

The full submission can be viewed at:

[http://www.qrc.org.au/dbase\\_upl/FTS%20Submission%20to%20Min%20Ferguson%2005%20Nov%202008%20FINAL.pdf](http://www.qrc.org.au/dbase_upl/FTS%20Submission%20to%20Min%20Ferguson%2005%20Nov%202008%20FINAL.pdf)

There has as yet been no response to this submission, other than an indication that it will be considered as part of the 'Review of Australia's Future Tax System.' There is some concern that the submission will be swamped by the broader strategic imperatives of the review.

The implementation of the scheme is particularly critical in the current economic climate. Despite signs of recovery in the minerals sector, mineral exploration remains the hardest hit sector of the profession. A survey by the Australian Institute of Geoscientists (AIG), which represents geologists and geophysicists, showed 21.1 per cent of geoscientists in Australia are unemployed or underemployed.

A recent Report commissioned by industry bodies including The AusIMM indicated that an FTS scheme would deliver significant short term socio-economic benefits across Australia at an estimated cost to government of approximately \$130 million per year.

In summary, between 2009-10 and 2012-13, a FTS scheme could generate immediate socio-economic benefits across Australia through up to:

- **4,196 new jobs**
- **\$114.4m in additional Gross Domestic Product**
- **\$191.2m in additional real private consumption**
- **\$965.1m in additional real investment**

The AusIMM urges the Government to make good on its election promise to implement a flow through share scheme as a matter of urgency.

#### **Recommendation 1.1.1**

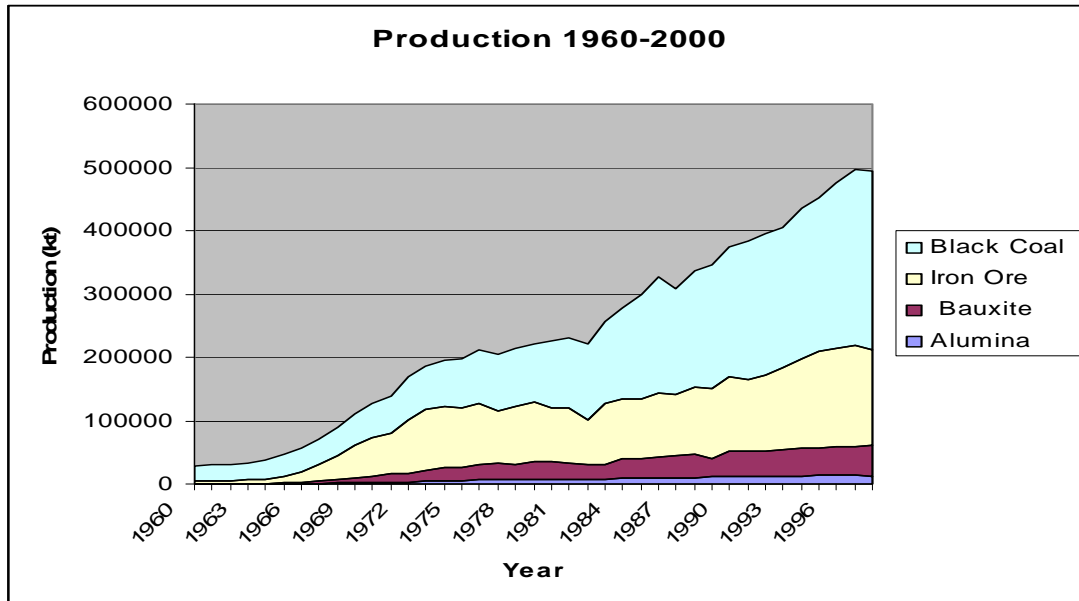
**Implement as a matter of urgency a Flow-Through Share scheme as outlined in the joint industry submission to the Minister for Resources**

### **2. Goal: Encourage R&D that will make the difference to Australia's competitiveness as a destination for exploration and mining investment**

An unwavering commitment to R&D by industry leaders, leading to process and technology development in the Australian mining industry has been a key driver in the achievement of our current status as a major exporter of minerals. As stated in a recent Productivity Commission report "Over time the Australian mining industry has built up a competitive advantage [over other mining regions] by applying leading edge technologies, which have improved mining practices, reduced costs and increased productivity."<sup>4</sup>

Notwithstanding the challenges of increasing remoteness, depth and depletion of high grade, readily available ore reserves over the past half century, technology developments enabled order of magnitude increases in mineral production from Australia as illustrated in the table below.

<sup>4</sup> See Chapter 6, 'Commercialisation and Utilisation', Productivity Commission, 'Public Support for Science and Innovation Draft Research Report (2 November 2006) at <http://www.pc.gov.au/study/science/draftreport/index.html> .



The benefits of mining R&D go far beyond the immediate economic rewards. Innovative activities in mining are often conjoined with technological developments elsewhere in industry and the economy, creating spill-over effects. For example, the accelerated mining activity in Australia has underpinned major expansions in supporting services, and spurred growth in the high value-add mining technology services sector, which is worth more than \$4 billion in export earnings alone.<sup>5</sup>

Australia's reputation as a leading edge minerals innovator is the envy of many nations which are now seeking to emulate our success. A strong commitment on the part of the Government to both world class public research infrastructure, and to financial incentives for the continued engagement of private sector companies with mining R&D in Australia, are critical to maintaining our leading edge.

## 2.1 Policy: Maintain support for world class minerals related public research infrastructure within Australia

Australia's current position as leading edge innovator has been made possible by our successful model of university-research-industry collaboration. A particularly strong role has been played by AMIRA International, a consortium of companies which contracts out pre-competitive research to public research organisations. These include organisations like CSIRO (where the Minerals Down Under Flagship leads the way), our mining focused universities and Cooperative Research Centres (CRCs) such as CRC Mining, the Ian Wark Centre and the Parker Centre.

Our centres of excellence are globally recognised and produce world first breakthroughs and new exploration, automation, modelling and processing technologies on a regular basis. They also generate significant international investment. In a recent submission to the Productivity Commission, Rio Tinto indicated that the decision to invest in R&D for a particular location is driven primarily

<sup>5</sup> Invest Australian and Austrade, 'Innovation Australia: Backing Australia's Ability', Palamedia (2007) at <http://www.innovationaustralia.net/article/article.php?article=10,174> .

by “the existence of a critical mass of world class research facilities and researchers supporting basic science, with which we can establish strong relationships.”<sup>6</sup>

The current Government has been a strong supporter of investment in minerals public infrastructure, has supported the creation of the CSIRO Minerals Down Under Flagship and, more recently, the CRC for Deep Exploration Technologies. We applaud this commitment and urge the Government to sustain this strong support. Public research institutions have a clear vision on the research and innovations that are needed in order to ‘make the difference’ in terms of Australia’s competitiveness as a destination for exploration and mining investment, and will target their activities toward this greater overall aim.<sup>7</sup>

#### **Policy Recommendation:**

##### **2.1.1 Maintain strong support for the CSIRO Minerals Down Under Flagship, relevant CRCs and mining research focused university departments**

##### **2.2 Policy: Ensure changes to the R&D tax incentive eligibility criteria do not adversely affect mining R&D investment**

The R&D tax concession is an iconic policy instrument in Australia, and has played a major role in stimulating R&D that would not have otherwise occurred, particularly in the mining industry. AMIRA has indicated that the deduction figures are an important consideration for its members, who conduct rigorous analysis of R&D proposals. In the past, mining R&D activities claimed through the R&D tax concession scheme have included development of new or improved:

- Mineral exploration technologies or equipment
- Drill and blasting techniques
- Mining method development
- Mineral extraction or processing technologies
- Throughput and mill process efficiency
- Environmental solutions for waste and rehabilitation, water and dust suppression
- Equipment for use in mining operations
- Knowledge regarding geological formations in Australia

Following the ‘Review of the National Innovation System,’ a number of changes have been suggested to the incentive. The AusIMM welcomes the proposal to move from the current tax concession to an R&D tax credit.

However, we oppose several elements of the *Tax Laws Amendment (Research and Development) Bill 2010*. A detailed submission has been made to Treasury regarding the changes.<sup>8</sup>

<sup>6</sup> Productivity Commission, ‘Public Support for Science and Innovation Report’ (9 March 2007) at [http://www.pc.gov.au/data/assets/pdf\\_file/0016/37123/science.pdf](http://www.pc.gov.au/data/assets/pdf_file/0016/37123/science.pdf) p 390.

<sup>7</sup> See Appendix 1: Vision for 2030 as outlined by CSIRO’s Minerals Down Under National Research Flagship director Dr Peter Lilly’s keynote address at the 6th Annual *Australian Mining Prospect Awards* for a more specific list of innovations that will ‘make the difference’

<sup>8</sup> See The AusIMM Response to the Tax Laws (Research and Development) Amendment Bill 2010 at [http://www.ausimm.com.au/content/docs/tax\\_laws\\_amendment\\_research.pdf](http://www.ausimm.com.au/content/docs/tax_laws_amendment_research.pdf)

Of the various proposed changes, one that has the most potential to adversely impact R&D spending in our sector is the new augmented feedstock rule. The current feedstock rules reduce the amount claimable by reference to the costs of materials and goods produced or acquired in processes undertaken prior to the R&D activities, and the process energy inputs into these activities unless a loss is made on these costs. The augmented feedstock rule significantly expands this rule by reducing the incentive by reference to all cases where R&D activities produce direct output, even where “the feedstock output is not in a marketable state, in which case the output’s value may need to be imputed from a later production stage.”

This new rule is essentially a commercial clawback. For industries such as mining, which require long term in production trials involving modification of existing plant, the amount claimable will be significantly reduced. There are few situations where the R&D will produce a useless product, as the production of the mineral resources is ongoing. Indeed, there would be little incentive for a minerals company to undertake a multi-year large scale investigation that continued to produce a useless product (up until a hypothetical moment of commercial viability).

The new rule signifies a fundamental lack of understanding of R&D in our industry. The new rule is also problematic in that it requires an imputation of value at a time in the future, introducing significant complexity and uncertainty into the amount of the incentive.

The new feedstock provisions will not only adversely affect the mining industry, but all large scale test work for transformative industries that wish to undertake process improvements to boost competitiveness, reduce carbon, water and other environmental impacts. The unintended consequences are significant. We strenuously object to this change.

**Recommendation:**

**2.2.1 R&D outputs to be excluded from the operation of the feedstock rule.**

**3. Goal: Facilitate the attraction and retention of a critical mass of highly skilled technical professionals**

In recent years, the professional skills shortage in the mining industry has proven to be both global and persistent. According to our research, although pressures eased somewhat during the worst of the financial crisis, they continued to place pressure on the industry. In their responses to the *2009 AusIMM Remuneration and Employment Survey* of members, more than half of respondents disagreed or strongly disagreed with the statement, “The shortage in skilled professionals has not affected my workplace.” This survey data was collected in August and September, following a year of depressed commodity prices. As companies now ramp up production the shortage of professionals is likely to further hamper both production and innovation.

The AusIMM applauds the Rudd Government for instituting the National Resources Sector Employment Taskforce with its strategic and forward looking terms of reference and clear deliverables. That is, “*a comprehensive workforce development plan taking into account the planned major resource, energy and related infrastructure projects in Australia and their employment and skill requirements.*”

Recent projections of skills needs undertaken by the Minerals Council of Australia into the next decade have indicated that at least 70,000 additional skilled workers and 7,500 additional professionals will be needed for the minerals sector in 2015.<sup>9</sup>

Critically, meeting professional skills needs is not just a numbers game. For a competitive sector, it requires that individuals allocated to various professional roles with the industry are possessed of the appropriate high level of technical knowledge and experience to value add in that role. Moreover, our capability to make major innovations is ultimately dependent on the capability of individuals – professionals - to identify opportunities for technical improvement, and work to develop appropriate solutions.

### **3.1 Provide support for sustainable *quality* minerals-related higher education courses**

Minerals related higher education courses in Australia have been underfunded for some time and the number of mining engineering, metallurgy and geoscience departments in universities has been steadily declining. Since 2000, at least eight minerals departments have closed, three are marked for closure and four have been merged into other degrees.<sup>10</sup>

The steep decline in the number and focus of minerals-related courses is largely due to the funding arrangements instituted under the *Higher Education Support Act 2003* (Cth). Under the scheme, courses are funded on a per student allocation, depending on what 'cluster' various subjects taken within a course belong to. Clusters are very broadly defined (eg 'Science and Engineering,' 'Agriculture' etc), taking no account of the differences in course content requirements, infrastructure needs, location or any other course or institution-specific factor. Under this funding formula, small, capital intensive courses such as mining engineering and field and laboratory intensive courses such as geosciences are particularly disadvantaged. There is significant concern that the new student-driven funding model will exacerbate the current situation.

A federal funding compact or partnership of the kind recently announced in the areas of teaching, nursing and medicine is required for minerals-related disciplines in the area of mining, metallurgy and geosciences to ensure that these courses remain viable within university and are taught at a quality.

The AusIMM is also aware that, due to the significant concern regarding the fate of Engineering courses under a student demand driven model, a number of associations have grouped together to form the Australian National Engineering Taskforce (ANET). The AusIMM has formally endorsed the activities of ANET, in particular activities around forecasting future engineering skills needs. We believe an ongoing dialogue with this body will be beneficial to developing future policy around engineering education provisions.

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<sup>9</sup> Chamber of Minerals And Energy Western Australia, 'Staffing the Supercycle: Labour Force Outlook in the Minerals Sector 2005-2015', (August 2006) at <http://www.cmewa.com.au/UserFiles/File/Publications%20-%20Human%20Resources/Staffing%20the%20Supercycle.pdf>

<sup>10</sup> Galvin J. and Carter R., 'Strategic Review of Minerals Council of Australia Tertiary Education Initiatives,' *Minerals Tertiary Education Council of Australia* (May 2003) at [http://www.minerals.org.au/\\_data/assets/word\\_doc/4328/MTEC\\_Review\\_FINAL.doc](http://www.minerals.org.au/_data/assets/word_doc/4328/MTEC_Review_FINAL.doc)

## **Policy Recommendations:**

- 3.1.1 Establish mission-based compacts with minerals higher education providers in the areas of mining engineering, metallurgy and geoscience**
- 3.1.2 Review the funding formula established by the *Higher Education Funding Act 2003* (Cth)**
- 3.1.3 Maintain ongoing dialogue with relevant industry, university and professional associations through the mechanism of the Australian Engineering Task Force (ANET)**

## **3.2 Create affordable, quality child care options for professionals in the mining industry**

The changes in labour patterns that have taken place in recent years, such as the increasing participation of women in the workforce, the rise of non-standard working hours (ie 8.00-5.00, Monday – Friday) and the increasing demand for childcare, have been well documented.<sup>11</sup>

Research conducted by The AusIMM has indicated that the lack of affordable quality childcare is adversely affecting retention in the minerals sector, leading to a decline in the retention rate of critically experienced professionals. In recent surveys, both male and female members of The AusIMM have indicated that there is a dire shortage of child care centres in rural and regional Australia. For example, a female mining engineer living in Moranbah, QLD, has indicated that there are only six places per day for children under two for the whole town (population ~10,000).

Not only are there inadequate numbers of child care centres, but those that do operate tend to operate only during ‘traditional’ working hours and are incompatible with mining rosters. Primary carers who are employed in mining roles are therefore required to look for alternative and costly options such as nannies, or a customised family day care plan. At roughly \$16 an hour, the costs of child care enabling full time work in the industry will exceed \$30,000 per year, and can account for half of a professional’s after tax salary. These costs are a major disincentive for people with caring responsibilities to enter into, or stay in mining.

The current lack of affordable, quality child care also has clear adverse effects on sexual equality. That is, as women are more likely to be primary carers, the retention of women in the industry is likely to be more significantly affected than that of men. According to the *2008 AusIMM Remuneration and Employment Survey*, of the 506 respondents who identified themselves as carers for a child:<sup>12</sup>

- 12% indicated that costs of caring are a disincentive to continue working in their current role (25.0% of females; 10.6% of males); and
- 15.5% indicated that costs of caring are a disincentive to continue to work in the minerals sector (20.8% of female carers; 15.0% of male carers)

A number of mining companies have indicated that they would like to step in and assist with their employees’ childcare costs. However the current taxation system works against them as such assistance is subject to the Fringe Benefits Tax. The

<sup>11</sup> See for example The House of Representatives Standing Committee on Family and Human Services *Balancing Work and Family Report* (2006) at <http://www.aph.gov.au/house/committee/fhs/workandfamily/report.htm>

<sup>12</sup> The AusIMM, *The AusIMM Remuneration and Employment Survey Report* (July 2008) at <http://www.ausimm.com.au/publications/epublication.aspx?ID=3420>

Fringe Benefits Tax Exemption is available only for employers who run their own child care centres. The risks and liabilities of running a child care centre, along with limited place availability, make this an unattractive prospect for most mining companies.

**Policy Recommendations:**

- 3.2.1 Support the creation of child care centres in rural and regional Australia, with operating hours that reflect the actual needs of local employees**
- 3.2.2 Extend the Fringe Benefits Tax exemption to all forms of employer sponsored child care**

**3.3 Policy: Enable the free movement of Australian professionals between countries in a global industry**

In a global industry, mineral professionals, particularly those who work for multinational companies are regularly required to spend a number of years at an overseas minesite. Such opportunities provide unprecedented opportunities for professional development and knowledge transfer. Likewise, employees of mining service contractor companies based in Australia often spend time overseas on order to fulfil contracts. The increasing number of professionals in consulting who work across countries was indicated on our most recent survey of professionals.

Consequently the free and unhindered movement of professionals across jurisdictions is critical for both professional development, and competitiveness of the mining technology service sector.

Recent changes to the taxation regime affecting expatriates have created a barrier to this movement. We are referring specifically to the recent changes to section 23AG of the Income Tax Assessment Act 1936. The changes removed the exemption for Australian resident individuals in overseas employment by who were liable to tax in a foreign jurisdiction from paying tax in Australia. The exemption applied to foreign earnings derived from service in a foreign country for a continuous period of 91 days or more.

Under the changes, expatriates are now required to pay tax in Australia as well as the foreign jurisdiction in which they work, with a credit provided for foreign tax paid.

The changes have placed significant additional compliance costs on employers of Australians working overseas who will now need to have payroll teams able to understand personal taxation laws in two jurisdictions. That is, expatriates and their employers are now required to obtain the details and documentation within tax years of both Australian and the foreign country (which are rarely the same given Australia's year end).

The compliance costs associated with this change in law is likely to inhibit the placement and hiring of Australians overseas. That is, Australian and foreign employers may shy away from hiring Australians due to the high cost and compliance burden. Australian mining companies will also be less likely to offer their Australian employees professional development opportunities at their overseas projects (*a major mechanism for up-skilling*), and look to other sources for professional staffing of their projects.

Meanwhile Australian specialist service and technology firms employing a high proportion of Australian residents to working on overseas projects will also lose cost competitiveness due to the need to provide higher net salary to employees in jurisdictions where taxation is lower.

The change to section 23AG will not deliver significant revenue gains for Government, but merely impact on company behaviour in a way that impacts professional development and growth of Australian services overseas. Our recommendation is that section 23AG be changed as a matter of urgency to restore the previous status quo.

#### **Policy Recommendations:**

##### **3.2.1 Restore section 23AG of the Income Tax Assessment Act to the previous status quo to enable the free movement of professionals across countries**

#### **4. Goal: Advance nationally consistent and comprehensive approach to health and safety that will advance the goal of zero harm for our industry**

The pitfalls of national inconsistency in approach to health and safety in the mining industry are well recognised by the minerals sector. At present, companies that work across jurisdictions are required to comply with multiple regimes driven by a variety of compliance philosophies. The various jurisdictions have different approaches to key issues such as the scope of the duty of care, levels of accountability for different duty holders, the role of the inspectorate and the approaches to prosecution. This divergent approach not only makes compliance difficult, but it also compromises the integrity of the concept of best practice health and safety management.

##### **4.1 Policy: Commit to clear timelines for the implementation of all strategies of the National Mine Safety Framework**

The National Mines Safety Framework (NMSF), an initiative of the Ministerial Council for Minerals and Petroleum Resources, was instituted as a mechanism for delivering a nationally consistent (not necessarily identical) mine health and safety regime across jurisdictions. The NMSF is made up of seven strategies which have been identified as key elements of improving the health and safety record of the Australian mining industry, which are:<sup>13</sup>

1. Nationally consistent legislative framework
2. Continuous skills development and competency in maintaining OHS nationally
3. National approach to providing advisory information for duty holders
4. Nationally coordinated protocol on enforcement
5. Consistent and reliable mining industry data set which allows analysis across jurisdictions
6. Effective consultation mechanisms between stakeholders and between jurisdictions
7. Appropriate mechanisms for governments to foster effective collaborative research into OHS in the industry.

<sup>13</sup> See the 'National Mines Safety Framework Implementation Plan', (December 2004) at [http://www.ga.gov.au/image\\_cache/GA6360.pdf](http://www.ga.gov.au/image_cache/GA6360.pdf).

In recent years, significant progress has been made in advancing strategies 1, 5 and 6, and the industry would like to see all these initiatives progress further. The Productivity Commission has continually indicated that the slow progress on the NMSF and resultant lack of coordination is a major burden on industry, and has recommended that the Federal Government makes a strong commitment to the implementation of the NMSF as soon as possible. The Commission has also recommended that transparent, clear and staged timelines should be established and adhered to.<sup>14</sup>

Progress on the implementation of the NMSF has once again stalled as the relationship between the framework and the model Act for OHS remains unclear.

The AusIMM urges the Rudd Government to ensure that the strategies outlined in the NMSF are progressed as a matter of priority within the broader policy reform currently taking place. Moreover, that all strategies remain a priority (research, data sharing etc) – not just nationally consistent regulation, so that, as intended a proactive approach can be taken to minimizing risk.

**Policy Recommendations:**

- 4.1.1** Ensure that the strategies outlined in the NMSF are progressed as a matter of priority within the broader plans for a model National OHS Act
- 4.1.2** Progress all strategies of the NMSF with a national commitment to clear, staged timelines

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<sup>14</sup> Productivity Commission, 'Annual Review of Regulatory Burdens on Business: Primary Sector,' (November 2007), [http://www.pc.gov.au/\\_data/assets/pdf\\_file/0018/74115/primarysector.pdf](http://www.pc.gov.au/_data/assets/pdf_file/0018/74115/primarysector.pdf) , pp 238-242.

## **Appendix 1: Vision for 2030 as outlined by CSIRO's Minerals Down Under National Research Flagship Director Dr Peter Lilly, in his keynote address at the 6th Annual Australian Mining Prospect Awards**

The following elements of innovation along the minerals value chain were described by Dr Peter Lilly, Past President of The AusIMM and CSIRO Flagship Director. In this vision, *“Australian mineral exports continue to grow to meet global demand as new, low grade and complex resources are seamlessly integrated into the production cycle, with products that meet evolving customer needs.”*

### **Exploration**

- Four-dimensional geological interpretations are now routine, and simulation of all geological processes is possible.
- A predictive understanding of geochemical anomaly formation is also possible and imaging of potential new discoveries at depths of up to 1km takes place.
- As a consequence, the average real cost of discovery in Australia is half what it was in the decade 2000 to 2010.
- Drilling economics have been transformed by lightweight, easily transportable drilling equipment.
- Hard wearing new materials are engineered into drill bits and fibre composite coiled tubing contains embedded fibre optics for telemetry.
- High power laser and plasma drilling is more common than it was in the 2020s.
- Logging and measuring while drilling are standard, with feedback to intelligent control systems for drill rigs.
- Semi-autonomous moles are guided with pin-point accuracy and are used to drill multi-lateral boreholes from a parent borehole.
- Sampling boreholes themselves are now very small in diameter, and down-hole probes measure elemental and mineralogical compositions in real time.

### **Mining**

- Remotely controlled semi-autonomous rigs are able to move around in mines or in the field.
- Many mines are controlled from major centres.
- Operations are fully automated, highly selective and host minimal local support staff.
- Geologically “intelligent” autonomous mining systems are capable of mining ore selected for grade, and are able to sort ore as it is mined.
- Deep ore mining systems keep people isolated from the hazardous activities of drilling, explosive placement, access construction and ore haulage.
- Large resources of mineral sands, alluvial gold, alluvial uranium and alluvial iron ore are being mined with minimum impact on other land uses using keyhole mining techniques.
- The injury frequency rate is now a very small fraction of what it was in 2010, and there are no fatalities on mine sites.

### **Metallurgy/Minerals Processing**

- Innovative biological processes have revolutionised heap leaching, and processing underground using in-situ and in-place leaching technologies is widespread.
- For some ore bodies, in-situ processing has meant lower energy and water use, and reduced disruption to the environment from waste storage in tailings dams.

- Many large Australian deposits that were on hold due to limited availability of process water are being developed and operated using dry processing technologies.

### **Environmental**

- The minerals industry no longer competes with communities for allocations out of the nation's stretched water resources.
- Forests are now considered a key part of mining, as biomass partially replaces coal as a major energy source and reductant in several metallurgical processes such as in blast furnaces.
- Hundreds of millions of dollars of mineral products are extracted from old tailings dams or from what once were tailings product streams.
- Many other materials, once considered to be wastes, are used to generate valuable products.
- Based on low waste and in-situ technologies, several mines now operate with wide community support in close proximity to Australian towns and cities.
- Waste high grade heat is recovered from molten slags, which is used for the desalination of water.
- Millions of hectares of salinity affected farmland in Western and South Australia have been rehabilitated through partial revegetation with Mallee trees, restoring the soil and land quality, and electricity and charcoal by-products from this agricultural industry are recycled into the metal production industry, making it almost greenhouse gas neutral.