



Economic Development and Infrastructure Committee

**INQUIRY INTO GREENFIELDS MINERAL EXPLORATION AND
PROJECT DEVELOPMENT IN VICTORIAN**

Submission by

Minerals Council of Australia, Victorian Division

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1. EXECUTIVE SUMMARY

The Victorian Minerals industry has the potential to continue to be an important contributor to Victoria's growth, particularly in regional and rural Victoria. For the sustainable future of the industry, the policy and regulatory framework must be balanced between promoting investment in the State, good practice and the expectations of the community in an efficient way with a minimum but appropriate level of direct control of economic agents by government authorities.

Over recent years the State has lost market share in minerals activity to other states and is no longer seen as prospective or an attractive place to invest. However, the substantial contribution of the mining sector to Melbourne's economy is indisputable.

In this increasingly difficult financial environment, the importance of attracting investment into Victoria is paramount. For investment to occur, an investor must be confident that the sovereign risk to its investment is as low as possible. Changing policies, onerous and duplicative legislation leading to very unpredictable and often inexplicable outcomes does nothing to provide the investor with confidence. Nor do approval processes that cost millions of dollars and cause significant delays to investment decisions. A legislative spider web with reams of red tape will result in investors looking elsewhere.

The Minerals Council of Australia (MCA) recognises that this Inquiry provides a unique opportunity for Victoria to focus on developing the minerals industry and recapturing lost market share. Significantly streamlining regulations without compromise to quality of regulation could make Victoria the showcase for mineral development with real outcomes.

Victoria faces a range of issues when compared to the other mainland jurisdictions of Australia. Two in particular - a small land mass with the 2nd largest population of the country; this same land being well endowed with economically recoverable mineral resources and an abundance of brown coal.

Victoria's policy and regulatory environment is by no means leading practice. Many regulatory systems are ineffective and inappropriate with obstructive laws, regulations and guidelines, as well as inadequate administrative arrangements for the implementation of the laws and regulations.

The MCA does not advocate a reduction in social or environmental standards. We do however; seek greater efficiency, effectiveness and consistency. We see the resources and competency of the industry regulators as a critical area for attention. We also seek a whole-of-government approach to project approvals so as to avoid the need to satisfy the often personal view of every relevant (and often not so relevant) individual in every relevant agency.

Ideally we seek a one stop shop for project approvals. That is, a single agency charged with the authority to approve projects. Whilst such an agency would be required to do an intense amount of work across all relevant agencies to reach a whole of government position on a proposal, the proponent would only deal with the one point in Government.

The Victorian minerals industry has participated in dozens of inquiries and reviews over the past decade. Each being conducted at the portfolio level, focusing on single issues. The Victorian Competition and Efficiency Commission has also done some excellent work, however as with portfolio reports, we see little change in the policy or regulatory environment.

Industry simply asks government to implement the recommendations of these various inquiries and reviews. Many recommendations come at no or little cost but would see an extraordinary impact on efficiency and effectiveness of government processes and encouragement of investment in minerals projects.

Further, scorecards prepared by MCA demonstrate that Victoria has ample scope for improvement.

It is also noted that the Fraser Institute continues to rate Victoria as one of the least attractive jurisdictions in Australia on its Policy Potential Index. South Australia is consistently rated best Australian jurisdiction and in the top quartile each year.

Regarding the prospectivity of Victoria, MCA advocates that a well resourced Geoscience Victoria is critical to the industry's future. Pre-competitive geological data provides a sound platform upon which explorers view the prospectivity of the State. This data is also fundamental in understanding the State's underlying geology and resource potential.

The previous Government determined there was a need to reform the Mineral Resources (Sustainable Development) Act (MR(SD) Act) as it had been in operation for 20 years. This was to be undertaken in two stages. The stage 1 reforms were directed at tenement licencing arrangements, whilst the stage 2 reforms were to be primarily directed at the work plan processes and streamlining of the extractive industries additions to the Act.

The stage 1 reforms were passed by the parliament in 2010 and come into effect in February 2012. The regulations and guidance notes to support the legislation changes are currently being prepared by government.

MCA and its members supported some of the amendments such as the introduction of a Retention Licence. Many of the other features related to renewal and relinquishment of licences were opposed. We remain opposed to these reforms, as they place an unwanted burden on many exploration projects.

The Stage 2 reforms to the MR(SD) Act, that is the reforms to the work plan and project approvals processes were sold to industry as the benefits to counter the down side of some of the stage 1 reforms. The proposal is to streamline the project approvals. The government is currently consulting industry on these reforms which are expected to go to parliament in 2012. If approached in a manner to streamline the regulatory burden and break down the 'silos' of the bureaucracy, the reforms have the potential to improve the regulatory burden on the minerals sector.

Access to land for exploration is a key issue for the prosperity of the industry. The MCA recognises that land can be used for different purposes at the same time (multiple) and for different purposes after a land use has finished (sequential). Multiple and sequential land use is fundamental to achieving simultaneously the State's economic and conservation objectives and is consistent with the principles of sustainable development as operationalised for the Australian minerals industry in *Enduring Value*.

The Victorian minerals industry has over the years established effective and practical processes to access farm land and native title land for exploration. The processes have been embodied in the MR(SD) Act; through joint agreements with landowners and other stakeholders; and through promotion of good business practice.

Victoria is the only jurisdiction to legislate an obligation on explorers and miners to consult with community stakeholders. This was done in 2007. MCA was a supporter of the change to institutionalise community engagement obligations in the MR(SD) Act as it is simply good business. We advocate that the provision should place the obligation on the Licensee without prescribing how that consultation would occur. We do not want to see the Government or DPI officials becoming an intermediary between the relationship of the explorer or miner with the community.

Dispute resolution is important aspect of any land access management regime. To improve the independence and transparency of the Mining Warden's office it is recommended that the Warden be relocated from the Department of Primary Industries to the Department of Justice and co-located with, and resourced through, the Small Business Commissioner. Specifically, the Warden would provide pre-mediation advice to the Small Business Commissioner on MR(SD)A disputes. The Small Business Commissioner would have a formal role in mediation of disputes under the MR(SD)A and a Certificate of 'failed' mediation would be required before progressing to the Wardens Court or VCAT. We would expect this to be a timely intervention; not a source for new delays.

The ever growing complexity of the EES process, its increasing cost of compliance and expanding timeframes to achieve an outcome have plagued the minerals industry in Victoria for almost the past 20 years from when the MR(SD)A was first introduced. Whilst the industry welcomed the opportunity to gain planning approval for mining projects through the EES process, the MCA has consistently sought improved efficiency and effectiveness. Unfortunately, we continue to see reduced efficiency and less effectiveness.

Also, approvals processes relating to the Environmental Protection and Biodiversity Conservation Act (EPBC Act) is a key area of overlapping regulation. While bilateral agreements between Federal and State governments can avoid this duplication, only a limited number of agreements for approvals have been developed. Leadership is required to overcome the impasse on 'approvals' bilateral agreements between the Commonwealth and Victoria.

There is no defensible reason why Victoria cannot enter into a bilateral agreement to undertake the Commonwealth's interests for both assessments and approvals. This would create significant efficiency gains for proponents and regulators and eliminate cross-jurisdictional forum shopping by opponents to new developments.

From the outset, the MCA has supported the principles of net gain as described in the native vegetation Framework. However, it is critical that offsets are able to be sought in a more flexible way. It is also desirable that offsets are kept within the local community. As there are numerous occurrences where the vegetation classes simply do not exist on private land, we therefore need the ability to offset on Crown land is essential. MCA has long viewed shortcomings in the way that Crown land is managed. Offsets for native vegetation on Crown land, beyond normal government programs, must be available. The principle of net gain should not discriminate between private and Crown land.

With the stamp of a Parliamentary Committee, the industry hopes that this Inquiry will deliver a mature and proactive policy and regulatory approach to enhance the growth of the Victorian minerals industry, recapture market share and ensure a vibrant and sustainable minerals industry which can bring economic and social wealth to all Victorians.

2. INTRODUCTION

The Minerals Council of Australia (MCA) welcomes the opportunity to make a submission to the Economic Development and Infrastructure Committee Inquiry into Greenfields Mineral Exploration and Project Development in Victoria.

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 MCA’s strategic objective is to advocate public policy and operational practice for a world-class industry that is safe, profitable, innovative, environmentally responsible and attuned to community needs and expectations. The Victorian Division of the MCA represents the interests of member companies operating, exploring and providing services to the industry in Victoria.

Policy positions of the Victorian industry are one and the same as the entire Australian minerals industry. The MCA operates on a platform of national consistency and therefore considers that minerals operations in all jurisdictions should be subject to the same policies and legislative frameworks across the country.

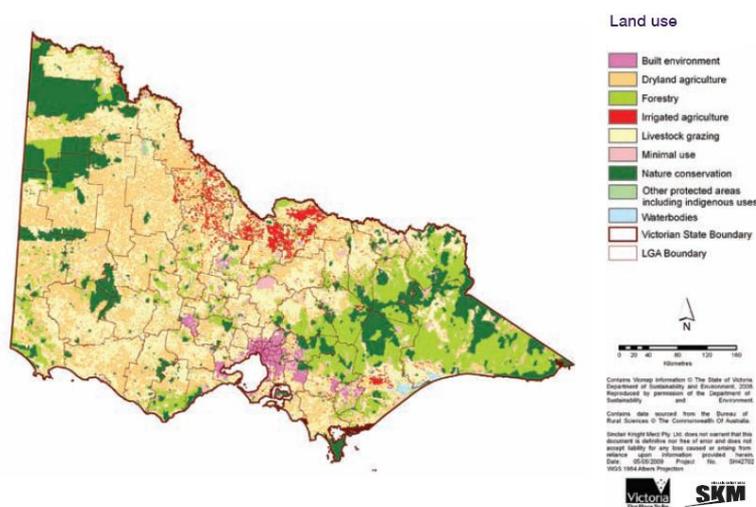
2.1 VICTORIAN MINERALS INDUSTRY

The Victorian minerals industry is often separated into the coal sector and the metalliferous sector. The metalliferous sector is dominated by four operating gold mines and mineral sands mining. The major mines are at Ballarat, Fosterville, Stawell, Balmoral and Ouyen. There are additional exploration and smaller scale gold operations, including at Bendigo, Walhalla, Costerfield, Donald, Benambra, Maldon and Alexandra.

The coal sector consists of the three Latrobe Valley coal mines (Loy Yang, Hazelwood and Yallourn), which collectively constitute the largest brown coal mining operation in the southern hemisphere, and second only to the large brown coal mines in Germany. The three Victorian mines power 5 coal-fired power stations. In addition, the Anglesea mine to the west of Melbourne supplies brown coal to Alcoa’s Anglesea Power Station. There is also a small brown coal mine at Bacchus Marsh.

The physical footprint of the industry doesn’t even rate a mention...

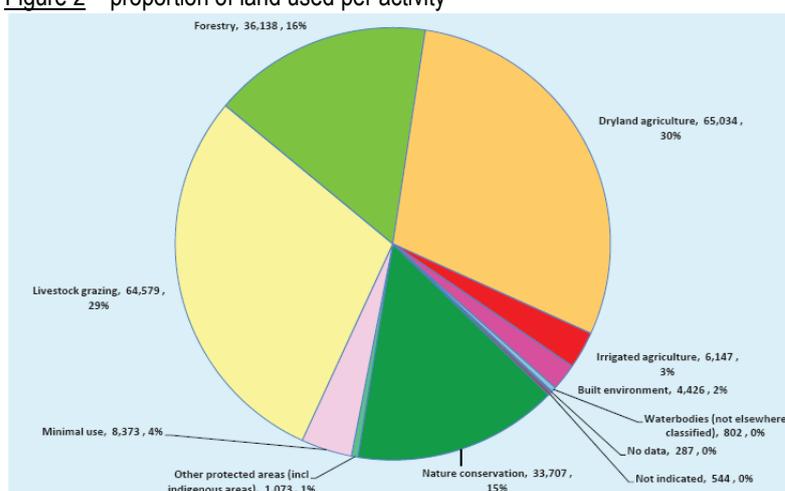
Figure 1 – Land use in Victoria



Source: Renewable Resourceful Victoria - The renewable energy potential of Victoria, Sinclair Knight Merz

A pictorial representation further illustrates the minimal footprint the minerals industry has i.e. negligible.

Figure 2 – proportion of land used per activity



Source: Renewable Resourceful Victoria - The renewable energy potential of Victoria, Sinclair Knight Merz

MCA recently undertook an analysis of the geology and demographics of each Australian jurisdiction with a minerals industry, which is quite revealing.

Victoria is by far the smallest mainland State. Couple this with the 2nd largest population and we have a population density almost three times greater than any other State. This brings with it enormous challenges.

Table 1 – geographical and population data in mineral jurisdictions

	Vic	NSW	Qld	NT	WA	SA	Tas
Total area km ²	227,416	800,642	1,730,648	1,349,129	2,529,875	983,482	68,401
Private land %	68	89	91	50	44	59	40
Parks & reserves %	16	8	5	4	11	26	37
Population Millions, 2007	5.246	6.927	4.228	0.218	2.131	1.592	0.497
Population Density	23.07	8.65	2.44	0.16	0.84	1.62	7.26

M.Davison, Resources Victoria Conference, July 2010

The scale of the industry varies considerably between Australian States and Territories. The MCA also undertook a comparison of exploration across the country.

Table 2 – Exploration activity (2008/09 Data)

	Vic	NSW	Qld	NT	WA	SA	Tas
Exploration Licences No.	298	1,100	Not available	1,091	4,959	798	267
Exploration \$M	62.2	175.3	351.7	146.1	1,246.8	220.7	20.4
EL area km2	95,240	195,928	Not available	460,932	423,670	373,539	19,014
EL propn. of State	42%	24%	–	34%	17%	40%	28%
Expl. \$/EL	20,805	159,363	–	134,005	251,422	276,566	76,404
Expl. effort index \$/km2	653	894	–	317	2,943	591	1,073

M.Davison, Resources Victoria Conference, July 2010

The exploration effort index is a measure of exploration expenditure per km2 of exploration licence. These data show that exploration effort in Victoria is low compared to WA, but not the lowest.

2.2 ECONOMIC CONTRIBUTION

The mining sector accounts, directly and indirectly, for 9.4 per cent of the Australian economy. In 2009-10, the sector generated exports of \$138 billion, representing over 54 per cent of total exports of goods and services¹.

Of this, Victoria's minerals sector produced \$502.5* million (*excluding brown coal) of product in 2009-10 (primarily gold and mineral sands). During the same period, investment in project developments was \$742 million and private industry expenditure on exploration grew to \$94.3 million².

Production in 2009/2010 included:

- 68.7 Mtpa lignite (4 mines)
- 242k oz. of gold (3 significant mines plus several small mines)
- 90ktpa zircon and 117ktpa rutile (2 mines)

The industry paid \$47.8M in Royalties in 2009/10.

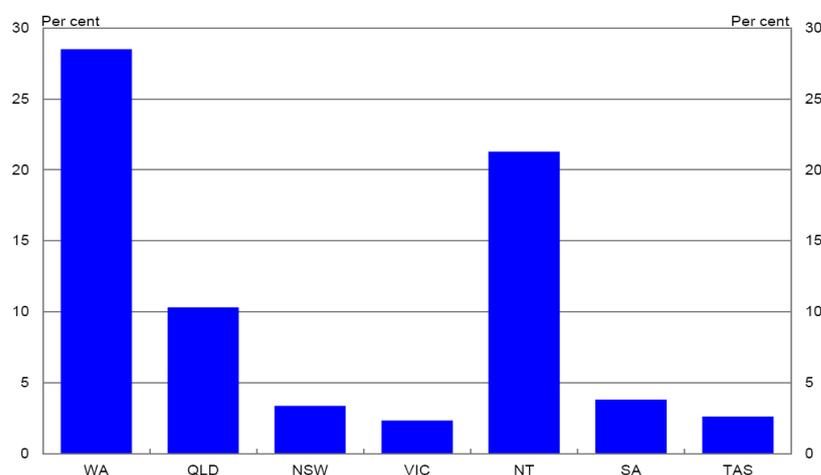
The industry directly employs about 5,000 people in regional Victoria with a further estimated 5,000 people or more directly employed in Melbourne head offices and service companies.

¹ ABARES, Australian Mineral Statistics.

² Department of Primary Industries, 2009/2010 Statistical Review- Victoria's Mineral, Petroleum and Extractive Industries, 2011.

The Victorian minerals sector is small and contributes least to the State economy when compared with other Australian jurisdictions (see Table 3).

Table 3 - Mining value added shares 2009-10



Source: David Gruen, Treasury, Skills Australia Conference, July 2011

The State has lost market share and is not seen as a prospective or attractive place to invest (see Chapter 6 for further details).

However, the Melbourne central business district is booming. Melbourne is one of a few international mining capitals. A number of international head offices of mining houses are located here, including the world’s largest mining house. Wherever international headquarters are, the support and service sectors follow. Melbourne has a wealth of expertise focused on the international, national and State industry. Large businesses in insurance, financial services, technical services, engineering, and equipment and materials manufacturers all call Melbourne home.

In 2006, the MCA commissioned La Trobe University to undertake an analysis of the economic contribution of the minerals industry to the Melbourne Region³.

The demand by the mining sector for intermediate goods and services from the Melbourne Area in 2006 was estimated at \$940.51m per annum. The flow-on impacts take this to approximately \$2.4 Billion and a corresponding 9,797 jobs. These flow-on impacts have an industrial supply chain effect, as well as a consumption effect.

Figure 3 – Economic impact for Melbourne



Source: Figure ES-1, Mining sector – Economic Impacts for Melbourne

³ Urban Resources: Mining sector – Economic Impacts for Melbourne, Economic Research Unit, La Trobe University Bendigo, 2006

From the total stimulus provided by the mining sector in Victoria, including all direct, industrial and consumption impacts, the industry sectors to benefit the most include manufacturing (\$747.398m), property & business services (\$466.033m), and retail trade (\$217.111m).

The substantial contribution of the mining sector to Melbourne's economy is indisputable.

As with elsewhere, further investment in the minerals industry in Victoria is influenced by the identification of viable mineral resources, access to the land containing those mineral resources, financial resources, the support of the community, the regulatory environment, and the availability of a skilled workforce. Consequently, issues associated with gaining development approval can have a significant impact on investment decisions.

2.3 NATIONAL AND GLOBAL INDUSTRY

The Australian minerals industry is large and depending on Commonwealth and State/Territory decisions has enormous potential to grow.

The Australian minerals sector produces a significant amount of the world's key minerals commodities including:

- bauxite, alumina, rutile, ilmenite, zircon and tantalum;
- uranium, lead, zinc and lithium;
- gold, diamonds, iron ore, aluminium, manganese, nickel, copper, silver and niobium;
- black coal and brown coal.

In 2009-10, the value of Australia's minerals exports was \$138 billion⁴. Minerals exports currently account for around half of Australia's total exports of goods and services with coal and iron ore alone making up one third. Australian Bureau of Statistics (ABS) figures show that mining industry investment (including oil and gas) is at historically high levels and accounted for around 40 per cent of new capital expenditure across all surveyed industries in the September quarter 2010.

In the minerals sector specifically, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) reports that advanced projects (those either committed or under construction) totalled \$45.2 billion in the six months to October 2010, while less advanced projects have a total potential capital expenditure of \$131.2 billion.

Employment in the minerals industry grew to 187,200 in the December quarter 2010, 21 per cent higher than a year earlier. The industry is a key driver of economic activity in regional and remote Australia, accounting for 30 per cent of direct employment in some regions. The industry is the largest source of private sector employment for Indigenous Australians who comprise up to a quarter of employees at some project sites.

With global growth propelled by major trading partners in Asia, Australia's economic outlook is favourable in the medium term, but with the potential for marked volatility in commodity prices given the large financial flows into commodities and rising inflationary pressures in emerging markets.

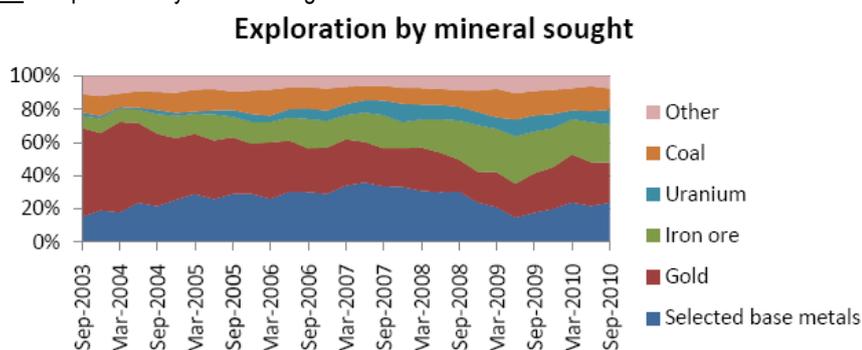
The Australian economy is expected to strengthen through 2011 based on robust business investment (especially in the resources sector) and strong export earnings. Severe flooding in Queensland in particular is likely to clip output in the near term, but not so as to prevent the economy's return toward full capacity over the next year.

Mining investment has continued to grow strongly in Australia. At \$10.5 billion in the September quarter 2010, new capital expenditure in mining (including oil and gas) increased 7 per cent on the June quarter and was 32 per cent higher than a year earlier⁵.

⁴ MCA Pre-Budget Submission 2011-2012.

⁵ MCA 2011-2012 Pre-Budget Submission, February 2011

Figure 4 – exploration by mineral sought



Source: ABS (excludes petroleum exploration)

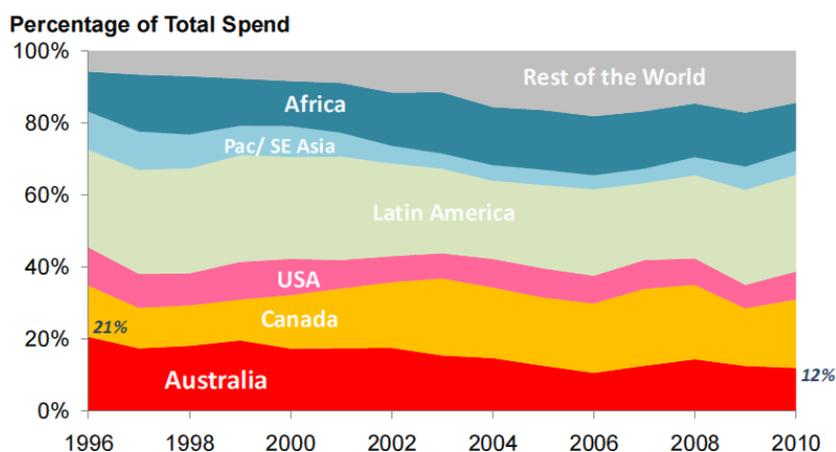
The above graph clearly identifies the move towards investment in bulk commodities.

In 2007, MCA undertook a Vision 2020 Project. The First Phase of the Project, released in 2008, examined the global demand potential for the minerals industry through to 2020 and assessed the supply-side requirements, including the skilled labour, needed for Australia to maintain or grow its share of the global market.

This report demonstrated that while world demand for minerals is increasing, Australia is rapidly losing market share to its global competitors.

Further analysis undertaken in 2010 by MinEX Consulting on behalf of the MCA showed that Australia was lagging on exploration expenditures

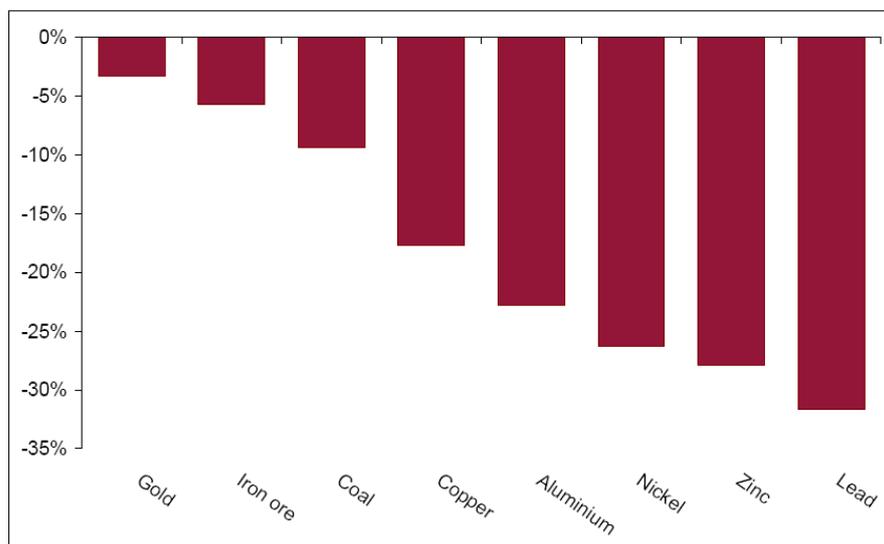
Figure 5 - Exploration expenditures by Region: 1996-2010



Source: MEG

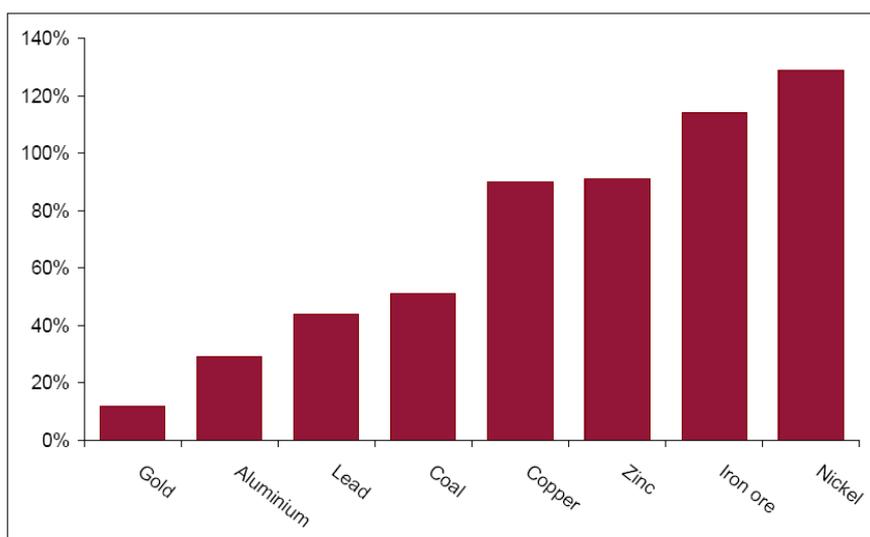
A key driver behind Australia's decline is due to global changes in the risk/reward for exploration. In detail, over the period, large parts of the world (especially in developing countries) opened up to foreign investment. This was coupled with a perception that the traditional countries – in particular Australia - were mature in terms of exploration. A third factor was changes in relative business risk and attractiveness. In the case of Canada, the Government encouraged domestic exploration through the generous availability of tax credits from Flow Through Financing.

Figure 6 - The change in Australia's global market share in key minerals between 2002 and 2007.



For Australia to hold the line i.e. halt the decline in market share, it was shown that increases in Australian production of a number of minerals would have to jump well above 2007 levels by 2020.

Figure 7 - The production task ahead of the Australian mining sector if it is to (a) hit ABARES production forecasts as at 2013 and then (b) maintain global market share through to 2020.



Furthermore, Victoria is attracting proportionally less mineral exploration and development than the rest of the nation.

2.4 PLATFORM OF SUSTAINABLE DEVELOPMENT

Members of the MCA, have a long-standing commitment to sustainable development including the responsible stewardship of natural resources. Whilst the effective footprint of mining projects is relatively small, many companies own or manage large tracts of land associated with their projects.

Additionally many companies undertake exploration activities across land owned or leased by others. In regional and rural Victoria, minerals companies are a major contributor to natural resource management, including biodiversity conservation outcomes.

A key focus of the MCA is to build the capacity of the Australian minerals industry to align itself with the pursuit of sustainable development. The Australian minerals industry seeks a regulatory framework that provides consistent, equitable and efficient standards of performance, while at the same time supporting and encouraging the adoption of leading practice approaches as a beyond compliance measure.

To give an example of this sort of voluntary industry initiative, in 1997 the MCA developed the Australian Minerals Industry Code for Environmental Management. At the time it was considered a leading framework for an industry association to develop in that it outlined beyond compliance requirements for the sector to improve its environmental performance. It also institutionalised public environmental reporting to the extent that the industry became a leader in that area and has driven a lot of the development of indices around the world.

However, like everyone else, we have recognised that sustainable development is not only about environmental management. The triple bottom line of environmental, social and economic responsibility means that we had to make a transition to a platform of incorporating all these elements. To give effect to this new platform, the environmental code was retired and replaced with *Enduring Value – the Australian Minerals Industry Framework for Sustainable Development*⁶ in 2005.

Developed with the input of over 900 stakeholders, *Enduring Value* is based on a set of internationally agreed principles. In response to the Brundtland commissions report on environment and development, the minerals industry produced a set of 10 principles and 46 elements of what sustainable development meant for an industry – particularly an industry like ours that is dealing primarily with finite resources.

Enduring Value, in turn, represents the national application of these principles, drilling them down into a series of 300 guidance points for on-site implementation. Compliance with relevant legislation is a fundamental requirement under *Enduring Value*, but the industry also recognises that compliance with legislation forms only one part of the industry's 'social licence to operate'.

The concept of a 'social licence to operate' is one of the key underpinnings of *Enduring Value*, being that the regulatory licences issued by government also need to be complemented by acceptance of operations within both local communities and the broader public. It is a condition of membership to the MCA that companies sign on to *Enduring Value* and report progress on the ten Principles

As a result, *Enduring Value* encourages companies to take beyond-compliance actions to meet the community's expectations of social, environmental and economic performance. With regulatory licences forming an essential component of this broader licence to operate, the MCA seeks efficiency, consistency and effectiveness in their application.

2.5 MINERAL WEALTH CREATION CHAIN IN VICTORIA

Mining is a much broader activity than exploration and pure extraction of minerals.

As shown in Table 4 (Appendix A), the minerals sector wealth creation chain goes well beyond exploration and extraction and includes mineral processing and commodity transport, both vital to overall efficiency and performance. State and Commonwealth policies and regulations impact all aspects of this value chain and it is in the State's interest that such regulation is efficient and least cost. The plethora of regulatory instruments that impact on this process are listed in the Appendix.

The remainder of the submission addresses the terms of reference for the Inquiry, identifies barriers to the industry's growth and therefore the State's prosperity and offers some structural improvements to eliminate these barriers. The following chapters are built upon each term of reference (a-i) which is identified for ease of reference within a break out box at the start of the chapter.

⁶ *Enduring Value* – Minerals Council of Australia, 2005, www.minerals.org.au

3. VICTORIA'S PROSPECTIVITY

a) Victoria's mineral endowment (often referred to as 'prospectivity') across a portfolio of commodities (including energy earth resources and extractives products);

3.1 CURRENT UNDERSTANDING OF THE MINERAL ENDOWMENT

3.1.1 Coal

Victoria's vast brown coal (lignite) resources provide the energy for about 85 per cent of electricity generation. Total estimated in-situ brown coal is 430 billion tonnes, with potential economically recoverable brown coal in the Latrobe Valley of 33 billion tonnes. Annual production was about 68.7 million tonnes in 2009-10⁷. Several projects are proposed to utilise brown coal for new industries, including urea, char, gas and liquids.

3.1.2 Gold

Victoria is a world recognised gold province hosting a variety of deposit styles. Gold production from Victoria's thirteen goldfields accounts for two per cent of all the gold that has been mined throughout the world.

A total of 80 million ounces of gold worth \$68.2 billion has been mined in Victoria since 1851. Annual production was about 242,000 oz in 2009-10⁸. Despite its prospectivity, much of Victoria remains unexplored using modern techniques. GeoScience Victoria's assessments indicate that it is likely that there are multi-million ounce deposits in the state that remain undiscovered. Most of these are under thin Tertiary cover, which emerging exploration techniques should be able to penetrate.

3.1.3 Mineral Sands

Victoria's mineral sand endowment includes an estimated 8 million tonnes of rutile and 6 million tonnes of zircon. Mineral sand exploration and production is focused on the Murray Basin, in the state's west. Production in 2009-10 was about 236,000 tonnes⁹.

3.1.4 Base metals

Strong global base metal prices have attracted applications to resume exploration for base metal deposits in eastern Victoria. Base metal projects that are under investigation in Victoria and include the reopening of the copper-zinc mine at Benambra and the development of molybdenum mine in north-east Victoria.

3.2 FUTURE MINERAL DEVELOPMENTS

3.2.1 Clean coal

Over 80% of the 430 billion tonnes of in-situ brown coal located in Victoria is located in the Latrobe Valley with seams in the Latrobe Valley containing an estimated 65 billion tonnes of measured resource. Approximately half of this has been identified as 'potentially economic'¹⁰. The Latrobe Valley has the potential to be one of the foremost global sites for the application of new clean coal technologies (i.e. low emission coal). The combination of an

⁷ Department of Primary Industries, 2009/2010 Statistical Review- Victoria's Mineral, Petroleum and Extractive Industries, 2011.

⁸ ibid

⁹ ibid

¹⁰ <http://new.dpi.vic.gov.au/earth-resources/industries/coal>

abundant low cost, high quality (ash, sulphur) energy source adjacent to a large sink for carbon dioxide (the depleted oil & gas fields and deep saline aquifers in the offshore Gippsland Basin) create this potential¹¹.

A number of companies are actively working at developing coal projects for power generation, gas, urea and diesel production. Several other projects are at conceptual stage. Some of these projects could commence by 2020 with lifetimes in excess of 40 years. New coal technology demonstration projects are likely to start earlier.

Future large-scale industries based on the coal resource could include coal conversion to diesel, methanol, ammonia, urea, coal char, dried coal and electricity co-generation.

3.2.2 Alternate fuel types

Coal Seam Methane

There is enormous potential for a coal seam methane industry in Victoria. Coal seam methane (CSM) can be used for the generation of electricity and to produce derivative products.

NSW and QLD CSM industry has grown rapidly, whilst the Victorian industry is yet to get off the ground. A significant barrier to this industry is groundwater. This will be discussed later.

Coal gasification

Gasification of coal can produce synthesis gas (syngas, a mixture of predominantly carbon monoxide, carbon dioxide and hydrogen). This syngas can be used in the development of a range of products.

3.2.3 Alternate coal uses

Chars and cokes can be derived from brown coal for pyrometallurgical applications, to produce reductants and carburising chemicals and as a general carbon source for other applications.

Calcium loaded char has applications in water & waste treatment and as an ion-exchange medium. In the future, brown coal may even be refined into a purer form of carbon for use in production of a myriad of carbon products including carbon fibres, carbon anodes, activated carbons, filter aids, pigments, graphite lubricants and conductors and formed carbon materials¹².

3.2.4 CCS

Victoria has excellent potential for the geosequestration of carbon dioxide into on-shore and offshore geological formations. Research is underway into technical and economic feasibility, allied to clean coal research and the use of oil and gas technology.

Victoria has the potential to be a world class CCS hub, taking CO₂ streams from many sources.

3.2.5 Base metals

Though Victoria is regarded as a greenfield area for base metal exploration, geological links between parts of Victoria and the highly prospective Mt Read Volcanics on the west coast of Tasmania, together with geological analogues, provide new incentives for exploration.

Copper, lead, zinc, molybdenum and nickel are present across Victoria.

3.2.6 Gold

GeoScience Victoria's Gold Undercover Initiative has shown that there may be 73 million ounces of gold still to be discovered in northern Victoria¹³. New exploration and mining technology and continued high gold prices are

¹¹ Victorian Department of Primary Industries, *Latrobe Valley 2100 Coal Resources Project*, 2005.

¹² DPI Fact Sheet: Our Coal Our Future – Future opportunities for brown coal

¹³ <http://new.dpi.vic.gov.au/earth-resources/industries/minerals/metals>

necessary ingredients for the industry to expand. For example, there have been three discoveries of gold undercover that followed the GSV Rediscover Victoria work. These discoveries are yet to be extensively examined.

3.2.7 Uranium/thorium

The exploration for uranium or thorium is prohibited under s.5 of the *Nuclear Activities (Prohibitions) Act 1983*. This Act requires amendment to allow for the exploration of both minerals to identify any economic opportunities for the State of Victoria.

4. THE REGULATORY ENVIRONMENT

b) the regulatory environment;

The MCA strongly advocates the principle of minimum effective regulation – specifically, that the development of good regulatory process should be informed by the following principles:

- regulation should only be adopted in cases of demonstrated market failure, and there should generally be an assumption that the open and transparent operation of markets will lead to efficient outcomes;
- regulatory approaches should not be used unless a clear case for action exists, including an evaluation of why existing measures are not sufficient to deal with the issue;
- regulation should only be adopted after a range of policy options (including self-regulatory and co-regulatory approaches) have been assessed and found wanting;
- the regulation represents the greatest net benefit to the community;
- the regulation developed is the most efficient means of achieving the desired outcome at least cost to government and industry;
- effective guidance is provided for both regulators and stakeholders to ensure that the regulations are correctly implemented and monitored;
- mechanisms such as sunset clauses or periodic reviews are built into the legislation to ensure that the regulations remain relevant over time; and
- there is effective consultation with stakeholders at key stages of the development and implementation of the regulation.

These principles are consistent with the Council of Australian Government (COAG) National Reform Agenda which focuses on reducing the regulatory burden across all three levels of government and the implementation of a range of measures to ensure best-practice regulation making and review.

4.1 ONE-STOP-SHOP / LEAD AGENCY

The MCA is not seeking self regulation or advocating a reduction in environmental or community standards. We do however, seek greater efficiency, effectiveness and consistency. We see the resources and competency of the industry regulators as a critical area for attention. We also seek a whole-of-government approach to project approvals so as to avoid the need to satisfy the often personal view of every relevant (and often not so relevant) individual in every relevant agency.

Ideally we seek a one stop shop for project approvals. That is, a single agency charged with the authority to approve projects. Whilst such an agency would be required to do an intense amount of work across all relevant agencies to reach a whole of government position on a proposal, the proponent would only deal with the one point in Government.

Such an approach requires a great deal of maturity by agencies who may feel threatened by what they perceive to be a loss of their agency's 'control' being delegated to a single whole of government agency. However, it does mean that project proponents are not required to 'hawk' their projects across all relevant agencies of government for approval, which is most inefficient and a disincentive to invest.

The MCA has made numerous submissions to Government on its position regarding the need for a one-stop-shop or Lead Agency. The MCA's submission to the Review of the MR(SD)A Issues paper of 2009 articulated this position.

More recently MCA restated industry's position to the Victorian Competition and Efficiency Commission's Inquiry into Victoria's Environmental Regulations which articulates the view of industry regarding the form and function of a Lead Agency. This is summarised below.

“The Minerals industry seeks a one stop shop for project approvals. That is, a single agency charged with the authority to approve projects. Whilst such an agency would be required to do an intense amount of work across all relevant agencies to reach a whole of government position on a proposal, the proponent would only deal with the one point in Government. Such an approval requires a great deal of maturity by agencies who may feel threatened by what they perceive to be a loss of their agency’s ‘control’ being delegated to a single whole of government agency. However, it does mean that project proponents are not required to ‘hawk’ their projects across all relevant agencies of Government for approval, which is most inefficient and a disincentive to invest. Inter-agency differences in approach to the minerals industry and project approvals is a significant disincentive to industry and therefore impacts on Victoria’s attractiveness”.

Where within Government such a Lead Agency is located needs further discussion. There is merit in the functions being housed outside of portfolio agencies to ensure that true whole of Government considerations are made. There must be statutory recognition of the Lead Agency. There must also be deeming provisions that assume consent in the absence of any Government agency decision within a prescribed timeframe.

Practically, decisions of the Lead Agency and approval of the work plan would be the only instrument required, i.e. a whole of government authority. It will also be incumbent on the Lead Agency to ensure that all conditions on work plans are current and relevant. The work plan is the critical approval instrument required to commence work – it details the approved actions.

Greater consideration of possible models is urgently required and the MCA recommends a comprehensive analysis of the approaches adopted in other jurisdictions, particularly the use of a Coordinator General in Queensland and the power granted by the Premier of South Australia to the head of Primary Industries and Resources of South Australia, be undertaken.

4.2 STATE POLICIES AND REGULATION

The majority of regulations impacting on exploration and mining projects are administered by the State. There is no single point of contact, or one stop shop for regulation, nor is there a whole-of-government approach to regulation. Generally, each regulatory agency operates in isolation to the others. Although, it must be said that the Department of Primary Industries (DPI) does attempt to coordinate some regulatory approvals with the Department of Sustainability and Environment through a memorandum of understanding.

Benefits of a whole of government administration of approvals would also include significantly improved consolidation of conditions for regulatory compliance. Operators are currently required to gain consent and approval from a broad range of authorities, which invariably include repetitive and duplicating regulatory conditions. The operator’s ability to demonstrate compliance is significantly hindered by the layers and layers of stand-alone regulatory instruments used to regulate a given activity.

Again, the minerals industry encounters numerous bottlenecks where approvals are required by multiple agencies many with singular interests and no consideration of whole of government policies.

Land access requirements and planning approvals for minerals operations, and the application and use of offsets or other mechanisms to support environmental management, are influenced by a variety of land managers, often within and across the same physical areas, including:

- > local government (e.g. statutory planning approvals, ‘local environment plans’, land use zoning through planning schemes, etc);
- > State government agencies (e.g. utilities – ‘infrastructure planning’, conservation agencies – ‘biodiversity strategies’, water planning authorities – ‘statutory water plans’);
- > regional natural resource management organisations (e.g. ‘catchment action plans’); and
- > Commonwealth, State and local government development approval processes (e.g. which additionally determine where natural resource management ‘offsets’ are placed in the landscape, with or without strategic planning support).

Local government is responsible for administering the local planning scheme. However, under the Mineral Resources (Sustainable Development) Act (MR(SD) Act), exploration work can be undertaken without the need for a planning permit. Mining projects are however required to gain planning approval before the work plan can be

approved. Planning approval can be gained through a planning permit issued by the local government authority or through an Environmental Effects Study completed under the direction of the Minister for Planning.

Whilst we acknowledge this demarcation of responsibilities there is often very little communication and knowledge sharing across the levels of Government to enable efficient, effective and timely decision making. Examples are provided in Chapter 12 below.

4.3 COMMONWEALTH POLICIES AND REGULATION

A range of policies and regulations are governed by the Commonwealth Government. All have an impact on the Victorian minerals industry i.e. the proposed mineral resource rent tax, the proposed carbon tax, environment regulations, national water policy, native title and product stewardship.

A significant impact is represented by the regulatory overlap between the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and the Victorian Environmental Effects Act. The EPBC Act defines a broad range of matters as being of national environmental significance, requiring formal approval should minerals projects risk significant impact on these matters.

When a project is likely to have a significant environmental impact or impact on sensitive areas, it must be referred to the Commonwealth Minister for the Environment, who will decide whether the project requires an environmental assessment and a decision under the EPBC Act. Many of the matters to be assessed, and documentation required, are duplicated between State and Commonwealth impact assessment processes.

The minerals industry is a significant stakeholder in the operation of the EPBC Act

Although the immediate direct footprint of our operations is small, less than 0.2% of the landscape in the last decade, the impacts of our operations in the landscape can be locally significant, not well understood, and easily attract attention from other landscape managers. Despite this low footprint, the Australian minerals industry generates approximately 8% of national GDP, compared, for example, to 3% GDP from agriculture, which uses approximately 50% of the landscape.

According to annual Commonwealth departmental reports on the operation of the EPBC Act, the minerals industry is consistently one of the major stakeholders in the implementation of Act, despite our very low environmental footprint, and very high investment in remediation of those impacts.

This impact will be discussed further in chapter 12.

5. FINANCIAL IMPOSTS

c) fees, charges and royalties;

5.1 FEES AND CHARGES

Regulatory fees and charges are typically not of such a level as to be prohibitive.

The DPI currently collects significant revenue from licence fees and rents and periodically benchmarks these fees and rents against those of other jurisdictions. A significant proportion of the costs of regulating the industry are recovered in this way. Given that the State is the custodian of the resource, and the beneficiary of royalties, the State must share the cost of regulatory activities. Without extraction of the resource the State derives no value. There is, therefore, a significant public good component.

The public benefit of each stage in mineral development includes:

- identifying the State's minerals endowment;
- investment dollars brought in to the State;
- employment;
- skills transfer;
- regional development;
- royalty income;
- shared infrastructure provision; and
- export potential.

Unfortunately, over the past few years Government has gone beyond reasonable "user pay" or fee for service activities - where industry is required to provide additional funds for the routine activities of a regulator. The most recent example is that which arose from the batter failure at the Yallourn coal mine. Following an inquiry the Government determined that specific companies should pay for additional staff within DPI and fund a Technical Review Board. These activities are considered core regulator functions that should be funded by Government.

5.2 ROYALTIES

Royalties can be used as competitive advantage by States and Territories to attract exploration and mining companies.

The transfer of ownership of minerals from the Crown to the miner and the payment of a Royalty can be seen as a partnership. Without this partnership the State would derive no value for the resource, in terms of jobs, regional development and royalties. The current Victorian mineral royalty rate in the existing Regulations of 2.75 per cent of the net market value is appropriate considering the financial and technical risks involved with minerals development and is competitive with other states.

The modern Victorian gold industry remains in its infancy. The geology of the goldfields is extremely complex and discovery and development involves long timelines, considerable capital and very high technical and financial risks, as demonstrated on numerous occasions in the recent past. However, a successful gold industry in Victoria offers considerable promise of prosperity to regional Victoria. Therefore, until the gold sector is sustainable, gold should continue to be exempt from royalty payments. In addition, emerging resource industries such as coal seam methane, underground coal gasification, and engineered biogenic methane generation all require large capital outlays and significant technology risk. These too should be encouraged through a similar royalty holiday.

The MCA considers a profit based royalty regime, rather than the ad valorem and energy content basis currently applied in Victoria, most appropriately reflects the value of the resource¹⁴.

The industry remains concerned that royalties can be arbitrarily raised through the budget process.

The Victorian brown coal miners are subject to the Commonwealth's Mineral Resources Rent Tax (MRRT). State royalties are discounted from the MRRT liability. Details of a safe harbour process to determine the MRRT liability for vertically integrated brown coal businesses remains a work in progress.

5.3 TAXATION REGIME AND EXPLORATION

Industry growth is impeded by rising costs of exploration. Enabling regulation and taxation rules are required to drive exploration in Australia, especially for smaller, entrepreneurial operators disadvantaged by existing arrangements. On the regulation side, processes for obtaining an exploration tenement are costly and time consuming.

Policies are sometimes contradictory across levels of government, leading to governments trying to promote and constrain exploration activity simultaneously.

Financially, junior exploration companies with no taxable income are unable to claim deductibility of eligible exploration expenses. Some form of Flow Through Shares (FTS) scheme would address the current structural imbalance by allowing a percentage of unrealised tax deductions to be passed through to shareholders. The implementation of such a policy was a commitment of the incoming Labor Government in 2007. Unfortunately this has not occurred.

Based on Australia's dividend imputation system, the minerals sector favours a scheme where junior exploration companies undertaking greenfields exploration in Australia are able to pass a percentage of their unrealised tax deductions to Australian shareholders via exploration tax credits (ETCs) at the Australian company tax rate. Eligible shareholders would then be entitled to use their ETCs to offset personal tax liabilities.

A study by Synergies Economic Consulting and the Centre of Policy Studies found that such a scheme for Australian junior explorers would induce 10 to 30 per cent more exploration expenditure. The industry considers the ETC scheme superior to company level rebates (such as the Exploration Refundable Tax Offset model) because it leverages shareholder investment directly and addresses the fundamental tax asymmetry that discourages investment.

As part of deliberations on minerals resource taxation reform, the Federal Government's Policy Transition Group was asked to consider the best way to promote future exploration and ensure a stream of new resource projects for future generations. Its December 2010 report¹⁵ made a number of useful recommendations, including that the Australian Government provide more stable funding for Geoscience Australia's pre-competitive and national data repository work and that governments across Australia accelerate efforts to improve the regulatory environment faced by explorers. As part of this endeavour, the PTG recommended the Australian Government ask the Productivity Commission to undertake an examination of the regulatory barriers faced by exploration companies and present the report to the Council of Australian Governments.

The MCA considers that while these measures are worthwhile, they are insufficient to arrest Australia's declining share of global minerals exploration. In electing not to recommend an ETC scheme at this stage, the PTG noted that it is not clear that a fiscal incentive package is the most effective or appropriate mechanism to address changing domestic and global patterns of exploration. The industry maintains, however, that the ETC is designed to address a tax asymmetry. Rather than being a (distortionary) incentive, it removes a structural disincentive so as to better leverage capital markets for investment in a future pipeline of resource projects.

¹⁴ MCA's submissions on the Commonwealth Government mining tax proposals can be found at <http://www.minerals.org.au/>

¹⁵ Policy Transition Group, Report to the Australian Government on Minerals and Petroleum Exploration, Dept. of Treasury, Dec. 2010

6. PERCEPTIONS

d) national and international perceptions of Victoria's prospectivity and regulatory environment

6.1 THE NATIONAL CONTEXT

Project Approval Score Card

In 2006 the MCA assessed the regulations in all Australian jurisdictions for exploration and mining project approvals and released the resulting audit¹⁶ and scorecard¹⁷ report. These are available at www.minerals.org.au.

The audit of project approval procedures:

- > found that over time, long-standing areas of regulation, such as mining tenement administration, have been refined to the point where systems work efficiently and well. Although systems may differ between jurisdictions, they are broadly similar and well understood by industry and agency staff; and
- > confirmed the significant burden on business caused by inefficient and ineffective project approval procedures:
 - problems tend to arise in the design of relatively new areas of regulation, such as environmental management, cultural heritage and access to land; and
 - poor administration and implementation of regulation impose unnecessary burdens on business.

Regulations governing project approvals for exploration and mining projects are cumbersome, complex, inconsistent and undermine smooth and speedy project development. In addition there are significant inconsistencies between state/territory planning process requirements.

For some time, various jurisdictions have been seeking to improve their project development requirements and to develop better strategic approaches to infrastructure planning and investment licensing. These range from detailed approaches involving Major Project Facilitators and the use of one-stop-shops to none at all.

MCA research suggests there are useful learnings available across jurisdictions that could inform better practice. For example, in South Australia the Minerals and Energy Resources Division of Primary Industries and Resources South Australia plays a coordinating function in the regulation of the various activities requiring approval. A recent Parliamentary report recommends a broader government one-stop-shop be established to promote improved exploration and minerals development¹⁸.

Four lead consultant companies engaged in mining project approval processes (URS, GHD, SKM, and Enesar) prepared the scorecard. The consultants collectively agreed a 'scorecard' for the purpose of assessing and comparing approval processes in each jurisdiction. This scorecard was directed at criteria in two key areas, specifically:

- A. How well the policy and regulations are *designed* in each jurisdiction.
Policy and regulatory design was scored against the criteria including: institutional framework, clarity of policy objectives, stakeholder input & appeals, opportunity and efficiency of chosen regulatory measures in achieving policy outcomes.
- B. How well these policies and arrangements are *administered* in each jurisdiction.
The policy and process administration was scored against the following criteria: clarity of process; timeliness; compliance cost; government agency capacity; predictability and certainty; and effectiveness in achieving policy outcomes.

The criteria were assessed against 17 key project approval issues. The 17 issues were those considered most important to both effecting and affecting investment in a mining project.

¹⁶ URS Australia, National Audit of Regulations Influencing Mining Exploration and Project Approval Processes, Prepared for MCA, February 2006.

¹⁷ URS, Enesar Consulting, GHD, Sinclair Knight Mertz and Environment Action, Scorecard of Mining Approval Processes, Prepared for MCA, May 2006

¹⁸ Parliament of SA, Natural Resources Committee Mineral Resource Development In South Australia, 8th Report, Sept. 2006.

Category 1: Environmental issues

- The environmental impact assessment; Native vegetation management; Environmental standards for air pollution; Environmental standards for noise pollution; and Fauna management

Category 2: Mining specific issues

- Exploration tenure; Mining tenure; and Mine operating conditions

Category 3: Land access issues

- Crown land access; Private land; Access to land under pastoral leases; Indigenous land access; and Native title

Category 4: Other issues

- Planning approval; Water access; Water management (which includes discharge of water from mine sites); and European and aboriginal cultural heritage

The individual criteria of each issue were given a score on a scale of 1 (poor) to 5 (very effective) relative to their perceived ability to meet the MCA goal of nationally consistent project approval processes that are *efficient, effective, transparent* and *non-prescriptive* and based on common standards and codes of practice.

The results demonstrate that while there is variation between jurisdictions in the quality of the processes in place for obtaining approvals, the total scores for each jurisdiction were not markedly different (i.e. there were no stand-out States or Territories). Rather, substantial differences were recorded between jurisdictions on various issues and between issues in the same jurisdiction.

Processes generally scored higher in their design than in their administration. This reflects a common observation by the consultants that there is a major problem with the skills and resources available in government agencies and with the co-operation displayed between agencies involved in the approvals processes.

Table 5 details the aggregate score for each jurisdiction. Victoria scored slightly above average for both regulation design and regulation administration.

Table 5 - Average score for each jurisdiction across all issues.

	Average score - Design criteria	Average score - Administration criteria	Average score
NSW	3.9	3.4	3.6
Vic	4.0	3.4	3.6
Qld	3.9	3.1	3.4
W.A	3.9	3.2	3.5
S.A	3.9	3.7	3.8
Tas	3.9	3.6	3.7
NT	3.6	3.3	3.4
Commonwealth Env	2.9	2.6	2.5
Average - all jurisdictions	3.8	3.3	3.5

Processes that scored highly include environmental impact assessment processes in NSW; mining tenure in the Northern Territory; native title in South Australia; and private land access in Victoria.

Processes that scored poorly included the Commonwealth's environmental impact assessment processes; South Australian Native Vegetation Management; NSW private land access and Western Australian mining tenure.

Table 6 details the range of aggregate scores across all criteria.

Table 6 - Average score for each criteria across all jurisdictions.

Criteria	Range in scores		Australian average	Lowest scoring jurisdiction	Highest scoring jurisdiction
	Lowest	Highest			
Institutional Framework	3.6	5.0	4.2	NT	Comth env
Clarity of policy objectives	3.0	4.3	4.0	Comth env	Qld
Stakeholder Input & Appeals	1.0	4.1	3.3	Comth env	VIC
Efficiency of chosen measure	2.7	4.0	3.6	Comth env	Tas
Clarity of Process	3.3	4.1	3.7	NT	Tas
Timeliness	2.9	4.0	3.4	WA	Comth env
Compliance cost	3.0	3.6	3.3	Qld	SA/Tas
Government Agency Capacity	1.0	3.7	2.9	Comth env	SA
Predictability and certainty	2.0	3.9	3.2	Comth env	SA
Effectiveness	1.0	3.7	3.2	Comth env	SA
Total	2.5	3.8	3.5	Comth env	SA

The scorecard is dated now but little has changed in Victoria. That is, there is ample scope for improvement.

6.2 THE INTERNATIONAL CONTEXT

Since 1997, The Fraser Institute has conducted an annual survey of metalliferous mining and exploration companies to assess how mineral endowments and public policy factors such as taxation and regulation affect exploration investment. Survey results represent the opinions of executives and exploration managers in mining and mining consulting companies operating around the world. The survey now includes data on 68 jurisdictions around the world, on every continent except Antarctica, including sub-national jurisdictions in Canada, Australia, and the United States.

The most recent annual Fraser Institute survey of mining companies was published in March 2011.

While geologic and economic evaluations are always requirements for exploration, in today's globally competitive economy where mining companies may be examining properties located on different continents, a region's policy climate has taken on increased importance in attracting and winning investment. The Policy Potential Index (PPI) serves as a report card to governments on how attractive their policies are from the point of view of an exploration manager.

The PPI measures the effects on exploration of government policies including uncertainty concerning the administration, interpretation, and enforcement of existing regulations; environmental regulations; regulatory duplication and inconsistencies; taxation; uncertainty concerning native land claims and protected areas; infrastructure; socioeconomic agreements; political stability; labor issues; geological database; and security.

The PPI is based on ranks and normalized to maximum score of 100. Each jurisdiction is ranked in each policy area based on the percentage of respondents who judge that the policy factor in question "encourages investment".

The jurisdiction that receives the highest percentage of "encourages investment" in any policy area is ranked first in that policy area; the jurisdiction that receives the lowest percentage of this response is ranked last. The ranking of each jurisdiction across all policy areas is averaged and normalized to 100. A jurisdiction that ranks first in every category would have a score of 100; one that scored last in every category would have a score of 0.

It is noted that the Fraser Institute¹⁹ continues to rate Victoria as one of the least attractive jurisdictions in Australia on its Policy Potential Index. Victoria was rated 31 out of 79 jurisdictions in the 2010/11 survey of global mining jurisdictions. The policy potential index is a composite rating of the regulatory regime of each jurisdiction. Victoria consistently rates below other Australian States and the NT. It is the first time in a number of years that Victoria did not come last, with Queensland faring poorly regarding uncertainty on environmental regulations and land claim

¹⁹Annual Survey of Mining Companies 2010/2011, Fraser Institute, 2011

disputes thus dragging it down. Victoria has plenty of scope for improvement. This is especially true as South Australia is consistently rated best Australian jurisdiction and in the top quartile each year.

The Policy Potential ranking for all Australian jurisdictions in the 2010-11 survey are detailed below.

Table 7 - Policy Potential Index of Australian Jurisdictions

Jurisdiction	Score	Rank
South Australia	75.9	11/79
Tasmania	61.3	28/79
Northern Territory	62.2	27/79
Western Australia	70.6	17/79
New South Wales	68.2	20/79
Victoria	56.9	31/79
Queensland	52.8	38/79

The preceding 4 years has seen Victoria decline significantly in policy potential index score (out of 100) and in world ranking.

Table 8 – Victoria’s performance over time

Year	Score	Rank
2006-07	76.7	12/65
2007-08	53.0	29/68
2008-09	57.1	29/71
2009-10	57.0	30/72

Whilst this decline is a significant concern, Victoria consistently rates well in:

- Transparent and fair legal processes
- Infrastructure
- Socio-economic agreements
- Trade barriers
- Geological database
- Supply of labour

These areas are also rated highly for the other Australian jurisdictions also so there is no comparative advantage for Victoria.

The areas where Victoria lags other jurisdictions and the world are:

- Mineral potential
- Uncertainty over environmental regulations
- Uncertainty over protected and wilderness areas

These uncertainties are discussed further in Chapter 12 below.

7. WHY AREN'T WE GROWING?

e) the success and failure of projects in Victoria's mining development pipeline;

This is the multiple billion dollar question! The industry hopes that this Inquiry will lead to establishing the policy and regulatory frameworks that will lead to greater opportunities for the minerals industry and lead to more successful projects.

Anecdotally for every mining development there will have been 1000 exploration projects. Geological data and high imagery surveying can identify a potential target but until metres are drilled i.e. exploration activity is undertaken, there is no certainty that an economically recoverable resource is present.

If an exploration project successfully locates an ore body, the task of proving up a resource to progress into the approvals phase and to attract finance begins. This takes a significant amount of time. The availability of finance and the commodity markets will determine whether or not a mine is developed. The project finance will often be dependent on successful completion of the regulatory approvals process. Most of the regulatory hurdles are encountered after the exploration phase and before the development phase..

Mining, of course, has been occurring in Victoria for centuries, one could say that all the 'low hanging fruit' has been well and truly picked with regards to precious and base metals. Technology and access to land are the key. Any significant new deposit in Victoria will invariably be undercover and at depth.

For coal, government policies and regulations have contributed to a delay in developing the brown coal fields for alternate uses, most obviously with regards to coal seam methane.

Victoria is highly prospective for mineral sands, however a company with operations in both Victoria and South Australia experience entirely different regulatory hurdles with SA providing a far more effective, efficient and timely outcome, leading observers to ponder why anyone would find Victoria attractive to operate in.

As mentioned earlier, uranium and thorium exploration or mining is banned in Victoria.

8. HOW CAN WE LEARN FROM OTHERS?

f) different approaches and programs applied in other Australian and international jurisdictions to foster increased investment in greenfields exploration for, and development of, minerals and energy earth resources;

The Fraser Institute Reports provide an enormous wealth of knowledge on how other jurisdictions, both internationally and within Australia rate across a range of policy and regulatory settings. It is interesting to note that Victoria leads the nation and is 4th in the world as one of the best places in the world for petroleum companies to do business. It would be valuable to understand why such a stark contrast occurs with regards to mineral exploration.

South Australia consistently leads the nation with regards to both policy and regulatory settings. As mentioned earlier, an analysis of the approaches adopted in other jurisdictions, particularly the use of a Coordinator General in Queensland and the power granted by the Premier of South Australia to the head of Primary Industries and Resources of South Australia is warranted. This work could build on the 2006 MCA Report assessing the regulations in all Australian jurisdictions for exploration and mining project approvals and the resulting audit and scorecard report.

MCA research suggests there are useful learnings available across jurisdictions that could inform better practice. For example, in South Australia the Minerals and Energy Resources Division of Primary Industries and Resources South Australia plays a coordinating function in the regulation of the various activities requiring approval under their environmental impact statement process.

The SA Plan for Accelerating Exploration (PACE) program has led the nation with regards to partnering with industry to explore. Other jurisdictions have modeled their programs from this initiative, including Victoria's Drilling Initiative. The SA program remains the most successful with regards to exploration leading to mine development. However, it is recognised that the history of exploration in SA differs to that of Victoria.

9. WHAT CAN GOVERNMENTS DO?

g) the different roles of government (this may include, but is not limited to, targeted industry engagement, facilitation and generation of geological survey information);

As mineral resources are owned by the Crown, it is incumbent on the Government to protect, allocate and use these resources for the prosperity of the State.

The MCA has long been frustrated by the *ad hoc* approach to resource management across the State. Rarely are whole of government decisions made. Furthermore, the policies and objectives of some Departments clearly contradict public Government positions.

9.1 IMPLEMENT RECOMMENDATIONS

As discussed earlier, the industry has spent a significant amount of time contributing to inquiries and reviews over the past decade. Unfortunately little on the ground improvement has been seen. The ‘silo’ nature of departments and agencies does not allow for whole of economy strategic thinking. Even the recommendations of the State’s competition and efficiency commission (VCEC) – an agency that has the ability to elevate itself above the portfolios and consider economic, social and environmental issues has had limited success in influencing governments to change policies and practices. For example, the recommendation to amend the low impact exploration definition in the MR(SD) Act was first made by VCEC in 2005. The Departments are still ‘actively’ working on the solution.

VCEC is best placed to advise government on the market impacts of its policies and regulations, and the consequences of interfering with the market, particularly where an industry such as ours is part of the international market. Industry has long decried governments’ lack of understanding of business drivers and the market.

Industry simply asks government to implement the recommendations of these various inquiries and reviews. Many recommendations come at no or little cost but would see an extraordinary impact on efficiency and effectiveness of government processes and encouragement of investment in minerals projects.

9.2 UNDERSTAND MARKET FORCES WHEN DEVELOPING POLICY AND REGULATORY SETTINGS

A common frustration of industry is the lack of understanding by governments and their departments of how the private sector operates and the role of market forces. For too long governments have developed policy and regulatory settings that interfere with the market. Often, the best strategy for government is to encourage the market, not intervene.

The minerals industry is generally a volatile industry with rapid changes of the supply/demand balance playing out for the different communities.

9.3 INVEST IN UNDERSTANDING THE STATE’S RESOURCE BASE

A well resourced Geoscience Victoria is critical to the industry’s future. Pre-competitive geological data provides a sound platform upon which explorers view the prospectivity of the State. This data is also fundamental in understanding the State’s underlying geology and resource potential.

Whilst Victoria has an excellent geological database, it is limited by the technology of the time. New technologies continue to provide new understanding of the State’s resources. Government must continue to invest in better understanding of its minerals inventory.

9.4 WHOLE-OF-GOVERNMENT DECISION MAKING

As mentioned throughout this submission, it is critical that decisions are made on projects based on their merit. No one portfolio of Government can be the ultimate decision maker – mineral projects have impacts on planning, environment, safety and health, aboriginal heritage and native title, water, transport etc. A whole of government decision is required. This is best facilitated through a one-stop-shop as detailed earlier in Chapter 4.

The time taken to plan, finance, insure and regulate a mining operation has increased substantially in the past few decades, particularly in the case of large-scale mines.

It now takes several years and multiple millions of dollars to achieve project approval for moderate sized mining projects in Victoria.

9.5 REGULATORY REFORM

The previous Government determined there was a need to reform the MR(SD) Act as it had been in operation for 20 years. This was to be undertaken in two stages. The stage 1 reforms were directed at tenement licencing arrangements, whilst the stage 2 reforms were to be primarily directed at the work plan processes and streamlining of the extractive industries additions to the Act.

The stage 1 reforms were passed by the parliament in 2010 and come into effect in February 2012. The regulations and guidance notes to support the legislation changes are currently being prepared by government.

MCA and its members supported some of the amendments such as the introduction of a Retention Licence. Many of the other features related to renewal and relinquishment of licences were opposed. We remain opposed to these reforms, as they place an unwanted burden on many exploration projects.

The Stage 2 reforms to the work plan and project approvals processes were sold to industry as the benefits to counter the down side of some of the stage 1 reforms. The proposal is to streamline the project approvals. The government is currently consulting industry on these reforms which are expected to go to parliament in 2012. If approached in a manner to streamline the regulatory burden and break down the 'silos' of the bureaucracy, the reforms have the potential to improve the regulatory burden on the minerals sector.

10. DELIVERING BENEFITS

h) opportunities to increase the net benefits from Victoria's minerals and energy earth resources, and to potentially provide for self-sufficiency in low cost energy and extractive materials, consistent with the principle of economic efficiency; and

In addition to the economic benefits derived from the Victorian minerals industry there are a range of community and regional benefits.

The minerals industry is acutely aware that:

- we can only find and develop resources with the support of the community;
- we operate under increasing expectations and the scrutiny of local, regional and global stakeholders;
- communities are seeking a balance between economic growth, responsible social development, and effective environmental management; and
- communities expect to share in the benefits derived from resource development.

The minerals industry is a key stakeholder in developing policy and strategic frameworks for regional development. This includes maximising the economic development benefits of resource projects in line with industry's social licence; providing policy frameworks for the development of stable, strong and vibrant communities beyond life of mine; engaging governments at all levels in the effective provision of critical community infrastructure, both soft and hard; building a localised and diverse workforce aligned to business needs; and supporting enterprise development as a path to economically diverse communities.

10.1 COMMUNITY BENEFITS

The minerals industry has a strong, practical commitment to corporate social responsibility (CSR). Over time, the industry has shifted its focus from dealing with immediate impacts on local communities towards the building of sustainable regional communities through long-term partnerships. A new paradigm of community engagement has taken hold – from a tradition of deciding, announcing and defending to an approach based on engaging, listening and learning.

The industry recognises that corporate social responsibility is not an adjunct to its business, it is its business – the industry's core function is to convert natural endowment to societal capital, and that can only be achieved sustainably when there are real mutually beneficial considerations of the safety and health of its workforce, the environment, host communities, and the rights and interests of Indigenous peoples. In this context, the industry has a duty to ensure the benefits of natural resource development accrue to communities and the nation across generations, beyond the life of mine.

Mining operations are supported because of the contribution they make to society. The industry knows that this support is neither automatic nor unconditional. There is the need to gain and maintain the support of regional communities for a valid social licence to operate and that this "licence" is just as important as its regulatory licence granting access to natural resources.

Implicit in a social licence is that companies recognise there are strong societal and business benefits from adhering to high standards of CSR²⁰.

²⁰ MCA 2001-2012 Pre-Budget Submission, February 2011

10.2 ENVIRONMENTAL MANAGEMENT

The minerals industry has continued to transition from managing present environmental impact through rehabilitation and reclamation to long-term environmental stewardship with the aim of securing sustainable ecosystems beyond life of mine. The industry's environmental performance has improved with an increased focus on resource use efficiency, including in relation to energy, water and chemicals. The industry has also focused on practical measures to improve land use planning and management, particularly in areas where operations intersect with agriculture and other industrial sectors.

In addition, the industry has added significantly to the understanding and management opportunities to especially groundwater and water in general. This derives from the need to first obtain extensive data on the occurrence and environmental interfaces and then the management techniques which can be used to best conserve the beneficial uses of the resources. This information then becomes part of the public experience and is available to be used to the benefit of the community and the environment into the future.

Over the last two decades, the minerals sector has moved progressively from a compliance mentality in emissions management to engaging in continuous improvement and operating in a manner attuned to community expectations of risk management.

10.3 SUSTAINABLE INDIGENOUS COMMUNITIES

The MCA considers that ineffectual policy development and systemic implementation inadequacies by Federal and State governments have resulted in ongoing failures in the ability of Indigenous people to fully realise socio-economic opportunities. Collaborative action between governments at all levels, the private sector and Indigenous communities is critical to ensuring that Indigenous Australians are able to share in the same opportunities as non-Indigenous Australians while also maintaining a strong culture and linkages to country.

A clear opportunity exists to leverage the increased economic activity associated with mineral wealth to enhance the social and economic capacity whereby Indigenous people can become long-term contributors to, and drivers of, regional and community development. Specifically, the MCA considers that, provided a framework of policies and social and physical infrastructure is in place to support Indigenous economic development, payments made under Native Title agreements provide a platform for the long-term investment of such monies to ensure sustainable, intergenerational benefits to Indigenous communities.

10.4 STRENGTHENING REGIONAL COMMUNITIES

The minerals industry is a crucial part of Australia's regional fabric. It is both a major employer and an economic catalyst for other employment and enterprise development opportunities in remote and regional Australia.

The MCA has advocated for some time that the absence of effective governance and service delivery has meant that the social and physical infrastructure that is provided as core citizenship entitlements in urban and coastal Australia is largely absent in remote and regional Australia. To address this, industry has taken a "proxy role of government" in providing community level services including child care facilities, housing, schools, health care and training in areas such as work readiness and financial management skills.

Whilst less evident in Victoria, the industry makes significant financial and in kind contribution to regional communities and with growth of the minerals industry has the potential to make an even greater contribution.

The industry is able to use its leverage as an economic catalyst in rural and remote Australia to assist communities to maximise the benefits of economic development through:

- the provision of skills development opportunities including training programs, apprenticeships and employment;
- the use of local supply chains to provide and enhance business development opportunities; and
- the development of effective community networks which provide support structures for what are often rural and regional communities in decline.

The industry also provides support to communities recognising their role as a partner in resource development, with an emphasis on ensuring that the economic benefits of operations can extend beyond the life of the mine, and to ensure that those communities most impacted by mining operations are also the communities that most benefit.

Government acknowledgement of the community benefits of the minerals industry through public support and the provision of information on the industry to the public would be a tangible contribution that would deliver benefits.

11. POTENTIAL FUTURE CONFLICTS

j) consideration of the costs and benefits of greenfields minerals exploration (economic, social and environmental), and whether there are opportunities to improve the management of potential conflicts between exploration and other land uses.

11.1 LAND USE

The MCA recognises that land can be used for different purposes at the same time (multiple) and for different purposes after a land use has finished (sequential). Multiple and sequential land use is fundamental to achieving simultaneously the State's economic and conservation objectives and consistent with the principles of sustainable development as operationalised for the Australian minerals industry in *Enduring Value*.

Exploration for minerals using state of the art techniques can be undertaken in ecologically sensitive areas with minimal impact. The impact of any subsequent minerals development would depend on the mining and rehabilitation technologies to be employed and the environmental values in the area. In most cases it should be possible to protect significant environmental values, yet allow development to proceed. Therefore regulatory arrangements should not embody the presumption of incompatibility.

The minerals industry has unique characteristics that need to be considered in the context of strategic land use planning. For example, mining is a temporary land use and following the completion of mining, land can be rehabilitated and used for a wide range of purposes including urban and industrial development, agriculture and conservation. It is also important to recognise that mining can and does coexist successfully with a wide range of other land uses, and the industry creates positive outcomes in the areas of conservation, cultural heritage and regional economic development.

There is an increasing trend for regulation to presume that minerals development activities are inconsistent with other land use objectives, rather than the industry's preferred approach of multiple and sequential land use. Examples of this trend include the Qld Strategic Cropping Lands and Wild Rivers legislation, and the NSW High Value Agricultural lands legislation.

In Victoria exploration and mining is a permitted activity under all planning schemes. This provides enormous certainty to exploration and mining companies as well as signalling that projects will be assessed on their merits rather than through an arbitrary zoning of land. In many areas of the state exploration and mining is recognised as a clear beneficial use.

Land use conflict has transcended the historical issues with the conservation estate to now centre on the intersection between mining and agriculture, and a perception that the industry's activities are having a negative impact on soil structure and water availability in agricultural regions, in turn impacting on food security. The reality is that these industry's have co-existed for over 150 years, that mining operations water consumption by volume could be largely offset by minor efficiency gains in the agricultural sector, and that food security, while an international issue of concern, is not yet a real concern for Australia.

Australian minerals companies have adopted the following vision to deliver sustainable land use outcomes: *"Australian mining companies will be recognised as responsible stewards of the land by delivering long-term balanced economic, social and environmental outcomes"*.

The MCA advocates the application of the following principles to achieve this vision:

Land use planning and access:

- Land use planning should facilitate compatible land uses to maximise economic, social, cultural and conservation values for the benefit of current and future generations;
- Land use planning should be holistic with integrated consideration of cultural, environmental and economic values;

- Mining, conservation and other land uses can be complimentary as sequential or neighbouring activities;
- The rights and knowledge of traditional owners and community stakeholders should be considered in integrated land use planning processes; and
- Planning decisions that impact access and use arrangements should be ethical and transparent, and consider the social, environmental and cultural implications of developing or sterilising mineral resources.

Land management:

- Mining activities should minimise disturbance, and provide for ongoing progressive rehabilitation, directed at achieving an agreed final land use; and
- Non-operational land should be managed responsibly considering adjacent and future land uses.

Future land use:

- Mining planning activities will pro-actively engage stakeholders on an ongoing basis and consider changing circumstances; and
- Closure standards should reflect agreed expectations for the post-closure land use.

The entire Australian minerals industry disturbs less than 0.2% of Australia's land mass and the industry spends more than \$200 million on the rehabilitation of disturbed lands each year. An ongoing constraint to the minerals sector's continued contribution to the economy is the shrinking national minerals inventory. While exploration spending has grown in recent years, Australia continues to fall behind other nations in identifying new base metal and gold resources.

Access to land to explore for minerals is critical to growing the inventory. Geoscience Victoria has mapped a large part of Victoria with modern geological appraisals, and in some areas this mapping identifies where minerals might be found. Exploration companies use this information to then explore these areas and sink drill holes to determine the exact location, grade, quantity and quality of any mineral resource. Unfortunately, exploration is a risky business and very few projects locate a resource significant enough to establish a mining operation. Most exploration is undertaken over a short period with low impact techniques. It is not until a target resource body is identified that extensive drilling occurs to 'prove' that resource.

11.2 LAND ACCESS

The Victorian minerals industry has over the years established effective and practical processes to access farm land and native title land for exploration. The processes have been embodied in the MR(SD) Act; through joint agreements with landowners and other stakeholders; and through promotion of good business practice.

On private land

The MR(SD) Act specifies that explorers (and miners) cannot enter a property to conduct exploration without the consent of the landowner. That consent can be informed verbal consent or written consent and include a formal compensation agreement. Compensation is for disruption to the landowner, not for any possible damage to the property. A separate rehabilitation bond is lodged with the DPI as a guarantee against making good any damage to the property.

In cases where a landowner refuses to grant consent the explorer can take the matter to VCAT. VCAT shall then determine if access is warranted and the compensation that is to be paid. This is a route that explorers in Victoria are very loath to take as it is not conducive to lasting relationships between the parties and generally, no one likes going to VCAT. Over the past 10 years there have been very few, if not nil, cases referred to VCAT for access.

A cooperative approach to land access considerations between the MCA and the Victorian Farmers Federation (VFF) has over the years established good practice guidelines. Firstly, it is accepted that the first approach to a landowner should be in person at the front door where the project can be explained and the intentions of the explorer discussed. Other jurisdictions require a written letter to precede the home visit which immediately sets a negative environment from the outset.

MCA and the VFF first prepared a guide for private landowners regarding exploration and mining on private land in 2000. This has been updated a couple of times and is co-signed by the President of the VFF and the Chair of the

Victorian State Council of the MCA. The current edition was produced in 2008²¹ and will be updated following the current round of amendments to the MR(SD) Act.

Explorer members of the MCA carry the guide with them when visiting landowners and leave them a copy. The guide clearly spells out the rights of landowners and the obligations of explorers.

In addition, the VFF and MCA have agreed a standard compensation agreement between landowners and explorers that sets out the standard clauses and simply requires the details of the property concerned to be inserted and the agreed sums for the various classes of work proposed to be undertaken. The standard compensation agreement is co-endorsed by the President of the VFF and the Chair of the Victorian State Council of the MCA. The standard compensation agreement fast tracks agreement making and generally avoids the need for lawyers to become involved.

A 2010 amendment to the MR(SD) Act removed the condition that prescribed the matters that could be considered for compensation related to mining projects. The agreements can now be based on a business to business consideration. The amendment was co-sponsored by the MCA and VFF.

On native title land

In 2004, MCA successfully concluded negotiations with Native Title Services Victoria (NTSV) (the native title representative body for native title claimants in Victoria) and the Victorian Government on a series of proforma native title agreements for exploration and mining on land subject to native title claim under the C'th Native Title Act.

The agreements included s31 Agreements, Project Consent Deeds, and proforma Indigenous Land Use Agreements (ILUAs) for exploration and for mining. The proforma agreements facilitated a rapid increase in agreement making for exploration on Crown land in Victoria.

The process of negotiation over the period 1998 to 2004 cemented strong and lasting relationships between MCA and NTSV; relationships that continue today, so much so that MCA has on occasions intervened in native title determinations in support of claimants in Victoria.

In 2006 NTSV and MCA negotiated two Regional ILUAs for exploration in the central goldfields areas. The Regional ILUAs were between the MCA and the Dja Dja Wurung people and the Wadi Wamba Burrupa people. The ILUAs were eventually registered and included a standard set of conditions and compensation arrangements. Explorers were invited to sign a deed to join the ILUA and hence proceed to be granted their exploration licences.

The Regional ILUAs between a mining industry association and a claimant group were a first for Australia and fast tracked all exploration licence applications in the goldfields. The compensation arrangements included in the Regional ILUAs were heavily influenced by the standard agreements and compensation payments made to private landowners.

In 2010 the Traditional Owners Settlement Act (TOS Act) was passed by the parliament. MCA was a strong supporter of the new state based native title settlement arrangement as it clarified claimant status and aligned the Aboriginal heritage process.

Under the TOS Act all land access arrangements are controlled by a Land Use Activity Agreement (LUAA) between the State and the Traditional Owners. Exploration is identified as a “procedural” activity in the LUAA. MCA and NTSV are currently negotiating the terms for Schedule 6 (exploration) for inclusion in the framework LUAA.

11.3 COMMUNITY ENGAGEMENT

Victoria is the only jurisdiction to legislate an obligation on explorers and miners to consult with community stakeholders. This was done in 2007. MCA was a supporter of the change to institutionalise community engagement obligations in the MR(SD) Act as it is simply good business. We advocated that the provision should place the obligation on the Licensee without prescribing how that consultation would occur. We did not want to see

²¹ MCA, Guide for Private Landowners regarding Exploration on Private Land, October 2008
www.minerals.org.au/Victoria

the Government or DPI officials becoming an intermediary between the relationship of the explorer or miner with the landowners and other stakeholders.

A community engagement tool kit was prepared by the MCA as a good practice guide for Victorian explorers and miners in February 2006²².

Whilst explorers have a duty to consult they are not required to lodge a formal community engagement plan with DPI. However, mining operators are required to prepare and implement a formal community engagement plan. The duty to consult is on the Licensee, that is, the obligation commences when the licence is granted.

At the exploration licence application stage explorers are required to place an advertisement in a prescribed format in the local media. The advertisement invites landowners to advise the Minister should they have concerns with the application being granted.

It is recognised by many MCA members that it is good practice (and good business) for explorers to map the community, prepare a community engagement plan and commence consultation at the application stage.

11.4 DISPUTE RESOLUTION

The Minerals Council of Australia has consistently sought a stronger, transparent and effective disputes resolution process for the minerals sector in Victoria. The current disquiet within some community groups related to coal and CSM exploration projects would also suggest that there is a need to review the procedures. The current stage 2 reforms to the MR(SD) Act offer an opportunity to review the dispute resolution procedures. MCA in conjunction with the VFF and the Prospectors and Miners Association of Victoria has previously recommended detailed changes to the MR(SD) Act reform process specifically aimed at the role of the Mining Warden. The proposed change:

- maintains the Warden as a statutory appointment;
- maintains the jurisdiction to review decisions of the Department;
- maintains the jurisdiction to review disputes between miners;
- maintains the power to undertake inquiries on behalf of the Minister;
- maintains VCAT as the arbitrator of land access compensation (following failed mediation);
- maintains the Supreme Court as the appeals body; and most importantly
- improves the dispute settlement provisions of the MR(SD)A related to land access so as to enable professional mediation and the establishment of binding consent agreements.

To improve the independence and transparency of the Warden's office it is proposed that the Warden be relocated from the Department of Primary Industries to the Department of Justice and co-located with, and resourced through, the Small Business Commissioner.

Specifically, the Warden would provide pre-mediation advice to the Small Business Commissioner on MR(SD)A disputes. The Small Business Commissioner would have a formal role in mediation of disputes under the MR(SD)A and a Certificate of 'failed' mediation would be required before progressing to the Wardens Court or VCAT. We would expect this to be a timely intervention; not a source for new delays.

The specific amendments to the MR(SD)A we seek are:

- Amend s43(1) to enable consent agreements with binding conditions to result from the mediation process. s87(1) was amended in the stage 1 reforms to enable compensation agreements to be reached without reference to the prescribed matters under s85 of the Act;
- Amend s88(2) to ensure mediation by the Small Business Commissioner is attempted before a determination by either VCAT or the Supreme Court;
- Amend s97(2) to enable the Warden to engage the Small Business Commissioner to mediate a dispute; and
- Add new clause to s97 to enable the Warden to provide advice to the Small Business Commissioner on MR(SD)A disputes.

²² MCA, Community Consultation Toolkit, a good practice guide for Victorian explorers and miners, February 2006. www.minerals.org.au/victoria

12. BARRIERS TO GROWTH

12.1 ACCESS TO LAND

A key barrier to increased investment in country Victoria is access to land for exploration..

The minerals industry's continues to have concerns regarding reduced access to Crown land for exploration and mining. The growth in restricted and exempt Crown land and failure to recognise both the options for multiple and sequential land use management regimes, and the rights of existing licence holders, is of concern. The general presumption that conservation objectives and modern mineral resource development are incompatible is inaccurate as it is not borne out by evidence. For example, the Newbridge dredging sites and residential areas of the cities of Bendigo and Ballarat have been reclaimed and are now regarded as valuable land by the community.

12.1.1 Growth in Restricted and Exempt Crown land

In Victoria the Crown Land estate comprises 32% of the State and there are three primary categories of Crown land relevant to exploration and mining tenements. The current relative size of the categories is:

Exempt Crown land	42%
Restricted Crown land	12%
Unrestricted Crown Land	46%

Exempt Crown land includes National Parks, State Parks and Wilderness Areas. Restricted Crown land includes Nature Conservation Reserves, Flora and Fauna Reserves, Regional Parks and the new category of Forest Park. In Victoria, resource exploration and extraction is allowable in State forests.

The minerals industry is excluded from a suite of Crown land categories under the Mineral Resources (Sustainable Development) Act 1990 (MR(SD)A 1990), in particular land that is a reference area under the Reference Areas Act 1978, land that is a national park, wilderness park or State park under the National Parks Act 1975, unless the land is covered by a pre-existing licence granted before the declaration of the national park, wilderness park or State park.

It has become increasingly common for recommendations arising from Government Inquiries to either increase the number of hectares to be restricted and exempt or to move existing Unrestricted Crown land hectares into more restrictive categories. For example, in a recent Victorian Environment Assessment Council (VEAC) Inquiry into the River Red Gum Forests there was an almost tripling of National Park from 52,000ha to 152,000ha. This is an additional 100,000ha that the minerals industry is excluded from without consideration of the potential loss of the mineral value to the State or a methodology to change if the value of known mineral deposits increases.

Mineral deposits found through exploration are important to the State, as the minerals are the property of the Crown. Ownership of the minerals transfer to the mining company upon extraction and royalties are paid and redistributed by government's to provide for public services. Therefore, an absolute restriction on access to land is not in the public interest. Increases in National Park and other exempt Crown land is counter to a modern land management regime that addresses the three pillars of sustainable development by effectively assessing the risks of all possible land uses on a case by case manner.

Although these principles should apply everywhere, the MCA is not advocating access to existing National Parks where such access is currently prohibited. It is the growth of exempt and restricted Crown land that we are concerned about.

Also, MCA supports the need to improve the protection of specific tracts of land, including the need for continuous land connections between habitats (where appropriate), while balancing the social, environmental and economic needs of the region, including short-term and low impact alternate land uses.

12.1.2 ELs on New National Parks

It is acknowledged that existing exploration licence holders under the MR(SD)A 1990 are legally able to continue to operate according to their licence in the event that the land their EL covers is proclaimed to be National Park. That is, they may have the EL renewed (if they do not lapse); and, may apply for a mining licence and work authority although this is a prohibitive process requiring parliamentary approval.

Unfortunately, the experience of MCA members who have held exploration licences in newly proclaimed National Parks is that continued operation and in particular renewals and work plan approvals are effectively impossible to attain. In such cases many companies find it prudent to walk away from their investment. Whilst this has not been the stated policy intention of the Government in the past, unfortunately it is the practical commercial reality that proposals for areas covered by exploration licences to become National Parks result in a negative commercial outcome.

While minerals companies agree, in principle, that there are some areas where mining development is inconsistent with the protection of ecological, cultural and landscape values, they have reservations over whether such areas always coincide with the boundaries established by National Parks.

MCA is concerned at any increase in the area of exempt or restricted public land as this invariably limits the potential of future generations to access the mineral wealth contained in those areas and the economic impact to the State. Increases in National Park and other exempt Crown land is counter to a modern land management regime that addresses the three pillars of sustainable development by effectively assessing the risks of all possible land uses on a case by case manner.

In summary, improving access to Crown land is quite simple; in the first instance:

- expand the definition of low impact exploration and improve notification processes for the land manager;
- simplify the approval process for exploration on restricted Crown land; and
- limit the growth of Exempt Crown land categories.

12.1.3 Private land

Private land represents 68% of Victoria's land area. Gaining access to private land can represent a significant challenge for exploration and mining companies.

The Victorian minerals industry has long held the view that a social licence to operate is a critical ingredient in a successful exploration and mining projects. The industry has well developed procedures for engaging with land owners and shares a constructive relationship with the Victorian Farmers Federation (VFF).

The MCA was instrumental in enshrining the principles for community engagement into the MR(SD)A in 2004 as this had long been best practice. The industry in collaboration with the VFF developed a Guide for Private Landowners regarding exploration and mining on private land which provides landowners with information regarding the licencing regime in Victoria, compensation agreements and rehabilitation of land. This Guide has proved very effective and is now in its second run.

The minerals industry understands that private landowners are businesses also. Access to land is a matter for commercial negotiations and there is enormous scope for mutually beneficial outcomes. There is a role for government to improve the understanding of landowners as to who owns the minerals.

12.2 ENVIRONMENTAL APPROVALS

Regulations impacting on exploration, mining and mineral processing involve a multitude (see Table 3 in Chapter 1) of controls at all three tiers of government. The variability in content, administration and enforcement of these regulatory processes represents a significant constraint on the effective operation of the minerals sector.

Principles that underpin a preferred framework for improved project approvals processes, specifically:

- > national consistency - in procedures, regulations and administration/interpretation;

- > co-regulation – minimum effective regulation and industry voluntary initiatives (guidelines, protocols, codes);
- > continuous improvement – beyond regulatory compliance (minimum standards) including conformance with industry voluntary initiatives (leading practice, eg. *Enduring Value*);
- > regulatory capacity – accountable (clearly defined role), competent and appropriately resourced regulators;
- > sustainable development assessment criteria – regulations and determinations to be constructed on the integration of the three pillars of sustainable development;
- > single instrument of approval – single agency with responsibility for coordinating whole-of-Government process and determining whole-of-Government position;
- > risk management – regulations characterised in risk assessment and management (for environmental and social impact assessment and management plans).

12.2.1 EES Approvals Processes

The principle environmental regulatory instrument applied to mining projects is the Environmental Effects Statement (EES) process. The EES process places an emphasis on identifying and avoiding or mitigating all possible environmental and social impacts of the proposed project.

The ever growing complexity of the EES process, its increasing cost of compliance and expanding timeframes to achieve an outcome have plagued the minerals industry in Victoria for almost the past 20 years from when the MR(SD)A was first introduced. Whilst the industry welcomed the opportunity to gain planning approval for mining projects through the EES process, the MCA has consistently sought improved efficiency and effectiveness. Unfortunately, we continue to see reduced efficiency and less effectiveness.

Nevertheless we continue to appreciate that the EES process has many advantages for large, complex projects compared to the planning permit route. MCA has been a consistent advocate for improved efficiency through the numerous reviews of the *Environment Effects Act 1978* and its implementation through the EES process.

Victoria's project approvals process under the *Environment Effects Act 1978* is by no means leading practice. The process is cumbersome, very time consuming and very costly. For example the recently completed Donald Mineral Sands EES commenced in December 2005. The final draft EES documents were presented to government in December 2007 and the Planning Minister finally handed down his recommendations in November 2008. The EES process cost the company \$2.3 million.

The Iluka Resources EES experiences in Victoria tells a chilling tale of inefficiency through a simple comparison with approvals in South Australia. The Iluka Murray Basin Stage 2 Project near Ouyen process commenced in January 2004. Serious discussion to progress the approvals commenced in March/April 2007, the same time that the company commenced discussions with the South Australian government to progress approvals for the Jacinth-Ambrosia mine near Ceduna. The South Australian project had ancillary works underway by October 2008 whereas the Victorian project had just received the Planning Ministers Assessment of the EES in November 2008. The Victorian project still had a great deal of work to be done to gain the subsequent approvals including the authority to commence work under the mining licence.

The experience in the Victorian Goldfields is similar, the Bendigo Mining supplementary EES completed in 2004 took two years to prepare and gain the approvals, it cost the company \$2 million. The EES process resulted in 234 individual regulatory approvals for the project.

And, in the Victorian Coalfields the International Power project to develop the West Field of the Hazelwood Mine (stage 2), which included the relocation of the Morwell River and a State Highway commenced with an EES request in December 2002. The EES Panel commenced public hearings in July 2004 and in September 2005 the Planning Ministers Assessment was handed down. However, it was not until October 2006 that the last of the critical subsequent approvals were granted. The EES and associated approvals cost the company \$4.5 million and generated approximately 14.5 shelf metres of documents and a total of 442 specific regulatory obligations that the company must comply with.

The EES process is the largest regulatory hurdle all moderate and large mining projects are required to pass. It is generally done in conjunction with the project design and feasibility study.

The EES process invariably results in changes to the project design and operation (which is a good outcome) and comprehensive licence or work plan conditions that must be implemented at either startup or implemented

throughout the life of the project. For example, the project approval process for the Hazelwood mine west field development resulted in 442 separate regulatory instruments that must be managed by the company throughout the life of the project. The company had to develop a comprehensive database simply to track these instruments.

There are further aspects of the EES process that frustrate proponents. These include:

- The failure of regulatory agencies to adequately specify the issues and standards that must be achieved at the scoping stage;
- The failure of regulatory agencies to provide consistent representation of officers able to make decisions at the Technical Reference Group;
- The failure of government to ensure whole-of-government decisions, so much so that on occasions different sections of the same Department put forward differing arguments to the Independent Panel reviewing the EES; and
- The difficulty in enlisting suitably qualified people to sit on the Independent Panels.

12.2.2 EPBC Act Assessments and Approvals

In 1997, the Commonwealth and State Governments, through COAG, agreed to work towards establishing bilateral agreements whereby States can undertake assessments and approvals for Commonwealth matters, significantly reducing regulation duplication.

Approvals processes relating to the Environmental Protection and Biodiversity Conservation Act (EPBC Act) is a key area of overlapping regulation. While bilateral agreements between Federal and State governments can avoid this duplication, only a limited number of agreements for approvals have been developed. The Productivity Commission has urged Australian governments to give high priority to completing all assessment and approvals bilateral agreements.

The EPBC Act is seen as simply “another layer” of process-driven regulation, without providing demonstrable additional value in the protection of biodiversity above that which is already afforded through the EES process.

Inconsistency between Federal and State regulatory assessment and approvals processes promotes inefficiencies and unnecessary duplication. Compounding these inefficiencies, the regulatory system faces potential capability constraints to address the growing complexities associated with climate change and land and water use planning.

Eleven years after the COAG agreement, we are still striving for the shaping and development of approvals bilaterals, and the better implementation of assessment bilaterals (See Table 9 for an overview of the status of bilateral agreements.)

Table 9 - Summary of bilateral agreements between the Commonwealth and jurisdictions

Jurisdiction	Assessment Bilateral	Approvals Bilateral
QLD	YES	0
NSW	YES	1 (Sydney Opera House)
ACT	YES	0
VIC	YES	0
SA	YES	0
NT	YES	0
WA	YES	0
TAS	YES	0

Reform in this area is slow, despite COAG commitments as mentioned above.

In a recent submission to the Senate, the MCA recommended [amongst others]:

- > the removal of the Commonwealth from project-by-project approvals processes;
- > the establishment and full implementation of bilateral agreements for assessments and approvals;

- > establishment and endorsement of regional planning instruments that meet EPBC Act protection requirements under bilateral approvals, whereby other jurisdictions then subsequently review and regulate projects; and
- > Commonwealth activities being focussed more appropriately on strategic investments and planning support, and assessing outcomes through monitoring and auditing compliance.

There has been some support for these recommendations, including strong support from the Commonwealth in developing strategic regional assessments.

In discussion with Commonwealth officers MCA is told that they seek bilateral agreements on approvals but Victoria has been unwilling. In discussion with Victorian officers we are told that Victoria is willing to enter into a bilateral agreement on approvals but the Commonwealth is unwilling.

Clearly, some leadership is required to overcome the impasse on approvals. There is no defensible reason why Victoria cannot enter into a bilateral agreement to undertake the Commonwealth's interests for both assessments and approvals. This would create significant efficiency gains for proponents and regulators and eliminate cross-jurisdictional forum shopping by opponents to new developments.

The Victorian government has indicated a desire to lead in regulatory reform. By reaching a bilateral agreement on both assessments and approvals it would demonstrate that commitment. Of course concessions will be required but surely with good will and common sense an outcome can be achieved. However, an approval bilateral agreement will only be achieved if driven from the highest office in the State.

In 2009, both the Hawke Review of the EPBC Act²³ and a study by researchers at the Australian National University (ANU)²⁴, noted significant duplication and inefficiencies remaining in project approvals processes in Australia. The ANU study estimated a direct cost to all industries of up to \$820 million over the life of the EPBC Act, with little demonstrable improvement in environmental outcomes. Costs from the failure to appropriately align approval processes across different levels of government are considerably higher. The Productivity Commission²⁵ has also concluded that the cost of project delays due to duplication and inefficiencies in regulatory systems "could total several billion dollars each year".

The Hawke Review presented an important blueprint toward more streamlined, nationally-consistent, environmentally effective and economically efficient environmental regulation. The MCA supports the Review's key recommendation that the EPBC Act be rewritten as it is too repetitive, unnecessarily complex and, in some areas, overly prescriptive. The MCA notes, however, that without the requisite political will and appropriate resourcing a new Act risks replicating current inefficient processes.

12.2.3 Native Vegetation Clearance

The minerals industry members have long been closely involved in the development of native vegetation policy culminating with the 2002 release of the Victorian Government's Native Vegetation Management Framework.

From the outset, the MCA has supported the principles of net gain as described in the Framework and the measurement of this through habitat hectares. We wish to make it very clear that we do not seek to challenge the principles and policies of the Framework.

The MCA is focused on the development of effective guidelines that assist our members and provide direction for government officials tasked with implementing the Framework. Another area of concern is the availability of offsets.

The MCA has expressed considerable frustration over the lack of industry-specific guidelines for the Framework and the inconsistent interpretation and implementation of the Framework by government officials over the past 5 years. Many of our member companies have experienced considerable delays and expense in approval processes

²³ A.Hawke, *The Australian Environment Act – Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999*, Commonwealth of Australia, Canberra, 2009

²⁴ A.Macintosh, *The EPBC Survey Project: Preliminary Data Report*, Australian National University, Australian Centre for Environmental Law, Canberra, 2009

²⁵ Productivity Commission, *Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector*, Productivity Commission, Canberra, 2009.

with regional government officials uncertain as to how to implement the Framework. It is imperative that guidelines are developed and implemented as soon as possible. We continue to work closely with Government to achieve this.

The obligations of the Framework are primarily regulated through the planning provisions of the *Planning and Environment Act 1987* (P&E Act). While mineral development is generally exempt from planning permit requirements and therefore to the application of the Framework, in the majority of cases the obligations of the Framework are applied through the MR(SD) Act.

The MCA agrees with the three-step approach to native vegetation management of avoid-minimise-offset. In many situations, as the minerals being explored or mined are fixed in space the third step of offset is relevant and therefore most of our discussion focuses on offsets.

Certain regions of Victoria have a number of mosaic communities of flora and when a comparison between EVC mapping and what is actually found on the ground is made, there can be very little correlation. Without EVC mapping to a sufficiently sensitive scale, it is difficult to calculate the habitat hectares. We have been advised that much of the state's EVC mapping was not actually mapping but modelled using some aerial photography and satellite imagery. This makes it very subjective. Some MCA members have received conflicting advice on determinations and calculations for offsetting and there is significant variation across the regions in interpreting the Framework. It is imperative that the basis of determining habitat hectare is robust and training of government officials removes any inconsistency and personal bias.

To date, compliance with the Native Vegetation Framework has cost a number of mine operators a significant amount of money – a large part of this is the purchase of offset freehold land and in engaging consultants to work out how to deliver net-gain. In addition delays in approvals along with multiple meetings with DSE personnel to reach a common understanding also create a burden on business. It is currently a very lengthy and onerous process and we look forward to working with government to significantly reduce this burden through effective and efficient guidelines for the earth resources industry.

It is critical that offsets are able to be sought in a more flexible way. It is also desirable that offsets are kept within the local community however, there are numerous occurrences where the vegetation classes simply do not exist on private land. Therefore the ability to offset on Crown land is essential. MCA has long viewed shortcomings in the way that Crown land is managed. Offsets for native vegetation on Crown land, beyond normal government programs, must be available. The principal of net gain should not discriminate between private and Crown land.

There are some EVCs that simply do not occur on private land in alpine areas, or if they do the land is not for sale. There is a strong rationale for the application of the Native Vegetation Framework to be more risk based for exploration. Also, there are clear differences regarding expectations of various industries, i.e. forestry.

The vast majority of barriers to achieving net gain relate to regulatory practice rather than the law. Differing approaches in the regional offices lead to *ad hoc* and often unreasonable requirements that reflect local bias rather than needing to meet the objectives of the Native Vegetation Framework. MCA acknowledges that Government Agencies have undertaken training in regional offices; however this has not led to more consistency and certainty. There are also occurrences where decisions are simply not made by the regional offices – there continues to be a high degree of uncertainty in how to administer the Framework.

The industry advocates for:

- extension of offsets on public land
- establishing strategic reserves that require works to go beyond the duty or care required by the land manager could provide a significant ecological benefit at lower cost to the developer and the regulator
- expansion of payment in lieu as is available to Vic Roads

Offsets for native vegetation on Crown land, beyond normal government programs, must be available. In some cases industry will be able to provide better preservation of native vegetation on crown land than the government can, e.g. in alpine areas fencing off areas with very high conservation status to prevent brumbies and deer from entering.

12.3 WATER ACCESS

The industry continues to face numerous myths regarding the impacts of exploration and mining on groundwater supplies.

The minerals sector accounts for less than 3 per cent of national consumption of water with a very high internal rate of water recycling. Water availability and security of supply is nonetheless a critical business risk for the minerals industry, which generates a very high economic value-add from that use. A study by ACIL Tasman found that the availability of water represents a potential constraint on further investment and expansion of the minerals sector at substantial cost to the industry and broader economy in lost production²⁶.

The minerals industry is a strong supporter of water market reform, including the removal of the barriers to market entry it faces. This will promote the highest value uses of scarce water resources.

Water represents a potential constraint on further investment and expansion of the minerals sector at substantial cost to the industry and broader economy in lost production.

While mining and minerals processing cannot occur without secure access to reliable water supplies, water impacts may also include water surplus, excess water storage risks and water quality.

The minerals industry utilises a wide variety of water sources including surface water, groundwater and sea water. Much of the water used by the minerals industry is not fit for purposes other than for industrial applications, with utilised water quality ranging from simply non potable, through to saline and hypersaline groundwater.

Water is used in mining operations for a variety of purposes including dewatering of ore bodies, processing activities, equipment wash down, tailings management, transport of materials as slurries and dust suppression.

All minerals operations recognise that initiatives to better manage their natural resource assets, beyond duty of care requirements, reflect on their 'social license to operate'. Accordingly, there has been an increasing effort by minerals companies to invest in landscape and water resource management far beyond mandated requirements, targeted at fostering cooperative relationships with local communities and building relationships with stakeholders on water issues to generate mutually beneficial outcomes.

12.3.1 National water reform

As a low volume, high value user of waters, much of which is self sourced and of a quality which is not suitable for other users, it is an ongoing challenge to maintain the prominence of the minerals industry in national dialogues on water.

National water reform has been hampered by the difficult process of establishing the nature and extent of existing property rights, of establishing the legal and market processes for trading those rights, and of ensuring proper accounting of demands for non-commercial uses (such as ensuring ecological flows and cultural entitlements).

The MCA considers that the National Water Commission (NWC) should continue to drive water reform to ensure allocation of water to users and the environment based on sound science, allowing for security of supply and trading to be established in an equitable market whilst pricing reflects source, quality and water infrastructure investments. Specifically, the NWC should require that current and future high-value industrial user water requirements be considered in the development of jurisdictional water sharing plans, including by incorporating industrial water user representation in the development of access arrangements beyond community consultation provisions.

The minerals sector is acutely aware of the importance of long-term, secure access to water supplies. Lack of water resource security can threaten the viability of existing mining operations and potential new developments (expansions or greenfield sites). More rapid implementation of the National Water Initiative (NWI) will help to improve this situation, by enabling trading of entitlements across multiple sources of supply and providing enhanced resource security for mining operations.

In recognition of these challenges, the MCA has led a landmark effort to better understand the industry's water use (and future needs) through the development of a water accounting framework. This serves as a one-stop-shop for

²⁶ ACIL Tasman, *Water Reform and Industry*, Prepared for Department of Industry, Trade, Tourism and Resources, April 2007.

water information for stakeholders keen to understand a mine's water use and to integrate minerals operations into regional water planning approaches. This initiative should be supported and promoted through COAG reform processes as an example of how to reduce regulatory burdens, whilst maintaining environmental integrity and driving water use efficiency.

The development of a national water trading market based on sound pricing principles should be a national priority. As the NWC has correctly noted, the efficient pricing or charging for water-related services underpins investment and provides signals for the efficient use of water services. Getting the price signals right by ensuring that they fully reflect the efficient costs of providing the services is a key element in encouraging innovation and efficient water use. In addition, MCA advocates that the Federal Government should initiate a review by the Australian Consumer and Competition Commission into existing barriers to water market entry for minerals operations, emerging barriers to entry and trade, and policy options to remedy them.

Risk assignment provisions agreed in the NWI should prioritise attention on high-value water users' security. Exposure to these risks is greater for high-value users in little understood systems, therefore greater attention should be paid to securing minerals industry entitlements in these circumstances.

12.3.2 State water reform

For too long, the Victorian minerals industry has not been recognised in the water planning process. Many regional water plans are being developed without consultation with the minerals industry.

The MCA recently commissioned URS to prepare a report on the current regulatory regime in Victoria and where reform is required²⁷.

The minerals industry in Victoria is currently required to comply with a wide range of water policy and regulatory tools which are managed by a number of Government agencies, including:

- Department of Primary Industries;
- Department of Sustainability and Environment;
- Environment Protection Authority;
- Catchment Management Authorities; and
- Rural Water Authorities (RWA).

These include the requirement for licences to access and use surface or groundwater, as well as approval to construct dams, discharge water off-site and discharge of water to an aquifer. Some of these requirements are subject to area or catchment based plans, prepared to manage the resource.

The total volume of water entitlements in Victoria are approximately 6,000GL, comprising about 5,366GL surface water and 804GL groundwater entitlements. In the overall scheme of water allocation in Victoria, the mining industry is not a major water (surface water and groundwater) user or generator. A 2005 project found that water allocation for the mining industry in Victoria is less than 60GL, that is, less than 1% of the total water allocation in Victoria. More than 50% of this total allocation relates to dewatering around open cut coal mines in the Latrobe Valley (about 2% of Victoria's groundwater allocation).

On a local scale, however, water issues can be critical to a mining operation, particularly if water is required (or extracted to make mining safe) and the resource is located in a fully allocated catchment or groundwater management area (GMA).

Water quantity and quality requirements for mining are predominantly driven by the type of mining, the specific ore treatment, concentration process or environmental controls for discharge. As a result, water requirements for mining operations tend to be site and operation specific.

The most significant volumes of water required by mining in Victoria relate to the dewatering of aquifers around open cut coal mines in the Latrobe Valley (ie. allocation of about 40GL/year, 2003/4 usage was about 23GL).

The mineral sand operators in the Murray Basin also have locally significant water issues, and there are recent examples where operators have recognised water supply as its key operational risk. This issue is known to have

²⁷ Water Reform in Mining, URS 2011

delayed developing the resource until sufficient water allocation was secured. Other mineral sands deposits are being explored and are proposed for future development. The ability to use and/or manage water will be a key issue in their development.

Other existing or proposed mining operations (gold and potentially CSM) presently require in the order of hundreds of ML/year. Generally, the development of gold resources now occurs in bedrock where groundwater quality is commonly poor and/or are not located within GMAs (with controls on groundwater extraction). There have been exceptions, however, resulting in unintended requirements for the miner. It is anticipated that future gold developments in or adjacent to Deep Leads (eg. Loddon) require dewatering of larger volumes of groundwater where this is in or around GMAs would be technically and regulatory difficult.

It can be stated that the value put on water from the mining industry is relatively high and transitory compared to other users such as farming. Also there can be benefit in the removal of poorer quality water from the system and entrapment in tailings storage facilities and/or treatment with discharge to the catchment.

Security of water supply of consistent quality and daily availability is essential to the viability of mining operations, particularly for mineral processing. In areas where water allocations are capped or restricted (eg. seasonally), the use of reclaimed water (ie treated sewage) provides a opportunity for the minerals industry that should be encouraged. Two mining operations in Victoria have in the past gained approval for the use of reclaimed water for their processing plants. Current guidance in relation to the use of reclaimed water by the mining industry (or use of waste mine water) is limited. However, the volume, location and certainty of supply typically mean this water is not preferred by operations as a primary source. Safety issues are also a source of problems.

Unbundling water rights from land title and encouraging water trade is expected to assist miners in that it provides improved access to available water. It may also allow miners to trade water generated by dewatering and treatment. It is understood, however, that no current operator has gone on to the open market to test this and it remains an unknown process in Victoria. Further, where a project needs to access water for exploration or investigation purposes, there is a need for at least a temporary licence outside the PCV.

The key opportunities for improvement relate to:

- reducing regulatory overlap;
- addressing gaps in legislation, policies guidelines as they relate to water and mining;
- the provision of a single, all of Government Guideline on Water and Mining; and
- clear leadership amongst regulatory agencies in relation to mining and water.

Examples where water policy is out of step with other policy initiatives of government are discussed below.

Coal Seam Methane Exploration

Several years ago the state embarked on a program to encourage the exploration and potential development of a coal seam gas industry in Victoria. Industry responded and Exploration Licences were taken out over almost all of the available coalfields of the State. The extraction of coal seam gas is a potentially economic method of extracting the energy from our extensive coal reserves with a relatively low environmental and social footprint.

The coal seam gas industry supplies a great proportion of the gas used in the USA and is growing in volume in Queensland. However, the industry has failed to make any inroads beyond exploration in Victoria due to incompatible water laws.

To extract the methane from coal seams it is necessary to depressurise the groundwater in the actual seam. This is done by removing the water, as the gas is dissolved in the water and flows out of boreholes with the extracted water.

However, a groundwater extraction licence is required to remove the water in the seam and unfortunately two water policy measures block serious trials under ELs. These water policies are the cap on new groundwater licences over much of Victoria and the treatment of all groundwater in the vertical column of strata as a single source.

The only way explorers are able to test the coal seam gas fields is to buy groundwater licences from local farmers. The industry is willing and able to engage in commercial agreements for water licences, and whilst this can be done for a trial there is little point as this solution would be impossible for a production well field. A more realistic long term solution is required that recognises that the water taken from the very deep coal seams is not associated with the consumptive use water that other users access.

Bendigo Mining Water Treatment Plant

The Bendigo Mining Water Treatment Plant created a significant regulatory burden on the company that was seeking an environmentally and socially responsible solution to the discharge of excess water removed from the old mining voids of the goldfield. The alternative and previous practice was to evaporate the water in ponds. This practice denied access to the water by other users but avoided the need to seek special additional approvals. The company persisted with the sustainable development solution at great expense and delay.

The regulatory approvals required for this project included:

- > A DPI Work Plan Variation
- > An exemption from EPA Works Approval
- > An EPA Waste Discharge Licence (to discharge treated water)
- > An EPA Environmental Improvement Plan (EIP)
- > Forest produce permit (to remove trees)
- > A consent to disturb Heritage
- > A groundwater extraction licence (from Goulburn Murray Water)
- > A CFA permit for welding/cutting during fire restrictions
- > A Cultural Heritage Assessment (for pipeline)
- > A permit to construct a pipeline on a waterway (NCCMA)
- > Council Planning Permits (6)
- > Council Building Permit
- > Vic track Pipeline Agreement
- > Dangerous Goods Notification (reagents)

12.4 CLIMATE CHANGE

Climate change is one of the most compelling challenges confronting the global community. An effective response must not only be genuinely global in scale, but also sustainable over the long term; and Australia must be an integral part of that effort. The Australian minerals industry also must be part of the global solution given that fossil fuels will continue to be the world's primary energy source for many years to come. The scale of the challenge for all Australians should not be underestimated. Our geography, resource endowment and robust economic and population growth outlook will mean that the abatement of greenhouse gas emissions will be more expensive for Australia than for most other developed nations.

In Victoria this is ever more critical due to our strong reliance on energy generated from our brown coal resources.

12.4.1 A measured transition

The MCA supports a measured transition to a low emissions economy. A comprehensive measured transition to a low emissions global economy requires the alignment of three key policy pillars including:

- a global agreement for greenhouse gas emission abatement that includes emissions reduction commitments from all major emitting nations;
- market-based policy measures that promote the abatement of greenhouse gas emissions at the lowest cost without compromising the competitiveness of Australia's internationally traded sector; and,
- substantial investment in a broad range of low emissions technologies and adaptation measures.

Such an approach recognises the need for a transition for those sectors of the economy which are trade-exposed i.e. unable to pass carbon costs because their foreign competitors (either in overseas markets or the domestic market) will not confront similar carbon costs. A central challenge is developing a better approach to identifying and preserving the competitiveness of trade-exposed firms.

When developing climate change policies, policy-makers should assess alternatives against the following principles:

- Clear, predictable and long-term price signal – ensure that carbon price signals influence producers and consumers such that emissions and carbon consumption are reduced, and the focus on low carbon technologies is increased.
- Broad based – cover the broadest possible range of greenhouse gas emission sources, sinks and low carbon energy options.
- Internationally competitive – progressively reduce emissions without distorting trade and investment flows or compromising the international trade competitiveness of Australian industry.
- Revenue neutral – the objective is to establish a carbon price signal to change behaviour not raise revenues – if revenues are raised, they should be used to provide assistance to individuals and firms adversely affected by the policy measures, not be diverted into general revenue.
- Simple and effective – to achieve sustainable emissions reductions at least economic cost, and be simple to implement.
- Measured, equitable transition – to avoid adverse economic and social consequences, ensure continued energy security and provide equitable treatment of existing investment and greater certainty to new investment. Transitional measures to maintain trade competitiveness should be non-discriminatory.
- Technology – encourage the adoption of the most efficient low emissions technologies through a carbon price signal, and fiscal measures where market failure can be demonstrated.

12.4.2 Remove overlapping policies and measures

A comprehensive approach to climate change policy should also include the following steps:

- Reconsider the Renewable Energy Target. A new carbon pricing scheme will seek to provide a price signal that will direct investment towards abatement measures at least economic cost. The introduction of a mandatory Renewable Energy Target (RET), which dictates the use of a preferred abatement source (renewable energy), directly contradicts this objective.
- Rationalise the proliferation of Federal and State climate related policies and programs that have emerged over the last decade.
- All governments should promote an open debate on all low emissions power generation technologies, including nuclear energy. Its potential contribution to GHG emissions reductions by 2050 is considerable – between 8 and 17 per cent. A policy response without nuclear energy will raise the cost of Australia's GHG emissions reductions efforts, not least because nuclear energy is one of the most cost-competitive low emissions technologies available.

12.4.3 Low emissions technologies

There are three factors that justify public support for research, development and demonstration (RD&D) of low emissions technologies, including but not limited to, carbon capture and storage.

First, the nature and scale of the task is beyond the resources of a single company, so government, industry and the research community will need to work together to undertake the pre-competitive RD&D to bring these technologies to commercial reality.

Secondly, carbon pricing policies scheme will work most effectively when there are alternate low emissions technologies available for deployment. Where no such technologies are available or in prospect, carbon pricing will simply function as a blunt taxation instrument.

Thirdly, in the transitional phases of a carbon price signal, this price may not be sufficient to divert investment into RD&D projects.

APPENDIX A

Table 4: The Minerals Sector Wealth Creation Chain

CHAIN ELEMENTS	TIME, COST & QUALITY ESSENTIAL ASPECTS	POLICY AND REGULATORY INTERSECTION
Exploration, discovery and conversion of resources to reserves	Access to land	<ul style="list-style-type: none"> > OHS Act 2004 and OHS Regulations 2007 > Aboriginal Heritage Act 2006 and Regulations 2007 > Native Title Act (C'th) 1993 > Environment Protection and Biodiversity Conservation Act (C'th) 1989 > MR(SD) Act 1990 and Regulations 2002. > Environment Effects Act 1978 > National Parks (Box-Ironbark and Other Parks) Act 2002 > National Parks and Crown Land (Reserves) Act 2006 > Planning and Environment Act 1987 > Environment Protection Act 1970 > Water Act 1989 <p>Policies:</p> <ul style="list-style-type: none"> • Skills and training, skilled migration. • National Reform Agenda including the National Energy Market, • National Water Market and Competition Policy reform • National Environment Protection Measures. • Victorian Ministerial Statements • State regulations • Quarantine • Availability/access to pre-competitive geoscience data.
Extraction – development, commissioning and operating a mine	Mining project approvals. Environmental approvals. Timely availability, cost and quality of skilled people, finance, technology, water, energy and industrial inputs. Quality of operation /process/output.	<ul style="list-style-type: none"> > OHS Act 2004 and OHS Regulations 2007 > Environment Protection and Biodiversity Conservation Act (C'th) 1989 > MR(SD) Act 1990 and Regulations 2002 > Planning and Environment Act 1987 and Regulations > Environment Protection Act 1970 > Water Act 1989 > Environment Effects Act 1978

		<p>> Aboriginal Heritage Act 2006 and Regulations 2007</p> <p>Policies:</p> <ul style="list-style-type: none"> • Skills and training, skilled migration. • National Reform Agenda including the National Energy Market, • National Water Market and Competition Policy reform • National Environment Protection Measures. • Victorian Ministerial Statements • State regulations • Quarantine
Minerals processing – concentration of extracted product and smelting and refining	Timely availability, cost and quality of skilled people, finance, technology, water, electricity and industrial inputs. Environment regulations. Quality of operation/process/output.	<p>> OHS Act 2004 and OHS Regulations 2007</p> <p>> Environment Protection and Biodiversity Conservation Act (C'th) 1989</p> <p>> MR(SD) Act 1990 and Regulations 2002</p> <p>> Planning and Environment Act 1987 and Regulations</p> <p>> Environment Protection Act 1970</p> <p>> Water Act 1989</p> <p>> Environment Effects Act 1978</p> <p>> Aboriginal Heritage Act 2006 and Regulations 2007</p> <p>Policies:</p> <ul style="list-style-type: none"> • Skills and training, skilled migration. • National Reform Agenda including the National Energy Market, • National Water Market and Competition Policy reform • National Environment Protection Measures. • Victorian Ministerial Statements • State regulations • Quarantine
Transport to final consumers	Efficient transport and logistics networks, open sea and air lines of communication Access and pricing regimes and quality of service	<p>> OHS Act 2004 and OHS Regulations 2007</p> <p>> Environment Protection and Biodiversity Conservation Act (C'th) 1989</p> <p>> MR(SD) Act 1990 and Regulations 2002</p> <p>> Planning and Environment Act 1987 and Regulations</p> <p>> Environment Protection Act 1970</p>

		<p>Land, air and sea transport regulations (including Australian security, safety and environmental aspects and intersection with international treaties such as the Safety of life at sea and Ballast water Conventions and the Bulk Cargoes Code).</p> <p>Policies:</p> <ul style="list-style-type: none">• Skills and training, skilled migration.• National Reform Agenda including the National Energy Market,• National Water Market and Competition Policy reform• National Environment Protection Measures.• Victorian Ministerial Statements• State regulations• Quarantine• Port State Control• Competition policy
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