NATIONAL MINERAL EXPLORATION STRATEGY

VISION:
Unlocking Australia’s hidden resource potential.

MISSION:
To address greenfield exploration challenges, stimulate new discoveries, ensure continuity of the pipeline of mineral resource investments, and the longevity of Australia’s mineral resources industry.

SCOPE OF THE STRATEGY
This National Mineral Exploration Strategy focuses on the acquisition and delivery of pre-competitive geoscience, applied geoscience research initiatives to assist exploring undercover and a mineral exploration investment attraction plan. Supporting activities associated with the strategy aimed at cross-jurisdictional collaboration on regulatory reform are also underway. The strategy will not address the financial challenges facing the minerals sector.

THE THREE ELEMENTS OF THE NATIONAL MINERAL EXPLORATION STRATEGY ARE:

- PRE-COMPETITIVE GEOSCIENCE INFORMATION
- MINERAL EXPLORATION INVESTMENT ATTRACTION PLAN
- NATIONAL GEOSCIENCE RESEARCH INITIATIVE
Key trends and drivers for mineral exploration investment

The minerals sector plays an important role in Australia’s economic prosperity through employment, downstream industries and revenue to governments. In addition, it makes a significant contribution to regional and indigenous communities.

In 2010-11, mining including associated services contributed about 7 per cent to Australia’s GDP and about 2 per cent of total employment. The gross value added from mining and exploration activities was about $101.7 billion in 2010-11.

New discoveries are essential for the continuing growth in Australian mine production. Such growth is critical to retain our capacity to supply both domestic and export needs. While extensions to existing resources will continue to support production volumes, exploration for new greenfield discoveries are urgently required to ensure that an ongoing pipeline of mineral resource projects are available to meet future demands.

In the 1990s, Australia dominated world mineral exploration expenditure with around $1 in 5 spent in the country. In recent times, Australia has slipped in its share of global mineral exploration expenditure to only $1 in 8 spent in 2011.

Australia’s attractiveness as an exploration destination, despite its history of finding high-quality resources, its political stability and attractive financial and regulatory regimes, has been diminished by a range of factors including:

▸ perceptions of Australia as a mature exploration destination where there are fewer opportunities for new discoveries,
▸ challenges in exploring for deposits buried under the overlying sand, soil and sediment that covers much of Australia,
▸ high cost of exploration in Australia, through factors such as the high Australian dollar and labour costs, and
▸ increasing global competition with every jurisdiction that permits and promotes exploration.

New mineral discoveries are becoming harder and more costly. In the decade from 2000 to 2010 there were 25 major deposits found in Australia, whereas in the 1980s and 1990s over 5 major deposits were found each year on average. Despite increased exploration expenditures, Australia’s discovery rate (excluding bulk commodities) has roughly halved since the start of the decade. This decline is a reflection of a profound decrease in the ratio of exploration dollars committed to greenfields programs compared to brownfields programs.

Several recent government reports have recognised the value of pre-competitive geoscience which grows prospectivity, uncovers opportunities, and reduces exploration risk and cost. The provision of pre-competitive geoscience is only one element in a sustainable mineral exploration sector. There is a range of challenges facing the Australian minerals sector to maintain its competitive position including, sovereign risk (removal of red/green tape), access to land, skilled workforces and infrastructure as well as achieving best practice in efficient and effective legislation and governance. Strategic initiatives are required to restore Australia’s mineral exploration competitiveness, address the greenfield exploration challenges, ensure a long-term resources pipeline is filled to prepare for the next cycle of investment in mineral resource projects, and secure the longevity of Australia’s resources industry. This strategy focuses on the pre-competitive geoscience information, geoscience research and mineral exploration investment attraction and briefly discusses the supporting activities associated with regulatory reform.

Strategic initiatives

The major initiatives of the National Mineral Exploration Strategy include:

▸ renewed commitment to generation and delivery of government-funded pre-competitive geoscience from all jurisdictions,
▸ refreshed approach to the promotion of Australia as the lead destination for investment in mineral exploration and mining through a mineral exploration investment attraction plan, and
▸ a National Geoscience Research Initiative, which will be a cross-institutional research venture focused on delivering the applied geoscience needed for industry to better explore under the covered greenfield areas of Australia.

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3 Government of Western Australia Department of Mines and Petroleum, 2012, Geological Survey of Western Australia review.
The Exploration Investment and Geoscience Working Group (EIGWG) of the Standing Council on Energy and Resources (SCER) will lead the pre-competitive geoscience initiative and the mineral exploration investment attraction plan. Geoscience research agencies in conjunction with EIGWG will develop applied geoscience research projects to assist exploring underground. Associated with this strategy are a range of supporting activities and they together with the responsible bodies are noted later in this document.

PRE-COMPETITIVE GEOSCIENCE INFORMATION

The Australian geological surveys are world leaders in acquiring, developing, and applying pre-competitive geoscience information to the Australian exploration challenge. The pre-competitive geoscience information and digital delivery systems have provided this country with a substantial competitive advantage.

Future mineral discoveries must be made in greenfield areas to sustain Australia’s minerals industry. A new phase of pre-competitive geoscience information generation is vital to attracting global attention in the exploration industry by demonstrating the potential prospectivity of Australia’s covered greenfield regions and that Australia is a competitive mineral exploration investment destination.

Many of Australia’s greenfield areas of mineral potential are obscured by overlying sands and sediments and have, therefore, not been effectively explored. The provision of pre-competitive geoscience information is one of the fundamental activities that can demonstrate the potential of a greenfield area and provides the catalyst for action by industry. In covered area, a critical source of information required to reduce the risk to explorers is drilling to confirm the nature of the bedrock geology.

Actions

The acquisition and interpretation of pre-competitive geoscience information and knowledge creation is the core of Australia’s prospectus for mineral potential. A pre-competitive geoscience information program will involve acquisition, processing and interpretation of a range of geological and geophysical data in covered greenfield regions.

EIGWG will lead the development of a pre-competitive program, including drilling, in consultation with industry. The program focus will be dependent on available Australian, States and Territory governments funding. The planned acquisition programs for 2013 include regional seismic and airborne geophysical surveys, geological mapping and sampling, reports on the potential for a range of commodities and the compilation of company geoscience and exploration data.

MINERAL EXPLORATION INVESTMENT ATTRACTION PLAN

The Australian, State and Northern Territory governments collaborate under the banner of Australia Minerals to promote internationally mineral exploration investment in Australia. Australia Minerals delivers a coordinated, collaborative and cost-effective vehicle to attract investment in mineral exploration and development in Australia.

The objectives of the investment attraction plan are to:

- promote Australia to make it the preferred destination for investment in mineral exploration,
- advocate opportunities in covered greenfield areas, new mineral provinces and new commodities, and
- target all market segments responsible for guiding investment decisions in mineral exploration.

The investment attraction plan identifies key investor segments (major mining companies, financiers and junior mineral exploration companies) and the locations of target markets. The investment attraction plan takes into account the wide range of geological and policy factors that make Australia an attractive exploration investment destination and seeks to use the combined strength of the Australian governments to promote investment in the Australian mineral exploration sector.

Actions

EIGWG will implement the mineral exploration investment attraction plan, which defines how Australia Minerals will promote exploration investment in each investor segment. A mix of specific products and appropriate delivery channels will be developed to address the requirements identified for each investor segment and region.

The mineral exploration investment attraction plan will be implemented in 2013. The plan will be reviewed annually by the EIGWG.

NATIONAL GEOSCIENCE RESEARCH INITIATIVE

The geoscience research community has exceptional capacity for innovation and the ability to address the mineral exploration challenge in Australia. The community consistently ranks as the nation’s highest impact research discipline and extends across industry, government and academia.

4 Fraser Institute, 2011, Survey of mining companies 2010-11.
A national exploration geoscience research initiative on *Searching the Deep Earth*\(^5\) has identified the opportunity to collaborate and co-ordinate around a common vision. The initiative focuses on the genesis, distribution and discovery of the nation's mineral wealth through activities concentrating on:

- characterising Australia's cover, with new knowledge developed to confidently explore beneath it,
- investigating Australia's lithospheric architecture by providing a whole-of-lithosphere architectural framework for mineral systems exploration,
- resolving the 4D geodynamic and metallogenic evolution of Australia and use this knowledge to better understand ore deposit origins for better prediction, and
- characterising and detecting the distal footprints of covered ore deposits, and thus provide a new toolkit that is best tuned for minerals exploration in Australia.

**Actions**

Geoscience research agencies and EIGWG will collaborate to develop applied geoscience research projects focused on the challenges of exploring undercover. The *Searching the Deep Earth* vision provides the impetus for improved collaboration at the national level. The development and commencement of geoscience initiative projects is intended to be undertaken across academia, industry, geological surveys, CSIRO and CRCs and will be dependent on available funding. An engagement process between the stakeholders under the auspices of the Academy of Science has commenced. A wide range of geoscience research initiative activities are being addressed in future work plans of the nation's geological surveys.

**SUPPORTING ACTIVITIES: CROSS-JURISDICTIONAL COLLABORATION FOR REGULATORY REFORM**

There are a range of challenges for the Australian minerals sector in maintaining its competitive position including international competitiveness, regulatory burden, access to land, skilled workforces and infrastructure.

The ongoing strength of the minerals sector and its capacity to support the Australian economy into the future is dependent on sustainable development regime and efficient and effective legislative frameworks.

The Australian Government is working in collaboration with State and Territory governments through COAG to improve environmental approval processes and reduce the regulatory burden on new developments. In addition, there are initiatives being undertaken by SCER to address issues such as legislative barriers, land access, and mineral resource and production reporting.

In 2013, the Productivity Commission is undertaking an inquiry into non-financial barriers to mineral and energy exploration with a focus on legislative and regulatory issues, and will form a significant contribution to identifying potential additional actions.

The Land Access Working Group established by SCER is focused on addressing impediments to land access related to competing land uses, native title and aboriginal heritage and approval processes.

A specialist working group under SCER is developing an options paper outlining the policy problem of mineral resources and production reporting. A mandatory approach to the collection of relevant mineral resources and production information may be required, noting the need to ensure industry is not burdened with duplicative reporting requirements.

States and the Northern Territory are continuing to tackle jurisdictional issues to improve global policy rankings.

**DELIVERING THE STRATEGY**

The progress towards delivering the National Mineral Exploration Strategy will be monitored through actions for each strategic element. Key performance measures will include:

- *Pre-competitive geoscience information* - planning, commencement and delivery of acquisition programs.
- *National geoscience research initiative* - the development of research projects related to mineral exploration.
- *Mineral exploration investment attraction plan* - implementation of the plan in 2013.

An annual report reviewing the progress of the strategy will be provided to SCER.

Specific groups will report to SCER on regulatory reform activities related to non-financial barriers, land access and resources and production reporting.

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