

To: **THE NSW INDUSTRY POLICY TEAM**

Re: **THE GREEN PAPER - SECURING FUTURE INNOVATION
AND GLOBAL COMPETITIVENESS IN NSW**

1 June 2022

Introduction

The Association of Mining and Exploration Companies (AMEC) welcomes the opportunity to provide a submission to the Industry Policy Team for *The Green Paper - Securing future innovation and global competitiveness in NSW*.

About AMEC

AMEC is a leading national minerals industry association representing over 480 member companies across Australia. Our members are explorers, emerging miners, producers, and a wide range of businesses and services working in and for the minerals industry, with a growing number of members investing in NSW.

The minerals industry is a pillar of NSW

Mining and exploration is a pillar of the New South Wales economy and a core regional industry. The resources industry is currently contributing record royalties to the NSW Government. Royalties of over \$8.4. billion over the four years to 2024-25 were noted in the 2021-2022 Half -Yearly Review¹ (an increase of \$1.2 billion from the 2021-2022 Budget²) that supports important State spending and will help return the state to surplus by 2024-25. In the 2021 calendar year alone, mining projects in NSW delivered over \$2 billion in royalties.

The strong return mining provides to the community in jobs, revenues and royalties underlines the reliance of NSW on a strong exploration and mining sector. Without ongoing exploration success, the identification of new mineral deposits and the ability to progress these discoveries into productive operating mines, there will be a significant reduction in growth, jobs, investment, and Government revenues delivered by the mining sector. The mineral exploration and mining sector in NSW must be supported and promoted by NSW policies and programs to secure the future of the industry.

¹ <https://www.budget.nsw.gov.au/2021-22/half-yearly-review>

² <https://www.budget.nsw.gov.au/>

AMEC provides the following comments and recommendations in answer to the consultation questions presented in the Green Paper:

TRANSFORMATIVE FORCES CREATING CHALLENGES AND OPPORTUNITIES

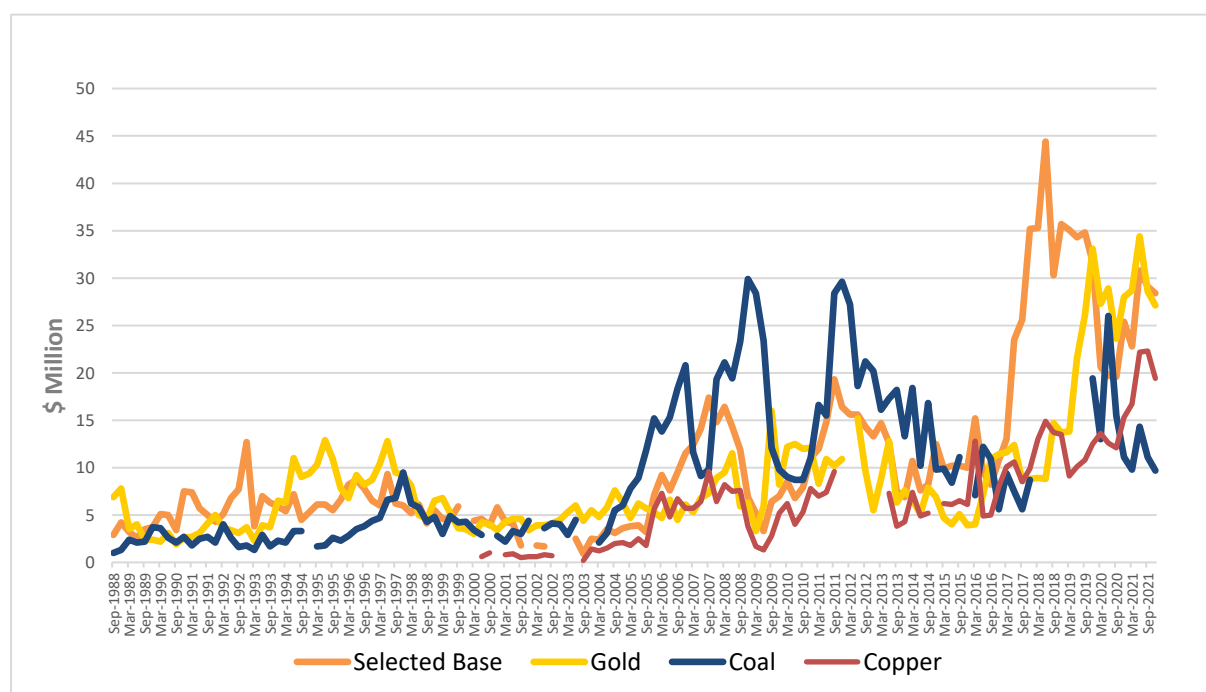
1. Describe the top two or three transformative forces that will shape transition challenges and opportunities in your industry over the next 10 years.

Transitioning to net zero

The transition to net zero will necessitate numerous technological changes to continue our current way of life without a reliance on fossil fuels. These technological advances have already begun and the technologies that will support a net zero future will be underpinned by critical and high-tech minerals. One of the great challenges for not just NSW but the world will be ensuring a steady supply of critical minerals.

NSW is in a privileged position of hosting known deposits of critical minerals along with the significant potential for discovery of new deposits. In line with this, NSW has seen an increase in exploration expenditure in these critical minerals and high-tech metals as shown in **Figure 1** below. The presence of these critical minerals presents an opportunity to position NSW as a global supplier of critical minerals, however the minerals industry will require support from Government from exploration through to development and downstream processing of these deposits to ensure the potential of NSW to take advantage of this transformative force is not lost.

Figure 1 – Mineral exploration expenditure in NSW by minerals (in \$ millions)



Source: ABS, Mineral and Petroleum Exploration, Australia, Cat No. 8412.0.

Shifting to an increasingly digital economy

The shift in recent years to an increasingly digital economy is shaping the minerals industry in two ways. Firstly, this change is creating an increased need for and reliance upon critical and high-tech minerals worldwide resulting in increased commodity prices and the need for new discoveries of these minerals to keep up with demand. Secondly, the minerals industry itself is becoming increasingly connected and technological. Examples of these changes include the use of artificial intelligence in exploration and electric vehicles in mining, as well as the increased digitisation and use of historical and pre-competitive data.

2. What effects do you expect these transformative forces will have on your industry (or on your own business) over the next 10 years?

Transitioning to net zero

The transition to net zero and the need for critical and high-tech metals as part of this process provides for NSW to emerge as a global supplier of critical minerals. However, challenges will arise as the industry will require support from Government to find and develop these deposits. NSW has an industry reputation for being a difficult jurisdiction in which to explore, something borne out in the feedback from the internationally recognised *Annual Fraser Institute Survey*³ responses that rate NSW poorly for clarity in regulation, investment attractiveness and policy perception. Without strong investment into the exploration sector, discovering these deposits will be extremely difficult. Similarly, without a strong and supportive regulatory environment these minerals of the future could remain undeveloped in favour of more supportive jurisdictions.

Expectations are growing for the minerals industry, especially operators to move toward lower emissions operations. This will likely affect operating costs and will also influence investment as this issue becomes increasingly important to investors.

Shifting to an increasingly digital economy

As with the transition to net zero, an increase in the need for critical and high-tech metals due to the increasingly digital economy will also present NSW with the opportunity to become a global supplier of critical minerals, but only if the industry receives the support it needs from Government.

The increased use of technologies within the industry itself present opportunities for investment from a variety of sources, including the technology sector, as well as opportunities for new discoveries using innovative technologies and through the effective use of historical and pre-competitive data.

3. What action is your industry or business taking, or intending to take, to address the effects of these transformative forces?

Transitioning to net zero

As an industry, there has been a shift by many companies towards exploring for critical and high-tech minerals. Some companies are also revisiting legacy and historical mines that still have mineral

³ <https://www.fraserinstitute.org/categories/mining>

deposits in the ground and/or tailings that may not have been accessible or even discovered at the time the mine was operating. This shift can only be sustained if there is strong investment in this sector in NSW which must be supported by a clear and supportive regulatory framework.

Many companies have also begun looking for 'greener' ways of conducting business including electric vehicles or powering their sites through the implementation of renewable technologies.

Shifting to an increasingly digital economy

As well as increasing exploration for critical and high-tech metals, many companies are embracing the benefits that come from the increasingly digital economy and are trialling new technologies or hiring data scientists to make the most of newly available resources for exploration and mining.

BUSINESS OPERATING ENVIRONMENT

4. Are there critical constraints across the business operating environment (for instance, related to markets, skills, production capacity, technology, finance capital or infrastructure) that affect the capacity of your industry or business to take up opportunities?

The two most critical constraints affecting the minerals industry in NSW are access to capital/investment and a difficult and complex regulatory environment, with investment often being deterred by the policy and regulatory framework in NSW.

For companies to explore in NSW they must be well resourced, and for most exploration companies their capital comes directly from outside investors. For the minerals industry to continue to grow and thrive, NSW must be seen as an attractive investment destination. According to the internationally respected Fraser Institute *Annual Survey of Mining Companies 2021*⁴ NSW remains amongst the lowest jurisdictions in the world for uncertainty for environmental regulations, administration and enforcement of existing regulations, and regulatory duplication and inconsistencies. Comments by respondents in NSW include *"Too much red tape and wasted time during the permitting approval process"*.

Although there has been recent growth in NSW, perceptions of the State as a sound investment destination are concerning and undoubtedly investment capital has gone to other national and international jurisdictions that have clearer, more certain regulatory regimes and lower cost operating environments.

5. Why would your industry be a suitable target for demand or supply side industry policy interventions over the next 10 years? Where in your supply chain would this intervention be most effective, and why?

Supporting the minerals industry from exploration through to development and downstream processing of these deposits will be vital to position NSW as a global supplier of critical minerals.

⁴ <https://www.fraserinstitute.org/studies/annual-survey-of-mining-companies-2021>

Interventions to help industry discover these deposits will be the most effective way to support the industry, followed by support by Government for the development of these minerals.

Without appropriate policies to support the exploration industry, this important opportunity for NSW could be missed altogether.

6. What are the key areas and opportunities in your industry where there are opportunities for NSW Government programs and actions to accelerate ongoing economic growth?

AMEC recommends the following to accelerate ongoing economic growth for the NSW minerals industry:

Resource the *NSW Critical Minerals and High-Tech Metals Strategy* and provide a clear action plan

The release of the *Critical Minerals and High-Tech Metals Strategy* in November 2021 was welcomed by the NSW minerals industry and signals the Government's commitment to the future of mining in NSW. NSW hosts a range of strategically important critical minerals that are vital for a range of future industries including advanced manufacturing, renewable energy, defence, aerospace, battery storage, automation, and electric vehicles. The *Critical Minerals and High-Tech Metals Strategy* sets out a clear pathway for the Government to support NSW in becoming a world leader in critical minerals supply and downstream processing, however it lacks specific actions or resourcing commitments to realise the strategies. AMEC recommends updating this document to provide a strategic roadmap to support critical minerals exploration and development in NSW and committing resources to achieve these important actions.

Extend the Co-operative Drilling program

Collaborative exploration development programs, where Government provides funding grants to stimulate mineral exploration in under-explored greenfield areas, are offered in many State and Territory jurisdictions and are a key incentive for investment, particularly for historically underexplored minerals including many critical minerals. The previous four rounds of the Co-operative Drilling program in NSW, each with at least \$2 million funding, have been highly successful and oversubscribed. An economic review of the similar Western Australia program led to a finding that for every \$1 million of Government funds invested, there was a direct additional stimulation of \$10.3 million and 12.5 FTE positions in mineral exploration, extending to \$38.3 million if the project is brought to mine.⁵

AMEC believes that this program should be offered annually, just as in other key mining jurisdictions, to ensure there is this regular commitment to this proven program to bring significant investment into the State and help discover the next critical minerals deposit. A regular annual program in NSW would assist to ensure that our State is an attractive and competitive jurisdiction for exploration investment and is supported to become a global supplier of critical minerals.

Streamline and simplify Government processes and assessments

⁵ <http://www.dmp.wa.gov.au/Petroleum/Exploration-Incentive-Scheme-2251.aspx>

It will be of benefit to industry and Government to make the system more time, cost and administratively efficient. Every dollar paid in levies or fees or spent understanding complex and often confusing Government requirements is a dollar lost on investment in work on the ground to explore for mineral reserves. The investors that do contribute to the exploration sector are often deterred when they see their funds simply flowing to Government bureaucracy with no demonstrable benefit to industry, the community or the State. AMEC recommends a review to benchmark industry processes and costs to ensure that NSW has a fair, competitive and transparent regime that supports the development of the minerals sector.

COMMUNITY VIEWS

7. Considering the transformative forces underpinning economic structural change, such as those described above, what are the benefits to NSW citizens of adequate and well-coordinated industry policies that accelerate this change?

Having supportive policies in place that take advantage of NSW mineral potential, particularly for critical and high-tech metals, will create a secure mineral stream for the technological industries of NSW and Australia including those which will be required for the transition to net zero and the shift to an increasingly digital economy. Production of these minerals will in turn encourage downstream manufacturing and create more jobs in NSW

Further, the minerals industry directly invests in regional economies. The minerals industry is a regional industry. We work in regional locations, purchase goods and services locally, stay in local hotels, eat and drink locally, and routinely hire regional contractors and staff. The minerals industry is well placed and ready to be part of the solution to support NSW regional economies as well as the broader economy of the State.

8. Where do you think the NSW Government could make the biggest difference to encourage industry innovation and growth?

As mentioned above, collaborative exploration development programs, where Government provides funding grants to stimulate mineral exploration in under-explored greenfield areas, are a key incentive for investment, particularly for historically underexplored minerals including many critical minerals. Continuing this program and offering it annually would be an important incentive for investment in the industry that in turn promotes innovation and growth.

Further, exploration and mining are generally not seen as preferred industries by many school leavers, and this is reflected in the very low university and TAFE enrolment numbers in the various mining-related disciplines. This is leading to severe skill shortages and a lack of locally trained minerals professionals which in turn stifles development.

A Government-Industry collaborative approach is needed to address this issue by promoting the minerals industry, particularly to primary and secondary level students. Government, some companies, and sectors are doing work towards this objective, but a unified approach is needed to spearhead a campaign to ensure that NSW does not lose a generation of skilled experts to realise the future minerals industry.

9. Are there any risks or costs from intervention that the NSW Government should consider?

There are no significant risks associated with interventions in the form supportive policy measures or extending the Co-operative Drilling grant program – the only real risk is not moving forward and losing the race to find and develop critical minerals. There is of course a cost associated with extending this program, however the returns to NSW far outweigh the costs. As noted above, an economic review of the similar Western Australia program led to a finding that for every \$1 million of Government funds invested, there was a direct additional stimulation of \$10.3 million and 12.5 FTE positions in mineral exploration, extending to \$38.3 million if the project is brought to mine.⁶

Additionally, effective and streamlined policy measures which reduce the administrative burden on both industry and Government would decrease costs for the NSW Government.

10. What information would you like to see to demonstrate how progress is being made towards accelerating industry growth through NSW Government programs and actions?

It would be beneficial for NSW to undertake an economic review of the New Frontiers Co-operative Drilling grant program and other industry growth initiatives to demonstrate the benefit of this program for NSW.

VIEWS ON CURRENT INDUSTRY PROGRAMS AND ACTIONS

11. What are your views on how well the current selection of NSW Government programs and actions enable change at the industry level?

As above, AMEC strongly recommends extending the New Frontiers Co-operative Drilling grant program including increasing funding, increasing frequency, and increasing the types of exploration activities that it covers. This has proven to be a highly effective program with far reaching benefits, and this is exactly the type of program NSW needs to encourage investment in NSW.

The minerals industry is also facing a skills shortage, current NSW programs aimed towards training and upskilling staff for the transition to net zero do not currently focus on training staff for the minerals industry

12. Describe any current programs and actions that have made a notable difference to productivity and competitiveness in your industry? Please include how they have made a difference.

Once again, the New Frontiers Cooperative Drilling Program makes a notable difference in investment into the minerals industry in NSW which in turn increases productivity and competitiveness in the industry. AMEC believes that this program should be offered annually, just as in other key mining jurisdictions, to ensure there is this regular commitment to this proven program to bring significant investment into the State and help discover the next critical minerals deposit. A regular annual program in NSW would assist to ensure that our State is an attractive and competitive

⁶ <http://www.dmp.wa.gov.au/Petroleum/Exploration-Incentive-Scheme-2251.aspx>

jurisdiction for exploration investment and is supported to become a global supplier of critical minerals.

13. Could any programs be merged to be more effective, or should any be ceased?

There are no programs that are relevant to the minerals industry that should be merged or ceased.

14. Are there any actions, or examples of effective practice in other jurisdictions (within Australia or overseas) that the NSW Government should consider to better support economic structural change in NSW industries?

AMEC recommends the following to support economic growth for the NSW minerals industry:

Pilot crowd sourcing for NSW explorers

In November 2019, the South Australian Government was the first government globally to host a \$250,000 crowdsourced open data competition to fast-track the discovery of mineral deposits in South Australia⁷. NSW could pilot a similar opportunity as a novel way to attract global interest in NSW minerals and bring fresh ideas, diverse thinking and new approaches to the State. Providing a pilot program opening a data set in a prospective area with rewards of \$250,000 for proposed solutions could help bring more interest and investors to NSW.

Review security bonds structure to maximise the use of exploration funds

Access to capital is one of the most important issues for the mineral exploration sector. Any capital raised that is not directly related to exploration is seen as a disincentive to investors. This includes capital tied to environmental and performance bonds. The minerals industry is committed to high environmental standards and the importance of the bond to social licence, however a system must be established that encourages investment and does not disadvantage the smaller, entrepreneurial companies (essentially the explorers) by tying up significant funds.

AMEC strongly supports a full review of the current system and potential introduction of a pooled fund model, similar to Western Australia's Mining Rehabilitation Fund, that removes the need for expensive bonds without reducing any environmental standards or obligations. Queensland has also initiated a similar pooled fund model for some tenure. The Mining Rehabilitation Fund in Western Australia has released over \$1.2 billion of much needed working capital and removed the need for administratively and financially expensive rehabilitation bonds without reducing any environmental standards or the State's obligations.

15. How can the NSW Government generate program outcomes that drive growth and value? How should the NSW Government work to achieve these outcomes with your industry, private sector and other levels of government?

AMEC recommends the NSW Government consult with peak industry associations and with industry directly to determine the issues currently facing each industry and the types of programs and initiative that would address these issues.

⁷ http://www.energymining.sa.gov.au/minerals/latest_updates/sa_to_host_first_crowd_sourced_mineral_exploration

AMEC looks forward to working further with Government on this important matter and if you have any queries regarding this submission, please do not hesitate to contact:

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