

16 August 2023



Ms Victoria Pullen  
General Manager  
Critical Minerals Office  
Industry House, 10 Binara Street  
Canberra ACT 2601

Sent via email: [CMOconsultation@industry.gov.au](mailto:CMOconsultation@industry.gov.au)

Dear Ms Pullen

## CRITICAL MINERALS LIST – ISSUES PAPER

The Chamber of Minerals and Energy of Western Australia (CME) is the peak representative body for the resources sector in WA. CME is funded by member companies responsible for 60 per cent of Australia's mining new capital expenditure<sup>1</sup> and 44 per cent of Australia's corporate income tax receipts by value.<sup>2</sup>

Over half of Australia's major critical minerals projects are in WA, with half of this investment pipeline's value attributable to our members.<sup>3</sup> In preparing this submission, CME has sought to align our views and recommendations with the Minerals Council of Australia (MCA), and in principle, we support their submission.

Demand for critical minerals continues to grow rapidly. For example, the global energy transition has driven a three-fold increase in demand for lithium, 70 per cent growth for cobalt and 40 per cent for nickel.<sup>4</sup> Last year in WA, spodumene concentrate sales reached an all-time high of \$16.3 billion, nickel rose to a 15-year high at \$5.7 billion, and cobalt achieved a record \$528 million.<sup>5</sup> However, despite federal-state intentions since 2019 to move into downstream processing, we still have not seen a diversified midstream value chain in Australia<sup>6</sup> and, more broadly, internationally.<sup>7</sup>

The release of the new Australian Critical Minerals Strategy 2023-2030 (the Strategy) and the subsequent review of the Critical Minerals List (the List) is welcome. It is a timely opportunity for CME to provide input into the process for updating the List, emphasise recommendations from our recent position paper on critical minerals<sup>8</sup> and for the Australian Government to communicate the benefits of the List to the industry and the broader market. We also appreciate efforts by the Critical Minerals Office (CMO) to visit and consult with stakeholders in WA.

Consultation with CME members indicated a priority should be placed on providing **increased clarity on the value proposition of the List**. For example, in relation to:

- Policy support and incentives. There is a need for **further detail on applying the financial support measures**<sup>9</sup> announced before the Strategy's release in June 2023. Specifically, clarity on how the List will support government decision-making on financial support would be welcome and likely enhance the value of the List. Separately, the quantum of funding available may not adequately address capital

---

<sup>1</sup> Australian Bureau of Statistics, [5625.0 Private New Capital Expenditure and Expected Expenditure Australia](#), March 2023 reference period, released 1 June 2023, tables 1 and 15.

<sup>2</sup> Australia-wide operations of companies with direct, equity joint venture or subsidiary interests in WA-based member projects. Commonwealth of Australia, [2020-21 Report of Entity Tax Information](#), Australian Taxation Office, 3 November 2022.

<sup>3</sup> 48 of 81 projects; approximately \$8.6 billion of \$17.7 billion of the WA investment pipeline consisting of publicly announced, feasibility and committed projects but excluding completed projects. Commonwealth of Australia, [Resources and Energy Major Projects 2022](#), Department of Industry, Science and Resources, data set to the report as of 31 October 2022, 9 January 2023.

<sup>4</sup> International Energy Agency (IEA), [Critical Minerals Market Review 2023](#), 11 July 2023.

<sup>5</sup> Government of Western Australia, [Latest statistics release](#), Department of Mines, Industry Regulation and Safety, 21 April 2023.

<sup>6</sup> Commonwealth of Australia, [Australian Critical Minerals Prospectus 2022](#), Australian Trade and Investment Commission, 8 December 2022, pp 20-23.

<sup>7</sup> IEA, [Critical Minerals Market Review 2023](#), 11 July 2023, p 8.

<sup>8</sup> CME, [Accelerating opportunities in WA's critical minerals sector](#), position paper, 17 June 2023.

<sup>9</sup> National Reconstruction Fund (\$3 billion for low-emission technologies; \$1 billion for value-adding in resources); Northern Australia Infrastructure Facility (\$500 million earmarked); Critical Minerals Development Program (exhausted); Export Finance Australia's Critical Minerals Facility (balance of ~\$750 million); Clean Energy Finance Corporation's existing Investment Mandate in businesses that supply goods to clean energy technologies and Powering Australia Technology Fund (combined balance of ~\$4.9 billion).

investment barriers.<sup>10</sup> As mentioned below, there is a missed opportunity if the Australian Government does not communicate the full extent of the 'size of the prize'.

- Assistance navigating regulatory approvals processes at a state and federal level, e.g., via the Major Projects Facilitation Office. CME membership comprises companies operating across the mining, energy, contracting and manufacturing sectors.<sup>11</sup> General feedback to date indicates that projects proposing to develop commodities included on the current List have not necessarily benefited from improved levels of project facilitation support or increased efficiency of approvals processing. However, improving regulatory efficiency is a focus area under the Strategy.

With the latter, we would like to take this opportunity to highlight that regulatory certainty and **timely, efficient federal-state approvals processes are critical to support investment decisions for projects regardless of commodity type**, not just for those on the List. However, there may be a case for nationally significant or strategic projects such as critical minerals to receive greater support through these complex processes.

The independent economic modelling commissioned by the department found faster project development times for critical minerals projects yielded the highest net present value of \$170.8 billion and additional cumulative 329,000 full-time equivalent jobs out to 2040, more than double our status quo market position.<sup>12</sup> This is a potentially **significant economic dividend** and warrants **greater targeted, coordinated policy and financial support beyond a single budget lifecycle** to all minerals needed for the global energy transition.

Members also note the increasing cumulative burden of recent regulatory changes such as the Safeguard Mechanism and proposed reforms to the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). A lack of policy certainty and stability makes it harder to do business in Australia.

## Is the current set of criteria still fit for purpose?

CME supports the current criteria for considering minerals for inclusion on the List. There is, though, an opportunity to strengthen the assessment of the List's criteria and interaction with other government processes, such as:

- Foreign Investment Review Board (FIRB) – Using the List to promote trade will inevitably result in increased foreign interests as most of the intellectual property and appetite for risk in mid- and downstream processing technologies reside overseas. CME notes the FIRB's list of recommended minerals for voluntary notification includes 'sensitive' minerals not on the List, such as nickel and copper. We also note the Strategy's key actions do not explicitly state how increased FIRB scrutiny will be managed, notably if the List is expanded. Further to the Treasury's \$2.2 million to develop sophisticated ways to track foreign investment patterns in Australia's critical minerals sector, there is an opportunity for the CMO to better consult with the Treasury to ensure foreign screening decision-making processes are efficient and proportionate in balancing Australia's objectives of supply chain diversification with the national interest.
- List of Critical Technologies in the National Interest – The category 'energy and environment technologies' received the largest number of suggested changes in the last consultation. As critical minerals are upstream enablers of these technologies, key findings from this consultation process can be extended to this List's update, i.e. need for greater clarity on purpose and intent.<sup>13</sup>
- Net Zero Taskforce's upcoming sectoral decarbonisation plans – Specifically, the proposed 'electricity and energy' and 'resources' sectoral plans. CME supports the proposed inclusion of waste under the 'industry' sectoral plan and as a cross-cutting circular economy issue across all six sectoral plans. As outlined in our response to the issue paper's fourth question, when functional recycling improves alongside the modernisation of industrial waste regulation and technological improvement, the role of by-products in unlocking secondary supplies of critical minerals will become necessary.

---

<sup>10</sup> CME, [Accelerating opportunities in WA's critical minerals sector](#), position paper, 17 June 2023, pp 13-16.

<sup>11</sup> Mineral and petroleum commodities and manufacturing. Minerals include cobalt, lithium, heavy mineral sands, rare earths and platinum group metals; whilst manufacturing includes alumina, basic inorganic chemicals such as lithium hydroxide and silicon and explosives.

<sup>12</sup> PwC, [The economic potential of Australia's critical minerals and energy transition minerals: Economic impact analysis of Australia's critical minerals and energy transition minerals and downstream processing](#), report prepared for the Department of Industry, Science and Resources, updated 7 July 2023, pp 20-24.

<sup>13</sup> Commonwealth of Australia, [List of Critical Technologies in the National Interest: Stakeholder consultation report](#), Department of Industry, Science and Resources, 19 May 2023.

- Future Australia-EU trade agreement, noting member states like the Netherlands are profiling co-investment opportunities and risk sharing in Australian companies via offtakes and supply contracts.<sup>14</sup>

## Are there minerals that should be considered for addition or removal from the List?

CME is aware other peak bodies are advocating for new minerals to be added to the List. In addition to our comments below, we support MCA's recommendations for copper, nickel, bauxite-alumina (aluminium), zinc and molybdenum to be considered for inclusion on the List. This expansion would align our List with key trading partners. However, CME cautions against a significant expansion of the List as this may undermine the Strategy's aims of being targeted and proportionate in prioritising policy support.

For example, PwC's economic modelling expanded the interpretation of critical minerals to include copper and nickel. These two minerals are intrinsically linked to the policy discussion of what is needed for the energy transition, and it would be impossible to separate its effects from the modelling. Also, CSIRO's technical modelling included aluminium, copper and nickel as second-tier criticality.<sup>15</sup> Their assessment was based on forecast electricity demand in December 2020, a three-tiered criticality assessment based on key trading partners and mineral intensity factors. Any changes to the List should be underpinned by modelling assessments such as this. Therefore, we recommend the CMO request CSIRO update their modelling assumptions to reflect changes to projected demand and technologies in the last two years.

## Should Australia differentiate between criticality or importance of minerals, the capability to process them, through categories within the List or a separate category that sits alongside the List?

CME does not support establishing different categories or separate lists for prioritising minerals at this stage. To maximise existing resources, the Federal Government should focus on effectively delivering the Strategy based on the current structure of the List. These lists used by other countries serve multiple purposes but also reflect inherent differences in their economies' level of industrialisation and government participation in markets.

## What lessons can be learned from other countries' approaches or the ways in which they consider their criteria for listing critical minerals?

Of the five countries listed in the issues paper, Canada has a similar comparative advantage to Australia in mineral potential and policy perception as considerations of investment attractiveness.<sup>16</sup> Since 1997, Canada's jurisdictions (Saskatchewan; Newfoundland and Labrador; Quebec) and United States jurisdictions (Nevada; Colorado; Arizona) are often compared with Australia's jurisdictions (WA; Northern Territory; South Australia) in Fraser Institute's annual survey of mining and exploration companies.

Notably, Canada has a 30 per cent Clean Technology Manufacturing Tax Credit for reprocessing secondary critical minerals and a 30 per cent Critical Mineral Exploration Tax Credit for flow-through shares agreements to support exploration expenditure on specific minerals, including nickel and copper. Due to these tax credits, Canada's year-on-year lithium and nickel exploration expenditure growth has caught up to Australia's.<sup>17</sup>

Canada also scores higher than Australia in the Energy Transition Index in its willingness to foster an effective energy transition through regulation and political commitment.<sup>18</sup> Apart from the Republic of Korea, the four listed countries rank higher than Australia on energy transition readiness.<sup>19</sup> For Australia to take a more significant share of the critical minerals value chain, **minerals considered for inclusion on the List could be more closely tied to Australia's trade opportunities and readiness for the energy transition domestically.**

<sup>14</sup> Netherlands Enterprise Agency, [Critical minerals opportunities in Australia 2023](#), Ministry of Foreign Affairs, 8 March 2023.

<sup>15</sup> Bruce S, Delaval B, Moisi A, Ford J, West J, Loh J and Hayward J, [Critical Energy Minerals Roadmap – The global energy transition: Opportunities for Australia's mining and manufacturing sectors](#), Commonwealth Scientific and Industrial Research Organisation, 20 May 2021, figure 25 and tables 6-8.

<sup>16</sup> Policy potential includes a measure of onerous regulation, taxation and infrastructure quality. Mejia J and Aliakbari E, [Fraser Institute Annual Survey of Mining Companies 2022](#), 4 May 2023.

<sup>17</sup> IEA, [Critical Minerals Market Review 2023](#), 11 July 2023, pp 21 and 24.

<sup>18</sup> World Economic Forum, [Fostering Effective Energy Transition 2023 Edition](#), 28 June 2023, p 46.

<sup>19</sup> US 12<sup>th</sup>, UK 13<sup>th</sup>, Canada 19<sup>th</sup>, Australia 24<sup>th</sup> and Korea 31<sup>st</sup>. Top 20 is dominated by EU member states. Ibid, p 12.

There is an opportunity for the State and Federal Government to address the regulatory and commercial barriers to unlocking secondary critical minerals supplies, supporting the building of processing capability closer to the source. For example, the Council of the European Union recently adopted its position to increase domestic recycling and processing to meet its demand for critical raw materials.<sup>20</sup> CME members with global vertically integrated operations are investing overseas in initiatives to improve the recovery of minerals such as cobalt and rare earths.<sup>21</sup> Global investment in battery waste and recycling has occurred mainly in China, Europe and the US.<sup>22</sup>

In Australia, however, apart from the research focus on end-of-life batteries, no metallurgical facilities can process and recover critical minerals from different 'virgin' materials and industrial by-products. Depending on the pace of technological change and functional recycling rates achieved, CSIRO's modelling suggests the balance between the primary and secondary supply of nickel, cobalt and lithium can radically alter.<sup>23</sup> As this will affect the characterisation of potential economic geological resources, a future iteration of the List could consider this lack of processing capability for unlocking critical minerals from secondary supplies.

## What should trigger an update to the List?

Triggers to update the List should not be prescriptive. They could include major strategic, technological, economic and policy changes, e.g. changes in the G7, G20 (i.e., Sustainable Critical Minerals Alliance) or Australia's key trading partners. Consistent with the US, reviewing the List at least every three years on the proviso that progress against achieving the Strategy's objectives is reviewed and communicated regularly would be reasonable.

Although the investment effects of multinational firms responding to the US Inflation Reduction Act of 2022 and its eight titles are yet to be seen, the tax credits for component manufacturing are generous and should not be taken lightly. The EU's response with debt-financed funds under the Green Deal Industrial Plan is also another shift in the global economy.<sup>24</sup>

Considering these incentives, the purpose of Australia's List and the Strategy's actions must be clearer, appropriately targeted and well-understood to support the growth of new and existing domestic industries. There should be a broader, stronger whole-of-government focus on solidifying and diversifying the entire critical minerals value chain,<sup>25</sup> from upstream (mining), midstream (refining) to downstream (manufacturing). For critical and battery minerals captured on the List, as well as those not, it is imperative we do not take our existing operations of scale for granted. These industries are sensitive to changes in regulation and policy. Like Canada's approach, Australia should look to maintain existing positions of strength and support the development of a scalable, globally competitive industry.

---

<sup>20</sup> European Council, [Critical raw material act: Council adopts negotiating position](#), press release, 30 June 2023.

<sup>21</sup> Tronox Holdings PLC, [2022 Annual Report](#), 1 April 2023; Glencore International AG, [Glencore and Li-Cycle announce joint study to develop a European recycling hub](#), 9 May 2023; Institute of Materials, Minerals & Mining, [New technology to recover valuable metals from mine water](#), 12 May 2023.

<sup>22</sup> IEA, [Critical Minerals Market Review 2023](#), 11 July 2023, pp 46-47.

<sup>23</sup> West J, Ford JA and Meyers J, [Known unknowns: the devil in the details of energy metal demand. Using an integrated physical framework to explore opportunities and risks for metals in the energy transition](#), CSIRO, 1 October 2021.

<sup>24</sup> Net-Zero Industry Act, Critical Raw Materials Act, European Sovereignty Fund and relaxation of EU State aid rules. Scheinert C, [EU's response to the US Inflation Reduction Act](#), briefing request prepared for the European Parliament ECON Committee, Policy Department for Economic, Scientific and Quality of Life Policies, June 2023.

<sup>25</sup> A focus that extends across battery electric vehicle gigafactories, mining and refining. Energy Transitions Commission, [Materials and resource requirements for the energy transition](#), Barriers to Clean Electrification Series, July 2023, pp 85-87.

## Conclusion

CME supports maintaining the Critical Minerals List distinct from Australia's Critical Minerals Strategy. However, we call for increased clarity on the value proposition of the List, mainly on offering targeted financial support and project facilitation services. As mentioned above, the Australian Government should look to jurisdictions with similar lists and geological potential for examples of incentives that could be offered to help develop all stages of the critical minerals supply chain.

CME also strongly advocates for efficient, timely federal-state approvals processes for all mineral and energy projects, irrespective of List status.

Should you have questions regarding this submission, please contact Adrienne LaBombard, Director – Policy and Advocacy, at [A.LaBombard@cmewa.com](mailto:A.LaBombard@cmewa.com) or on 0400 912 525.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rebecca Tomkinson', with a stylized flourish at the end.

Rebecca Tomkinson  
**Chief Executive Officer**