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ALUMINIUM
COUNCIL LTD

info@aluminium.org.au

Standing Committee on Primary Industries

https://www.aph.gov.au/Parliamentary_Business/Committees/House/Primary_Industries/CriticalMinerals

27 February 2026

Dear Committee Chair;

Re: Inquiry into factors shaping social licence and economic development outcomes in critical minerals projects across Australia

The Australian Aluminium Council (the Council) represents Australia's bauxite mining, alumina refining, aluminium smelting and downstream processing industries. The aluminium industry has been operating in Australia since 1955, and over the decades has been a significant contributor to the nation's economy. Earnings for Australian exports of aluminium, alumina and bauxite are expected¹ to rise from \$18 billion in 2025–26 to \$19 billion in 2026–27. More than \$14B of this comes from the alumina and aluminium industries, as value adding mineral processing sectors. The industry includes six bauxite mines which collectively produce over 100 Mt per annum, making Australia one of the world's largest producers of bauxite. Australia is the world's largest exporter of alumina with five alumina refineries producing around 18 Mt per annum of alumina. Australia is the seventh largest producer of aluminium, with four aluminium smelters and additional downstream processing industries including more than 20 extrusion presses. Aluminium is Australia's top manufacturing export. The industry directly employs more than 21,000 people, including 6,600 full time equivalent contractors. It also indirectly supports a further 55,000 families predominantly in regional Australia.

The Council welcomes the opportunity to make a submission to the Standing Committee on Primary Industries Inquiry into factors shaping social licence and economic development outcomes in critical minerals projects across Australia (the Inquiry). The Council notes that bauxite, alumina and aluminium are not currently included on Australia's critical mineral list; despite being included on the lists of most peers and trading partners; but that Australia's critical minerals strategy and list is due to be reviewed in 2026. The industry already facilitates the development of supply pathways for a number of critical minerals including High Purity Alumina (HPA), gallium and fluorine. The Council's submission to the Inquiry provides context on both the existing and emerging industries as well as addressing the questions posed in the terms of reference. For the purposes of this submission, the Council has treated the existing bauxite, alumina and aluminium industries as critical minerals.

The Council's submission provides context for the industry in Australia, while addressing the matters of interest to the Committee. As the Committee considers the factors shaping the social licence and economic development outcomes in critical minerals projects across Australia, it is important that the Committee has a broad view of not what only is considered a critical mineral today, but what should be a critical mineral in Australia's interests; and how existing industry can provide examples not only of the social and economic benefits available but help directly facilitate new industries.

¹ <https://www.industry.gov.au/sites/default/files/2025-06/resources-and-energy-quarterly-june-2025.pdf>

The Council would welcome the opportunity to appear at one of the Public Hearings, should the Committee have any questions.

Kind regards,



Marghanita Johnson
Chief Executive Officer
Australian Aluminium Council
M +61 (0)466 224 636
marghanita.johnson@aluminium.org.au

1. **Aluminium Industry Context**

Aluminium is one of the commodities most widely used in the global transition to a clean energy future². It is also recognised for its importance to economic development. Aluminium use is highly correlated with GDP, so as countries urbanise, per capita use of aluminium increases. It is expected that, by 2050, global demand for aluminium will nearly double³. While an increasing proportion will be met through recycled aluminium, there will remain a need for increased production of primary aluminium requiring a comparable increase in global bauxite mining and alumina refining rates.

Australia has a large resource and industrial base and has great potential for conversion to zero- and low-emissions industrial production including for export, with economic benefits to match. While industrial production is a major contributor to Australia's overall emissions, both directly and via consumed electricity, Australia's green industry ambition is linked to opportunities created by the global transition to net zero. Yet, as the Council has maintained throughout our dialogue with Government, the future of the industry in Australia cannot be taken for granted⁴. As articulated in recent work⁵ undertaken by the Council, key risks include high energy costs combined with a high cost to decarbonise industrial processes, proactive industry policy among competitor nations, as well as regulatory complexity and uncertainty.

Without mining, the world cannot reach net zero by 2050, and the minerals required to achieve our decarbonisation goals are of such magnitude that we will need more mining, not less. While seeking to maintain Australia's highest ESG standards, global demand for minerals such as aluminium will continue to be met from elsewhere if not provided by Australia. Most of the world's bauxite comes from surface mines in tropical and sub-tropical areas, where bauxite typically occurs in extensive, relatively thin near-surface layers, normally beneath a few metres of overburden. Because bauxite deposits often cover a very large area, bauxite mining involves disturbance of comparatively large land areas compared to the mining of other minerals, although for a shorter time. Australian bauxite deposits have high grades and are shallow and relatively easy to mine. Bauxite mining is well suited to progressive rehabilitation.

Australia is one of the very few countries with bauxite mining, alumina refining, aluminium smelting and aluminium extrusion industries, making aluminium one of the few commodities in which the raw materials are mined and are processed all the way to a consumer product right here in Australia. However, the existing industry remains vulnerable to both domestic policy and geopolitical risk. This may increase the net global impact of mining, compared with continued development in Australia. While Australia has been the world's largest producer of bauxite and has 22% of global reserves, Guinea has 27% of global reserves and is now the world's largest producer and exporter of bauxite, principally to China. Whilst Western world production has been falling, China has secured its supply of bauxite by significant investment in bauxite mines in Guinea and has constructed low-cost alumina refineries on its coast to reduce freight costs. Indonesia is also increasing capacity across bauxite, alumina and aluminium. Recent analysis⁶ undertaken by the Council found that Indonesia can approve and build an integrated bauxite mine and alumina refinery faster than Australia can approve a bauxite mine. Australia's mineral exports, such as bauxite and alumina, rely on bulk freight which has also undergone a step change in its volatility, exposing the industry to vulnerabilities. The long term future for the sector in Australia is positive, but it is under near term stress.

Australia's existing aluminium industry is already predominantly located in regional Australia (Figure 1) with three existing and three potential bauxite mines; two alumina refineries, one aluminium smelter and a high purity alumina plant all located in Northern Australia. The majority of the industry's employees live in the regions in which they work and there is often intergenerational employment at sites.

² <https://www.worldbank.org/en/topic/extractiveindustries/brief/climate-smart-mining-minerals-for-climate-action>

³ International Aluminium Institute High Substitution Scenario

⁴ <https://news.alcoa.com/press-releases/press-release-details/2024/Alcoa-announces-curtailment-of-Kwinana-Alumina-Refinery-in-Western-Australia/default.aspx>

⁵ <https://aluminium.org.au/wp-content/uploads/2025/10/251024-Securing-a-Level-Playing-Field.pdf>

⁶ <https://aluminium.org.au/wp-content/uploads/2024/10/241010-AAC-Upstream-Vulnerabilities-Report-FINAL.pdf>

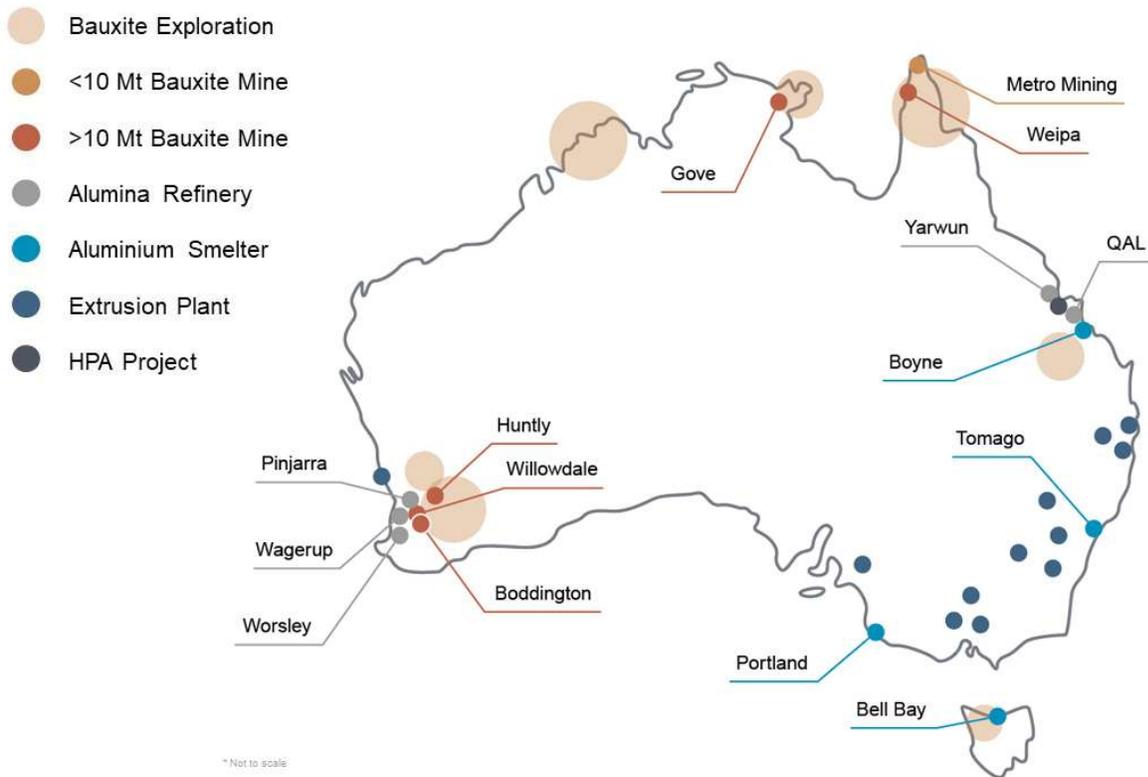


Figure 1. Aluminium Operations in Regional Australia

2. Bauxite, Alumina and Aluminium as Critical Minerals

Critical minerals are essential to modern and advanced technologies, including computers, heavy industry, defence, and renewable energy. However, these commodities are exposed to risks of supply chain disruption or bottlenecks, a feature which makes them ‘critical’. Different countries use different approaches to define critical minerals or ‘criticality’. These include an assessment of economic importance weighted against a measure of vulnerability. Often, vulnerability relates not just to the source of a mineral’s primary ore or its global distribution but also factors related to the supply chain, such as processing locations. Other assessments may recognise vulnerability as it relates to specific uses, such as defence. Each country has its own needs and vulnerabilities, and therefore, their critical minerals lists may vary.

In Australia, aluminium⁷ is not included as a critical mineral as the supply chain was not deemed to be sufficiently “vulnerable” during the last assessment in December 2023. The Critical Minerals Strategy⁸ indicates that list should be reviewed at least every 3 years, as recommended by the Critical Minerals Strategy (p. 44). The Critical Minerals list is due to be updated in 2026, however, the Minister for Resources is also able to review and update the list to reflect ‘global strategic, technological, economic or policy changes’, as was the case when nickel was added in February 2024⁹.

Bauxite, alumina and aluminium but are included on some State critical minerals lists, such as in Queensland. Aluminium is included as a Federal Strategic Material, but this listing lacks any other supporting policy framework. Australia’s failure to address this is a lost opportunity in its policy setting framework.

The Government should, as a priority, review the Critical Minerals strategy to address the changing geo strategic risks and align with global definitions and the needs of our strategic trading partners. Australia is now increasingly

⁷ Elemental name, does not expressly include bauxite or alumina

⁸ <https://www.industry.gov.au/publications/critical-minerals-strategy-2023-2030>

⁹ <https://www.minister.industry.gov.au/ministers/king/media-releases/nickel-placed-critical-minerals-list>

out of step with our peers. The new strategy should be stratified to address the different phases of critical mineral production in Australia. This would acknowledge the different policy measures including funding, strategic reserves and any export restrictions on the different minerals. Bauxite, alumina and aluminium should be included as critical minerals, noting their importance to not only the energy transition and sovereign capability, but for defence, trade and geopolitical reasons.

Indonesian Government Approach – Nickel and Bauxite

Following the implementation of the export ban on nickel ore, and the jump start this policy provided to the Indonesian domestic nickel processing industry, the Indonesian government banned bauxite exports in December 2023. This fundamentally changed the bauxite and alumina sector and, within a year, Indonesia flipped from being an exporter of raw bauxite to a net exporter of alumina.

At the opening of a new plant in 2024, President Joko Widodo said: “The construction of this smelter is our effort to prepare Indonesia to transform into an industrial country, by processing our own natural resources and no longer exporting raw materials. Let’s stop exporting raw materials and process them ourselves because the added value will be enjoyed by our community, our country,”. In his remarks, the President also highlighted Indonesia’s success in increasing the added value of products such as nickel. Before 2020, raw nickel exports only generated US\$1.4 to US\$2 billion, but after the implementation of the policy of stopping raw material exports, the added value jumped to US\$34.8 billion in 2023.

Mirroring its success in the nickel sector, the Indonesian Government now provides a variety of incentives to attract investment into bauxite, alumina and aluminium. These incentives include tax breaks, import duty exemptions for machinery and equipment, and streamlined licensing processes. Additionally, the government offers infrastructure support, such as access to reliable electricity supply and industrial parks dedicated to the aluminium industry. The rapid expansion being observed in alumina and aluminium mirrors Indonesia’s successful strategy in nickel, where it leveraged similar policies to become the world’s dominant supplier.

According to the 2024 US Geological Survey¹⁰, Indonesia has resources of 1 billion tonnes of bauxite. In 2024, Indonesia was the world’s 9th largest producer of bauxite and 7th largest producer of alumina¹¹, with capacity of around 1.3 Mt alumina in 2024.

Indonesia’s alumina refining sector is witnessing unprecedented development activity with at least three new alumina refineries to begin operations in 2025, and at least three additional refineries are expected by the end of 2027. These expansions will increase Indonesia’s processing capacity more than 500% within five years¹²

The smelting landscape is similarly transformative with two aluminium smelters already operational and four additional smelters are expected to come online by 2030, according to Goldman Sachs. Tsingshan’s first aluminium smelter was commissioned in 2023, with a significantly larger facility scheduled to begin production in 2026.

Additionally, there is evidence of increased exports from Indonesia’s downstream aluminium manufacturers to Australia, and the Council is actively monitoring whether these are taking place at levels which would constitute dumping.

There are a range of forecasts for Indonesia’s alumina capacity by 2030 (Figure 2), ranging from around 6 Mt per annum to 25 Mt¹³ per annum (if all 11 projects either under construction or potential) were constructed. Assuming most global growth comes from Indonesia 6Mt would see it move to 5th in global ranks whereas 25 Mt would see it overtake Australia and be second only to China.

¹⁰ <https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-bauxite-alumina.pdf>

¹¹ https://aluminium.org.au/wp-content/uploads/2025/04/J008227-AAC-TRADE-AND-COMPETITIVENESS-FACTSHEET-APRIL-2025_FINAL_WEB.pdf - data sourced from Department of Industry, Science and Resources.

¹² <https://discoveryalert.com.au/news/chinese-tycoons-transforming-indonesia-aluminum-industry-2025/>

¹³ <https://www.metal.com/en/newscontent/103308422>



Figure 2 Indonesian Alumina Supply Forecasts to 2030¹⁴

Industry experts had projected that global alumina markets could transition from current relative tightness to potential oversupply by 2026-2027 as the first wave of Indonesian projects reach full production. This oversupply was evident in the market from mid-2025 when alumina prices fell and are currently trading at around US \$300¹⁵/t. This shifting market balance will likely create downward pressure on prices, particularly during periods when global aluminium demand growth fails to keep pace with alumina supply expansion. If that happens, the alumina market could tip from tight supply into surplus within two years.

Indonesia's geographic proximity to major Asian markets may also create regional price differentials that favour Indonesian producers. Transportation cost advantages could allow Indonesian suppliers to offer more competitive pricing compared to Australian or Atlantic Basin producers, potentially creating segmented pricing structures in global markets. These regional differentials could force higher-cost, geographically disadvantaged producers to accept price discounts to maintain market share, further compressing margins and challenging their long-term viability.

The entrance of significant new low-cost capacity will likely reshape the global alumina cost curve, creating pressure on higher-cost producers. Facilities in the upper quartiles of the cost curve will face increasing margin pressure, potentially forcing rationalization of less competitive operations in established mining jurisdictions.

The Council first publicly called upon the Government to include bauxite, alumina and aluminium on the Critical Minerals list in early 2023¹⁶. By mid-2023, the Council was drawing attention to the increased risk from Indonesia and, in 2024¹⁷, the Council undertook a comparison of costs and delays impacting Australia's upstream bauxite and alumina sectors¹⁸ due to increased geopolitical risk combined with rising costs and prolonged regulatory approvals; particularly compared to growth in Indonesia.

¹⁴ <https://www.mining.com/web/chinese-tycoons-are-turning-indonesia-into-an-aluminum-giant/>

¹⁵ https://www.lme.com/metals/non-ferrous/lme-alumina_#Trading+day+summary

¹⁶ <https://aluminium.org.au/news/aac-submission-on-australias-critical-minerals-strategy/> and <https://aluminium.org.au/news/incoming-president-of-the-australian-aluminium-council-calls-for-bauxite-alumina-and-aluminium-to-be-formally-recognised-as-critical-minerals-in-australia/>

¹⁷ <https://aluminium.org.au/news/australian-aluminium-council-renews-call-for-inclusion-of-bauxite-alumina-and-aluminium-on-critical-minerals-listing/>

¹⁸ <https://aluminium.org.au/wp-content/uploads/2024/10/241010-AAC-Upstream-Vulnerabilities-Report-FINAL.pdf>

The 2024 CM Group Report¹⁹ highlighted that while Indonesian refineries are set to expand alumina capacity by 2030, Australia faces mounting challenges, including rising capital, labour, and energy costs, compounded by lengthy regulatory approvals; and that increased production from these new Indonesian refineries would force Australia's refineries up the cost curve. Since the CM Group report was released a year ago, growth forecasts in Indonesia have become more aggressive and the risk of the market being long in alumina, risking price collapse, have grown substantially.

The Council has repeatedly called upon the Government to review the Critical Minerals strategy list to address the changing geo strategic risks and align with global definitions and the needs of our strategic trading partners. Australia is now increasingly out of step with our peers. The new strategy should be stratified to address the distinct phases of critical mineral production in Australia. This would acknowledge the different policy measures including funding, reserves and any export restrictions on the different minerals. The Council has also requested that bauxite and alumina be eligible for the Critical Mineral Production Tax Incentive²⁰.

The current inclusion of aluminium on Australia's Strategic Mineral List acknowledges the metal's importance in the transition to net zero but does not come with any policy support. The Strategic Minerals list is a 'watchlist' of minerals that would meet the criteria for being a Critical Mineral but are not currently considered vulnerable to disruption. In October 2024²¹, the Council said that it did not want bauxite, alumina and aluminium to become the new nickel, acknowledging that the Government's decision to move it to the Critical Minerals list in February 2024 was too little too late. Since then, the threat has only grown, but the Government has taken no action to address the risk.

3. Opportunities for new Critical Mineral Production Dependent on Aluminium Supply Chains

The strong existing vertically integrated aluminium industry, with a regional manufacturing base in Australia, enables existing industry to be leveraged to create new manufacturing opportunities. Strengthening our national manufacturing capabilities now will put Australia in the strongest possible position to meet these future forecasts for not only traditional commodities such as bauxite, alumina and aluminium, but also other emerging aluminium related commodities like gallium, vanadium, high purity alumina (HPA), aluminium fluoride, aluminium alloys and aluminium salts, noting that these are already classified as critical minerals in Australia and some are also included in the strategic reserve.

High Purity Alumina

The HPA First Project is Alpha HPA's integrated development in Gladstone, Queensland, designed to progressively scale the production of High Purity Alumina (HPA) using a proprietary, hyper-efficient, lower-emissions refining process. A key foundation of the Project is Alpha HPA's long-term supply arrangement with Orica, which provides a reagent from Orica's nearby Yarwun facility. This local supply chain underpins the Project's operating model, reduces transport requirements, and supports the development of a highly integrated industrial precinct in Gladstone.

Stage One of the HPA First Project is fully operational and produces approximately 350 tonnes per annum of HPA equivalent. The facility currently employs around 80 people and serves as both a commercial production plant and a platform to validate Alpha HPA's proprietary processing technology, automation systems, and operating model at industrial scale.

Building on this foundation, Stage Two will significantly expand production capacity to 10,000 tonnes per annum of HPA equivalent. During construction and commissioning, Stage Two is expected to create up to 420 jobs, with a further 120 ongoing full-time roles once operational. The expanded facility is designed for an operating life of more than 25 years and will leverage the existing Stage One infrastructure, workforce capability, and established reagent supply arrangements.

¹⁹ <https://aluminium.org.au/wp-content/uploads/2024/10/241010-AAC-Upstream-Vulnerabilities-Report-FINAL.pdf>

²⁰ <https://www.industry.gov.au/mining-oil-and-gas/minerals/critical-minerals/critical-minerals-production-tax-incentive>

²¹ <https://aluminium.org.au/wp-content/uploads/2024/10/AAC-Media-Release-Inclusion-of-Bauxite-Alumina-and-Aluminium-on-Critical-Minerals-Listing-No-embargo-wording-1.pdf>

Alpha HPA's proprietary process uses reagents from Orica to leach of high-grade aluminium hydroxide, followed by solvent extraction to recover and separate aluminium nitrate at very high purities. This intermediate precursor is then converted into a wide-range of final HPA products. The Smart SX process refines HPA at lower temperatures than traditional methods, making it significantly less energy intensive. The HPA First Project has been designed to operate at high concentration, enabling a compact plant footprint, high levels of reagent recycling, and low waste generation.

Gallium

Gallium is naturally present in bauxite, the raw material used in the production of alumina, and can be extracted during the refining process. Gallium is a critical mineral essential to technology, especially the semiconductor industry and defence sectors and is recognized as vital to national security by the United States, Australia and Japan. Globally, gallium production is concentrated from a single source, and market controls have heightened interest in establishing and securing alternate supply chains.

In 2025, the Australian and United States Governments²² announced a package of support to advance the development of a gallium plant to be co-located at Alcoa's Wagerup alumina refinery in Western Australia. The plant, which would be operated by Alcoa, would be expected to produce 100 metric tons of gallium annually at full capacity. While 100 t per annum is small compared with alumina production, it represents about 10% of the current global gallium market.

There are some important social licence dimensions from a small-volume, co-located critical minerals project:

- The proposal is an extension of a currently operating process. It aims to derive more benefit from the same bauxite resource that would already be mined and refined.
- The small volumes mean the extraction facility can be accommodated within the existing site footprint.
- As such, no significant clearing will be required for the project.
- The additional energy required for the extraction facility is modest and can be met by the refinery's existing power generation.
- Wagerup is already among the lowest CO2 emitting refineries globally. There will be no change to the facility's emissions profile from the gallium extraction facility, which is expected to emit water vapour, hydrogen and oxygen.

Indicative modelling estimates the extraction facility could deliver about 150 direct and indirect jobs during construction, and about 15-20 additional permanent operations jobs at Wagerup.

Fluorine

While the majority of Australia's aluminium supply chain is vertically integrated, like many manufacturing processes, it relies on critical inputs including a range of feed materials, which are needed to sustain this value chain. An example is aluminium fluoride, which is essential for aluminium smelting. It is analogous to AdBlue²³ for diesel. No aluminium fluoride is produced in Australia, so Australian aluminium smelters are entirely reliant on imported aluminium fluoride. In fact, Australia is the largest producer of primary aluminium metal that does not produce any aluminium fluoride.

ABx subsidiary ALCORE Limited (Alcore) is developing a process to convert an aluminium smelter by-product into hydrogen fluoride, the precursor chemical for all fluorochemicals including aluminium fluoride. A pilot plant is under construction in Bell Bay, Tasmania. This is intended to be followed by a \$16.4M commercial plant in the same location. The pilot plant's initial operations will deliver up to 10 highly skilled, full-time jobs locally, with the potential to grow to more than 100 full-time equivalent positions as the project moves towards full-scale

²² <https://news.alcoa.com/press-releases/press-release-details/2025/GOVERNMENTS-ANNOUNCE-SUPPORT-FOR-ALCOAS-GALLIUM-CRITICAL-MINERAL-DEVELOPMENT-PROJECT-IN-WESTERN-AUSTRALIA/default.aspx>

²³ <https://minister.dcceew.gov.au/bowen/media-releases/securing-supply-diesel-exhaust-fluid-keep-australia-moving>

commercialisation²⁴. The plant is proposed to transform 1,600 tonnes per year of the aluminium smelter by-product into hydrogen fluoride and aluminium fluoride. The potential to establish domestic aluminium fluoride production will help protect the aluminium industry from supply chain disruption and increase Australia's manufacturing resilience and capability. This increase in the security of supply for Australian aluminium smelters will also create highly skilled manufacturing jobs, and the production of aluminium fluoride from aluminium smelter bath is an excellent illustration of the circular economy.

Fluorine is also an essential for the conversion of rare earth oxides to rare earth metals, so the production of hydrogen fluoride in Australia will support the production of rare earth metals in Australia. Iluka Resources is conducting a ~\$15m study²⁵ into the production of rare earth metals at its Eneabba rare earths refinery that is under construction.

4. Response to Specific Terms of Reference

a. The effectiveness of engagement practices with local communities, Traditional Owners, and other stakeholders.

The Council's Members have different strategies to engage with their local communities, Traditional Owners and other stakeholders. While these strategies have varied over time, the demonstration of their effectiveness is in the strong regional support for these operations over many decades.

b. How critical minerals projects contribute strategically to regional and national economic development.

As articulated earlier in this submission, the vertically integrated aluminium sector has been operating in Australia since 1955, and over the decades has been a significant contributor to the nation's economy. Earnings for Australian exports of aluminium, alumina and bauxite are expected to rise from \$18 billion in 2025–26 to \$19 billion in 2026–27¹. The industry directly employs more than 21,000 people, including 6,600 full time equivalent contractors. It also indirectly supports a further 55,000 families predominantly in regional Australia. New projects across additional critical minerals such as HPA, gallium and fluorine will further strengthen this with the potential to generate and additional 300 full time direct employees as well as maintain and create new sovereign supply chains.

c. Opportunities to strengthen workforce participation, skills development, and employment pathways, particularly in remote and Indigenous communities.

In regions like Cape York, bauxite mines can have indigenous participation rates of 30%²⁶. In the regions in which the Council's members operate the intent is to provide financial benefits and also education, training, cultural heritage protection and employment.

There are already workforce and skills shortage across many industries and regions that will impact industry growth and the further development of advanced manufacturing. The scale of the workforce and skills required for transformational abatement projects and new industries should not be underestimated, nor should the impacts of this on the pace of abatement. These challenges are, however, not unique to the aluminium sector and maintaining the existing assets in these regions will in fact help maintain a trained and agile workforce which can adapt to future opportunities.

Decarbonisation is an electrification story: large scale wind and solar, distributed solar, household and grid scale energy storage, increased electricity transmission and distribution, electric vehicles and the electrification of industry, in particular, mining and alumina refining. As a result, there will be significant demand for those with electrical skills including electrical discipline engineers, electricians, process control engineers and analyser technicians, electric vehicle mechanics. This demand will occur across all sectors in the economy. These skills are strongly linked to STEM subjects at high school and historically male dominated industries. These professions are likely to attract high salaries, good conditions and offer long term career prospects that are suitable for a range of

²⁴ <https://www.premier.tas.gov.au/latest-news/2025/january/tasmania-leading-the-way-with-world-first-aluminium-waste-recycling-pilot-plant>

²⁵ https://www.iluka.com/media/5x4fkb2s/230822-h1-2023-results-presentation_vf.pdf

²⁶ <https://www.metromining.com.au/media/33566/metro-investor-presentation-noosa-conference-nov-2022.pdf>

employment arrangements including “Fly-In Fly-Out”, regional and metro-based roles, full and part time, site, office and home based locations.

Ensuring there are enough suitably qualified workers will require the largest, and therefore most diverse, pool of talent. The promotion of STEM and the encouragement of both male and females into these careers is paramount to achieving decarbonisation. This should include re-training mature employees into these roles.

d. The role of state, territory, and local governments in supporting socially and economically sustainable development.

Australia is well placed to build on its aluminium supply chain to meet growing international demand. The integrated nature of bauxite mining, alumina refining, aluminium smelting and extrusion processes in Australia means that efficient and effective regulatory processes for each step are critically important to the ongoing operation of the overall system. Not only does policy funding need to be at an appropriate scale but there needs to be predictable streamlined process and approvals frameworks for the whole value chain from mine to market including infrastructure needed to ensure alumina and aluminium can continue to be made in Australia in the future. To do so, however, requires specific government policies:

1. Deliver internationally competitive supplies of firmed clean energy, at the scale and timelines needed;
2. Use of Production Credits and transformational infrastructure and technology funding to enable Australia to be sufficiently competitive to be able to attract global decarbonisation investment;
3. Prioritise the Australian aluminium value chain, as a critical mineral, within industry development policies;
4. Efficient environmental approval processes across the supply chain that appropriately balance the environmental rigour and protection with transparent timelines that reflect commercial needs; and
5. Development of long-term strategic partnerships with likeminded countries.

These policies are outlined in greater detail in recent analysis undertaken by the Council²⁷. Non-financial means of support – particularly the streamlining of regulatory approvals are also critical to lowering investment barriers.

e. Options for improved coordination between jurisdictions and the Commonwealth.

Governments also have a critical enabling role in addressing constraints to delivery of renewable energy projects including planning regulation, land access, and construction costs that are putting the industrial transition at risk due to tensions with competitiveness and scheduling. Planning systems, regulations and workforce development must also align with delivering projects required for shared net zero ambitions. The key to success for Australia’s green metals sector is to ensure that Australia’s bauxite resources continue to be able to be economically accessible, that competitively priced, firmed renewable energy is available and prioritised for use by industries such as the alumina and aluminium processes needed to convert the bauxite and that Australian industry is sufficiently able to attract the necessary financial support during the transition. Australia’s alumina and aluminium industries are located in key regional hubs, which have been identified as part of Australia’s transition to a net zero economy. These green metal industries can create the baseload, flagship offtake agreements in these key locations that can encourage additional investment and renewable energy to support other industries to be developed.

Planning and approvals processes are taking too long. While seeking to maintain Australia’s highest standards for ESG, it is also worth considering that global demand will continue to be met from elsewhere if not provided by Australia. Australia’s historic advantage in the aluminium industry stemmed principally from its substantial high quality bauxite reserves. The success of Australia’s green metals and critical minerals industries requires an integrated system of policies, including those which support ongoing approval to mine Australia’s bauxite reserves. This is impeding transformational investment – for example investment in alumina refineries also needs to be supported by access to bauxite environmental approvals on commensurate time scales. For example, investment in a transformational abatement project at an alumina refinery would need to be supported by surety of bauxite supply over the same long term period.

These delays in the current system are impacting on business confidence in Australia’s policy environment. The Council draws attention to the Fast41²⁸ process in the USA which has been successfully used to permit projects of

²⁷ <https://aluminium.org.au/wp-content/uploads/2023/11/Aluminium-Critical-Mineral-Report-Nov23.pdf>

²⁸ <https://www.south32.net/news-media/latest-news/hermosa-confirmed-as-the-first-fast-41-mining-project>

comparable significance to those Australia is seeking to develop. It creates a single point of contact and improves predictability, accountability and transparency in the permitting process. This process could be applied to a range of priority projects, including but not be limited to critical mineral and renewable energy projects.

The Council recognises that the Federal Government is currently completing the regulatory implementation to underpin the changes to the *Environment Protection and Biodiversity Conservation (EPBC) Act*. In developing these regulatory supports, it is important that they provide clear, practical requirements that deliver measurable improvements in environmental outcomes. For example, the National Environment Standards (NES) should reflect the best available information from industry experience, research and collaborative approaches, while also recognising the internationally competitive environment in which Australian industry operates. While the Council appreciates the early release of these draft standards, the consultation periods must reflect the complexity of the content and the need for a more iterative and consultative approach in their development. Updates to the NES must also reflect changes made during the passage of the legislation²⁹.

Accreditation of state and territory processes is a key priority for business, with the Standards acting as a critical enabler. States and territories should have priority input to ensure the Standards are drafted in a manner that facilitates accreditation to occur efficiently and expeditiously. The final NES must support consistency with existing state and territory approval and regulatory processes.

Beyond environmental matters, better cross agency coordination on a state and federal basis is required to manage apparent data gaps to reduce the need for duplicative reporting. While one agency may think different reporting requirements or boundaries are required to answer their question, this does not add to external understanding of the data or confidence in the reporting.

²⁹ <https://aluminium.org.au/news/aac-submission-on-national-environmental-standards-for-matters-of-national-environmental-significance-and-environmental-offsets/>