OZ Minerals submission to the Senate Economics References Committee Inquiry into the Australian manufacturing industry
September 2021

About OZ Minerals

At OZ Minerals we strive to be modern.

We're guided by our purpose, "Going beyond what's possible to make lives better".

We believe that only when we create value for all our stakeholders will we be successful and sustainable.

Our framework of systems and behaviours, we call The OZWay, guides us while giving us the freedom and pathways to achieve our aspirations and purpose. We are passionate about creating an inclusive culture where people challenge, innovate, learn, and grow together.

By exploring for and mining copper we contribute to a low carbon future and economic wellbeing which, in turn, helps us achieve our purpose and contribute to a better future.

OZ Minerals submission to the Senate Economics References Committee Inquiry into the Australian manufacturing industry

OZ Minerals welcomes the invitation to make a submission to the Senate Economics References Committee Inquiry into the Australian manufacturing industry (the Inquiry). The Inquiry is an opportunity to highlight the significant potential for Australian manufacturing to capture the economic, social, and strategic benefits of enhancing our downstream value-adding and manufacturing capabilities, particularly regarding mineral resources.

As a copper-focused mining company, OZ Minerals provides the raw materials which underpin the manufacture of numerous goods and products around the world. In particular, copper is an essential metal needed to support the global transition to a low carbon economy. Australia has natural strengths in terms of reserves of copper and other strategic metals and, when combined with abundant renewable energy resources and highly skilled capabilities, is well positioned to benefit from this transition.

However, the benefits to Australia are not currently fully realised. Much of the value-adding associated with raw materials and the manufacture of products occurs overseas. Australian raw materials tend to be exported for further processing and manufacture, with the end product imported back into the country. The economic opportunity associated with further processing and manufacturing is not one that Australia is currently enjoying. Opportunity exists to support Australia's manufacturing capability to capture downstream value-adding associated with strategic raw materials and facilitate the flow of benefits to the economy.

High-level discussion points

- **Australia's natural strengths are not well connected to Australian manufacturing –** Australia is home to some of the world's largest deposits of strategic, high-value minerals,

such as copper. Many of these minerals are increasingly in demand, critical for improving world living standards and underpinning the global transition to a low carbon economy. Copper is the cornerstone of renewable energy and electrification[1], while minerals such as lithium, nickel, cobalt, manganese, and graphite are critical to battery manufacturing[2].

Despite these natural strengths, Australia's resources sector is not well linked with Australia's manufacturing sector. In addition, Australia's manufacturing sector does not have the full capabilities to bring downstream processing and value-adding onshore. Greater focus on supporting the development of key downstream manufacturing capabilities such as copper smelting, cathode production and manufacturing of end products can establish these capabilities onshore. Of equal importance is support for retaining the skills and infrastructure already present in Australia, to avoid further loss of key manufacturing capabilities. Retaining skills and infrastructure also serves as a foundation to support more rapid growth of existing capabilities and the establishment of new strengths.

- **The global landscape has created a shift in manufacturing –** Australia operates in a global environment where industries and manufacturing capabilities gravitate to countries whose circumstances best accommodate them. Many manufacturing capabilities have increasingly shifted offshore to lower-cost jurisdictions. Energy, labour and regulatory costs are often lower in offshore jurisdictions, meaning the cost of manufacturing is lower, corresponding to more price-competitive end products. Of particular note is the shift of heavy manufacturing capabilities, particularly mineral processing and smelting, to jurisdictions with lower regulatory standards, particularly environmental standards.

- **Limited manufacturing capability in Australia can cause supply risk –** The COVID-19 pandemic has highlighted issues that can result from reliance on offshore manufacturing. In the mining sector, COVID-19 created supply issues for consumables, heavy industrial components and specialised equipment – all made with general manufacturing skills which are now considered 'highly specialised skills' in Australia. While COVID-19 exposed these issues, they are not necessarily a direct result of the disruption caused by the pandemic.

  OZ Minerals has seen some suppliers move to a global procurement strategy, where previously Australian-based manufacturing or servicing has moved offshore to lower cost jurisdictions. In turn, this shift has created challenges sourcing particular products, significant increases in lead times and increased costs to the mining sector. Within this global context, Australia is challenged to influence the decisions of major suppliers, given the small size of our market, relative to other jurisdictions. Increasingly, this means suppliers of some products have gravitated toward low cost centres of production which can service major centres of demand, with Australia missing out in both contexts.

Responses to the Inquiry Terms of Reference

The following sections respond collectively to several Terms of Reference, with the specific Terms of Reference addressed noted in each response.

[1] The Role of Critical Minerals in Clean Energy Transitions, World Energy Outlook Special Report, International Energy Agency, May 2021
[2] Outlook for Selected Critical Minerals Australia 2021, Office of the Chief Economist, Department of Industry, Science, Energy and Resources, Australian Government, 2021

Australian manufacturing and growth

This section responds to the following Terms of Reference:

a. What manufacturing capacities Australia requires for economic growth, national resilience, rising living standards for all Australians and security in our region;

b. The role that the Australian manufacturing industry has played, is playing and will play in the future; and

c. The drivers of growth in manufacturing in Australia and around the world.

While the Australian resources sector is a major supplier of raw materials to the world, the downstream value-adding and manufacturing associated with these materials is undertaken largely in offshore jurisdictions with Australian consumers and companies importing the end products. This model represents significant opportunities for Australia to capture some or all the manufacturing capability and return the benefits onshore.

In context of the resources sector, the manufacturing capabilities Australia requires exist at both ends of the value chain. At one end, manufacturing capability in downstream processing and value-adding of raw strategic minerals is needed to support onshore production of interim product, such as copper smelting and cathode production, and potentially end product containing high amounts of copper, such as electrical and renewable energy infrastructure. The global economic and societal shift to decarbonisation requires increasing electrification of conventional energy sources. Australia has the raw materials to service this shift[3], however, we are deficient in the manufacturing capability to capture the full value chain benefits.

At the other end of the value chain, the Australian resources sector is reliant on consumables and critical components, many of which are currently manufactured overseas. Traditionally, many of these items were manufactured in Australia, however, the shift by many suppliers to global supply chains has led to these capabilities migrating offshore. Manufacturing capability is required in this upstream context to support the onshore production of cost-effective supplies to the mining sector. Opportunity exists to capture the significant spend of mining companies on these products in Australia while simultaneously minimising supply chain risk and potential disruption to operations.

Taken together, opportunities exist across the value chain for Australia to build manufacturing capability. By delivering these capabilities, there exists the opportunity to capture greater economic benefit and bolster existing major industries such as mining.

Australia's strengths

This section responds to the following Terms of Reference:

d. The strengths of Australia's existing manufacturing industry and opportunities for its development and expansion;

[3] Outlook for Selected Critical Minerals Australia 2021, Office of the Chief Economist, Department of Industry, Science, Energy and Resources, Australian Government, 2021

e. The sectors in which Australian manufacturers enjoy a natural advantage in energy, access to primary resources and skilled workers over international competitors, and how to capitalise on those advantages; and

f. Identifying new areas in which the Australian manufacturing industry can establish itself as a global leader.

Australia has a natural advantage in terms of reserves of strategic minerals and the strong capability and skills of the resources sector. Australia also has a highly skilled workforce across other sectors such as space, automation, and digital technology, which can link with the resources sector to support advanced and responsible manufacturing. Support for businesses to invest in skills development and incentives to facilitate cross-industry collaboration are needed to leverage this highly skilled workforce.

In addition to mineral wealth and highly skilled workforce, Australia has amongst the highest potential globally to be a leader in powering our economy with renewable, zero emissions energy. In South Australia, where OZ Minerals' two major operating assets are located, nearly 60 per cent of grid electricity is generated from renewables. At times, this exceeds 100 per cent, with the State exporting surplus energy to others within the National Electricity Market (NEM) network. By operating assets powered by the South Australia renewable grid, we can significantly decrease our operational emissions and the emissions intensity of our product, attributes increasingly sought after by our stakeholders.

While the benefits of a low-carbon grid are enjoyed from a minerals production perspective, significant opportunity exists for Australian manufacturing to leverage low cost renewable energy to develop energy intensive – and traditionally emissions intensive – manufacturing capabilities. This is of relevance to downstream smelting and copper cathode production, capabilities which, as outlined previously, are generally provided by offshore jurisdictions. Further investment in leveraging Australia's zero emissions and low cost renewable energy resources supports further cost reduction from existing downstream manufacturing capabilities where they are maintained in Australia. This, in turn, increases the likelihood these capabilities and the associated skillsets will be retained in-country.

Role of Government

This section responds to the following term of reference:

g. The role that government can play in assisting our domestic manufacturing industry

The role of Government is central to supporting Australia's existing manufacturing capabilities and developing new strengths. Specifically, policy settings across the areas of trade, innovation and research and development (R&D), and emissions and energy are of relevance.

Trade policy settings are crucial to the competitiveness of Australian manufacturing in the globalised economy. Policy settings must strike the right balance between facilitating a global economy and maintaining Australia's manufacturing capability. Some policy settings have led to the loss of Australian manufacturing capability to less regulated and lower cost jurisdictions. At the same time, geopolitical tensions can at times create challenges for Australian manufacturers and companies by restricting market access or resulting in the imposition of tariffs. From another perspective, Australia's domestic policy settings support market innovation, strong governance and transparent practices. This, in turn, strengthens our position in some international markets, potentially supporting Australia's attractiveness as a trading partner.

Australia has significant strength and a history of innovation. This innovation is supported and facilitated through government support for companies to undertake R&D. Strengthened support for Australian companies to undertake R&D is needed. It is important to note that support is needed beyond direct manufacturers, but across the entire value chain.

Support for innovation and R&D can take several forms beyond direct funding. Australian manufacturing capabilities can be enhanced, where linkages are made across industries and sectors, and support provided to undertake R&D efforts to bring downstream value-adding onshore. Government support to facilitate the connection of manufacturing capability with raw materials producers supports multiple sectors to innovate, potentially enhancing Australia's manufacturing capabilities.

Furthermore, Australia's natural strengths, such as resources, are often located far from population centres and manufacturing capability. The role of Government is important when considering potential support for co-location of raw materials production, manufacturing capability, and skilled workforce. Co-location has the potential to reduce the cost of end products while simultaneously improving their sustainability through reduced inputs and externalities.

Finally, Australia has among the highest potential globally to provide low cost renewable energy. This energy source is a significant strength which can be leveraged in support of manufacturing and heavy industry generally. Policy settings regarding energy and emissions have been highly unstable in recent history, subject to constant change and a lack of a long-term pathway. If the benefits of this low cost, zero emissions energy are to be delivered in support of Australia's manufacturing capability, stable and effective long term emissions and energy policy which enjoys bipartisan support is critical.

The opportunity for reliable, cheap, renewable energy

This section responds to the following Terms of Reference:

h. The opportunity for reliable, cheap, renewable energy to keep Australia's manufactured exports competitive in a carbon-constrained global economy and the role that our manufacturing industry can play in delivering the reliable, cheap, renewable energy that is needed.

Australia has significant potential to power our economy with reliable, low cost and zero emissions energy. Adding further to this opportunity is the increasing low carbon transition of the global economy. Australian minerals are critical to underpinning this transition. Producing them onshore from zero emissions energy can position Australia to be at the forefront of the market for low emissions materials. The benefits of reliable, low cost, renewable energy extend to supporting further processing and value-adding of raw materials onshore. Energy is a significant cost in mineral processing, particularly for downstream smelting and refining. Lowering this cost through optmised policy settings which support Australia to develop its full renewable energy potential provides the foundation to preserve existing manufacturing capability and establish new, higher value capabilities. Stable and effective long-term emissions and energy policy which enjoys bipartisan support is central to developing this foundation.

At the same time, many jurisdictions around the world are introducing increasingly stringent emissions reduction policy settings including carbon pricing and border adjustments to account for emissions embodied in imported goods and shielding their own manufacturers from increased costs associated

with producing low emissions products. The European Carbon Border Adjustment Mechanism (CBAM)[4] is one such example. By establishing policy settings which facilitate optimisation of Australia's reliable, low cost, renewable energy, the emissions intensity of Australian products can be reduced, potentially insulating them from carbon price exposure in international markets.

We would be happy to discuss the content of this submission further if required. Please contact [redacted]).

Sincerely,

Andrew Cole
Managing Director and CEO

OZ Minerals

[4] https://ec.europa.eu/taxation_customs/green-taxation-0/carbon-border-adjustment-mechanism_en