

25 October 2023

Committee Secretary  
House Standing Committee on Economics  
Department of the House of Representatives  
PO Box 6021  
Parliament House  
CANBERRA ACT 2600

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Dear Committee Secretary

**House Standing Committee on Economics: Inquiry into promoting Economic Dynamism, Competition and Business Formation: Matters arising from 31 August 2023 public hearing**

The Minerals Council of Australia (MCA) is the leading advocate for Australia's world class minerals industry. The MCA's responses to the two Questions on Notice arising from the public hearing on 31 August 2023 are as follows.

**1. How much does vertical integration vary by the type of material being extracted; do you have high level data on that?**

Vertical integration of the stages of mining, processing and refining Australia's minerals and metals vary across the type of material being extracted, with the key distinction being between bulk commodities and other base metals.

Production of bulk commodities in Australia tends to be highly vertically integrated to the point of export since its stages of production to a final product are short, as in the case of thermal coal as input to coal-fired power stations, or metallurgical coal and iron ore lumps, fines and pellets as feedstock to steel-making. Some minerals and metals require treatment and refining in Australia before exporting to further stages of production that happen in locations closer to the final demand for the commodity.

***Coal industry utilises shared infrastructure to drive cost efficiencies***

The major supply chains of the Australian coal industries that serve domestic customers (coal-fired power stations, alumina refineries and cement plants) and seaborne trade follows a number of stages. Some segments of the supply chains are integrated where overall efficiencies can be achieved in production and investment, while other segments provide separate services but don't take ownership of the cargo.

Example: Hunter Valley Coal Chain

- Extraction: competing producers engage in extraction and preparation of coal at the minesite, and load coal using their own rail loading infrastructure
- Rail transport: the below rail infrastructure is owned and operated by State and Federal governments, but the above rail locomotive and freight wagons are operated commercially (with some coal producers owning their own)

- Port services: coal export facilities, including receiving, stockpiling, blending and loading are provided to producers commercially by independent coal terminals, which are owned by coal producers, but with the port owned by government or leased to a private sector operator and other services organised by the port (for example, tug operation, navigation lights and dredging)
- Coordination services: the entire end-to-end Hunter Valley Coal Chain is coordinated independently by a service provider working independently of any individual interests to optimise the performance of the entire supply chain.

The coordination of common-user infrastructure throughout the coal chain is critical to the efficiency and productivity of the coal sector and its international competitiveness.

***Iron ore industry is a model of extensive vertical integration from mine-to-port***

The major companies of the Australian iron ore industry, chiefly operating out of Western Australia, can be characterised as competing vertically integrated supply chains from mine to port. Each has their own portfolio of mines, rail infrastructure and port facilities and services with some degree of common-user infrastructure or leasing arrangements.

***In metal industries that have Australian refining or smelting stages, the story is mixed***

Production of final aluminium has more of the stages of production located in Australia, and vertically integrated segments. Producers are engaged in bauxite mining, refining and finally smelting of alumina to aluminium metal. Copper, gold and nickel are examples of metals where mining operations can be vertically integrated or separated from refining, the latter of which requires consistent feedstock to operate.

***Lithium industry will require common-user infrastructure and throughput scale***

The stages of lithium-ion battery production include extraction of spodumene and processing into lithium carbonate or lithium hydroxide, then manufacture of lithium battery components before assembly into cells.

In Australia, the extraction and concentration of spodumene has traditionally been vertically integrated before export to further stages for processing, manufacturing and assembling of lithium-ion batteries. More recently, the development of processing facilities has meant that some processing of the spodumene into lithium compounds is done in Australia.

Producers are vertically integrated from mining and spodumene concentration through to processing into lithium compounds at different facilities, though both up and downstream activities are carried out through joint venture agreements.

**2. Provide us with what modelling you have done in looking at how we would attract the scale and the investment to be able to move more into that downstream value-add and manufacturing.**

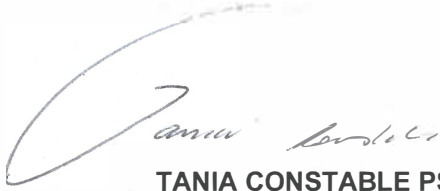
The MCA has not undertaken specific modelling on investment into downstream value-add and manufacturing.

In September, the MCA released a report *Future Critical: Meeting the minerals investment challenge* that provides 14 policy recommendations to government to ensure Australia remains an attractive destination for investment in the minerals industry by improving the productivity and international competitiveness of the mining industry.

Drawing on economic modelling of potential impacts from adverse changes to key policy areas – tax, workplace relations, environmental approvals and emission reductions – the report highlights that policy initiatives, which individually may seem to have a small adverse impact on the minerals industry's productivity, collectively have a significant impact on mining investment. Australia's role in

Australia's role in supplying the minerals and manufactures the world needs in the transition to net zero emissions will depend on how well domestic policies alleviate impediments to investment along the supply chain.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Tania Constable', is positioned above the printed name.

**TANIA CONSTABLE PSM  
CHIEF EXECUTIVE OFFICER**

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