

Securing a Level Playing Field

Navigating interventionist policies in global aluminium

Summary

Australia's aluminium industry faces an inflection point. Global overcapacity, subsidised competition, and rising domestic energy costs are continuing to erode production, investment, and employment. Yet with the optimal policy response, Australia can position itself as a leader in lower carbon, high quality aluminium, securing its role in global supply chains and delivering significant economic and strategic benefits.

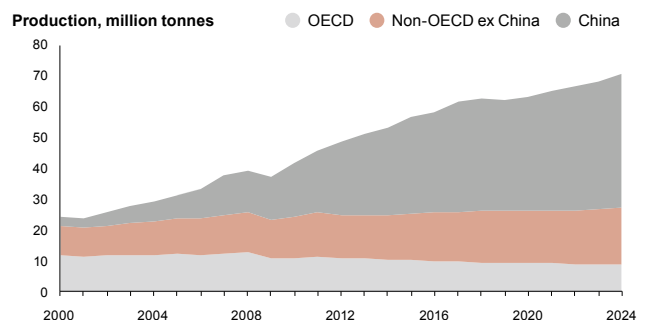
The evidence shows that Australia cannot rely on market forces alone to sustain this sector in the face of state-backed competition. The integrated aluminium value chain should be treated as a priority national industry, deserving of targeted support that reflects both its economic importance and its role in the energy transition.

The world aluminium market has changed

Throughout most of the 20th century, few countries had the energy resources, infrastructure and workforce capability to sustain a significant aluminium industry. In 2000, Australia supplied over 7% of global aluminium production. The rules of the game have been rewritten in the 21st century. Supported by protective trade measures, generous energy subsidies, and government financial backing, new competitors have surged in the global aluminium industry — and thrived.

OECD aluminium production has fallen by 27% since 2000, as smelters across the United States and Europe have closed.¹ In the same period, China's output has increased by 1,400%, making it the dominant global player. The Gulf States, which only began large-scale production 15 years ago, now produce almost 10% of global supply, firmly establishing themselves as low-cost competitors. Indonesia is now joining this race, using its significant mineral reserves and cheap state-backed coal power to rapidly expand alumina refining and move into aluminium smelting.

Chart 1: 12% to 62% - China's path to dominance in world primary aluminium production



Source: International Aluminium Institute website.

The global aluminium market has evolved and Australia is being left behind now producing around 2% of global production. Without decisive action, Australia risks losing not just competitiveness, but the foundation of its value-added industry.

1. OECD, *Measuring Distortions in International Markets: The Aluminium Value Chain*, 2019.

How governments support their aluminium industries

Government support for the aluminium industry takes many forms, reflecting its role as a strategic, energy-intensive sector central to industrial development, trade competitiveness, and the clean energy transition.

Across the major aluminium-producing and trading jurisdictions, policies can be grouped into three broad categories: trade and industry policy, energy subsidies, and finance subsidies. Together, these mechanisms create decisive competitive advantages for producers in those jurisdictions — advantages that Australian operations, facing high input costs and stringent environmental regulation, struggle to match.

Without immediate government action, Australia will continue to follow the decline of the North American aluminium industry.



70%
of aluminium jobs lost in
North America since 2013



24
US based smelters in 2000.
Just 4 today.

Source: The Aluminum Association.

Trade and industry policy

Aluminium markets have always been shaped by government planning — and Australia was no exception. The industry's foundation in the 1960s came only because government policy mandated it. But having since shifted to a less interventionist approach, Australia now finds itself on the back foot. Around the world, export bans, tariffs, anti-dumping measures, tax credits, and local-content rules are being aggressively deployed by nations determined to secure market control. These measures may distort costs, prices, and returns — but they also capture jobs, lock in investment, and, in some cases, serve national security goals.

- **China** embeds aluminium in its national Five-Year Plans as a critical industrial material. Support takes the form of export rebates, industrial zoning, and fast-tracked approvals, ensuring aluminium production continues to expand even under an official domestic capacity cap.²
- **Indonesia** is emerging as the newest competitor in aluminium markets. Already successful in capturing a dominant position in nickel markets via its ban on unprocessed ores, its industry policy is now paying dividends in aluminium value chains.
- The Gulf States (**UAE, Bahrain, Qatar, Saudi Arabia**) position aluminium as central to their long-term diversification strategies. Aluminium smelting is integrated into industrial hubs and free-trade zones, supported by sovereign wealth funds, concessional tax arrangements, and export incentives.
- **Canada** has listed aluminium as a critical mineral, granting preferential permitting, access to decarbonisation funds, and signalling clearly that aluminium is a strategic priority.³
- **United States** policy has shifted decisively. Under the Inflation Reduction Act (IRA), producers can access production tax credits of up to 10% for low-carbon aluminium and the Biden Administration provided a US\$500 million grant to Century Aluminium to build the first new US smelter in 45 years.⁴ The Trump Administration has doubled Section 232 tariffs to 50%.⁵ Emirates Global Aluminium has subsequently announced plans to build a new 600,000 tonne smelter in Oklahoma in May 2025.⁶
- **European Union** policy centres on its Carbon Border Adjustment Mechanism (CBAM), phasing in from 2026. A key pillar of the EU's Action Plan for Steel and Metals released in May 2025, CBAM effectively taxes high-emissions aluminium imports, intended to protect domestic smelters operating under the EU's Emissions Trading Scheme (ETS) and incentivise the global shift to low-carbon aluminium.^{7,8} The Action Plan will also provide €750 million in R&D funding for cleaner industrial technologies with €100 billion to be provided in the future via the Industrial Decarbonisation Bank to support investment in new smelting facilities.

For Australia, the lesson is clear: the aluminium industry is no longer competing against foreign companies but against foreign governments that are writing the rules to their own advantage. Without a policy response, Australia risks losing not just market share — but the aluminium industry itself.

2. OECD, *Measuring Distortions in International Markets: The Aluminium Value Chain*, 2019.

3. Government of Canada, [Canada's critical minerals website](#), viewed 28 July 2025.

4. Century Aluminium, [Press release](#), 25 March 2024.

5. Australian Department of Foreign Affairs and Trade, [website](#), viewed 28 July 2025.

6. EGA website, [Press release](#), dated 16 May 2025.

7. European Commission, Carbon Border Adjustment Mechanism [website](#), viewed 28 July 2025.

8. European Commission, [The Action Plan for Steel and Metals](#), released 19 March 2025.

CASE STUDY

Indonesia's aluminium value chain expansion – An emerging risk to Australia

Indonesia has rapidly positioned itself as a rising force in the global aluminium supply chain, with policies designed to capture value-adding at home while impacting competitors like Australia.⁹

The 2023 re-imposition of its mineral export ban halted around 20 million tonnes of annual bauxite exports, compelling foreign investors to build domestic alumina refining capacity instead. Underpinned by access to cheap energy and accelerated approval timelines, the results have been swift: Indonesia now operates two of the world's newest and lowest-cost alumina refineries, with at least two more under construction and several others in advanced planning. Industry analysis projects that by 2030, Indonesia could add up to at least 10 million tonnes per year of new alumina refining capacity, almost all powered by low-cost coal power.

This growth has been enabled by a uniquely favourable investment environment. PT BAI's Bintan Island refinery, for example, secured environmental, land, and community approvals in just 24 months, with construction taking a further 30 months — a total project timeline of just 4.5 years, compared to much longer in Australia. The Indonesian Government has backed these projects with tax breaks, concessional regulation, and close partnerships with Chinese firms, effectively aligning with Beijing's strategy to extend aluminium capacity offshore as China nears its official production cap.

The risk for Australia is stark: if current trends continue, Indonesia will not stop at alumina. With smelting projects already under construction, Indonesia is set to emerge as an integrated aluminium competitor, drawing in jobs, investment, and global market share at Australia's expense – all supported by electricity prices about 75 per cent lower than Australia.

This is a similar playbook Indonesia used to dominate the nickel market, closing down 80 per cent of Australian nickel mines.

Energy subsidies¹⁰

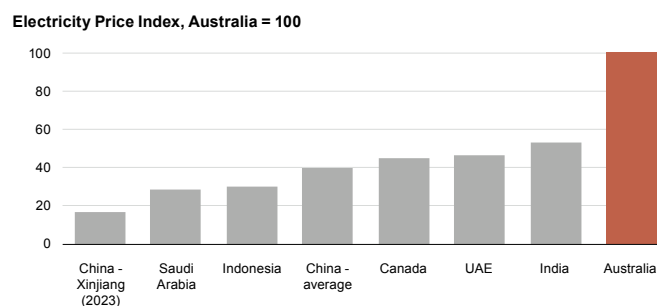
The relationship between competitive energy and aluminium has long been symbiotic, with the aluminium industry historically underpinning the construction of new generation. Aluminium smelting typically consumes 13,500–15,000 kWh per tonne, meaning energy accounts for up to 40% of total costs.¹¹ Even marginal differences in power pricing translate into hundreds of dollars per tonne of production, and billions across national industries. This makes government-backed energy subsidies a powerful source of competitive advantage.

- **China's** aluminium industry is built on state-backed, below-market energy pricing. State-owned energy enterprises continue to supply many aluminium smelters with electricity at subsidised, below-cost rates.¹² Chinese producers are often vertically integrated with on-site coal-fired power plants, supported by provincial tariffs that shield them from global fuel price volatility and ensure a stable, ultra-low-cost energy supply. To further secure access, leading firms such as China Hongqiao have relocated up to one-third of their smelting capacity to hydro-rich Yunnan province, capitalising on power discounts introduced under the provincial government's 13th Five-Year Plan (2016–20).¹³ The result is a structural cost advantage that ensures Chinese smelters maintain production, an advantage driven not by efficiency, but by deliberate government intervention. These dynamics not only distort markets but also undermine global emissions reduction efforts by rewarding production in jurisdictions with weaker environmental standards and energy mixes with high shares of coal-fired power.^{14,15}
- The **Gulf States** have established some of the lowest-cost aluminium industries in the world by leveraging abundant natural gas and state-backed power supply. Smelters in the UAE, Bahrain, Qatar, and Saudi Arabia operate under long-term, subsidised gas contracts, ensuring electricity prices well below international industrial benchmarks.

- **Canada** demonstrates a different model: not direct subsidies, but structural advantage through abundant, low-cost hydroelectricity (albeit government owned). With 96% of Canadian smelter power from hydro, energy costs are about half U.S. levels. In Quebec, further government directed discounts are also applied, keeping producers in the first quartile of the cost curve while also giving them a low-carbon premium in global markets.¹⁶

By contrast, Australia's refineries and smelters face volatile, market-linked energy prices. As Chart 2 shows, Australia's commercial and industrial customers are already at a significant disadvantage to international competitors – and further domestic electricity price increases appear likely. The challenge for Australia is how to restore its competitive energy advantage, and in doing so reestablish its advantage for large industrial customers, such as the aluminium value chain.

Chart 2: Indexed business electricity prices (average 2023-2025)



Sources: Global Petrol Prices website, CEIC Database.

9. CM Group, *Vulnerabilities and Opportunities in Australia's Upstream Aluminium Sectors*, 2024.

10. The degree of visibility over energy subsidies provided varies with jurisdiction and commercial arrangement, only regions for which public data can be referenced are included.

11. OECD, *Measuring Distortions in International Markets: The Aluminium Value Chain*, 2019.

12. Taube, Dr Markus, *China's changing role in the global aluminium industry*, presentation to Aluminium Business Summit, 2021.

13. Ibid.

14. SAFE Centre for Strategic Industrial Materials, *The US Aluminium Industry's Energy Problem and Energy Solution*, 2025.

15. Chen, V., Huleatt, L., and Wong, M., *The Chinese Aluminium Sector: Challenges and Opportunities for Decarbonisation*, Transition Asia, 2025.

16. SAFE Centre for Strategic Industrial Materials, *The US Aluminium Industry's Energy Problem and Energy Solution*, 2025.

Financial subsidies

Financial subsidies reduce the cost of capital for aluminium producers, either through direct grants, below-market loans from state banks, or equity injections by government entities. By lowering financing costs, they allow smelters and refineries to expand capacity or upgrade facilities even when market conditions would not normally justify the investment. This form of support has been particularly powerful in jurisdictions where governments treat aluminium as a strategic industry, tilting the global market in favour of their producers.

According to the OECD, the growth in non-OECD aluminium production has largely come through state-backed entities which owned 55.5% of total global aluminium sector assets in 2018 — the second-highest share of government ownership across all industries studied, after shipbuilding.¹⁷

Yet this high level of state ownership does not translate into stronger financial performance or efficient market outcomes for shareholders. OECD analysis showed aluminium firms with more than 33% government ownership recorded an average return on assets of just 2.61% - nearly half the rate of return of firms with less than 33% government ownership (4.76%).

This highlights that state ownership is not about profitability – which should be a priority in Australia's industry policy, but about sustaining production capacity as a matter of geostrategic positioning.

- China is the clearest example. OECD analysis found that between 2013 and 2017, 85% of the USD 70 billion in global aluminium subsidies went to just five Chinese firms, much of it via below-market debt and equity support from state-owned banks and provincial governments. These mechanisms provide a financial cushion that allows Chinese smelters to continue operating even in periods of low aluminium prices, ensuring capacity remains online and often expands despite weak margins.^{18,19}
- The Gulf States similarly rely on sovereign wealth funds and state-backed financing to underwrite large-scale aluminium projects. Companies such as Emirates Global Aluminium and Aluminium Bahrain have benefited from concessional loans, government guarantees, and equity infusions from state-owned entities.²⁰ This state financing ensures long-term cost stability and de-risks multi-billion-dollar smelter expansions that would be difficult to justify under purely commercial terms.

By contrast, in Australia, the United States, European Union, and Canada, financial subsidies have been deployed mainly to incentivise decarbonisation — through tax credits, concessional loans, and R&D funding for low-carbon technologies such as inert anode smelting. While these programs may help to meet climate objectives, they have done little to restore competitiveness against producers in China, the Gulf States, and India, who continue to expand capacity on the back of direct government financial intervention.

The net effect is that financial subsidies reinforce the uneven playing field: in non-OECD jurisdictions they sustain and expand production capacity, while in OECD countries they are largely climate-targeted and commercially neutral, leaving domestic industries exposed to subsidised global competitors.

Policy implications for Australia

Australia's aluminium value-chain is at a crossroads. Despite its natural endowment of bauxite, strong alumina refining base, and proximity to Asian markets, the industry has been steadily losing ground over the past 15 years. Global competitors — particularly China, Indonesia, and the Gulf States — are expanding capacity with state backing, subsidised energy, and strategic industrial policies. Australia, by contrast, has relied on commercial cost structures and market driven investment, leaving its producers exposed on an uneven playing field.

To ensure the viability of the sector and to seize opportunities in the energy transition, Australia requires a more assertive industrial strategy. The strategic environment has changed since the establishment of the national aluminium industry, so government policy too must adapt.

In addition to broader policy reform needed, including environmental approval processes and critical mineral listing, Australia's industry policy must be updated. Other nations have already provided a blueprint for the reforms needed to level the playing field for the Australian aluminium industry, maintaining thousands of high paid jobs in the process.

1. Address energy cost disadvantage
2. Promote investment and capacity renewal
3. Accelerate decarbonisation and innovation
4. Strengthen trade alignment and enforcement

Without strong national leadership, Australia's aluminium value chain is anticipated to follow that of other OECD nations, further entrenching non OECD supply chains and increasing economic and geostrategic risks.

17. OECD, *How Government's Back the Largest Manufacturing Firms*, 2021.

18. Ibid..

19. OECD, *Measuring Distortions in International Markets: The Aluminium Value Chain*, 2019.

20. Ibid..