



WILSONS
ADVISORY

Aluminium: Bright Prospects for a Critical Metal

Our weekly view on Australian equities.

29 October 2025

Robust Fundamentals Complemented by Policy Tailwinds

Last week's critical minerals deals between the US and Australia, as well as four Southeast Asian nations, have highlighted the West's push to strengthen supply chain resilience by increasing domestic production and reducing reliance on China for elements essential to defence, economic development, and the energy transition.

In addition to US\$8.5bn of financing support for mining and processing projects announced in the US–Australia deal (including US\$2bn over the next six months), the partnership will include coordinated infrastructure development, accelerated regulatory approvals, pricing mechanisms (e.g. price floors) and guaranteed purchase agreements.

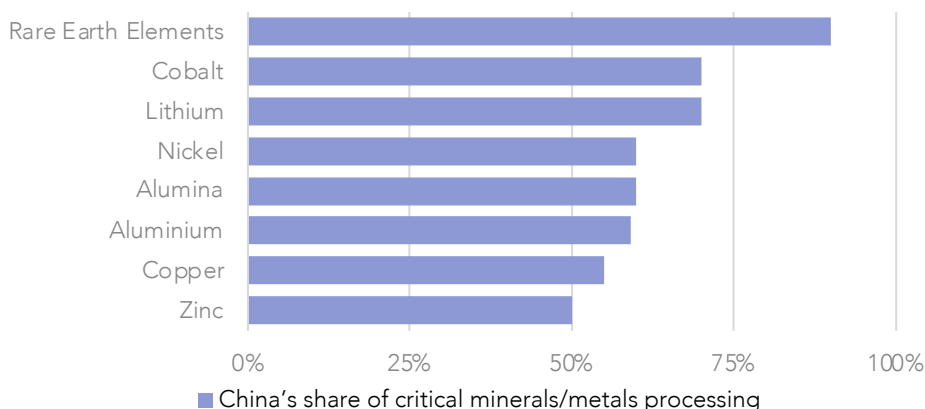
Early funding targets include Arafura Rare Earths' (ARU) Nolans Rare Earths Project in the NT and an Alcoa-led (AAI) gallium plant in WA, to be co-located with the company's Wagerup Alumina Refinery. Gallium is closely related to aluminium and is often produced as a by-product of alumina refining, directly linking the project to Australia's aluminium sector and existing infrastructure.

While support for rare earths has been the focal point of the deal, recent policy efforts have encompassed a much broader suite of critical metals with China-dominated supply chains – including aluminium. Like rare earths, aluminium is strategically important for both defence and the energy transition. Both alumina and aluminium production are dominated by China, which underscores the desire of the West to 'reshore' the aluminium value chain.

Both the US and Australian governments have provided material financing to the aluminium value chain over the past year, with a focus on 'green aluminium'. This includes a US\$500m grant from the US Department of Energy for the construction of the first new US primary aluminium smelter in ~45 years, and the Australian Government's A\$2bn Green Aluminium Production Credit, which will support domestic smelters transitioning to reliable, renewable electricity before 2036.

Moreover, despite speculation that US President Trump could 'water down' some aspects of the Inflation Reduction Act, he remains committed to strengthening domestic aluminium production given its strategic importance – a goal that is at the forefront of ongoing trade negotiations, with the US currently imposing 50% tariffs on aluminium imports.

Figure 1: China's dominance of global critical metals supply chains has prompted Western governments to incentivise the reshoring of production



Source: International Aluminium Institute (IAI), International Copper Study Group (ICSG), International Nickel Study Group (INSG), Benchmark Mineral Intelligence, International Energy Agency (IEA), U.S. Geological Survey (USGS), S&P Global, U.S. Energy Information Administration (EIA), International Lead and Zinc Study Group (ILZSG), Wilsons Advisory.

Collectively, growing recognition of aluminium as a strategically important critical metal – alongside expanding policy support – comes at a time when the commodity's fundamentals are becoming increasingly attractive. Robust demand and constrained supply are expected to drive widening deficits and higher aluminium prices over the medium and long-term.

In the remainder of this report, we explore our constructive outlook for aluminium and provide the rationale for switching our preferred sector exposure within the Focus Portfolio from South32 (S32) to Alcoa (AAI).

Aluminium Shortages Loom

The fundamental outlook of the global aluminium market, from a supply/ demand perspective, is as healthy as it has been in years. While aluminium has been in a structural oversupply for much of the last two decades – driven by China’s massive capacity expansion – we are approaching an inflexion point where new supply is unlikely to keep pace with steadily growing demand.

Demand underpinned by the energy transition and rising defence spend

A healthy medium- to long-term demand outlook for aluminium is supported by several key drivers:

- **Traditional industrial uses** – steady demand from traditional applications in construction, packaging, machinery, electronics, automotive, etc.
- **The energy transition** – decarbonisation will be a key source of incremental demand over the coming years and decades, driven by structural growth in the global electric vehicle fleet (and vehicle lightweighting), rapid renewables deployment, and electricity grid modernisation.
- **Rearmament and defence spending** – increased NATO defence budgets should provide a tailwind to demand given aluminium’s widespread use in weapons systems, military vehicles, and aircraft.
- **Generative AI** – the AI-driven surge in data centre capacity will require aluminium for cooling systems, server racks & structures, cabling, and energy-efficient building construction.
- **Material replacement** – continued substitution of plastics in packaging and copper with aluminium in automotives and other industrial uses will further support demand growth.

- **Green premium** – growing demand for low-carbon ‘green aluminium’, driven by ESG initiatives, regulatory requirements, and investor expectations, is supporting a price premium for sustainably produced metal.

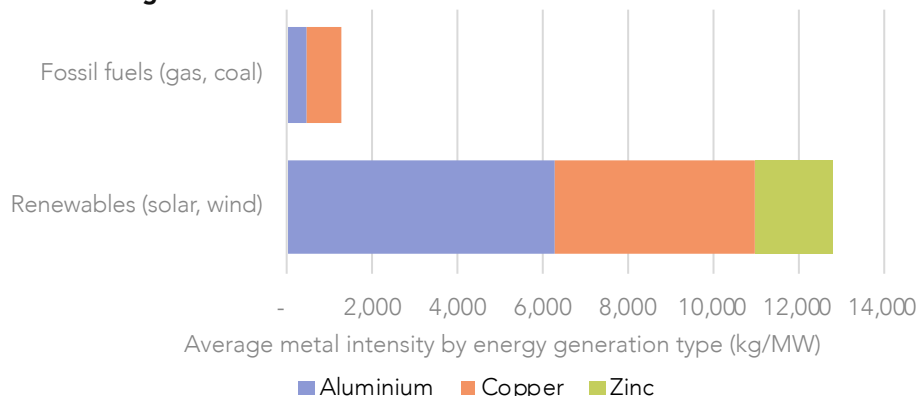
New supply growth will be constrained by China’s capacity cap and high energy costs

On the supply side of the equation, over the coming years capacity expansion will be constrained by two key factors:

- **China’s smelting capacity cap** – Having supplied nearly all of the world’s new aluminium capacity over the past two decades, China is now nearing its self-imposed 45 Mt capacity limit, introduced in 2017 to curb overcapacity and emissions. There is no indication that Beijing intends to relax this limit, and in our view, the broader policy agenda of ‘anti-involution’ further reduces the likelihood. Future supply growth will therefore need to come from ex-China markets (e.g. Indonesia), which appear ill-equipped to meet rising demand. Moreover, given Chinese smelters sit at the very low end of the global cost curve – driven by China’s cheap, abundant hydropower – new ex-China capacity is expected to push the global cost curve, and ultimately aluminium prices, higher over time.

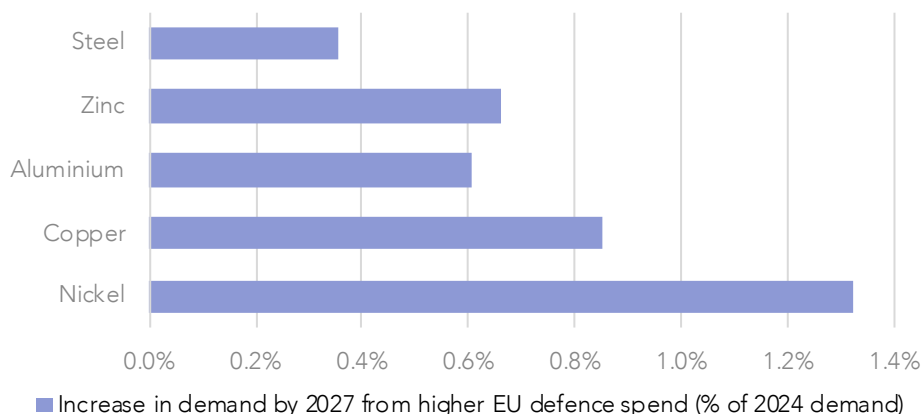
- **Energy costs and availability** – High energy prices and limited access to affordable power are emerging as major constraints on both existing and new supply. Smelting is extremely energy-intensive, with electricity accounting for roughly 40% of total production costs, and new projects typically requiring long-term (10+ year) power contracts at ~US\$40/MWh to be economical. However, smelters are increasingly competing for power with other energy-hungry sectors – most notably Big Tech – which is willing to pay over US\$100/MWh to secure capacity to power AI data centres. This pressure is already evident: Norsk Hydro recently wrote down Australia’s largest aluminium smelter, Tomago, to zero due to difficulties securing affordable renewable power. Tomago is also part owned by Rio Tinto and CSR.

Figure 2: The energy transition will drive structurally higher aluminium demand over the long term



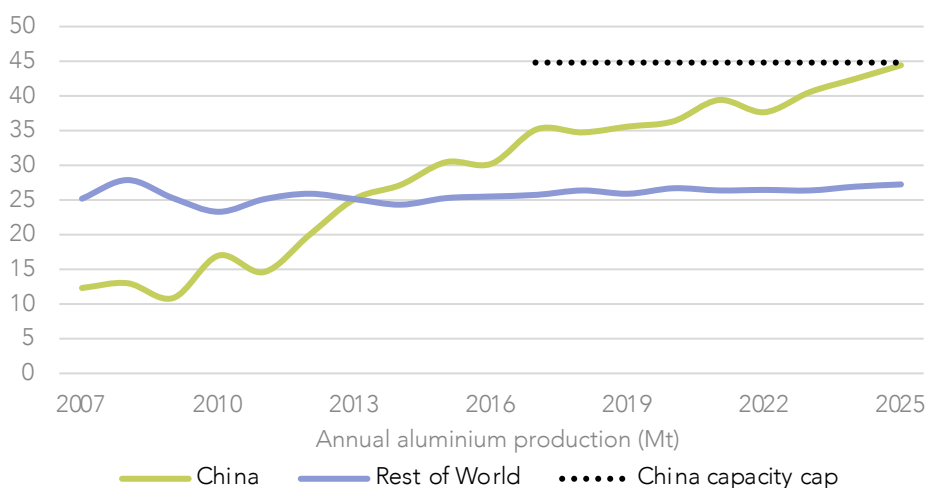
Source: Fitch Ratings, CRU, Wilscons Advisory.

Figure 3: Increased defence spending will provide a medium-term tailwind to metals demand



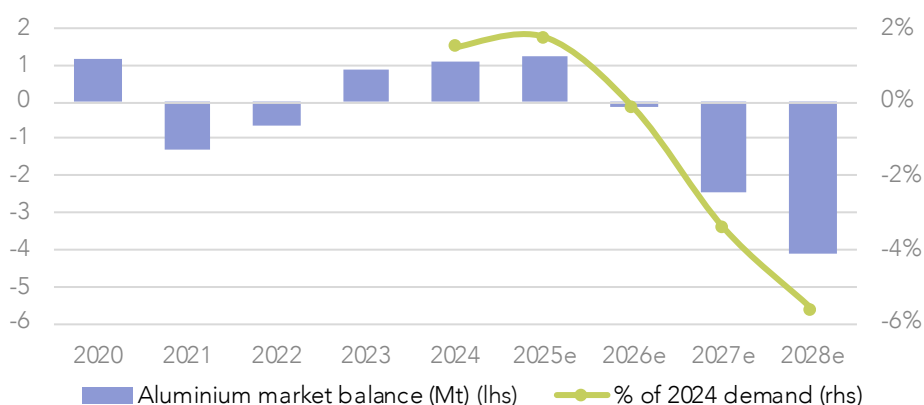
Source: Institute of Defense Analyses, World Bank, Wood Mackenzie, Wilscons Advisory.

Figure 4: With China nearing its 45 Mtpa production cap, future supply additions will need to come from higher-cost 'Rest of World' markets



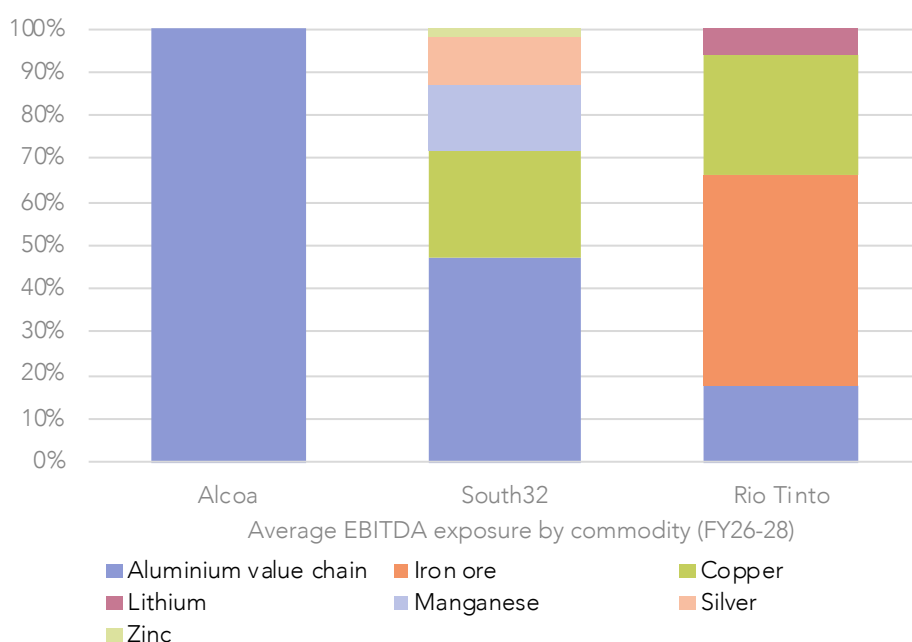
Source: IAI, Wood Mackenzie, Wilsons Advisory.

Figure 5: The global aluminium market is expected to enter a supply deficit over the medium-term



Source: Wood Mackenzie, Wilsons Advisory.

Figure 6: Alcoa is the only pureplay aluminium exposure on the ASX...



Source: Visible Alpha, Wilsons Advisory.

Meanwhile, South32 has heavily impaired its Mozal smelter in Mozambique, amidst uncertainty over power supply beyond mid-2026. Tightening power availability therefore looks set to constrain supply and further elevate the global cost curve over time.

Healthy demand + constrained supply = looming deficits

The combination of robust demand growth and structurally constrained supply supports expectations of widening aluminium deficits over the medium to long-term. Together with a rising global cost curve, this underpins our constructive view towards the commodity and its price outlook.

Switching from South32 to Alcoa

Given our constructive view towards aluminium, the commodity remains one of the Focus Portfolio's key overweight exposures. However, we are taking this opportunity to adjust our sector positioning by removing South32 (S32) (-3%) and adding Alcoa (AAI) at a portfolio weight of 3%.

Alcoa is a leading, vertically integrated aluminium producer with upstream exposure, operating from bauxite mining to alumina refining and finally primary aluminium production. The company is a relatively recent addition to the ASX 200, with trading of its Chess Depository Interests (CDIs) – which represent Alcoa's U.S. common stock on a 1:1 basis – commencing in July 2024, following its acquisition of the previously ASX-listed Alumina.

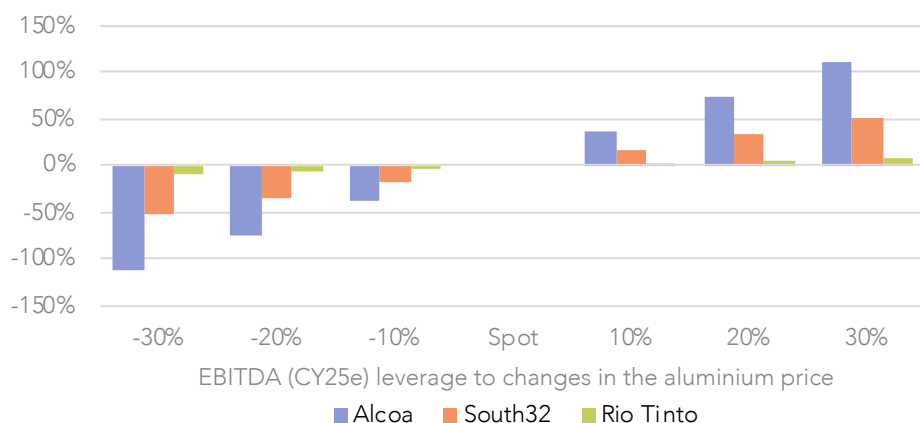
The rationale for this switch is based on three key considerations:

- 1. Pureplay exposure** – Alcoa provides the purest exposure to the favourable fundamentals of the aluminium market, given its sole focus on the aluminium value chain. This contrasts with other ASX-listed aluminium producers, South32 and Rio Tinto, whose earnings are diversified across a broader range of commodities (including some with weaker fundamentals). Alcoa is also expected to modestly grow its aluminium and alumina volumes over the medium-term.

In contrast, South32 and Rio Tinto's aluminium volumes are projected to remain broadly flat or decline, potentially exacerbated by smelter closures (i.e. Tomago, Mozal). Consequently, Alcoa provides the highest EBITDA leverage to aluminium price movements, positioning it to benefit from rising prices over time (our base case).

2. High quality asset portfolio – Alcoa's portfolio is supported by secure long-term power agreements concentrated in stable Tier 1 jurisdictions, with ~90% of production in Canada, the US, Australia, Norway and Iceland. In contrast, South32's aluminium assets are in Tier 2 and Tier 3 markets, namely Brazil, South Africa and Mozambique, which face greater risks regarding power access, regulatory and political stability, social unrest, and infrastructure reliability. In addition, Alcoa is a leader in 'green aluminium', with ~85% of its smelting portfolio powered by renewable energy. Lastly, thanks to its scale, vertical integration, low-cost (first quartile) bauxite and alumina assets, cheap and reliable power access, and recent restructuring (closure of higher-cost smelters), Alcoa sits in the lower half the aluminium cost curve, supporting through-the-cycle profitability.

Figure 7: ...which underpins superior EBITDA leverage to the aluminium price

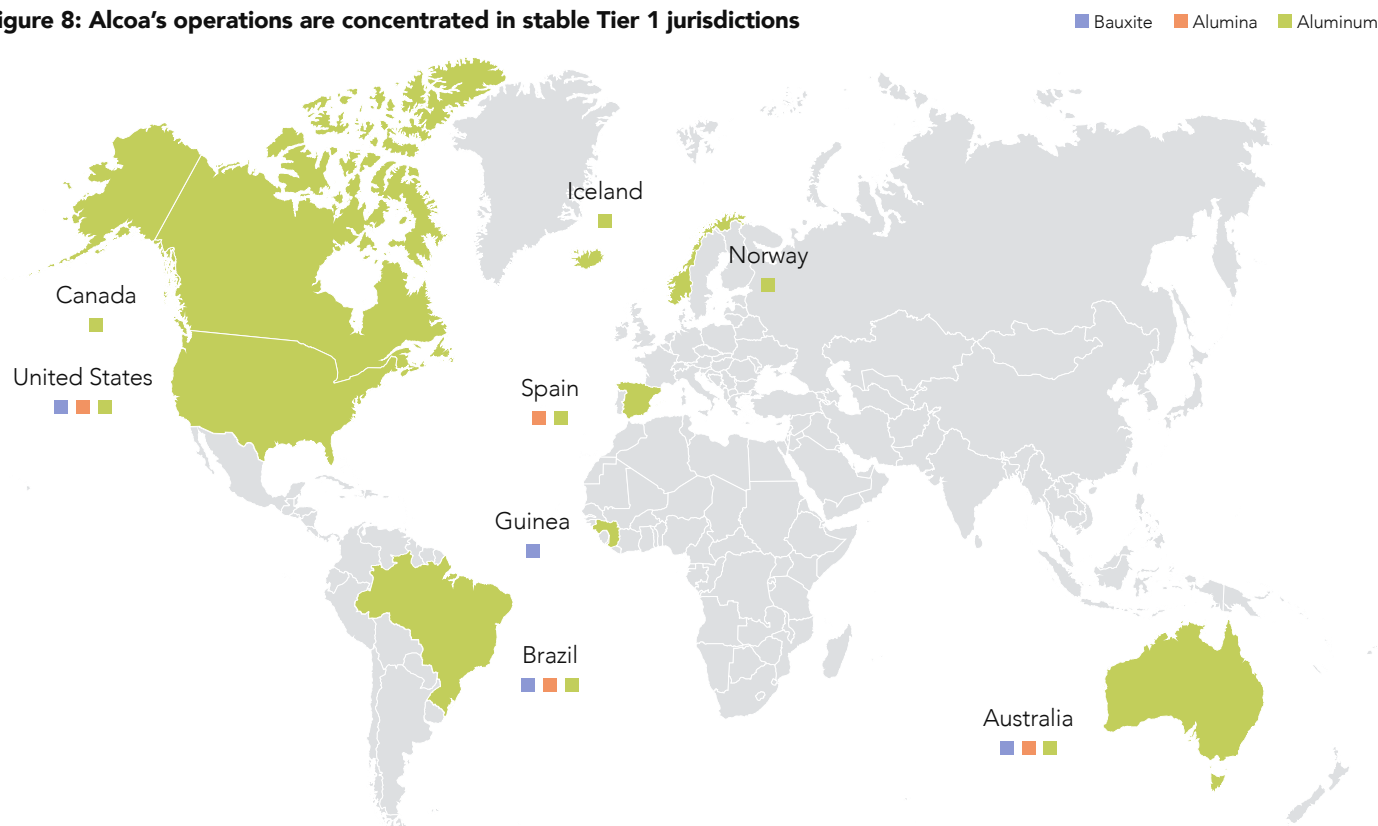


Source: Refinitiv, Visible Alpha, Wilsons Advisory.

3. Strong operational track record – Alcoa's recent operational performance has generally outperformed South32's, which has faced multiple large asset impairments in recent years - including at Mozal Aluminium and Worsley Alumina, among several others. Notably, the anticipated mid-2026 closure of Mozal Aluminium appears not fully reflected in consensus forecasts or market pricing. Moreover, we are cognisant of operational risks facing South32's Hillside Smelter in South Africa.

This asset faces uncertainty around the reliability of power supply due to its contractual terms that allow the utility to interrupt supply when required to support grid stability (in a country facing significant energy supply issues). In contrast, Alcoa has demonstrated strong execution – consistently meeting its production/cost guidance, achieving record production at five smelters in Q3, completing the highly astute Alumina acquisition last year, and operating with minimal asset-level disruptions from power outages, technical malfunctions, political/regulatory instability, civil unrest, or natural disasters.

Figure 8: Alcoa's operations are concentrated in stable Tier 1 jurisdictions



Source: Alcoa, Wilsons Advisory.

US import tariffs – net positive for Alcoa

In June 2025, the US imposed 50% Section 232 tariffs on imports of foreign produced aluminium. These tariffs have resulted in a surge in the Midwest Premium (MWP), which is regional price for US aluminium (both imported and domestic) that reflects additional costs (shipping, storage, tariffs) as well as local supply-demand dynamics. For Alcoa, the impact of these tariffs is nuanced given its global footprint, with aluminium production both within and outside the US.

For Alcoa's US-produced aluminium, the higher MWP translates into higher realised prices without the business incurring additional costs from tariffs, which together results in a meaningful margin benefit. For its aluminium imported into the US (primarily from Canada), the business has incurred some tariff costs headwinds to date, however, the impact is now broadly neutral given the recent rise in the MWP is now sufficient to cover the full cost of logistics for importing aluminium into the US - including the 50% tariff, according to Alcoa's management.

Therefore, while ongoing US trade talks are highly dynamic, Alcoa is currently an overall net beneficiary of the existing US aluminium tariffs – with its domestic US production benefiting from margin expansion while the additional tariff costs facing its imported aluminium are covered by the MWP.

Figure 9: Alcoa's share price is positively leveraged to a higher aluminium price (our base case)



Figure 10: ASX 200 aluminium producer comparison table

Company name	Ticker	Production volume (CY25) (Ktons)		3 year production CAGR (FY25-28)		Free cash flow yield		Aluminium beta	90 day EPS revisions (NTM)	Net debt / EBITDA (NTM)
		Aluminium	Alumina	Aluminium	Alumina	CY26	CY27			
Alcoa	AAI	2,318	9,594	1.2%	2.1%	4.7%	8.4%	1.9	16%	0.4x
South32	S32	1,154	5,099	-5.9%	1.3%	4.6%	7.2%	0.9	-15%	-0.1x
Rio Tinto	RIO	3,357	7,553	0.3%	0.5%	5.2%	6.3%	0.4	11%	0.6x

Source: Visible Alpha, Wilsons Advisory.

Disclaimer and Disclosures

Research disclosures at www.wilsonsadvisory.com.au/disclosures.

Disclaimer

All figures and data presented in this research are accurate at the date of the report, unless otherwise stated.

Wilsons Advisory Australian Equity Focus Portfolio (Focus Portfolio) is a portfolio of the Investment Strategy Group's (ISG) preferred companies. The Focus Portfolio aims to hold around 25-30 companies, largely taken from the S&P/ASX 300. Stocks may be substituted at any time at the discretion of the ISG. Performance numbers around the Focus Portfolio are unaudited, and should be used only as a guide to indicate returns if investors were to follow the Focus Portfolio. For further information please contact your Wilsons Advisory Advisor.

This document has been prepared by Wilsons Advisory and Stockbroking Limited (AFSL 238375, ABN 68 010 529 665) ("Wilsons Advisory") and its authors without consultation with any third parties, nor is Wilsons Advisory authorised to provide any information or make any representation or warranty on behalf of such parties. Any opinions contained in this document are subject to change and do not necessarily reflect the views of Wilsons Advisory. This document has been prepared by Wilsons Advisory's Investment Strategy Group. Wilsons Advisory makes no representation or warranty, express or implied, as to the accuracy or completeness of the information and opinions contained therein, and no reliance should be placed on this document in making any investment decision. Any projections contained in this communication are estimates only. Such projections are subject to market influences and contingent upon matters outside the control of Wilsons Advisory and therefore may not be realised in the future. Past performance is not an indication of future performance. All investing carries risk.

In preparing the information in this document Wilsons Advisory did not take into consideration the investment objectives, financial situation or particular needs of any particular investor. Any advice contained in this document is general advice only. Before making any investment decision, you should consider your own investment needs and objectives and should seek financial advice. You should consider the Product Disclosure Statement or prospectus in deciding whether to acquire a product. The Product Disclosure Statement or Prospectus is available through your financial adviser.

This communication is not to be disclosed in whole or part or used by any other party without Wilsons Advisory's prior written consent. All material presented in this document, unless specifically indicated otherwise, is under copyright to Wilsons Advisory. None of the material, its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of Wilsons Advisory. This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Wilsons Advisory to any registration or licensing requirement within such jurisdiction.

Wilsons Corporate Finance Limited ACN 057 547 323, AFSL 238 383 may have participated in some capacity with regard to capital raisings for some of the companies mentioned in this article. To manage any conflicts of interest with Wilsons Advisory Research, full disclosure on any relevant corporate transaction may be found on our website.

Wilsons Corporate Finance Limited ACN 057 547 323, AFSL 238 383 acted as:

- HealthCo Healthcare and Wellness REIT HCW.ASX - Co-Manager in the March 2023 capital raising of an Institutional placement and an accelerated pro rata non-renounceable entitlement offer; Co-Lead Manager in the September 2021 Initial Public Offering of HealthCo Healthcare and Wellness REIT securities
- Telix Pharmaceuticals Limited TLX.ASX - Joint Lead Manager to the Telix Pharmaceuticals Limited January 2022 Institutional Placement and SPP

for which it received fees or will receive fees for acting in this capacity. Wilsons Advisory and Stockbroking Limited may have a conflict of interest which investors should consider before making an investment decision. Wilsons Advisory and Stockbroking Limited, Wilsons Corporate Finance Limited and its related bodies corporate trades or may trade as principal in the securities that are subject of the research report.

Wilsons Advisory contact

greg.burke@wilsonsadvisory.com.au | +61 2 8247 3118

david.cassidy@wilsonsadvisory.com.au | +61 2 8247 3149

sam.waldron@wilsonsadvisory.com.au | +61 2 8247 3101

www.wilsonsadvisory.com.au