EVOLUTION CAPITAL

AUZ | INITIATION REPORT | RESOURCES
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Leverage to a Western Scandium Unlock

Australian Mines Ltd

We initiate coverage on Australian Mines Ltd (ASX:AUZ) with a **Speculative Buy** and a **12-month target price of A$0.071/sh, implying a total shareholder return of ~196%**.

Flemington is the closest geological and engineering analogue to Sunrise Energy Metals' construction-stage Syerston scandium project — same intrusion, comparable grade, scale and study economics — and offers direct leverage to the Western scandium unlock now underway.

Investment Thesis

Relative-Value Dislocation: A near-twin of SRL's Syerston at ~0.03x EV/NPV versus SRL at ~1.5x (and stalled-junior SCY at ~0.2x) — a gap explained by study stage, reserves and funding, not geology.

Upside torque at strategic prices: The NAV is highly leveraged to the scandia price. At US$3,000/kg, equity NAV rises to A$0.392/sh and the 12-month target to A$0.137 — an implied return of ~+471% (Table 12).

Supply-Gated Demand: Bloom SOFCs and Al-Sc alloys are throttled by the absence of Western primary supply; China's April-2025 licensing of all scandium exports (item 1C907) is the catalyst for a supply-security bid.

Patent-Locked Scandium Intensity: Bloom's granted claims pin the electrolyte at exactly 10 mol% scandia in an electrolyte-supported cell; at 40–80 t Sc_2O_3/GW, any GW-scale ramp collides with a world that produced ~80 t in 2025.

The China Problem Is Real: Hunterbrook traced four China-linked routes into Bloom's supply chain; essentially all Wall Street models imply a scandium shortage by 2028, and the DoD will not engage while supply runs through China.

The Ex-China Premium Is Printing: DLA solicitation at up to US$6,250/kg; the Lockheed Martin–SRL offtake option; a ~US$3,000/kg Western incentive-price cluster — versus a share price implying just ~US$1,050/kg.

Near-Twin of Syerston: Same intrusive complex, 60 tpa scale, US$125m capex and C1 of US$561/kg (SRL US$534/kg); SRK scoping NPV$_8$ US$270m / 32% IRR at the US$1,500/kg mine-design price.

Funded PFS Underway: A$3.0m Tribeca-led placement struck at a 16% premium to 30-day VWAP; ~A$5.5m pro forma cash; Flemington formally fast-tracked to PFS in May 2026.

Embedded M&A Optionality: Contiguous with Syerston on the same intrusion; AUZ's own scoping note flags a possible "sale, partial sale or joint venture"; Owendale → Rio Tinto is the precedent.

Datable Catalyst Path: SRL Syerston FID, Flemington drilling assays through 2026, the metallurgical program that resolves the 90.8% vs ~84–88% recovery question, and the 2027 PFS.

Evolution Capital's Internal AUZ SOTP Valuation

Sum-of-the-Parts Valuation	Value (A$M)	NAV/sh (A$/sh)
Flemington NPV (post-tax, unrisked)	503	0.204
+ Boa Vista Gold (risked)	4.2	0.002
+ Pro forma net cash	5.5	0.002
- Corporate adjustments	(12.7)	(0.005)
Equity NAV (ungeared)	**501**	**0.203**
12-month price target @ 0.35× P/NAV	**A$0.071/sh (+196% TSR)**	

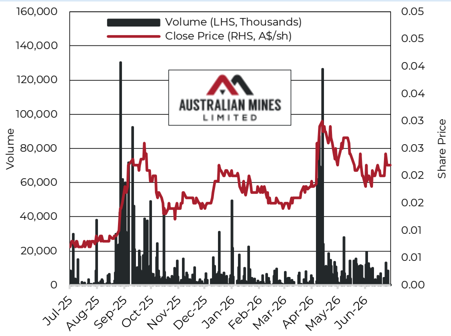
Speculative Buy, A$0.071 PT (+196%): sum-of-the-parts NAV off the live valuation model at US$2,000/kg, risked once through a 0.35× scoping-stage P/NAV multiple; deliberately wide outcome band given the pre-FID funding need and recovery risk.

Recommendation	**SPEC BUY**
Price Target	**A$0.071**
Share Price	**A$0.024**
TSR	**+196%**

Company Profile

Market Cap	~A$51.8M
Cash (Est.)	~A$5.5M
Enterprise Value	~A$46.3M
52-Week Range	A$0.006-0.034

Price Performance



Company Overview

Australian Mines Ltd (ASX:AUZ) is a critical-minerals company focused on developing the 100%-owned Flemington Scandium Project in the Fifield district of central NSW, contiguous with Sunrise Energy Metals' construction-stage Syerston project.

An SRK scoping study (April 2026) outlines a 60 tpa Sc_2O_3 operation over 28 years for US$125m capex; a PFS is underway. AUZ is also earning up to 80% of the Boa Vista gold project in Brazil's Tapajós province.

Analysts

Patrick Mankarious	pm@eveq.com
Aleem Khan	ak@eveq.com

Major Shareholders

Flynn Huang	4.92%
Yonglu Yu	4.77%
GoldMining Inc.	3.91%
Whale Watch Holdings Ltd.	2.09%
Andrew Nesbitt	1.78%

Upcoming Catalysts

SRL Syerston FID	2026
Flemington drilling assays	2026
Metallurgical program	2026-27
PFS delivery	2027
Boa Vista maiden MRE	2026-27

Table of Contents

Executive Summary

Australian Mines Limited (ASX: AUZ) is a small ASX-listed critical-minerals company. Its key asset is the 100%-owned Flemington Scandium Project in central NSW. Scandium is a rare metal essential to next-generation fuel cells, and Flemington sits directly beside — on the very same geological system as — Sunrise Energy Metals' (ASX: SRL) Syerston project, which is already at construction stage. An independent study (SRK, April 2026) mapped out a mine at Flemington producing 60 tonnes of scandium oxide a year for 28 years, costing about US$125m to build. The next milestone is a more detailed pre-feasibility study. AUZ also owns the Boa Vista gold project in Brazil.

We initiate with a Speculative Buy and a 12-month price target of A$0.071 ~3x current share price. At today's price, the market is effectively assuming a scandium price of only ~US$1,050/kg — below every recent Western benchmark deal, and only just above the price at which the project breaks even. Over the next 6–18 months, a string of events could close that gap: a final go-ahead at Syerston, new drilling results at Flemington, metallurgical test work, the 2027 pre-feasibility study, and any partnership or takeover interest.

- **Demand is taking off:** Bloom Energy, the US fuel-cell maker, is the world's dominant scandium buyer — and every unit it ships needs the metal. Its installed fleet has grown from ~300 MW at its 2018 listing to ~1.8 GW by end-2025, its factories are scaling to 2 GW per year by end-2026, its order book is marketed at ~US$20bn, and it is guiding to US$3.4–3.8bn of revenue this year after first-quarter sales grew 130%.

- **There is no substitute:** Bloom's granted patents lock its fuel-cell recipe at exactly 10% scandium oxide. Any replacement material would have to conduct electricity as well (the scandium version performs ~3–4× better than the standard alternative), survive 4,000 hours of operation without degrading, and expand with heat at the same rate as the metal parts around it. No commercially proven material ticks all three boxes.

- **Supply is scarce — and China controls it:** Bloom alone may need roughly 220 tonnes of scandium oxide a year to meet Wall Street's growth expectations, against forecast global supply of only ~240 tonnes — and ~310 tonnes of total demand. That points to a genuine shortfall by 2028. China refines ~85% of world supply and, since April 2025, requires a government licence for every scandium export. Western buyers are already paying up for secure supply: the US defence stockpile agency has offered up to US$6,250/kg, and Lockheed Martin has signed a supply option with Sunrise.

- **Why AUZ specifically:** Flemington is the closest lookalike to Syerston anywhere in the world — same geology, same planned output (60 tonnes a year), nearly identical build cost (US$125m vs US$120m) and running costs. Yet the market currently values AUZ's project at around 3 cents for every dollar of its independently assessed worth, while Sunrise trades at about 1.5 times. That gap exists for fixable reasons — AUZ is at an earlier study stage, hasn't yet booked formal reserves, and needs funding — and each fix has a date on the calendar. Being next door to Syerston also makes AUZ a natural takeover target.

- **Valuation:** We value the project's future cash flows (after tax, using a 10% discount rate) at our base-case scandium price of US$2,000/kg, then add a risk-adjusted value for the Brazilian gold project plus cash on hand. This yields an equity NAV of A$0.203/sh at our US$2,000/kg base-case scandia price; development risk is applied once, through a scoping-stage 0.35× P/NAV multiple, for a 12-month target of A$0.071.

Why Now: The Catalyst Stack

Cheap is not a catalyst — dated events are: Three clocks make this initiation timely.

1. China: every form of scandium has required an export licence since April 2025, and the suspended "0.1% rule" — reaching any product worldwide containing Chinese-origin rare earths — snaps back on 10 November 2026 unless extended.

2. Bloom: manufacturing capacity reaches 2 GW per year by end-2026 against FY2026 revenue guidance of US$3.4–3.8bn — a ramp the scandium market, at ~80 t of 2025 output, cannot currently feed.

3. The neighbour: Sunrise's Syerston — the construction-stage twin 15 km away — faces FID in 2026 with a Lockheed Martin offtake option and a US EXIM letter of interest already in place: the financing template, and the primary read-through, for Flemington.

Catalyst	Timing	Why it matters
SRL Syerston FID	2026	De-risks district and the financing template; the primary AUZ read-through
Flemington drilling assays	2026	Resource growth and continuity ahead of the PFS
Metallurgical work program	2026–27	Resolves the 90.8% vs ~84–88% recovery question — the key technical risk
PFS delivery	2027	Largest single discount-closer; supports reserve conversion
Boa Vista drilling / maiden JORC MRE	2026–27	Drilling at four drill-ready targets (Baixão rock chips to 31 g/t Au); converts the 336 koz historical foreign estimate and re-rates the risked gold value
Strategic / JV process	Open	Embedded M&A optionality; could sidestep corporate equity dilution
China export-control cliff	~Nov 2026	Suspension expiry; re-escalation would spike the supply-security bid

Table 1 – Catalysts and timeline

The Demand Engine: Bloom Energy and the SOFC Inflection

Energy context and Bloom's rise

The binding constraint on AI-era data-centre build-out has shifted from chips to electrons. New grid connections now take years to secure, and hyperscalers pay a premium for time-to-power; behind-the-meter generation has re-rated accordingly.

Bloom Energy has been the equity market's purest expression of that scarcity: the stock rose roughly 1,700–2,000% in two years, and at its June-2026 peak (~US$100bn market value) traded alongside the data-centre power majors — GE Vernova, Vertiv, Constellation — rather than its old fuel-cell peer group (Plug ~US$3.7bn, FuelCell ~US$1.4bn, Ballard ~US$0.8bn). Of the listed fuel-cell names, only Bloom's solid-oxide architecture consumes scandium.

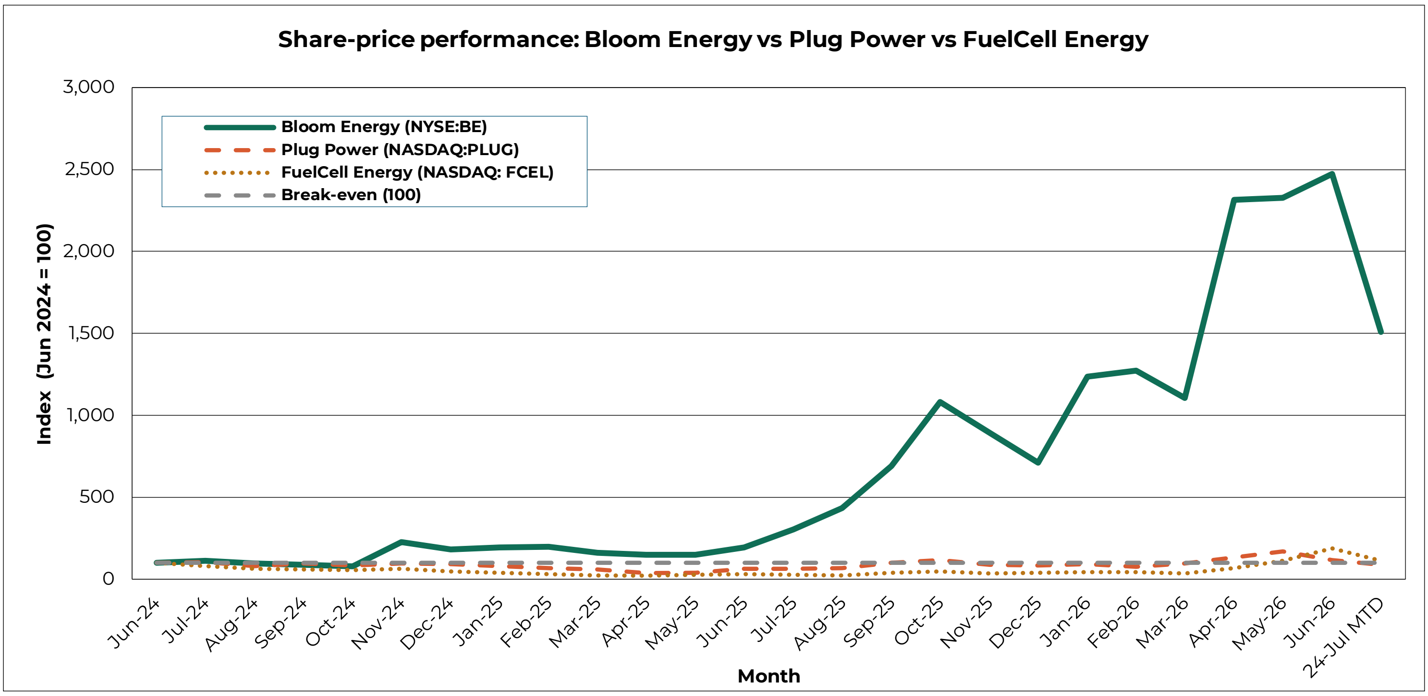


Figure 1 – Bloom Energy has re-rated ~1,500% since June 2024 while the other listed fuel-cell names de-rated — of the three, only Bloom's solid-oxide architecture consumes scandium.

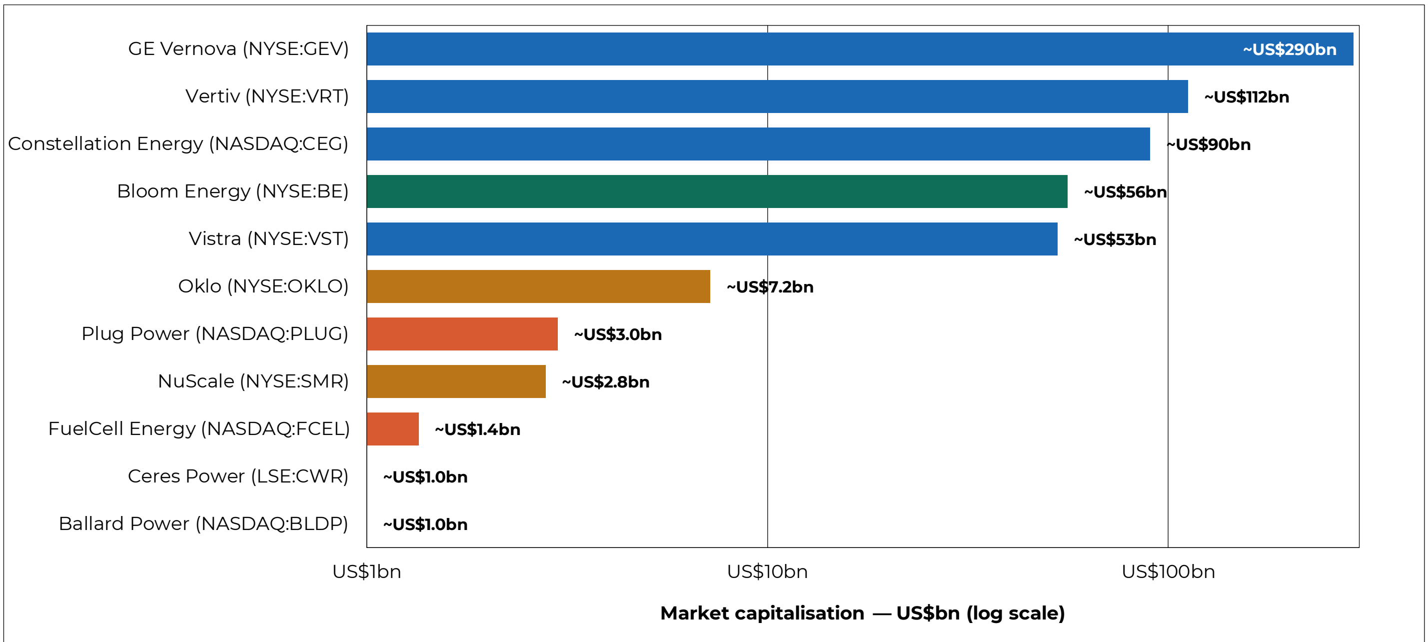


Figure 2 – Bloom now trades in the data-centre power tier rather than with its former fuel-cell peer group.

The operating numbers behind the re-rate: FY2025 revenue of US$2.02bn (+37%); Q1-2026 revenue of US$751m (+130% year-on-year); FY2026 guidance of US$3.4–3.8bn, implying roughly 1.7–1.9 GW of shipments; and manufacturing capacity scaling to 2 GW per year by end-2026. The installed base reached ~1.4 GW cumulative by end-2024, with a further ~0.7–0.8 GW deployed in 2025 alone (new units plus field replacements). The announced pipeline is headlined by Oracle (an award of up to 2.8 GW, of which 1.2 GW contracted), AEP (up to 1 GW plus a US$2.65bn Cheyenne order), Brookfield (a US$5bn partnership expanded to US$25bn in June 2026), Equinix (~75 MW operating across 19 data centres) and a marketed backlog of ~US$20bn. Bloom holds ~75% of the global SOFC market.

We note the counter-evidence Hunterbrook assembles: audited remaining performance obligations of just US$493m against the US$20bn marketed backlog, heavy related-party revenue through the Brookfield JVs, and slipping delivery dates on flagship projects — and address what it means for the thesis in the Risks section. For scandium, even the sceptical read changes less than it seems: at 37–80 t of Sc_2O_3 per GW, any Bloom ramp between 1 and 5 GW per year collides with a world that produced ~80 t in 2025 — Bloom's ~30 t of consumption was already roughly half of global demand.

What a SOFC is — and why it is winning

Bloom Energy, the flagship solid oxide fuel cell (SOFC) manufacturer, is being pulled into gigawatt-scale orders by AI data centres that need on-site, always-on baseload power faster than the grid can deliver it. Its core technology happens to run on scandium.

A fuel cell converts the chemical energy in a fuel directly into electricity — no combustion, no spinning turbine. Every design is the same three-layer sandwich: a fuel electrode, an air electrode, and an electrolyte in between; fuel is oxidised on one side, oxygen reduced on the other, and the electrons forced round an external circuit are the power output. The one choice that defines each type of fuel cell is **the electrolyte material,** because that choice dictates operating temperature, fuel, catalyst, and therefore commercial fit.

In an SOFC the electrolyte is a dense solid ceramic, almost always **stabilised zirconia** — that conducts oxygen ions only when hot (historically 800–1,000 °C; intermediate-temperature designs ~600–800 °C). The familiar "hydrogen car" PEM cell uses a wet polymer membrane; the SOFC is the only genuinely all-solid-state design, nothing leaks, corrodes or needs topping up — and because a refractory ceramic can take the heat, heat unlocks the economics.

The cell is hot enough to reform hydrocarbons internally, so it **runs on pipeline natural gas (with biogas and ammonia as options) — plugging into the gas grid that exists rather than a hydrogen supply chain that doesn't**; the reactions run fast enough on cheap nickel, so there is no platinum bill; and it delivers the highest single-cycle electrical efficiency of any fuel cell (45–65%, versus ~40–60% for PEM), with high-grade waste heat pushing combined efficiency toward 85–90%.

The trade-off sits in the same breath: brittle ceramic running red-hot starts in hours, not seconds, and tolerates thermal cycling poorly. SOFCs are therefore a stationary, always-on technology — data-centre and distributed baseload — and cede transport to PEM. Those same weaknesses are what pushed the industry toward intermediate-temperature operation, and intermediate temperature is precisely where scandium earns its keep.

The "solid oxide" is where scandium lives: zirconia must be stabilised by a doping oxide; the cheap default is yttria (YSZ), but scandia-stabilised zirconia (ScSZ) conducts oxygen ions roughly 3–4× better. That extra conductivity lets the cell hold performance while running cooler — ~600–800 °C instead of ~1,000 °C — and cooler is worth real money: cheap ferritic stainless-steel components instead of exotic ceramics, faster start-up, longer stack life.

Scandium is not a bulk input; it is a performance-enabling dopant in the one component that defines the technology. The linkage holds for electrolyte-supported ScSZ designs (Bloom, Kyocera) and is essentially absent from Ceres' ceria route and standard YSZ anode-supported cells. The full technology comparison (SOFC vs PEMFC vs MCFC) and supporting materials science are in Appendix A.

Why Scandium: The Materials-Science Case for ScSZ

The materials case in four numbers

1. Conductivity: scandia-stabilised zirconia (ScSZ) is the most conductive stabilised zirconia known — roughly 3–4× 8YSZ at 800 °C, with a peak of 0.184 S/cm — because Sc^{3+} (0.87 Å) is a near-perfect size match for the Zr^{4+} (0.84 Å) it substitutes, minimising the lattice strain that impedes oxygen-ion transport.

2. Stability: binary scandia–zirconia suffers a destructive phase transition in the middle of the operating window; ~1 mol% of cerium co-doping suppresses it, and a third dopant (yttrium or ytterbium) holds conductivity degradation below 15% over 4,000 hours at 850 °C — the durability standard Bloom's patents claim.

3. Fit: the electrolyte must match the thermal expansion of the chromium interconnect within ~1% — the true gate on any substitution.

4. The co-dopants import no second scarcity problem: cerium is a glut by-product of rare-earth mining (~2.3 t produced for every tonne of neodymium), which is why industry actively favours cerium-substituted routes. The crystallography, conductivity data and rare-earth supply detail sit in **Appendix A.**

The electrolyte verdict — where ScSZ wins

Verdict: there is no universal "best" electrolyte. ScSZ is the best pure-ionic zirconia for intermediate-temperature operation (~600–850 °C); ceria (GDC) wins below ~550 °C but only where its electronic leakage can be tolerated or blocked; thin-film 8YSZ remains best on cost-per-performance in anode-supported high-temperature cells (conductivity data: Appendix A, Table A2). The engineering fork is thickness: a ~0.15 Ω·cm² area-specific-resistance viability threshold means thick electrolyte-supported cells need ScSZ, while 5–15 μm anode-supported films can still use 8YSZ.

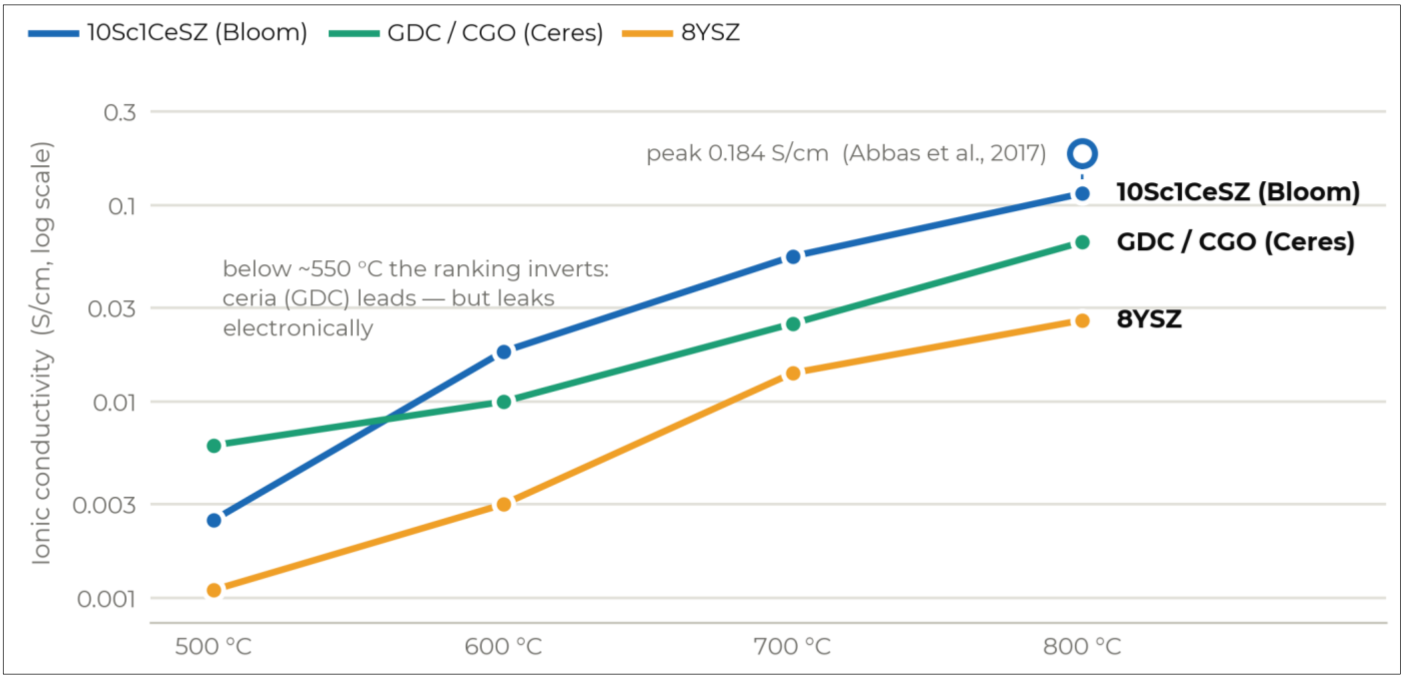


Figure 3 – ScSZ leads every stabilised zirconia across the intermediate-temperature window; Midpoints of published ranges; the ranking inverts below ~550 °C where GDC leads but electronic leakage must be tolerated or blocked by a bilayer. Bloom's granted claims pin its electrolyte at 10 mol% scandia. Source: Appendix A, compiled from published literature.

The scandium thesis lives or dies on whether the market migrates toward thick electrolyte-supported or robust IT cells that specifically require ScSZ — and that is exactly what is happening: roughly 95–98% of the world's cumulative deployed SOFC capacity today is Bloom's scandium-consuming architecture (see the next section), while the scandium-free ceria alternative (Ceres' metal-supported CGO) has less than ~20 MW cumulatively deployed across its licensees — a ~100:1 gap.

Bloom's Patents & the China Supply Problem

Patent evidence: Scandium is in the cell

Bloom's patents and product architecture confirm an electrolyte-supported cell built around scandia-stabilised zirconia. The portfolio shows two architectures across product generations: a single-phase, tri-doped ScSZ electrolyte (the 2011–2016 family), and — from a 2017 filing granted in 2020 — a heterogeneous composite blending lower-cost yttria-stabilised zirconia (YSZ) with the ScSZ phase in a single sintered layer (US 10,593,981 B2). The composition is not a preference but a granted-claim limitation: the claims pin scandia at 10 mol% (US 8,580,456 B2; US 9,413,024 B2), inside an architecture where the electrolyte supports the anode and cathode and must match the thermal expansion of a ≥94 wt% chromium interconnect within ~1% — a constraint that matters below.

Scandium intensity: the composite generations dilute rather than remove the scandium — US 10,593,981's claims cover a ScSZ phase down to 6 mol% scandia blended with up to 50 wt% YSZ, with cost reduction as the stated purpose — so treating the cell as pure ScSZ is a ceiling, not a base case. Our verified intensity work brackets Bloom-architecture demand at 40–80 kg/MW on a single-phase basis, pulling toward ~30–60 kg/MW where composite generations dominate; Hunterbrook's purchased-intensity estimate (37 kg/MW) and our own demand bridge (45 kg/MW) both sit at the conservative end of that band (Figure 4). The oft-cited 130–150 kg/MW legacy figure has no patent basis. Even so, a 5 GW-per-year build implies roughly 150–400 tpa of Sc_2O_3 — against a market that produced ~80 t in 2025 (USGS, 2025). The full nine-patent set and the intensity derivation are in Appendix A (Table A3).

Two caveats cut the other way: Bloom has pursued scandia thrifting since 2013 — WO 2014/081716 explicitly targets "cheaper" compositions — and in 2020 the dilution route was actually granted in the composite patent above.

Durability and CTE at lower scandia remain asserted in the specification but undemonstrated in the public record. And the binding constraint on substitution is not conductivity but the ~1% CTE window against the chromium interconnect: the defensible claim is "no publicly demonstrated substitute inside Bloom's architecture", not "substitution is impossible" — and not "Bloom can't thrift", which the composite patent forecloses.

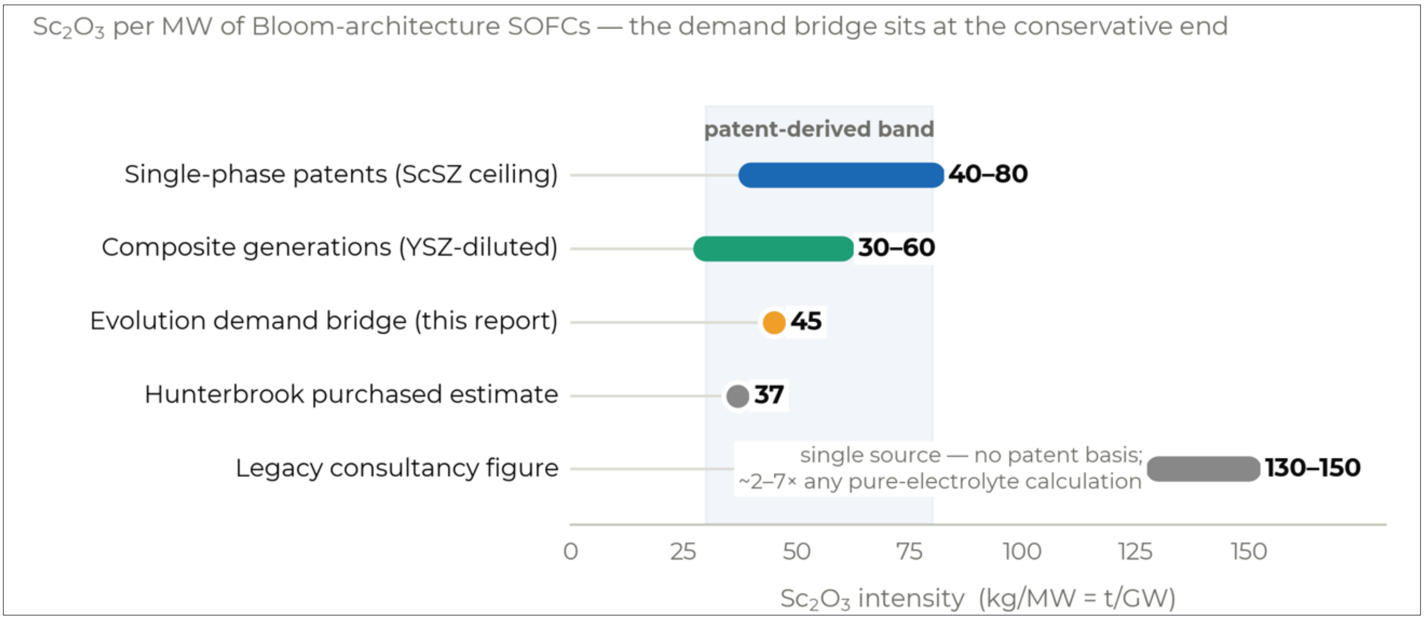


Figure 4 – Bands are patent-derived electrolyte mass balances (derivation: Appendix A, Table A3); the composite generations (US 10,593,981 B2) blend YSZ with the ScSZ phase at up to 1:1 by weight. The 130-150 kg/MW figure traces to a single consultancy source; the patents themselves contain no consumption data. Source: USPTO filings; Hunterbrook; USGS; Evolution Capital.

The Hunterbrook findings (“Bloom's Big Lie”)

Bloom says it does not get scandium from China — but the evidence says otherwise. Hunterbrook traced four separate China-linked routes into Bloom's supply chain — scandium oxide shipped directly to its Delaware plant, plus scandium-bearing ceramics and powders flowing through intermediaries in Thailand, Japan and South Korea.

A sales representative of Hunan Oriental Scandium — which claims over 50% of the global market for fuel-cell-grade scandium oxide — told Hunterbrook: “We are also BE's largest supplier of scandium.” Asked how the material reaches U.S. customers under Beijing's export controls: “Not exported directly.” Hunan Oriental was featured at Bloom's May supplier conference as one of three Chinese scandium-linked suppliers; one received Bloom's “Impact Supplier Award”. The four routes, specifically:

1. Direct: Hunan Oriental Scandium (an LB Group subsidiary) shipped scandium-oxide drums to Bloom’s Newark, Delaware plant at least four times over August 2023–May 2024;

2. Thailand: Glory Winner, a subsidiary of China's Three Circle Group, shipped over 154 t of ceramic electrolyte membranes to Bloom between July 2024 and November 2025 (Thailand produces no scandium; the parent's IPO prospectus states its raw materials are “all sourced domestically” in China);

3. Japan: DKK has shipped nearly 300 drums of scandia-stabilised zirconia powder since September 2024 (Japan mines no scandium; DKK's own commissioned research flags its fuel-cell scandium oxide as subject to Chinese export controls); and

4. Korea: Amosense makes ceramic substrates for Bloom from raw materials supplied by KV Materials, owned by China's Vital Group, which received Bloom's “Impact Supplier Award 2025”. The only meaningful non-Chinese refined source — Sumitomo's Philippine nickel by-product stream, refined in Japan — has never materially exceeded ~8 t per year of oxide-equivalent.

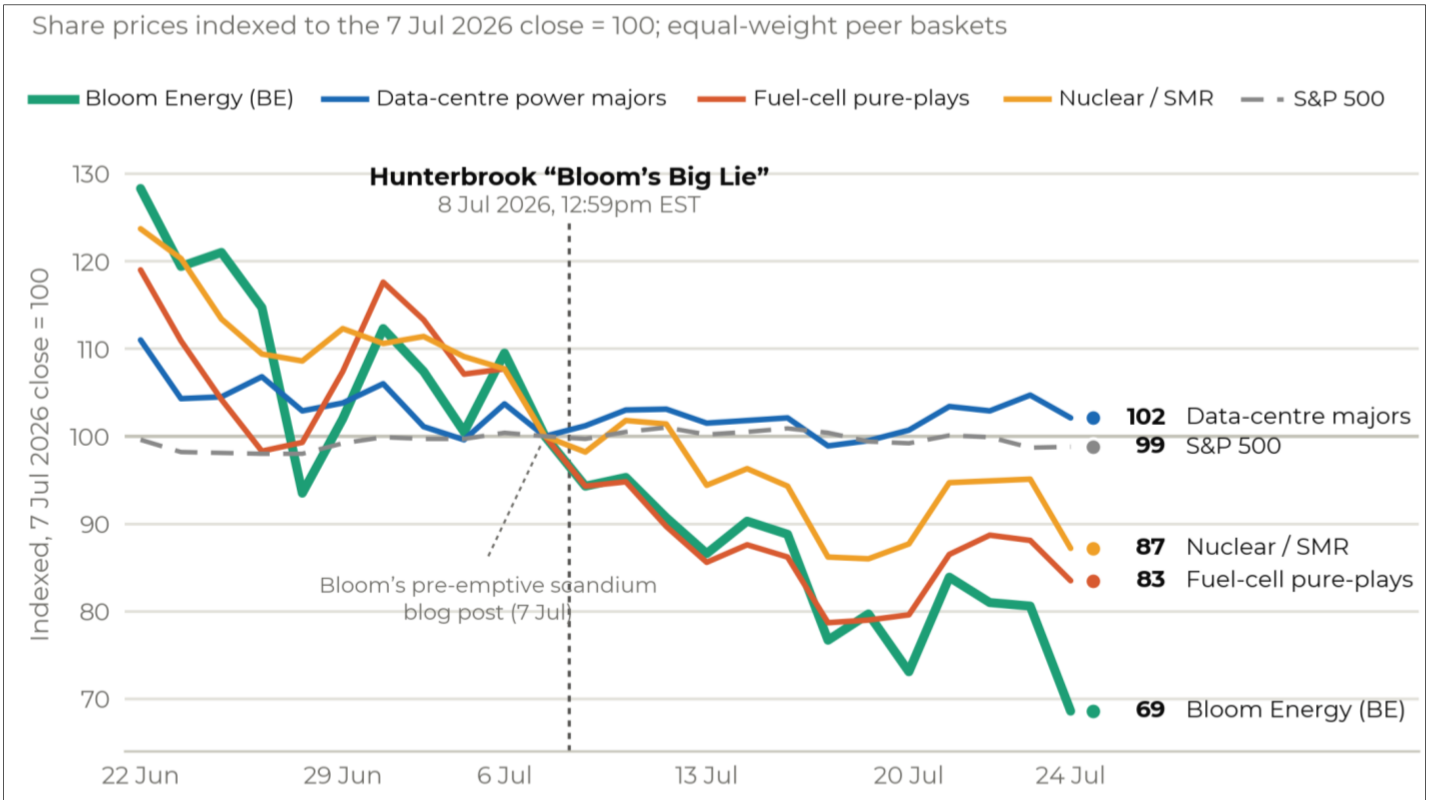


Figure 5 – Bloom Energy vs equal-weight composites around the Hunterbrook release: data-centre power majors (GEV, VRT, CEG, VST), fuel-cell pure-plays (FCEL, PLUG, BLDP, Ceres CWR.L) and nuclear/SMR (OKLO, SMR). Daily closes, US trading calendar. Source: Evolution Capital.

Market reaction and read-through

The sell-off split along tier lines: The data-centre power majors Bloom had re-rated alongside — GE Vernova, Vertiv, Constellation, Vistra — are flat to up since the release (prices to the 24 July close): the allegations were read as Bloom-specific, not as an AI-power-demand problem. The fuel-cell minnow tier fell with Bloom (FuelCell −18%, Ceres −21%, Ballard −11%, Plug −16% cumulative), even though Plug and Ballard are PEM architectures that consume no scandium — Bloom has, in effect, decoupled from the power majors and re-correlated with the minnow tier it had escaped. Bloom's 24 July slide to a new post-release low — −31% since the release-eve close, on the eve of its Q2 print — has since reopened the gap: at −17%, the minnow composite is now falling roughly half as hard as Bloom itself, sharpening the Bloom-specific reading.

Not all of the fall is Hunterbrook: the speculative nuclear/SMR names fell materially over the same window with no Bloom exposure, and against that high-beta basket the excess decline attributable to the report is roughly −19pp (~−30pp against the S&P 500). The cleanest evidence remains the event day itself — a −5.7% half-day move on ~1.7× volume, timed to the minute of publication, while the market fell −0.3%.

More telling for this initiation, the scandium **complex did not trade the report as a scarcity story.** Hunterbrook's supply–demand work is the most aggressive public endorsement yet of the scandium-scarcity view — it expressed its trade as short Bloom / long NioCorp — **yet NB gave back its +5.2% release-day pop within a week and now sits −7% since the release, SRL is down −9%, and AUZ's uptick — 2.1¢ to 2.4¢, +14% on paper** — is three ticks on a nano-cap where a single tick moves the stock ~5%. The market's reading was demand-side: if Bloom's 5 GW ramp is infeasible or partly circular financing, the SOFC demand line that anchors the bull case shrinks with it.

We draw three conclusions.

1. The demand engine is contested but not disproved: Hunterbrook's own model concedes Bloom is already the world's largest scandium consumer at ~1 GW/yr of production, so the scarcity argument survives even a halved ramp.

2. The episode strengthens the ex-China premium: whichever way the dispute resolves, "not dependent on China for scandium" is now an audited claim rather than a talking point, raising the strategic value of credible Western primary supply (Syerston, Flemington, Elk Creek).

3. For AUZ specifically the event cuts both ways: it validates scandium as a market-moving, headline-grade material, while demonstrating that the equity read-through runs through Bloom's credibility.

What to watch: Bloom's Q2 print (28 July 2026) and any 8-K or litigation response to the specific factual claims; scandium offtake or dual-sourcing announcements by SOFC OEMs; and whether NB, SRL and AUZ begin trading on the scarcity leg rather than the Bloom-demand leg.

The Scandium Market: Supply, Demand and the Ex-China Premium

Supply — by-product only, concentrated, no primary mine: Scandium has never been mined at scale as a primary product; 2025 output (~80 t) was produced "exclusively as a by-product", mainly from nickel and titanium streams and reprocessed tailings (USGS MCS 2026). Supply is inelastic to scandium's own price, volumes are tiny, and pricing is opaque. China is the leading producer and controls ~85% of refined supply; on 4 April 2025 it placed scandium in all forms under export licensing (MOFCOM/GAC Announcement No. 18, item 1C907) — the catalyst that turned a slow-burn supply-security argument into an active Western procurement scramble.

Producer / Project	Country	Status	Capacity (t Sc_2O_3 p.a.)
Chinese refiners (Hunan Oriental >50% of fuel-cell-grade 4N; LB Group et al.)	China	Operating	~two-thirds of world output; ~85% of refined supply
Rio Tinto — Sorel-Tracy (TiO_2 waste stream)	Canada	Operating	~3 (→12 planned)
Sumitomo — Taganito HPAL by-product, refined in Japan	Philippines / Japan	Operating	≤8 oxide-equivalent
Other by-product (Russia, tailings reprocessing)	Various	Operating	Balance to ~80 world total (2025)
Sunrise (SRL) — Syerston	Australia	FS / FID 2026	60 (→120)
NioCorp — Elk Creek	USA	Financing (EXIM up to US$800m sought)	~100 **(planned)**
Scandium International (SCY) — Nyngan	Australia	Stalled DFS / mining lease	~38
Rio Tinto — Owendale (ex-Platina)	Australia	DFS, held	20→40
Australian Mines (AUZ) — Flemington	Australia	Scoping → PFS	60

Table 2 – Global scandium supply — producers and pipeline

Sources: USGS MCS 2026 (~80 t world production 2025, by-product only); Hunterbrook supply model; company disclosures; Evolution Capital demand bridge. Pipeline nameplate fully built reaches ~340 tpa by 2032 — but is probability-weighted to ~240 t by 2030 in Hunterbrook's model. Our own supply stack (Figure 6) is stricter: counting only Western-available tonnes — the named projects at ramp timing, Chinese licensed exports at 35% availability — supply reaches ~127 t in 2030 and plateaus at ~268 t from 2034.

Demand — the Bloom (SOFC) leg, then Al-Sc alloys: Scandia-stabilised zirconia electrolytes give higher conductivity, lower operating temperature and better durability than yttria-stabilised zirconia. Bloom Energy is the flagship adopter and, per the most-cited estimate, ~74% of global scandium consumption (CM Group, 2023). The second leg is aluminium-scandium master alloys (~US$98m market in 2024; ~15 t of Sc_2O_3-equivalent non-SOFC demand in our bridge, growing 5% p.a.) for aerospace, additive manufacturing and EV lightweighting. The bridge itself is set out in Table 3: at the central ~45 kg/MW intensity, Bloom at just ~1.5 GW/yr of deployment already consumes the equivalent of the entire 2025 world output.

Bloom SOFC deployment scenario	GW/yr	New-build Sc_2O_3, t/yr (34–53 kg/MW)	Central @45 kg/MW	+ Other end-uses (t)	Total demand (t/yr)	× 2025 world output (~80 t)	vs SRL+AUZ nameplate (120 t)
Hunterbrook bear — Bloom production today	~1	34–53	45	~15	~60	0.8×	50%
Current shipments run-rate	~1.5	51–80	68	~16	~83	1.0×	69%
Evolution base case (reached by 2030)	**~3**	**102–159**	**135**	**~18**	**~153**	**1.9×**	**128%**
Wall Street consensus ramp	~5	170–265	225	~18	~243	3.0×	203%
Bloom bull — supply-infeasible by design	~10	340–530	450	~20	~470	5.9×	392%

Table 3 – The scandium demand bridge: Sc-loading × deployment = tonnes Sc_2O_3 per year

Sc_2O_3 intensity calibrated from Bloom's patent set (Appendix A, Table A3): central ~45 kg/MW, 34–53 kg/MW across single-phase and composite generations; Hunterbrook's purchased-intensity estimate (37 kg/MW) sits at the conservative end. New-build only — replacement demand net of 80% stack reclaim is carried in the annual path (Figure 6). Other end-uses ~15 t in 2026 growing 5% p.a. World 2025 output ~80 t (USGS MCS 2026); SRL + AUZ combined nameplate 120 t. Source: Evolution Capital bottom-up SOFC→scandium model; Bloom patent set; USGS; Hunterbrook.

The demand build and the deficit: Global consumption of ~60 t (2025) rises to ~310 t by 2030 on Hunterbrook's model against ~240 t of probability-weighted supply — the deficit opens in 2027 and widens past 65 t by 2030, and "essentially all Wall Street models of Bloom's production imply a scandium shortage by 2028". The ~20 t by which 2025 output (~80 t) exceeded consumption is stockpile and inventory build — the DLA solicitation is exactly that — not spare capacity.

Our own demand bridge is deliberately more conservative on Bloom's ramp (3 GW deployed by 2030 at 45 kg/MW, 80% stack-reclaim on replacements) and **still finds the market in deficit in every year of our 2026–40 forecast (Figure 6) — only 2032 approaches balance (−3.5 t) as the SRL, Nyngan, Rio and AUZ tranches land** — with Bloom at 75–80% of demand throughout; at Wall Street's 5 GW, **Bloom's new-build alone requires ~225 t per year.**

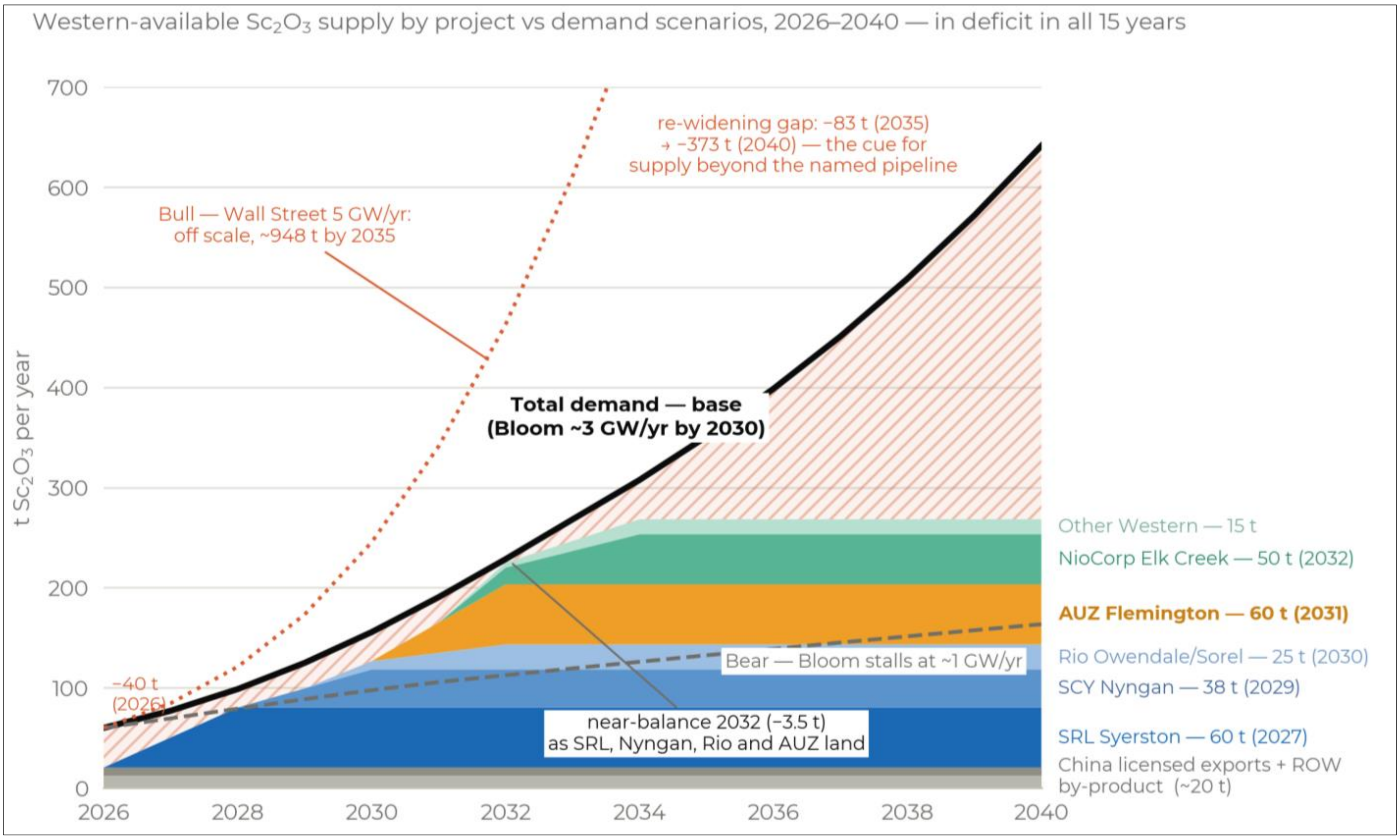


Figure 6 – Even the full Western pipeline never catches base demand: Western-available Sc_2O_3 supply by project vs demand scenarios, 2026–2040 — in deficit in every year; only 2032 approaches balance as SRL, Nyngan, Rio and AUZ land. Chinese licensed exports at 35% Western availability. Source: Evolution Capital scandium supply–balance model; USGS; company disclosures.

The chicken-and-egg: Scandium demand has been suppressed by supply, not the reverse. Designers will not specify scandium without security of supply; supply will not be built without offtake. Reliable Western primary tonnes therefore unlock latent demand rather than chase existing demand — which is why a single credible offtake (à la Lockheed–SRL) is worth more than its volume suggests, and why AUZ's adjacency optionality has value.

Producers have started buying the chicken — SRL is investing in its own demand: On 15 June 2026 Sunrise signed a binding term sheet for a US$5m strategic investment in Agni Semiconductor LLC, a Philadelphia-based developer of next-generation non-volatile memory and AI compute-in-memory chips built on aluminium scandium nitride (AlScN) ferroelectric diodes — 50% of Agni's US$10m seed round at a US$45m pre-money valuation for ~17–18% fully diluted, with a Sunrise-appointed director and a contractual pathway to 30% (completion subject to diligence and regulatory approvals); chairman Robert Friedland and MD Sam Riggall are personally co-investing alongside. The target is not a speculative lab: Agni's founders span the University of Pennsylvania groups of Deep Jariwala and Troy Olsson (a former DARPA program manager) whose

AlScN ferrodiode work took the top 2022 Bell Labs Prize, the company draws non-dilutive funding from US Air Force Research Laboratory programs and an SBIR Phase 2 award, and seed proceeds fund 8-inch-wafer prototyping and US foundry qualification over 30 months.

Why AlScN matters for the scandium market: AlScN — scandium alloyed into the wurtzite aluminium-nitride lattice — is not exotic to fabs: sputtered AlScN piezoelectric films already ship at commercial scale in RF bulk-acoustic-wave filters, though the USGS still classes electronics as a minor scandium use. Agni is the second act, and the technical record is unusually strong for a 2024-vintage company: the material stays ferroelectric in films down to ~5 nm and deposits in standard CMOS back-end-of-line flows; the two-terminal ferrodiode cell needs no access transistor; the UPenn founding group has already scaled devices to 40 nm — >100 Mbit/mm², on films carrying scandium at ~36% of the metal sublattice (Nano Letters, September 2025) — and demonstrated operation to 600 °C (Nature Electronics, 2024), which drew an explicit demand signal in a 2025 US Air Force SBIR topic seeking manufacturing scale-up of exactly this class of high-temperature ferrodiode memory. The addressable stack Agni cites — US$2.7bn NOR flash, US$112bn DRAM, US$184bn AI processors (2025) — dwarfs every existing scandium end-market. Per-wafer scandium consumption is modest, as SRL itself concedes, but it is the highest-purity, highest-value form of demand, it enters fabs through the aluminium-scandium sputter targets Sunrise has said it will help develop with established materials suppliers, and it scales with wafer starts rather than with any single customer's capex cycle.

The read-through for AUZ: None of this is in our demand bridge — semiconductors sit inside the flat ~15–20 t “other end-uses” line of Table 3 — so wafer-level adoption is upside to our numbers, not risk within them. The signal matters more than the tonnes: the owner of the district's flagship project, 15 km from Flemington, is deploying corporate capital to originate scandium demand — offtake first (Lockheed), now equity in the end-use technology itself — exactly the supply-unlocks-demand logic argued above. Demand seeded by SRL does not discriminate by supplier: every leg it creates enlarges the market each Fifield tonne sells into, and further sharpens the strategic rationale for consolidating the district's two contiguous deposits.

Price — opaque, bifurcated, the swing factor: There is no exchange price; transactions are bilateral. Post-controls the market is bifurcated: the reference Chinese ex-works oxide price sits near US$640/kg (USGS) — a small-lot domestic quote for material that now cannot be freely exported — while Western contract references cluster far higher:

The US DLA's stockpile solicitation of up to 6.4 t over five years for up to US$40m implies ~US$6,250/kg, Ramaco has cited US$3,750/kg, NioCorp US$3,675/kg, and both the Syerston FS and the Flemington scoping study use US$3,000/kg as their market-aligned case.

Feasibility-study design prices are deliberately conservative (Clean TeQ US$1,500/kg; Scandium International US$2,000/kg). **Western supply does not exist below the ~US$3,000/kg incentive-price cluster** — a most-favoured-nation style floor argument: a defence offtaker of SRL's structure would be expected to carry price protection that prevents arbitrage around that floor.

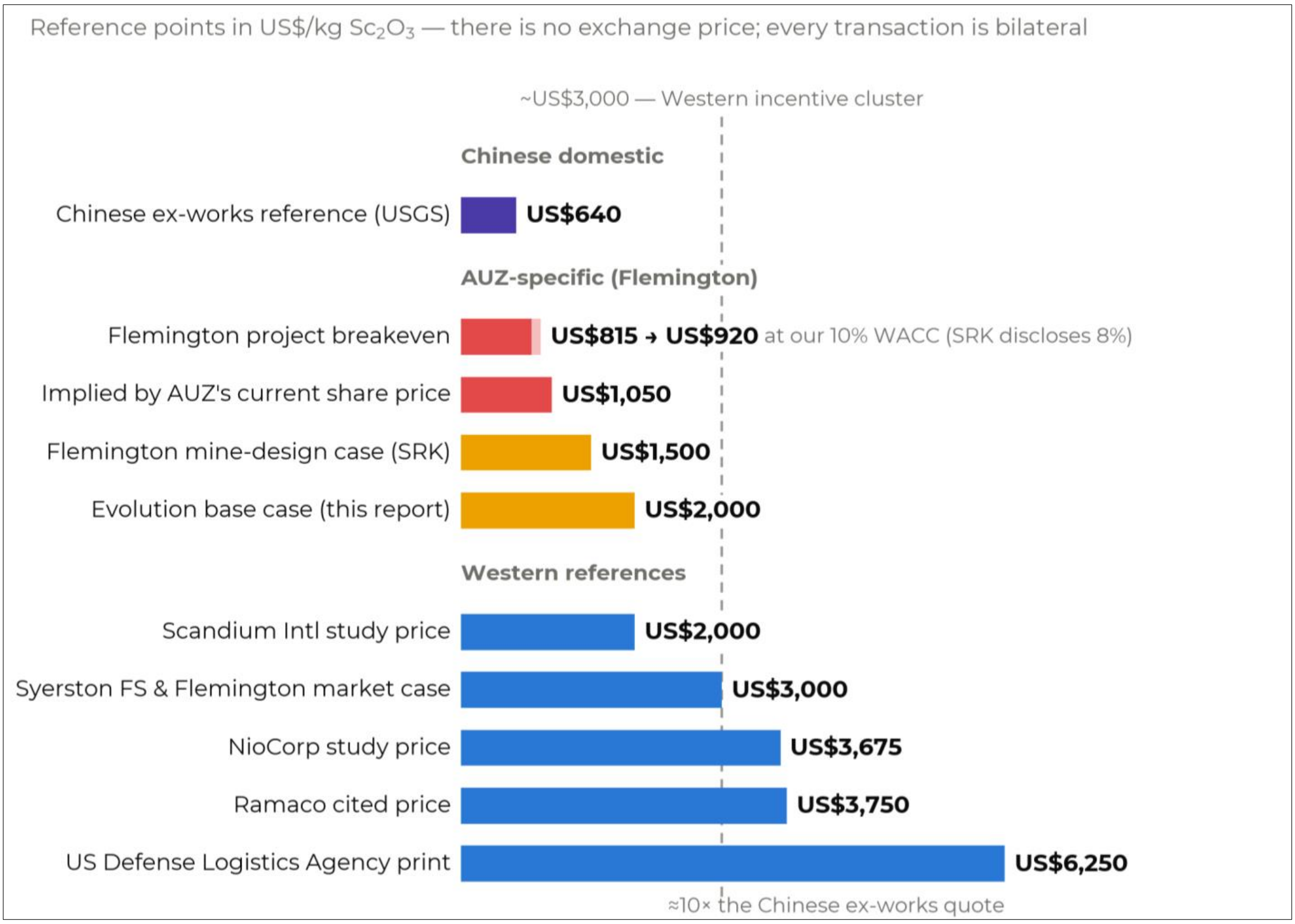


Figure 7 – There is no exchange price for scandium: Chinese ex-works is a small-lot domestic quote for material that has required an export licence since April 2025 (item 1C907). Western supply does not exist below the ~US$3,000/kg incentive cluster. Source: USGS; company disclosures; Evolution Capital.

The defence angle sharpens the ex-China premium: Bloom's CEO publicly discusses defence applications, but the DoD **will not engage while Bloom's scandium supply runs through China.** The Lockheed Martin agreement with Sunrise Energy Metals (ASX: SRL) — an option over the first 15 tpa of Syerston Sc_2O_3 for five years, up to 75 t, roughly 25% of nameplate — is the proof point that defence-grade demand will pay for a stable ex-China supply chain, alongside SRL's US EXIM letter of interest for up to US$67m.

Two dates matter: China's April-2025 controls (item 1C907) remain in force, and the suspended second regime — the "0.1% rule", reaching any product worldwide containing Chinese-origin rare earths — snaps back on 10 November 2026 unless extended, which would directly touch Bloom's Thailand/Japan/Korea waypoints. The market needs new ex-China primary supply — which is the cue for AUZ.

Australian Mines (AUZ): Ex-China Leverage

Company overview and the Flemington Project

Australian Mines Limited (ASX: AUZ) is a nano-cap critical-minerals company whose lead asset is the Flemington Scandium Project in the Fifield district of central NSW. A 60 tpa Sc_2O_3 scoping study (SRK, April 2026) is in hand; PFS is the next development gate.

History: The former flagship Sconi cobalt-nickel-scandium project (Queensland; a 2018 BFS that never reached construction) was set aside in favour of scandium at Flemington. The company is also earning up to an 80% interest in the Boa Vista gold project (Brazil), holds the Resende tin-lithium project, and is advancing a proprietary metal-hydride hydrogen-storage technology toward pilot scale — arguably scope-creep for a nano-cap, and carried at nil in our NAV, but no longer content-free (below). We read the Tribeca-backed, premium-priced scandium pivot as a net-positive change of direction, but investors should price the governance and dilution history explicitly.

The hydrogen-storage program: AUZ's proprietary metal hydride ("MH-May24") has been independently evaluated at a **US Department of Energy national laboratory** (NREL, since renamed the National Laboratory of the Rockies) under the HyMARC consortium, with results consistent with AUZ's own testing: 5.2 wt% hydrogen absorption at 200 °C and 38 bar (4.2 wt% in under four minutes), absorption beginning at room temperature, desorption of 5 wt% at 250 °C in ~3.3 hours, and — the parameter that matters for long-duration storage — repeatable absorption/desorption cycling. AUZ's theoretical system densities (1.15 kWh/kg, 1.78 kWh/dm³) would **sit above both lithium-ion batteries and 700-bar compressed hydrogen**, and the company's headline application — hydride-fed SOFC backup power for data centres and AI infrastructure — is precisely the demand engine this report is built on. Follow-on formulations were lodged for a further round of independent testing in **May 2026.**

The composition is proprietary: Whilst no scandium link is disclosed, but **scandium is itself a hydride-forming metal** and scandium-modified storage alloys are an active corner of the literature, so a scandium-bearing formulation is chemically plausible rather than fanciful — and, produced at scale, could absorb a meaningful quantity of Flemington scandium in its own right. That would hand AUZ its own version of the demand-seeding strategy SRL is paying US$5m to pursue with Agni — a captive downstream sink for its own metal (see the market section). We deliberately hold the program at nil — it is pre-commercial, un-costed and outside the company's funding envelope — but nil is a valuation choice, not a verdict: at the current price the market pays nothing for a US-lab-validated storage material, or for any scandium pull-through it may yet create.

Other assets — Boa Vista Gold (Tapajós, Brazil; earning up to 80%): Boa Vista sits in the Tapajós gold province on the Amazonian craton, alongside district peers including Tocantinzinho and Cuiú-Cuiú. The most advanced target, VG1, carries a historical NI 43-101 estimate of 336 koz (8.47 Mt @ 1.23 g/t Au) — a foreign estimate, not JORC (2012) — and a best intercept of 195.3 gram-metres ending in mineralisation, over ~700 m of strike, open along strike and at depth.

In July 2026 AUZ identified 14 additional gold targets, four of them advancing to drill-ready — headlined by Baixão (rock chips to 31.0 g/t Au; never drilled). Placement funds are earmarked for drilling toward a maiden JORC resource. In our NAV, Boa Vista contributes a deliberately small, heavily risked A$4.2m (see Valuation).

Flemington — tenure & setting	
Tenements	EL 7805 & EL 8546, held 100% via Flemington Mining Operations Pty Ltd (ex-Jervois Mining; acquired Jan. 2019)
Location	Central NSW, ~9 km NW of Fifield (~70 km SW of Dubbo) — the Fifield scandium district
Contiguity	On the same geological intrusion as, and contiguous with, SRL's Syerston project (~15 km)
Royalty	1.5% gross-revenue royalty to Nickel 28 Capital (life-of-mine encumbrance); 4% NSW state royalty
Infrastructure	Access to established regional infrastructure, road networks and nearby mining services; three-pit layout (Main, Northwest, West) with plant, TSF and ROM pad; water supply flagged as the key de-risking area at scoping

Table 4 – Flemington tenure & setting

Source: AUZ ASX releases; scoping study (28 April 2026); prior Evolution Capital work.

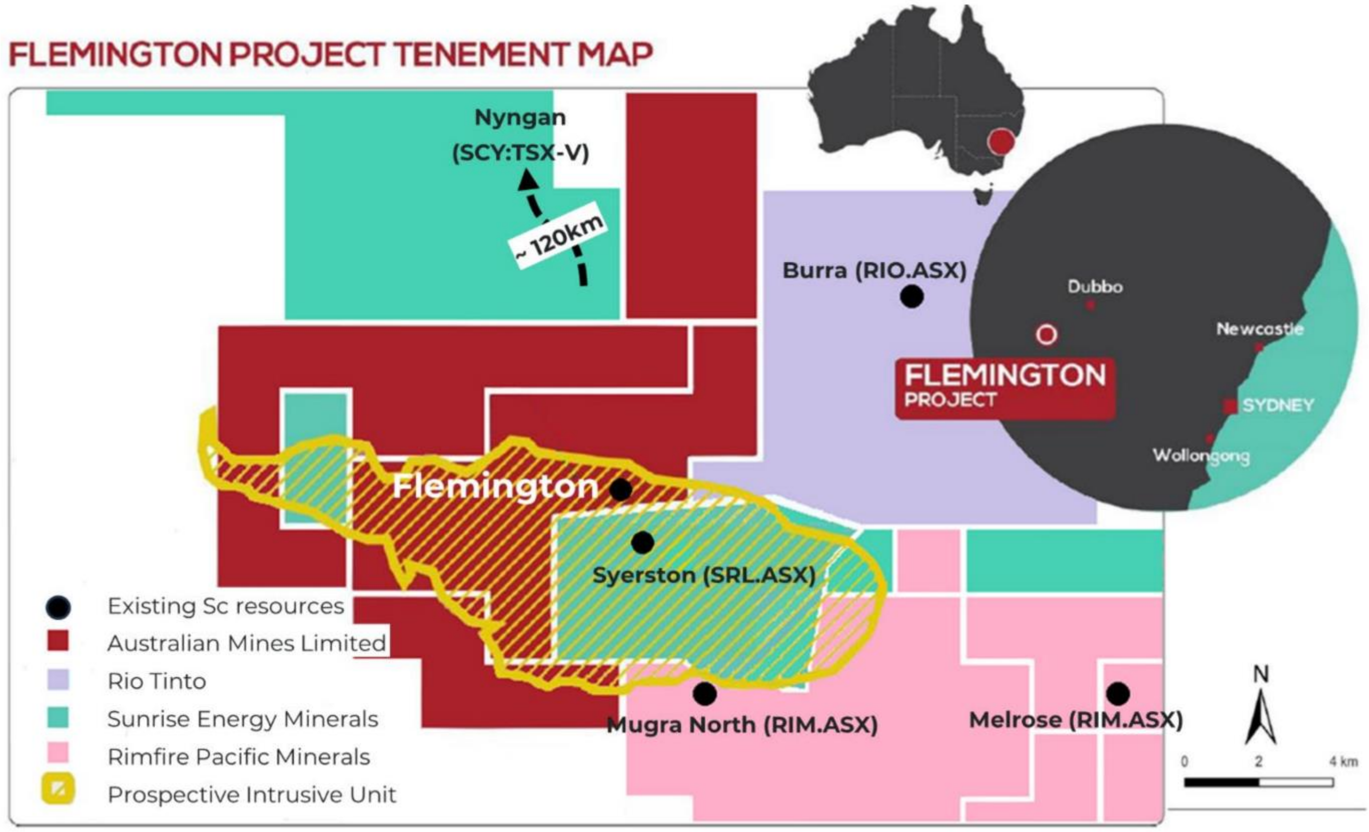


Figure 8 – Flemington sits on the same Alaskan-type intrusive unit as, and contiguous with, Sunrise Energy Metals' Syerston project — the geological basis for the read-through. Source: AUZ, SRK Scoping Study (28 April 2026).

Resource, grade and metallurgy

Geology: Flemington is a scandium-rich laterite developed over the Alaskan-type Tout mafic-ultramafic intrusive complex, the same complex that hosts Syerston. Scandium is concentrated principally in the limonitic portion of the weathering profile and is strongly associated with Al-bearing goethite, with lower concentrations occurring in hematite. Published mineralogical work on drill-core samples from the broader Syerston–Flemington system estimated that approximately 80% of the scandium in those samples was adsorbed on goethite, with most of the balance structurally incorporated in hematite.

2025 MRE (300 ppm cut-off)	Tonnage (Mt)	Grade (ppm Sc)
Measured	3.12	455
Indicated	3.02	441
Inferred	0.15	371
Total	**6.29**	**446**

Table 5 – Flemington 2025 Mineral Resource Estimate

Source: "Flemington Resource Expands Significantly" (ASX, 8 January 2025). ~98% Measured & Indicated; the declared resource sits within a much larger 28 Mt @ 217 ppm envelope at a 100 ppm cut-off.

Metallurgy and the recovery question: The disclosed route is high-pressure acid leach (HPAL) followed by solvent extraction, oxalate precipitation and calcination to a 99.9% Sc_2O_3 product, at a flat 90.8% life-of-mine recovery. We treat the flat 90.8% as optimistic for a limonite→saprolite profile: matched-condition leaching gives ~84% on limonite versus ~60% on saprolite, and disclosed peers (Nyngan 87%, Sunrise ~88%) land below 90.8% on limonite-only HPAL.

Balancing the other way, the mined MRE is effectively 100% laterite (the saprolite is grade-barren and drops out above a 200 ppm cut-off), the classic magnesium/calcium acid sink is geologically absent, and AUZ front-loads high-grade limonite, so late-life under-recovery is discounted in NPV terms. The scoping plant is internally consistent with this grade profile: at the disclosed 90.8% recovery, the top ~2 Mt of the MRE at ~575 ppm implies ~75 ktpa of feed for 60 tpa of Sc_2O_3 — squarely within the 72–76 ktpa plant in the scoping study (workings in Appendix A4).

The **irreducible cost variable is aluminium** — scandium is hosted in aluminogoethite, so the acid consumer and the payable metal are the same crystal. SRL, on the same intrusive complex, models ~380 kg of acid per tonne — the best available proxy, since AUZ's scoping discloses no acid-consumption figure.

The number is genuinely unresolved at scoping — which is precisely why the metallurgical work program (horizon compositing, diagnostic leach mineralogy, bench HPAL grids, a pilot run and acid-consumption mapping) is a first-order catalyst.

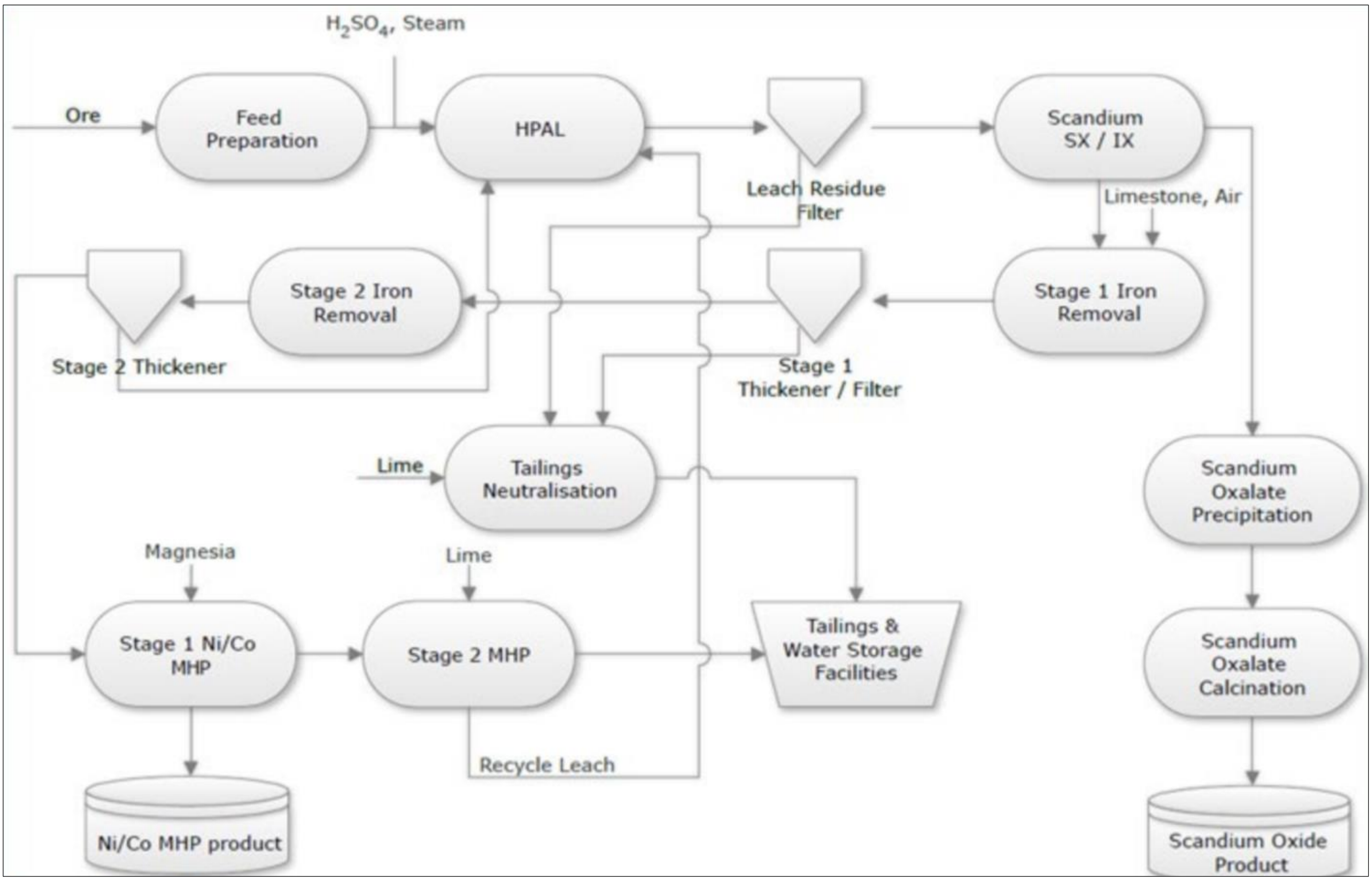


Figure 9 – The disclosed flowsheet: HPAL, two-stage iron removal, scandium SX/IX, oxalate precipitation and calcination to a 99.9% Sc_2O_3 product, with a Ni-Co mixed hydroxide by-product. Source: SRK Scoping Study (28 April 2026).

Project economics

Scoping-study economics (as disclosed)	
Production / life	60 tpa Sc_2O_3 (99.9% purity) over 28 years; three shallow free-dig pits (~40m deep, strip 1.9:1); 72–76 ktpa feed; ~2.1 Mt LOM at 529 ppm (573 ppm first 15 years); 450 ppm mining cut-off
Capex / sustaining / closure	US$125m initial; US$18.2m sustaining; US$42.0m closure (±35%, Class 5, Q1-2026 base)
C1 cash cost / breakeven	US$561/kg Sc_2O_3; breakeven ~US$815/kg; Ni-Co MHP by-product ~4% of revenue
Recovery / flowsheet	90.8% (flat LOM); HPAL + two-stage iron removal + SX/IX + oxalate precipitation + calcination
NPV_8 / IRR / payback (post tax)	US$270m / 32% / ~2.5 yrs at US$1,500/kg (mine-design); US$860m / 74% at US$3,000/kg (market-aligned sensitivity); US$2,040m / 143% at US$6,000/kg

Table 6 – Scoping-study economics (as disclosed)

Source: "Flemington delivers standout Scoping Study economics" (SRK scoping study, ASX, 28 April 2026). Class-5 scoping accuracy; no Ore Reserves declared. Our own model re-derives these cash flows at a 10% real WACC — see the Valuation section.

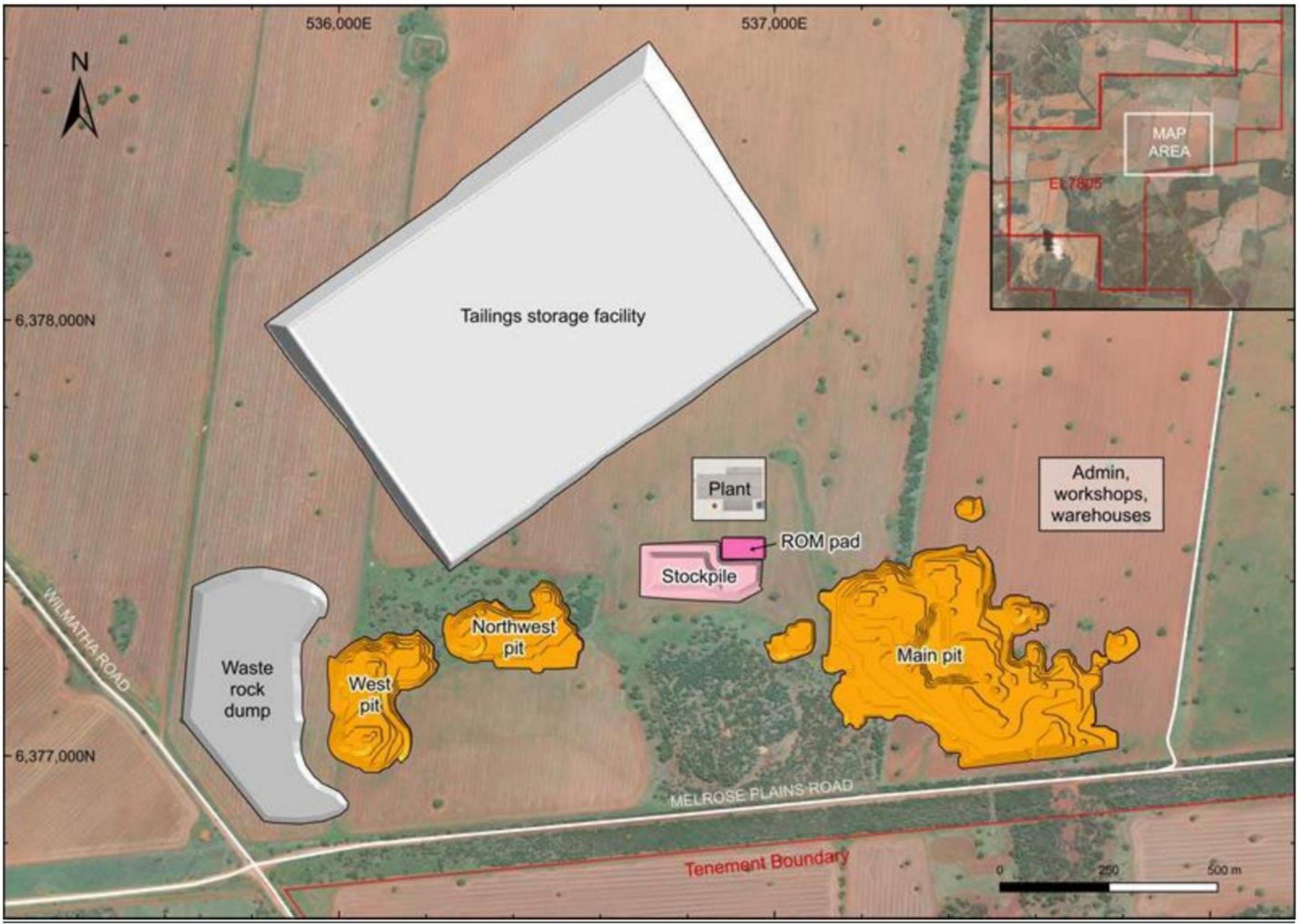


Figure 10 – Scoping-study general arrangement: three shallow free-dig pits feeding a 72–76 ktpa plant, with tailings storage and ROM pad. Source: SRK Scoping Study (28 April 2026).

Stage gap: This is the crux of the discount: Flemington is a Class-5 scoping study with no declared Ore Reserves, versus Syerston's Class-3 Feasibility Study with JORC reserves, a defined permitting pathway and construction underway. Two full development stages (scoping → PFS → DFS) and a financing separate the two.

Offtake, funding and strategic partners

Funding position: Pro forma cash is ~A$5.5m (30 June 2026 est.) after the May-2026 A$3.0m placement at A$0.028 — Tribeca Investment Partners A$2.7m plus two existing substantial holders — struck at a 16% premium to 30-day VWAP, with 1-for-2 attaching options. Ahead of first production we model ~A$24.5m of pre-FID corporate and study spend, leaving a funding gap of ~A$18.9m to be met by equity, option exercise (full exercise of both listed option classes would raise A$16.5m, but both expire within 10 months of this report and AUZOB needs a ~40% re-rate to go in-the-money), partner funding or an asset-level transaction.

The US$125m construction capex sits beyond that again — we model it all-equity inside the project cash flows to be conservative; in practice the SRL template (US EXIM letter of interest up to US$67m plus a defence offtake) is the financing playbook.

Strategic optionality: AUZ's own scoping cautionary statement explicitly contemplates "a sale, partial sale or joint venture of the project" — management has, in effect, flagged the call option itself. Contiguity makes AUZ the natural consolidation or JV counterparty for Syerston's owner, and the Owendale → Rio Tinto transaction (A$14m, 2023) shows majors will buy NSW scandium laterite assets outright. **No Flemington offtake is yet in place — the key commercial gap.**

The PFS is funded and underway: Flemington was formally "fast-tracked" to PFS on 4 May 2026. Placement proceeds fund the PFS and approvals workstreams — mine planning and pit optimisation, metallurgical testwork to confirm the flowsheet, geotechnical and hydrogeological studies, environmental baseline and permitting, infrastructure definition and product marketing including engagement with potential offtake partners — plus expanded Boa Vista drilling toward a maiden JORC resource and smaller programs on the metal-hydride storage technology and Resende. With Measured plus Indicated at ~99.4% of the high-grade resource, limited additional drilling is expected to be required for the PFS itself.

Peer Comparison

Project / owner	Stage	Sc_2O_3 tpa	Capex US$m	Post-tax NPV	Notes
Flemington — AUZ	**Scoping (Cl. 5)**	**60**	**125**	**US$270–860m**	**90.8% disclosed; US$1,500–3,000/kg; this note**
Syerston — SRL	Feasibility (Cl. 3)	60 (→120)	120	US$490m–2.08bn	Base US$3,000/kg → US$890m / 76% IRR; reserves; in construction
Syerston (orig.) — Clean TeQ	FS 2016 (stale)	~49	A$100	A$273m	~88% recovery; US$1,500/kg; superseded by SRL 2026 FS
Nyngan — SCY	DFS 2016 (stale)	~38	87	US$177m	87% HPAL (limonite); US$2,000/kg; ~CA$50m cap → ~0.2× NPV
Owendale — Rio Tinto	DFS 2018 (stale)	20→40	59→84	A$234m	Ex-Platina; sold to Rio for A$14m (2023) → ~0.06× NPV
Sorel-Tracy — Rio Tinto	Operating	3→12	n.d.	n.d.	Sc_2O_3 from TiO_2 waste; DLA contract ~US$6,250/kg (2025)

Table 7 – Scandium peer set. 'Stale' = pre-2020 study; capex/NPV not restated to current costs. Source: company disclosures; prior Evolution Capital work.

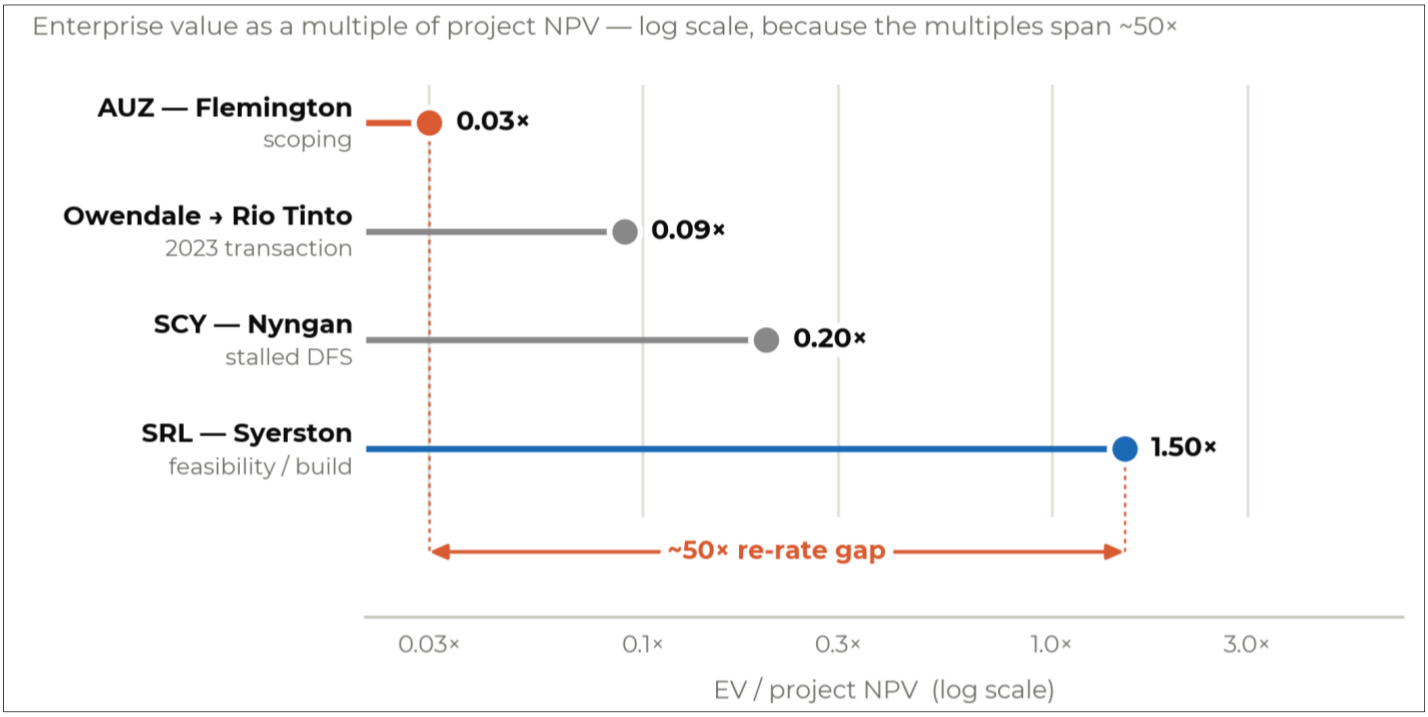


Figure 11 – The dislocation we are underwriting: SRL's multiple is contaminated by its Ni-Co project and momentum; the cleanest reads are Nyngan and the Owendale → Rio Tinto transaction. On EV per tonne of contained Sc_2O_3, AUZ screens ~A$10,000/t vs the Owendale mark ~A$4,000/t — the thesis rests on NPV and a stage re-rate, not asset backing.

What the multiples say: On EV against each project's study NPV at the shared US$3,000/kg reference price, AUZ trades at ~0.03× versus SRL at ~1.5× and stalled-DFS junior SCY at ~0.2× — the dislocation we are underwriting; even on our US$2,000/kg base-case DCF, AUZ trades at only ~0.09×. We flag the other side honestly: on EV per tonne of contained Sc_2O_3 (~A$10,000/t against the Owendale → Rio transaction mark of ~A$4,000/t), AUZ is not cheap on raw resource value. The thesis rests on NPV, optionality and a stage re-rate — not asset backing.

Endowment efficiency at equal output: Study economics compare engineering vintages as much as orebodies, so we also run the comparison on physics alone. We rank each deposit into indicative grade-ranked 2 Mt tranches and require each tranche to deliver the same 60 tpa of Sc_2O_3 at each project's disclosed recovery — 90.8% for Flemington, 88.0% from SRL's feasibility work — which collapses the comparison to a single variable: recovered Sc_2O_3 per tonne of ore. On that measure Syerston's headline grade advantage narrows materially. Its best 2 Mt runs 644 ppm against Flemington's 575 ppm (+12%), but Flemington's higher recovery claws back roughly a third of the gap, leaving Syerston ~9% ahead on recovered yield (~867 vs ~799 g Sc_2O_3/t). Across the full 6 Mt, Syerston needs ~14% less ore for the same output (~257 vs ~299 ktpa summed across tranches), and the implied life advantage on the longest-lived tranche is only ~2.3 years (~28.9 vs ~26.6). The point is not that the orebodies are equivalent — Syerston's is better — but that at the 60 tpa scale both projects are underwritten on, the difference is a ~10–15% throughput (and therefore acid and opex) gap, not the step-change the headline grades imply. Full workings in Appendix A4.

Tranche (grade-ranked, 2 Mt each)	Grade (ppm Sc)	Recovery	Feed for 60 tpa	Implied tranche life
Flemington — best 2 Mt	575	90.8%	~75 ktpa	~26.6 yrs
Flemington — second 2 Mt	430	90.8%	~100 ktpa	~19.9 yrs
Flemington — third 2 Mt	350	90.8%	~123 ktpa	~16.2 yrs
Syerston — best 2 Mt	644	88.0%	~69 ktpa	~28.9 yrs
Syerston — second 2 Mt	500	88.0%	~89 ktpa	~22.4 yrs
Syerston — third 2 Mt	450	88.0%	~99 ktpa	~20.2 yrs

Table 8 – Grade-ranked 2 Mt tranches at equal 60 tpa Sc_2O_3 output. Indicative: tranches are our grade-ranked splits of the published resources, not block-model breakdowns; Sc→Sc_2O_3 at 1.53; not a mine plan. Source: company disclosures; Evolution Capital estimates.

Board, management and capital structure

People: Andrew Nesbitt — CEO from October 2023, Managing Director since July 2026 — leads the Tribeca-backed pivot to scandium as the company's clear lead asset and the move toward a PFS; his background is operational rather than promotional (ex-De Beers, Gold Fields and SRK, and a former ASX resources CEO).

The board is weighted to financing and deal execution: Chairman Michael Ramsden and Dominic Marinelli (both Terrain Capital) bring three decades of corporate advisory and resources M&A between them, while the newest appointees — Michael McNeilly (CEO of Strata Investment Holdings plc, ex-Metal Tiger; NED of Cobre, Southern Gold and Armada) and Cristian Moreno (geologist-geophysicist; Managing Director of Torque Metals, ex-Red 5) — add London equity-markets reach and in-house geological depth, each granted 12.5m unlisted options (A$0.030, expiring July 2029) on appointment.

Capital structure (Appendix 2A, 12 May 2026)	Number (m)	Terms
Ordinary shares (AUZ)	2,159	Basic; market cap A$51.8m at A$0.024
Listed options (AUZOA)	307.4	Strike A$0.022, expiry 2 Feb 2027 — marginally in-the-money
Listed options (AUZOB)	305.1	Strike A$0.032, expiry 6 May 2027 — ~33% out-of-the-money
Unlisted options	25	Strike A$0.030, expiry 30 Jul 2029 — 12.5m each to Cristian Moreno and Michael McNeilly; ~25% out-of-the-money
Fully diluted (ITM)	**2,466**	Basis for per-share NAV
Fully diluted (all instruments)	**2,797**	+30% register if all options exercised, raising A$17.3m

Table 9 – Capital structure

Source: AUZ - Valuation Model (Capital Structure sheet); Appendix 2A, 12 May 2026.

Burn and runway: March-2026 quarter relevant outgoings were A$1.01m (A$0.50m operating, A$0.52m exploration) — 3.7 quarters of funding as filed, roughly doubled by the May placement. FY26 year-to-date: operating outflow A$1.85m, investing A$1.90m, financing inflow A$6.02m; cash A$3.72m at 31 March 2026 and ~A$5.5m pro forma at 30 June. We model A$2.2m/yr of corporate G&A and A$4.0m/yr of exploration and study spend through the PFS.

Valuation

Methodology: We value AUZ on a sum-of-the-parts NAV. Flemington is carried at unrisked post-tax project NPV — a full annual DCF replicating the SRK mine plan (75 ktpa mill, 85% year-1 ramp, Measured→Indicated→Inferred depletion, 28-year life, 90.8% recovery, 5.5% royalties, 30% tax), discounted to FID at a 10% real WACC, all-equity.

Boa Vista is carried at a risked in-situ value (336 koz × A$25/oz × 50% risk factor = A$4.2m; AUZ is earning up to 80%, a further haircut that the 50% risk factor is generous enough to absorb); the hydrogen-storage IP at nil (a choice, not a verdict — independently validated and potentially a captive user of Flemington scandium, it is optionality the current price pays nothing for; see the company section). Pre-production corporate G&A and study spend is deducted as a discounted annuity, and in-the-money option proceeds are added.

Development risk is applied once, at the end of the bridge: AUZ trades at ~0.11× P/NAV today, and we set the 12-month target at a scoping-stage multiple of 0.35× — within the customary 0.30–0.50× pre-PFS range — rather than layering a separate probability-of-development haircut on top.

Key assumptions	Value	Basis
Sc_2O_3 price — base case	US$2,000/kg	Evolution base case; full US$1,000–4,000/kg deck shown below
WACC (real, post-tax)	10%	Above the scoping study's 8% convention; scoping-stage funding risk
AUD/USD	0.68	Long-run real; single FX input for the workbook
Tax / royalties	30% / 5.5%	Australian corporate rate; 4% NSW + 1.5% Nickel 28 GRR
Metallurgical recovery	90.8%	As disclosed; recovery risk is carried in the target multiple, not the cash flows
FID / first production	Jul-2028 / Jul-2030	2Y build; ~3.9 years of pre-production burn from the report date
12-Month P/NAV target multiple	0.35×	Scoping-stage range; 0.20–0.50× sensitivity below

Table 10 – Key valuation assumptions

The NAV-to-equity bridge (base case, US$2,000/kg): Project NPV of A$503m (US$343m; the same cash-flow engine reproduces the SRK headline of US$270m / 32% IRR when run at US$1,500/kg and the scoping study's 8% discount rate) is bridged to equity as follows

Component	Risking	A$m	A$/sh
Flemington Scandium — NPV (100%, post-tax, unrisked)	nil	503	0.204
+ Boa Vista Gold — risked in-situ value (A$25/oz)	50%	4.2	0.002
+ Metal-hydride hydrogen-storage IP	nil	0.0	0.000
+ Pro forma net cash (30 Jun 2026 est.)	—	5.5	0.002
− Corporate adjustments (G&A + studies NPV, + ITM option proceeds)	—	(12.7)	(0.005)
Equity NAV (ungeared) [Intrinsic Value]		**501**	**0.203**
Price target @ 0.35× P/NAV			**A$0.071**

Table 11 – NAV-to-equity bridge (US$2,000/kg base case)

Corporate adjustments: −A$6.9m NPV of corporate G&A and −A$12.5m NPV of exploration/studies to first production, plus +A$6.8m of in-the-money AUZOA exercise proceeds. Per-share figures on 2,466.0m fully diluted (ITM) shares.

The price deck is the valuation: Scandium has no exchange price, so we show the full deck rather than defend a point estimate. At the US$1,000/kg bear case the equity NAV falls to A$0.014/sh and the 0.35× target below a cent: at that price Flemington sits barely above its ~US$920/kg breakeven (US$815/kg at the study's 8% rate), project IRR is ~13%, and the mine does not plausibly get built. At the US$3,000/kg market-aligned case — the price both the Syerston FS and the Flemington scoping use, and below every current Western reference print — the NAV is A$0.392/sh and the target A$0.137, roughly 6× the current price. The current A$0.024 price capitalises AUZ at ~0.11× base-case NAV: the market is paying for scandium at ~US$1,050/kg on full NAV credit — ~US$1,275/kg even at our 0.35× target multiple — below every Western reference print.

Sc_2O_3 price (US$/kg)	1,000	1,500	2,000 (base)	2,500	3,000	4,000
Project NPV (US$m)	25	184	**343**	501	660	977
Project NPV (A$m)	37	270	**503**	737	970	1,437
Equity NAV (A$/sh)	0.014	0.109	**0.203**	0.298	0.392	0.581
12-mo target @ 0.35× P/NAV (A$/sh)	0.005	0.038	**0.071**	0.104	0.137	0.204
Implied return vs A$0.024	−79%	+58%	**+196%**	+333%	+471%	+750%

Table 12 – Risked NAV across the Sc_2O_3 price deck (post-tax project NPV at 10% real WACC, discounted to FID; equity NAV per the full bridge (Boa Vista, cash, corporate adjustments), on 2,466.0m FD shares; 12-month targets at 0.35× P/NAV.)

Sensitivities: At the bear-case price, a ±15% move in the Sc_2O_3 price or recovery swings project NPV by ~US$95m; ±15% on initial capex swings ~US$34m; moving the discount rate from 10% to 8% lifts bear-case NPV from US$25m to US$49m (and to US$80m at 6%). The target scales linearly with the multiple: A$0.061/sh at 0.30×, A$0.071 at 0.35×, A$0.102 at 0.50×.

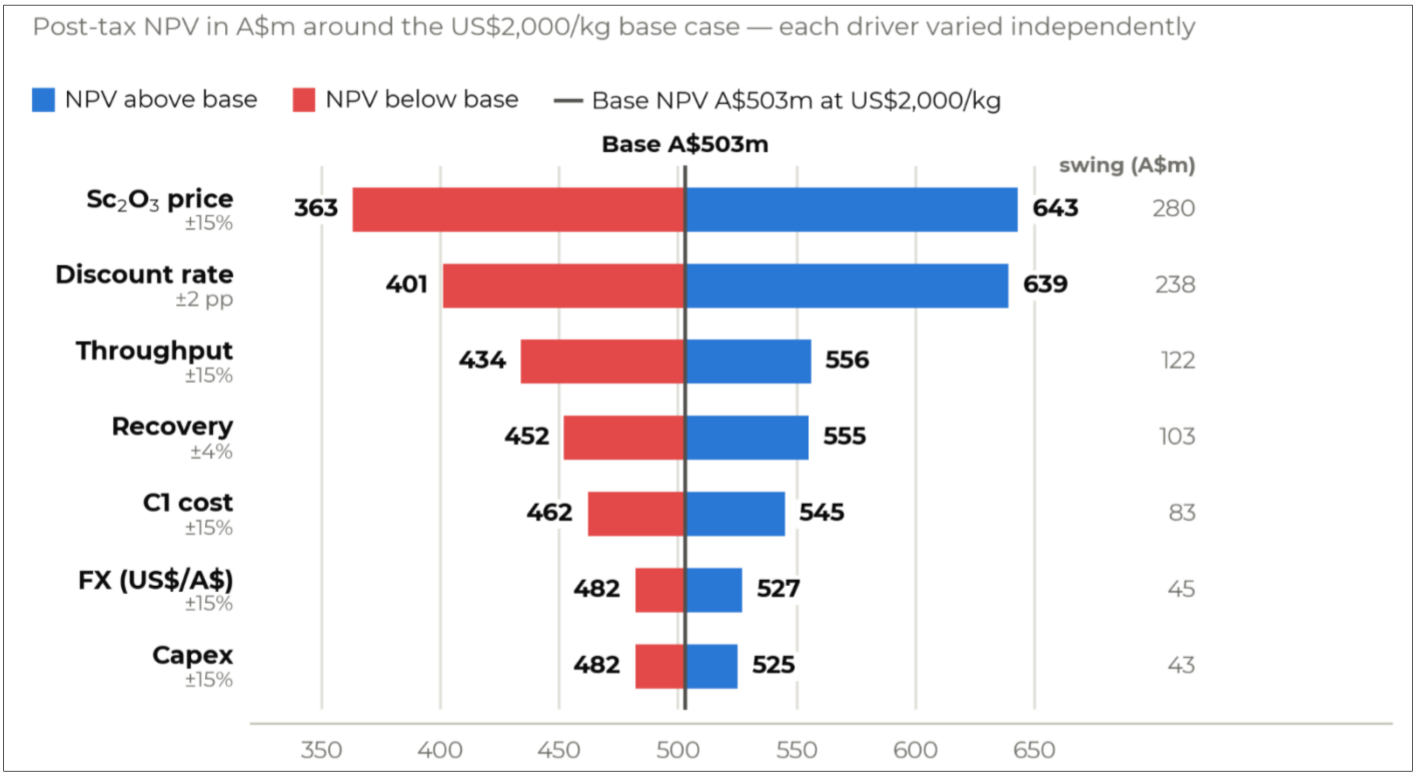


Figure 12 – Price and discount rate dominate the outcome; Each driver re-run in the model with the stated range mapped to the full bar. Source: Evolution Capital

What is not in the number: The per-share NAV is a pre-financing figure: the ~A$18.9m funding gap to first production, and any equity component of the US$125m construction capex, are not modelled as dilution in the bridge. Funding the gap entirely with equity at the current price would roughly halve the per-share NAV; funding it at re-rated prices, via option exercise, or at asset level (JV/partial sale) is materially less dilutive. This is why the rating is Speculative — the path, not the rock, is the risk. Our A$0.071 target sits at the US$2,000/kg base case — still below the ~US$3,000/kg Western incentive-price cluster; we regard the balance of probability as skewed to prints above it (see The Scandium Market).

Risks

We rate risks High/Medium/Low with reasoning, not boilerplate. Metallurgical recovery and funding are the two that most plausibly break the thesis.

Risk	Rating	Assessment	Mitigants / watch-items
Metallurgical recovery	High	Flat 90.8% LOM recovery across a limonite→saprolite profile is optimistic: matched lab leaching gives ~84% (limonite) vs ~60% (saprolite); peers achieve 87–88% on limonite-only HPAL. The single most material unhedged technical risk.	Staged testwork could confirm upper-80s on a limonite-dominant feed; front-loaded high-grade limonite mining limits the NPV drag; the mined resource carries effectively no saprolite above cut-off.
Capex / funding & dilution	High	US$125m (~A$184m) pre-production capex vs ~A$50m market cap (~3.7×); a ~A$18.9m pre-FID funding gap; concentrated sulphuric-acid supply.	Debt/offtake/JV — SRL's US$67m EXIM LOI plus the Lockheed offtake option is the template; Tribeca cornerstone; possible asset-level strategic deal; A$16.5m of option strike proceeds if the register re-rates before Feb/May-2027 expiries.
Single-customer concentration	High	The demand thesis leans on Bloom's ramp (roughly half to three-quarters of global scandium consumption on available estimates). A Bloom slowdown, a successful scandia-thrifting program (its patents target exactly that), or a stack-life extension would each soften the deficit that underpins the ex-China premium. Hunterbrook's fork: either the 5 GW ramp is real — and the scandium math breaks it while Beijing holds the off-switch — or the record quarters are largely circular financing. The scarcity case (bullish price) and the demand-mirage case (bearish volumes) are mutually exclusive.	One more reason the rating is Speculative and the base case sits at US$2,000/kg — closer to the mine-design price than to a demand-boom print.
Market / saleability & China response	High	The prospective Western pipeline (~160–190 tpa nameplate) dwarfs today's ~60 tpa consumption; pricing is opaque; AUZ has no offtake. China controls ~85% of refined supply and could suppress prices against new entrants.	Export controls cut the other way; the DLA/Lockheed precedents show security-of-supply buyers paying well above Chinese ex-works. The bull case rests on secure, scalable, low-cost tonnes winning the supply-security premium and unlocking suppressed adoption.
Corporate / governance	High	Heavy historical dilution; strategy pivots (Sconi → scandium; Brazilian gold; a hydrogen-storage program that is arguably scope-creep for a nano-cap); a single-producing-asset pathway.	The May-26 raise was struck at a 16% premium to VWAP with a specialist backer; scandium is now unambiguously the lead asset.
Substitution / technology	Medium	A migration back to thin-film 8YSZ or toward scandium-free ceria (GDC/CGO) architectures would bypass scandium entirely.	The ceria camp (Ceres licensees) has <20 MW cumulatively deployed vs Bloom's ~1.8 GW — a ~100:1 gap — and Bosch has exited. Watch-item: Ceres-architecture deployment crossing ~250–500 MW/yr, at which point the marginal electrolyte mix turns scandium-free.
Permitting / water	Medium	Greenfield EIS; water supply was identified as a key de-risking item at scoping.	The SRL/Syerston permitting pathway is a partial read-through; SRK found no fatal-flaw environmental or social issue.
FX (AUD/USD)	Medium	Revenue is USD-linked against a largely AUD cost base; the NPV is sensitive to A$ strength.	Natural hedge for an Australian exporter; a tailwind if the AUD stays weak.

Table 13 – Risk assessment. Ratings reflect probability-weighted impact on the base-case NAV. Source: Evolution Capital

Appendices, Sources and Disclaimer

This appendix carries the technical detail summarised in the body: the full fuel-cell technology comparison, the materials science and conductivity data behind scandia-stabilised zirconia, and Bloom's electrolyte patent set with the scandium-intensity derivation.

Appendix A1 — Fuel-cell technologies compared

A Solid Oxide Fuel Cell (SOFC) is an all-solid-state electrochemical device that converts the chemical energy of a fuel directly into electrical energy via the transport of oxygen ions (O^{2-}) across a dense, gas-impermeable ceramic electrolyte at elevated temperature (historically 800–1000 °C; intermediate-temperature designs 500–750 °C). The defining feature, dating to Walther Nernst's 1899 discovery that doped zirconia becomes oxygen-ion conductive at high temperature, is the use of a solid oxide as the electrolyte (Singhal & Kendall, High Temperature Solid Oxide Fuel Cells, 2003; Minh, J. Am. Ceram. Soc., 1993).

Parameter	SOFC	PEMFC	MCFC
Electrolyte	Solid ceramic (YSZ/ScSZ/GDC)	Solid polymer (Nafion)	Molten Li/K or Li/Na carbonate
Charge carrier	O^{2-}	H^+	CO_3^{2-}
Operating temp	500–1000 °C	60–110 °C	600–700 °C
Electrical efficiency (LHV)	45–65%	40–60%	~47–60%
CHP / combined-cycle	up to ~85–90% CHP; >70% with gas-turbine hybrid	~80–85% CHP (low-grade heat)	up to ~85% CHP; combined-cycle candidate
Fuel flexibility	H_2, CO, CH_4, NH_3, biogas; internal reforming; direct hydrocarbon	H_2 only (CO <10–50 ppm poisons Pt)	H_2, CO, CH_4; internal reforming
Sulfur tolerance	moderate (ppm-level; needs desulfurization)	very low	low
Reforming	internal or external	external + CO cleanup	internal or external
Catalyst	Ni (non-precious)	Pt / Pt-Ru (precious)	Ni / NiO (non-precious)
Startup time	hours (thermal mass)	seconds–minutes	hours
Thermal-cycling tolerance	poor (ceramic brittleness, CTE mismatch)	excellent	poor
BoP complexity	high-temp insulation, reformer	humidification, CO cleanup	CO_2 recycle to cathode, corrosion mgmt
Commercial maturity	commercial stationary (Bloom; Ceres licensees; ENE-FARM)	commercial (transport, backup)	commercial niche (FuelCell Energy)

Table A1 – Fuel-cell technology comparison: SOFC vs PEMFC vs MCFC. Source: compiled from published literature.

SOFCs are favored for stationary baseload and distributed generation for objective reasons: (i) the highest single-cycle electrical efficiency of any fuel cell, and uniquely high efficiency in gas-turbine hybrid configuration — Mitsubishi's pressurized 200-kW-class SOFC–micro-gas-turbine hybrid achieved 4,100 h of continuous operation, the first such demonstration; (ii) fuel flexibility enabling natural gas, biogas, ammonia and syngas with internal reforming, avoiding the CO-cleanup penalty that burdens PEMFC; (iii) non-precious-metal catalysis (Ni anode, perovskite cathode), avoiding platinum; and (iv) high-grade exhaust heat (>600 °C) usable for CHP or bottoming cycles. Their weaknesses — slow startup, poor thermal/redox cycling tolerance, and material degradation at high temperature — are precisely why the industry has pushed toward intermediate-temperature (IT) operation, the commercial driver for scandium-doped electrolytes (Steele & Heinzel, *Nature*, 2001; Wachsman & Lee, *Science* 334:935, 2011).

Versus liquid (KOH in AFC), molten (carbonate in MCFC, H_3PO_4 in PAFC) and polymeric (Nafion in PEMFC) alternatives, the solid oxide fuel cell's dense ceramic electrolyte offers:

- Structural and dimensional stability
- No corrosion or containment burden
- Fuel cross-over mitigation
- Thermal-expansion matching
- No precious-metal dependence
- Pure ionic conduction (for zirconia-based electrolytes)

The trade-offs are mechanical brittleness and the need for high operating temperature to achieve adequate conductivity — the very constraints that motivate scandia-stabilised zirconia (ScSZ).

Appendix A2 — Electrolyte materials science

The central physical argument for scandium is ionic-radius matching: Sc^{3+} (0.87 Å) sits almost exactly on Zr^{4+} (0.84 Å), where Y^{3+} (1.019 Å) does not. Minimal lattice strain around the dopant lowers the oxygen-vacancy migration barrier (~0.94 eV for 10Sc1CeSZ versus ~0.9–1.3 eV for 8YSZ), and the result is that **ScSZ exhibits the highest oxygen-ion conductivity of any stabilised-zirconia system** — roughly 1.5–3× that of 8YSZ across the operating window, and ~3–4× at 800 °C.

At 800 °C, ScSZ is the clear winner among zirconias (~3–4× 8YSZ); a peak 10Sc1CeSZ conductivity of 0.184 S/cm at 800 °C is the highest reported for the material class (Abbas et al., Ceramics International, 2017).

Temperature	8YSZ	10Sc1CeSZ	GDC ($Ce_{0.9}Gd_{0.1}$)
800 °C	~0.02–0.03	**~0.10–0.13 (peak 0.184)**	~0.05–0.08
700 °C	~0.013	~0.05–0.06	~0.025
600 °C	~0.003	~0.015–0.02	~0.01
500 °C	~0.0011	~0.0025	**~0.0058**

Table A2 – Electrolyte conductivity comparison. Total ionic conductivity, S/cm. Ranking inverts at 500 °C, where ceria (GDC) wins — but only where electronic leakage can be tolerated or blocked. Source: compiled from published literature; Abbas et al. (2017).

Verdict: there is no universal "best" electrolyte. ScSZ is the best pure-ionic zirconia electrolyte for intermediate-temperature operation (~600–850 °C) — near-unity ionic transference across the full oxygen-partial-pressure range; GDC is superior at 500–550 °C but only where electronic leakage can be tolerated or blocked by a ceria/zirconia bilayer; 8YSZ remains best on pure cost-per-performance for thin-film anode-supported high-temperature cells. The engineering fork is thickness: a ~0.15 Ω·cm² area-specific-resistance viability threshold means thick electrolyte-supported cells need ScSZ, while 5–15 μm anode-supported films can still use 8YSZ.

Binary scandia–zirconia near 10–11 mol% Sc_2O_3 suffers a cubic-to-rhombohedral (β-phase, $Sc_2Zr_7O_{17}$) transition at ~500–700 °C, producing a steep conductivity drop and CTE discontinuity precisely within the IT-SOFC operating window — fatal for thermal cycling.

The industrial solution is co-doping: adding ~1 mol% of a second oxide (CeO_2, giving 10Sc1CeSZ; or Y_2O_3, Yb_2O_3, Bi_2O_3, Al_2O_3) stabilises the cubic phase to room temperature. The cerium is a phase stabiliser, not a conductivity enhancer — isovalent Ce^{4+} adds no oxygen vacancies; its larger radius simply disrupts the Sc-vacancy ordering that nucleates the rhombohedral phase. The known trade-off is $Ce^{4+} \rightarrow Ce^{3+}$ reducibility on the fuel side, **which is why Bloom's commercial blends add a third dopant:** plain 10Sc1CeSZ degrades >15% in Bloom's own patent data, while 1 mol% of Y_2O_3 or Yb_2O_3 buys <15% conductivity degradation over 4,000 hours at 850 °C.

Importantly, Ce is not supply-constrained like the rare earths in the headlines: For every tonne of neodymium, the world also pulls out ~2.3 tonnes of cerium and ~1.6 tonnes of lanthanum — cheap, abundant light rare earths with too few uses. At the other end, terbium is just 1.82% of neodymium output and dysprosium 6.06% — produced in tiny amounts because they are genuinely scarce in the ore. The cerium/lanthanum glut is the tailwind behind cerium-substituted routes: **the industry is actively hunting for places to put surplus light rare earths.**

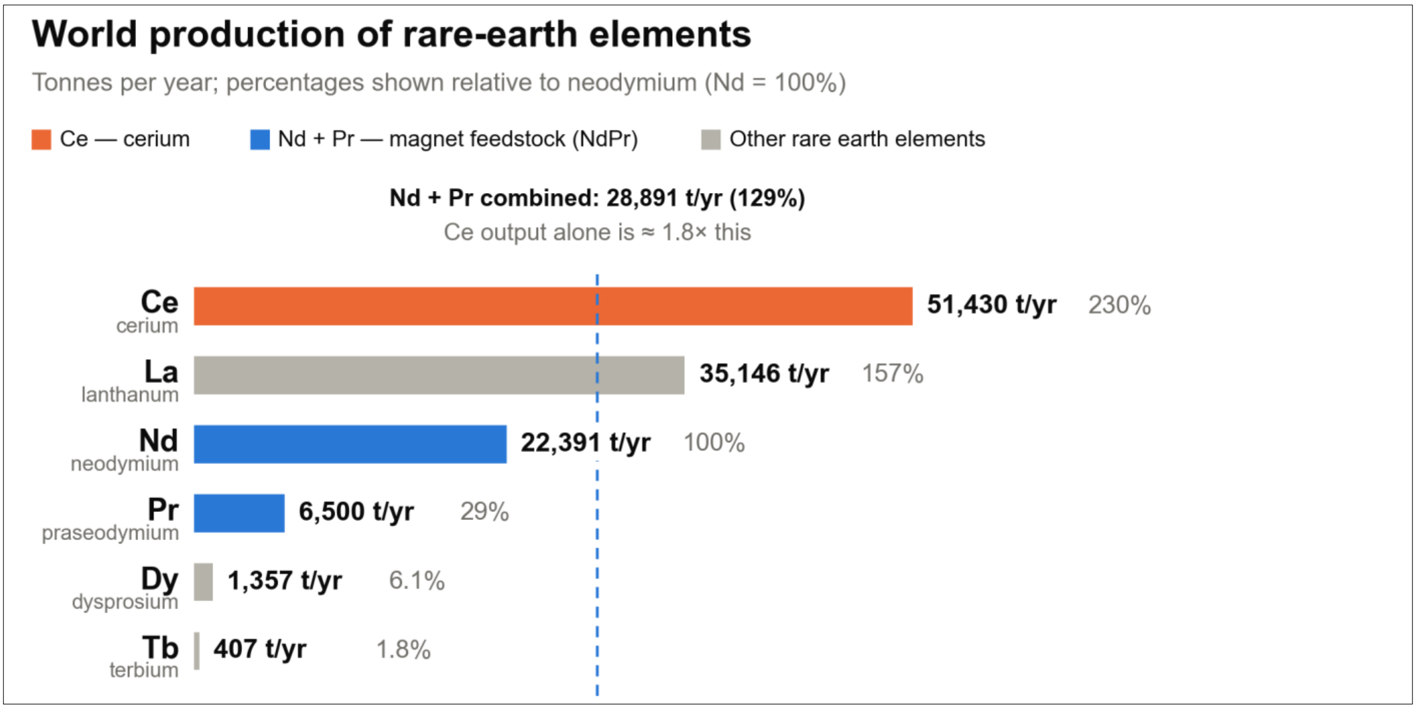


Figure A1 – World production of rare-earth elements, tonnes per year, with each element's output shown as a percentage of neodymium (Nd = 100%). Source: Durgun et al., Adv. Eng. Mater. 2025 (Fig. 11), redrawn.

Appendix A3 — Bloom patent set and scandium-intensity derivation

The composite patent discloses the blend ratio: a YSZ/ScSZ **“mixture in an about 1:1 to about 1:4 weight ratio, such as an about 1:2 to 1:3 weight ratio”** — i.e. YSZ up to 50 wt% of the electrolyte. Its claim 1 specifies the ScSZ phase at **“about 6 to about 11 molar percent scandia”** with ≤1 mol% ceria — a granted claim reaching well below the 10 mol% pin of the earlier family. The stated purpose is cost: *“By mixing a lower cost yttria stabilized zirconia powder with a higher cost, higher performance scandia stabilized zirconia powder, the overall cost of the electrolyte is reduced without significantly impacting the electrolyte performance.”*

Patent	Subject
US 8,580,456 B2	Parent phase-stable filing (2011→2013); claim 1 pinned to exactly 10Sc1Ce1Y
US 9,413,024 B2	Phase-stable doped zirconia; <15% degradation over 4,000 h at 850 °C; electrolyte-supported claim
WO 2014/081716 A1	PCT co-doped ScSZ; explicit “decrease the level of scandia” cost language
US 9,515,344 B2	Doped ScSZ (Sc-Ce-In; Mg substitution mechanism)
US 10,381,673 B2	Co-doped ScSZ compositions (Mg-thrifted data)
US 2019/0312294 A1	Co-dopant application (same continuation family)
US 10,593,981 B2	Heterogeneous YSZ + ScSZ composite electrolyte (1:1–1:4 ratio; ScSZ phase 6–11 mol% scandia), CTE-matched to the Cr-Fe interconnect
US 10,978,726 B2	Co-dopant continuation targeting ≥200 mS/cm at 850 °C
US 2022/0399559 A1	2022 continuation; claim 1: electrolyte thickness ≤100 µm

Table A3 — Bloom Energy electrolyte patent set. Source: USPTO / WIPO records; all nine patents verified against the original grants.

The YSZ/ScSZ split and scandium intensity: Bloom’s composite generations blend YSZ with 10Sc1CeSZ-type material (US 10,593,981), **with the blend ratio bounded by the patent at 1:1 to 1:4 (YSZ:ScSZ) and a preferred range of 1:2 to 1:3**; the commercial ratio and generation mix are undisclosed. At 10 mol%, scandia is ~11 wt% of the ScSZ phase (~7 wt% contained Sc metal). In composite generations the whole-electrolyte figure dilutes to **~7.3–8.2 wt% Sc_2O_3 at the preferred ratios** (~5.5 wt% at the 1:1 bound). Treating the cell as pure ScSZ is therefore a **ceiling, not a base case**.

Our verified intensity work brackets Bloom-architecture scandium demand at **40–80 t of Sc_2O_3 per GW** on a **single-phase basis**: a bottom-up electrolyte-only floor of ~25–38 kg/MW at 100–150 µm thickness and 0.25 W/cm², grossed up for anode loadings and ~50–70% manufacturing yield. Two flags on that bracket. **First**, the 150 µm end exceeds the ≤100 µm bound claimed in the 2022 continuation — treat it as a legacy-generation assumption, not a patent-supported value. **Second**, if composite generations dominate current production, the electrolyte floor scales by the ScSZ weight share: **~17–31 kg/MW at the preferred 1:2–1:3 ratios**, pulling the bracket toward ~30–60 t/GW.

Appendix A4 — Grade-ranked tranche comparison: Flemington vs Syerston at equal output

Method: We split each deposit into three indicative grade-ranked 2 Mt tranches and require each tranche to deliver exactly 60 tpa of Sc_2O_3 — the scale both projects are underwritten on. Annual feed falls out as 60 ÷ (grade × recovery × 1.53), where 1.53 is the Sc→Sc_2O_3 conversion factor consistent with SRL's resource reporting, and tranche life is 2 Mt divided by that feed rate. Grades are our grade-ranked splits of the published resources, not block-model breakdowns — the Flemington tranches average ~452 ppm against the declared 6.29 Mt @ 446 ppm MRE. Recoveries are as disclosed: 90.8% for Flemington (flagged in the metallurgy section as optimistic for a limonite→saprolite profile) and 88.0% from SRL's feasibility work.

Tranche (2 Mt each)	Grade (ppm Sc)	Recovery	Recovered yield (g Sc_2O_3/t ore)	Feed for 60 tpa	Tranche life
Flemington — best	575	90.8%	~799	~75 ktpa	~26.6 yrs
Flemington — second	430	90.8%	~597	~100 ktpa	~19.9 yrs
Flemington — third	350	90.8%	~486	~123 ktpa	~16.2 yrs
Syerston — best	644	88.0%	~867	~69 ktpa	~28.9 yrs
Syerston — second	500	88.0%	~673	~89 ktpa	~22.4 yrs
Syerston — third	450	88.0%	~606	~99 ktpa	~20.2 yrs

Table A4 — Equal-output tranche workings. Recovered yield = grade × recovery × 1.53. Source: company disclosures; Evolution Capital estimates.

What it shows: Three readings. First, recovery narrows the grade gap: Syerston's best tranche is +12% on grade but only ~+9% on recovered yield, because Flemington's 90.8% recovery claws back about a third of the difference. Second, at equal output Syerston requires ~14% less total feed (~257 vs ~299 ktpa summed across tranches). Third, the life difference is small — ~28.9 years against ~26.6 on the longest-lived tranche — because tail life is set by the best tranche alone, where the recovered-yield gap is only ~9%. The construction also validates the scoping study's plant: Flemington's top 2 Mt implies ~75 ktpa of feed for 60 tpa, squarely within the disclosed 72–76 ktpa.

The simultaneous-tranche ceiling: If all three tranches ran concurrently, each project would deliver 180 tpa from a single blended-feed plant, stepping down as tranches deplete. We present this as a stylised endowment ceiling, not a scenario: our valuation is underwritten at 60 tpa, SRL's disclosed expansion path stops at 120 tpa, and the equal-output-per-tranche construct depletes the lowest-grade tranche first — the reverse of any real schedule, which would front-load high-grade limonite. Read it as a statement about resource endowment at scale, not a production plan.

Simultaneous-tranche ceiling	Flemington	Syerston
Initial output (three tranches)	180 tpa	180 tpa
Combined feed	~299 ktpa	~257 ktpa
Step-down to 120 tpa	~16.2 yrs	~20.2 yrs
Step-down to 60 tpa	~19.9 yrs	~22.4 yrs
Final tranche exhausted	~26.6 yrs	~28.9 yrs

Table A5 — Simultaneous-tranche ceiling: stylised, not a production scenario. Step-downs occur as the lowest-grade tranche (highest feed rate) exhausts first — an artefact of the equal-output construct. Source: Evolution Capital estimates.

Source documents

Date	Document	Used for
8 Jan 2025	ASX: Flemington Resource Expands Significantly (2025 MRE)	Resource block — Measured 3.12 Mt @ 455 ppm, Indicated 3.02 Mt @ 441 ppm, Inferred 0.15 Mt @ 371 ppm
28 Apr 2026	ASX: Flemington delivers standout Scoping Study economics (SRK)	Mine plan, throughput, 90.8% recovery, US$125m capex, C1, 28-yr life; NPV_8 US$270m / IRR 32% at US$1,500/kg cross-check
4 May 2026	ASX: Strategic placement by internationally renowned resources fund	A$3.0m at A$0.028 (Tribeca A$2.7m + two substantial holders); 16% premium to 30-day VWAP; PFS decision
12 May 2026	Appendix 2A — quotation of securities	2,158,606,705 shares; AUZOA 307.4m (exp 2 Feb 27); AUZOB 305.1m (exp 6 May 27); no unquoted securities
30 Apr 2026	Appendix 5B / Quarterly Activities Report (Mar-26 quarter)	Cash A$3.72m; YTD operating (A$1.85m), investing (A$1.90m), financing A$6.02m; outgoings A$1.01m/qtr; nil facilities
2013	Schmulian, Giroux & Cuttle — Boa Vista / VG1 NI 43-101	336,000 oz historical foreign estimate (8.47 Mt @ 1.23 g/t Au at 0.5 g/t cut-off) — not JORC (2012)
Jul 2026	AUZ investor presentation — Flemington Scandium & Boa Vista Gold	Share price and option terms at the 30 Jun 2026 close
2025–26	Hunterbrook Media — “Bloom's Big Lie”	China supply-chain investigation; supply–demand model (~220 t Bloom need vs ~240 t supply, ~310 t demand)
23 Jun 2026	Evolution Capital — Bloom Energy & Scandium Demand Desk Note	Bloom installed base, backlog and demand build
2017	Abbas et al., Ceramics International	10Sc1CeSZ peak conductivity 0.184 S/cm at 800 °C
2011–22	Bloom Energy patent set (Appendix A, Table A3)	Electrolyte composition, architecture, thickness, degradation claims

Table A6 – Source documents

Evolution Capital Ratings System

Recommendation Structure	• **Buy:** The stock is expected to generate a total return of >10% over a 12-month horizon. For stocks classified as 'Speculative', a total return of >30% is expected. • **Hold:** The stock is expected to generate a total return between -10% and +10% over a 12-month horizon. • **Sell:** The stock is expected to generate a total return of <-10% over a 12-month horizon.
Risk Qualifier	• **Speculative ('Spec'):** This qualifier is applied to stocks that bear significantly above-average risk. These can be pre-cash flow companies with nil or prospective operations, companies with only forecast cash flows, and/or those with a stressed balance sheet. Investments in these stocks may carry a high level of capital risk and the potential for material loss.
Other Ratings:	• **Under Review (UR):** The rating and price target have been temporarily suppressed due to market events or other short-term reasons to allow the analyst to more fully consider their view. • **Suspended (S):** Coverage of the stock has been suspended due to market events or other reasons that make coverage impracticable. The previous rating and price target should no longer be relied upon. • **Not Covered (NC):** Evolution Capital does not cover this company and provides no investment view.

Expected total return represents the upside or downside differential between the current share price and the price target, plus the expected next 12-month dividend yield for the company. Price targets are based on a 12-month time frame.

Evolution Capital Pty Ltd
Level 8, 143 Macquarie Street Sydney, NSW 2000
Tel: +61 (2) 8379 2960
www.eveq.com