26 June 2024

The Lithium Market
Development –
Positioning to Capitalise

Fastmarkets Lithium Supply and Battery Raw Materials Conference 2024



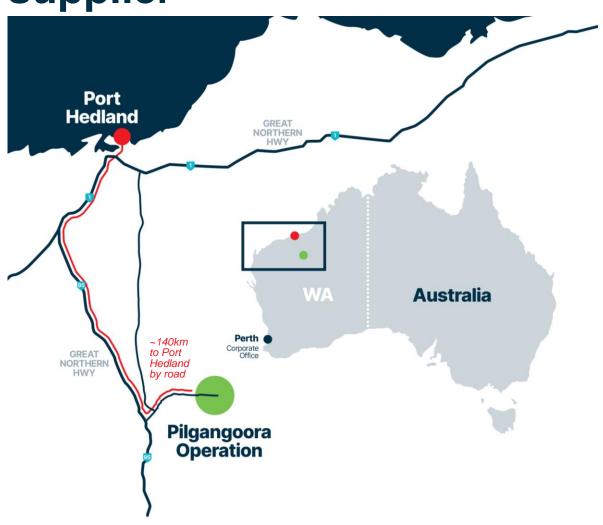
ASX: PLS



The largest, independently owned, hard rock lithium company in the world

Pilbara Minerals – a major lithium materials supplier





100% owner of Tier 1 Asset

in leading low risk mining jurisdiction

~34-year mine life

with 214Mt at 1.2% Li₂O Ore Reserve¹

Production capacity increase

to **1mtpa**² under construction and **2mtpa** feasibility study in progress³

Diversification

into battery materials supply chain underway

¹ For more information see Pilbara Minerals ASX announcement "55Mt increase in Ore Reserves to 214Mt" dated 24 August 2023.

² Production nameplate capacity uplift to ~1 Mtpa subject to completion and commissioning of the P1000 Project. Actual production is expected to vary in any year due to ore grade, concentrate grade, mine plan and other factors – refer to P1000 Project ASX release dated 29 March 2023.

³ For more information, please see Pilbara Minerals ASX announcement "Study Delivers 2MTPA Expansion Option" released on 21 June 2024

Delivering our strategy



To be a leader in the provision of sustainable battery materials products

Operate

Deliver our operating performance commitments

Grow

Achieve the full potential of the Pilgangoora asset

Chemicals

Extract greater value along the battery materials supply chain

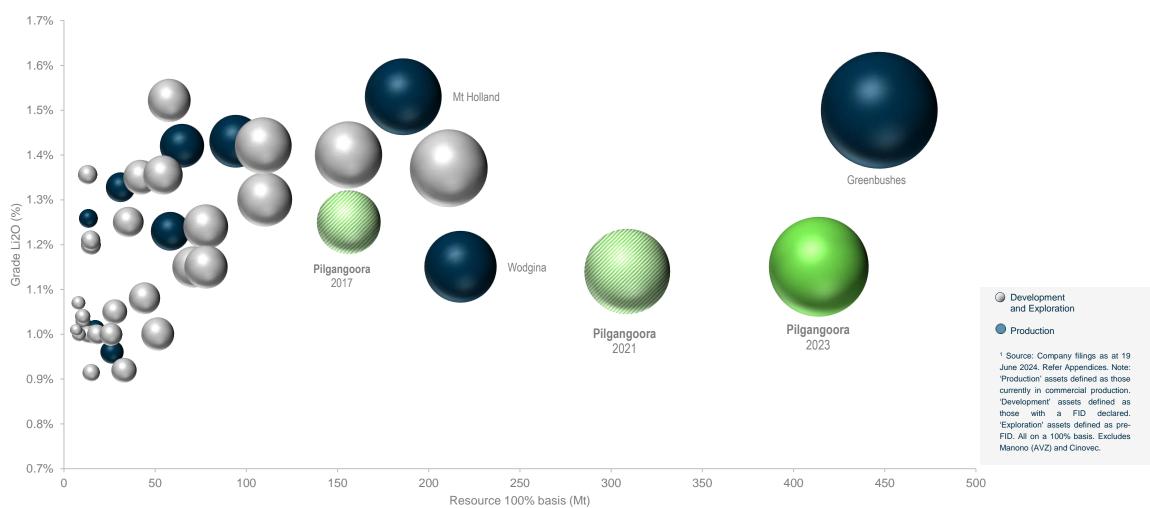
Diversify

Diversify revenue beyond the Pilgangoora asset

Globally significant lithium resource



Global hard rock lithium project landscape (bubble size represents Resource Lithium Carbonate Equivalent (LCE))1

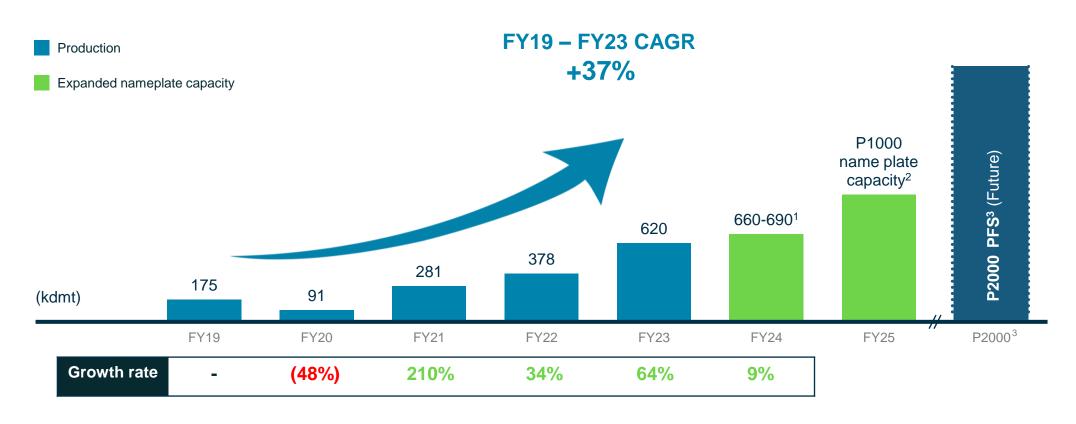




Scaling production in line with lithium market growth

Growing production in line with market





¹ FY24 production guidance range. Growth rate calculated using mid-point of FY24 production guidance range.

² Production nameplate capacity uplift to ~ 1 Mtpa subject to completion and commissioning of the P1000 Project. Actual production is expected to vary in any year due to ore grade, concentrate grade, mine plan and other factors – refer to P1000 Project Final Investment Decision ASX release 29 March 2023.

³ See ASX announcement "Study delivers 2Mtpa expansion option" released on 21 June 2024.

P2000 PFS highlights





Production

2 Mtpa

Potential production capacity (SC5.2)

New plant

Whole of ore flotation plant with estimated capex of \$1.2B (-20%/+30% accuracy)

NPV

\$2.6B

On 8% real, post tax

Next steps

Feasibility study commenced, outcomes expected December Quarter CY25

IRR

55%

on cash flows post tax

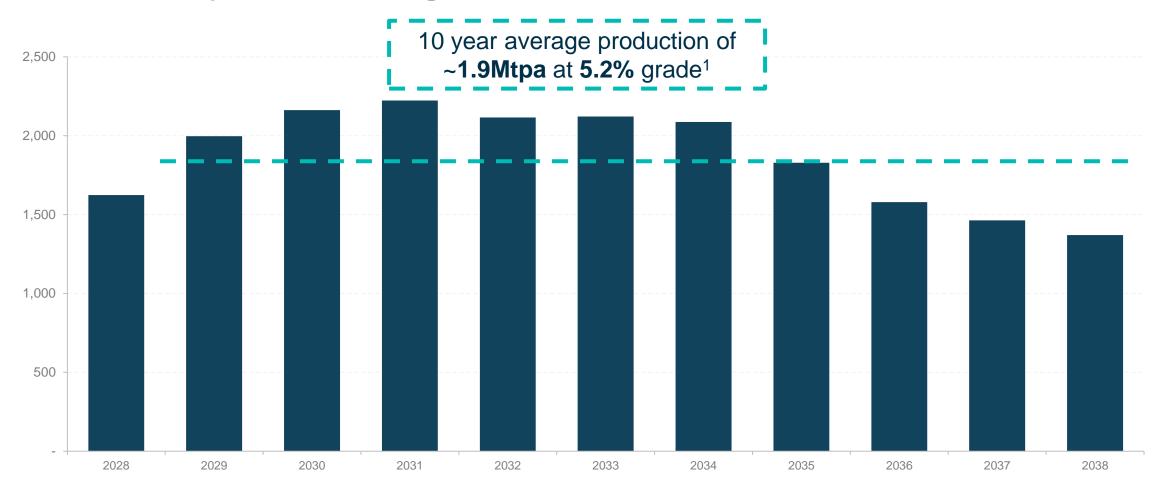
Timing

Creates optionality.
FID subject to
feasibility study,
approvals and market
outlook



P2000 10 year average production profile





¹ Future production profile is subject to successful construction and commissioning of the P1000 Project and the P2000 expansion and is influenced by a range of factors that may change over time. Production capacity in the chart over the 10 year production profile from 2029 is underpinned by the Company's existing Ore Reserves that have been prepared by a Competent Person (Mr Ross Jaine) in accordance with the JORC Code (2012 Edition) and reported and released by the Company to the ASX on 24 August 2023 in its release "55Mt increase in Ore Reserves and 91% Probable Ore Reserves. The relative proportions of Proven Ore Reserves and 91% Probable Ore Reserves

P2000 incremental NPV sensitivities





Spodumene concentrate price (6% basis) US\$/t real

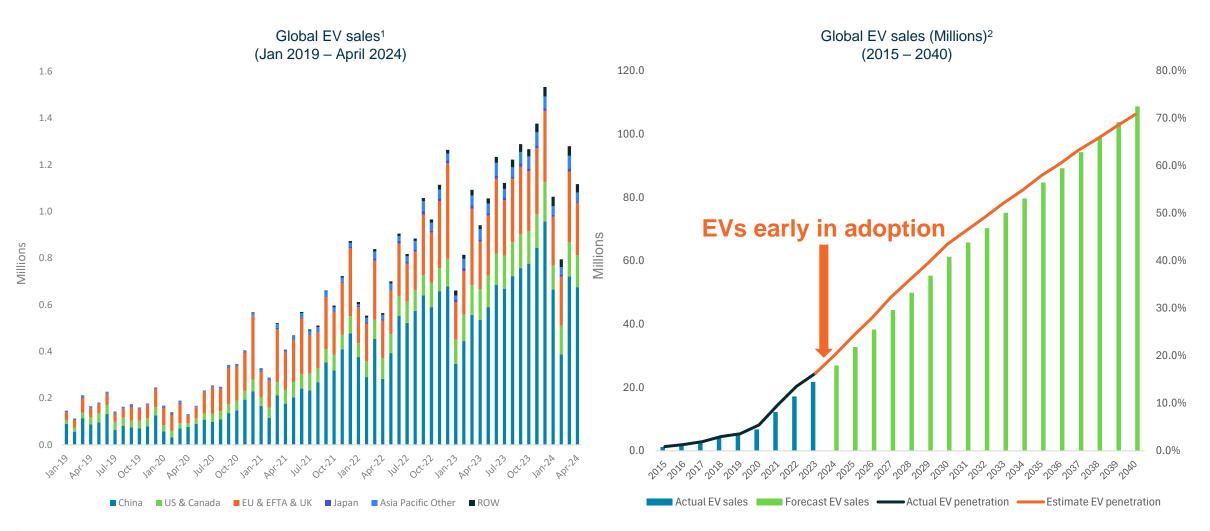
¹ For more information, please see Pilbara Minerals ASX announcement "Study Delivers 2MTPA Expansion Option" released on 21 June 2024.



Long term global demand trend for lithium continues

Strong growth fundamentals for EVs...



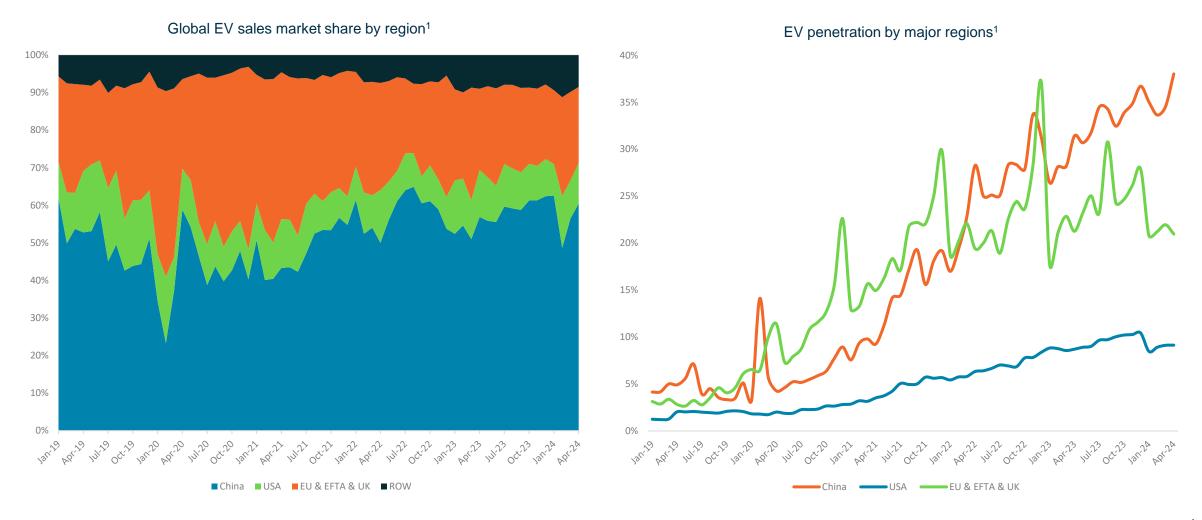


¹ Source: Rho Motion EV Sales Assessment May 2024 (retail sales).

² Source: Benchmark Mineral Intelligence Lithium Forecast Q1 2024.

...with global growth made-up of sub-markets on differing trajectories...





¹ Source: Rho Motion EV Sales Assessment May 2024 (retail sales).

...driving demand for lithium and clean energy solutions





¹ Benchmark Mineral Intelligence – Lithium Forecast Q1 2024.

² IEA 2024; Global investment in clean energy and fossil fuels, 2015-2024.

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Appendices

Important notices



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This document contains a summary of information about Pilbara Minerals and its activities that is current as at the date of this document unless otherwise stated. The information in this document is general in nature and does not contain all the information which a prospective investor may require in evaluating a possible investment in Pilbara Minerals or that would be required in a prospectus or a product disclosure statement prepared in accordance with the Corporations Act 2001 (Cth) ("Corporations Act") or the securities laws of any other jurisdiction. The information in this document should be read in conjunction with Pilbara Minerals' other periodic and continuous disclosure announcements lodged on the ASX.

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Reporting of Mineral Resources and Ore Reserves

Recipients of this presentation outside Australia should note that it is a requirement of the Australian Securities Exchange listing rules that the reporting of ore reserves and mineral resources in Australia comply with the Australian Joint Ore Reserves Committee Code for Reporting of Mineral Resources and Ore Reserves ("JORC Code"), whereas mining companies in other countries may be required to report their ore reserves and/or mineral resources in accordance with other guidelines (for example, SEC regulations in the United States). Such estimates of reserves are largely dependent on the interpretation of data and may prove to be incorrect over time. No assurance can be given that the reserves and contingent resources presented in the document will be recovered at the levels presented. Recipients should note that while Pilbara Minerals' mineral resource and ore reserve estimates comply with the JORC Code, they may not comply with the relevant guidelines in other countries including SEC regulations. You should not assume that quantities reported as "resources" will be converted to reserves under the JORC Code or any other reporting regime or that Pilbara Minerals will be able to legally and economically extract them.

Forward looking statements

This document contains forecasts, estimates, assumptions and other forward-looking statements (including production targets and financial forecasts). Forward-looking statements are not guarantees of future performance, and involve known and unknown risks, uncertainties, sensitivities, contingencies, assumptions and other important factors, many of which are beyond the control of the Company and its directors and management. Although the Company believes that its expectations, estimates and forecast outcomes and other forward-looking statements are based on reasonable assumptions (and that the material assumptions and charges and changes in the assumptions assumption assumptions (and that the material assumptions is are based on reasonable assumptions assumption in this document including the rest and consequents of the production targets and estimates existing at the time of assessment which may cover time, impacting the rest and estimates existing at the time of assessment which may also cause the production and have a flow on effect on sales. Various assumptions may prove to be incorrect, and known and unknown risk f

Important notices



Important Information regarding Mineral Resources, Ore Reserves and P680, P1000 and P2000 Projects

Information in this document regarding production targets and expansions in nameplate capacity of the Pilgangoora Operation in respect of the P680, P1000 and P2000 projects are underpinned solely by the Company's existing Ore Reserves that have been prepared by a Competent Person (Mr Ross Jaine) in accordance with the JORC Code (2012 Edition) and were released by the Company to ASX on 24 August 2023 in its release entitled "55Mt increase in Ore Reserves to 214Mt". The relevant proportions of proved Ore Reserves and probable Ore Reserves underpinning the production targets are 9% proved Ore Reserves and 91% probable Ore Reserves. The Company confirms it is not aware of any new information or data that materially affects the information included in that 24 August 2023 release and that all material assumptions and technical parameters underpinning the Ore Reserves estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The Inferred category Mineral Resource estimate has not been included in the Ore Reserves or production targets and have not been included in the PFS or any of its outputs. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources (or Ore Reserves) in relation to that mineralisation.

Financial information

The Company uses certain financial measures to assess how the Pilgangoora Project to perform. These financial measures, such as net present value (NPV) and internal rate of return (IRR) (collectively referred to as Non-IFRS Financial Measures) are not recognised under International Financial Reporting Standards (IFRS). The financial forecasts in this document are Non-IFRS Financial Measures. The Company considers these measures provide useful information about the estimated financial outcomes derived from the PFS, however, they should not be considered in isolation or as a substitute for measures of performance or cash flow prepared in accordance with IFRS. Since the financial forecasts and economic discussion in this document are not based on IFRS, they do not have standardised definitions and the way these measures have been derived may not be comparable to similarly titled measures used by other companies. Investors should therefore not place undue reliance on these Non-IFRS Financial Measures.

Access to Funding

There is no certainty that the P2000 PFS will be able to be funded when needed (nor any certainty as to the form such funding may only be available on terms that dilute or otherwise affect the value of the Company's shares.

Past performance

Statements about past performance are not necessarily indicative of future performance.

References to Australian dollars

All references to dollars (\$) and cents in this report are to Australian currency, unless otherwise stated.

Acceptance

By accepting, accessing or reviewing this document you acknowledge, accept and agree to the matters set out above.

Authorisation of release

Release of this presentation is authorised by Mr Dale Henderson, Managing Director & CEO.

Online communications

Pilbara Minerals encourages investors to be paperless and receive Company communications, notices and reports by email. This will help further reduce our environmental footprint and costs.

Shareholder communications available online include the Annual Report, Voting Forms, Notice of Meeting, Issuer Sponsored Holding Statements and other company related information. Investors can view, download or print shareholding information by choice. To easily update communication preferences, please visit: www.computershare.com.au/easyupdate/PLS.

Pilgangoora Mineral Resources and Ore Reserves



| Category | Tonnes | Li ₂ O | Ta ₂ O ₅ | Fe ₂ O ₃ | Li₂O | Ta₂O₅ | | | | | |
|---|--------|-------------------|--------------------------------|--------------------------------|------|--------|--|--|--|--|--|
| | (Mt) | (%) | (ppm) | (%) | (Mt) | (M lb) | | | | | |
| Mineral Resource estimate at 30 June 2023 | | | | | | | | | | | |
| Measured | 22.1 | 1.34 | 146 | 0.44 | 0.3 | 7 | | | | | |
| Indicated | 315.2 | 1.15 | 106 | 0.53 | 3.6 | 74 | | | | | |
| Inferred | 76.6 | 1.07 | 124 | 0.54 | 0.8 | 21 | | | | | |
| Total | 413.8 | 1.15 | 112 | 0.53 | 4.8 | 102 | | | | | |
| Ore Reserve estimate at 30 June 2023 | | | | | | | | | | | |
| Proved | 19.1 | 1.32 | 133 | 0.92 | 0.3 | 6 | | | | | |
| Probable | 195.1 | 1.18 | 100 | 1.00 | 2.3 | 42 | | | | | |
| Total | 214.2 | 1.19 | 103 | 0.99 | 2.5 | 48 | | | | | |

Notes:

- Totals may not add up due to rounding.
- 2. All Open-pit Ore Tonnes are defined using the weighted average cost and recovery of the Pilgan and Ngungaju Plants.
- Ore Reserves were estimated using projected concentrate prices of US\$1,450/dmt (CIF price) for 6% Li₂O concentrate and US\$36/lb for 25% Ta₂O₅ in concentrate.
- 4. The Mineral Resource estimate is not additional to the Ore Reserve estimate. The Ore Reserve is the economically mineable part of the Measured and Indicated Resource. It includes allowance for ore losses and dilution during mining extraction discussed further below.
- 5. Pilbara Minerals ensures that the Mineral Resource and Ore Reserve estimates quoted are subject to governance arrangements and internal controls at both a site level and at the corporate level. Mineral Resources and Ore Reserves are reported in compliance with the JORC Code 2012, using industry standard techniques and internal guidelines for the estimation and reporting of Ore Reserves and Mineral Resources. The Mineral Resources and Ore Reserve statements included in this document were reviewed by the Competent Persons prior to inclusion.
- Stockpiles at the Ngungaju Plant have had no Ta₂O₅ grade applied.
- 7. The Probable Ore Reserves include 5.0Mt of stockpiles. These comprise 1.7Mt at 1.27% Li₂O and 0.72% Fe₂O₃ at the Ngungaju Plant and 3.3Mt at 1.26% Li₂O, 106ppm Ta₂O₅ and 0.80% Fe₂O₃ at the Pilgan Plant.
- For further information on the Pilgangoora Mineral Resource estimate and the Pilgangoora Ore Reserve estimate, refer to the ASX announcements on 7 August 2023 "Substantial 109Mt Mineral Resource increase to 414Mt further extends Pilgangoora's position as a world class lithium project" and ASX release dated 24 August 2023 "55Mt increase in Ore Reserves to 214Mt". Pilbara Minerals confirms that it is not aware of any new information or data that materially affects the information included in those announcements and that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates continue to apply and have not materially changed.

Supporting data: Hard-rock Mineral Resources (slide 5)



| Rank ¹ | Company ² | Project name | Project name Category | Location | Announcement title | Announcement date | Total (Mt) | Resource grade (% Li₂O) | Contained Li₂O Contained LCE (Mt) (Mt)³ | |
|-------------------|---------------------------|--------------------|-----------------------|---------------|--|-------------------|---------------|----------------------------|---|-------|
| 1 | AVZ Minerals | Manono | Development | Africa | Manono Project Mineral Resource increases 47% to 842Mt | 31-Jan-24 | 842.0 | 1.61% | 13.52 | 33.43 |
| 2 | IGO / Tianqi / Albemarle | Greenbushes | Production | Australia | Greenbushes CY23 Resources and Reserves | 19-Feb-24 | 447.0 | 1.50% | 6.60 | 16.32 |
| 3 | Pilbara Minerals | Pilgangoora | Production | Australia | June 2023 Annual Report | 25-Aug-23 | 413.8 | 1.15% | 4.80 | 11.87 |
| | Pilbara Minerals | Pilgangoora | Production | Australia | Sep-21 Resource update | 6-Sep-21 | 308.9 | 1.14% | 3.52 | 8.71 |
| | Pilbara Minerals | Pilgangoora | Production | Australia | Jan-17 Resource update | 25-Jan-17 | 156.3 | 1.25% | 1.95 | 4.83 |
| 4 | European Metals Holdings | Cinovec | Development | Europe | Resource upgrade at Cinovec Lithium Project to 708Mt | 13-Oct-21 | 708.2 | 0.42% | 2.97 | 7.36 |
| 5 | Leo Lithium | Goulamina | Development | Africa | Significant Goulamina Mineral Resource upgrade 48% increase to 211Mt | 20-Jun-23 | 211.0 | 1.37% | 2.89 | 7.15 |
| 6 | Wesfarmers | Mt Holland | Production | Australia | Investor briefing | 23-Mar-23 | 186.0 | 1.53% | 2.85 | 7.04 |
| 7 | Mineral Resources | Wodgina | Production | Australia | Mineral Resources and Ore Reserves update | 22-Sep-23 | 217.4 | 1.15% | 2.50 | 6.18 |
| 8 | Liontown | Kathleen Valley | Development | Australia | Kathleen Valley DFS confirms Tier-1 global lithium project | 11-Nov-21 | 156.0 | 1.40% | 2.18 | 5.40 |
| 9 | Patriot Battery Metals | Corvette (current) | Exploration | North America | Patriot Announce the Largest Lithium Pegmatite Resource in the Americas at CV5 | 31-Jul-23 | 109.2 | 1.42% | 1.55 | 3.84 |
| 10 | Arcadium Lithium | James Bay | Development | North America | James Bay Mineral Resource increased by 173% to 110.2Mt | 11-Aug-23 | 110.2 | 1.30% | 1.43 | 3.54 |
| 11 | Sigma Lithium | Grota do Cirilo | Production | South America | NI 43-101 Technical Report | 16-Jan-23 | 94.2 | 1.43% | 1.35 | 3.33 |
| 12 | Latin Resources | Salinas | Development | South America | Colina Lithium deposit MRE upgrade | 30-May-24 | 77.7 | 1.24% | 0.96 | 2.38 |
| 13 | Mineral Resources | Mount Marion | Production | Australia | Mineral Resources and Ore Reserves update | 22-Sep-23 | 64.8 | 1.42% | 0.92 | 2.28 |
| 14 | Winsome Resources | Adina | Exploration | North America | Adina Mineral Resource increases 33% to 78Mt at 1.15% | 28-May-24 | 77.9 | 1.15% | 0.90 | 2.22 |
| 15 | Frontier Lithium | Pakeagama Lake | Development | North America | NI 43-101 Technical Report | 14-Jul-23 | 57.9 | 1.52% | 0.88 | 2.18 |
| 16 | Sayona Mining | Moblan | Development | North America | Moblan boosted by significant increase in lithium Resource | 17-Apr-23 | 70.9 | 1.15% | 0.82 | 2.02 |
| 17 | Arcadium Lithium | Nemaska | Development | North America | SEC Technical Report Summary | 14-Nov-23 | 54.3 | 1.36% | 0.74 | 1.82 |
| 18 | Sayona Mining | NAL | Production | North America | Definitive feasibility study confirms NAL value with A\$2.2b NPV | 14-Apr-23 | 58.3 | 1.23% | 0.71 | 1.77 |
| 19 | Lithium Ionic | Itinga | Development | South America | Lithium Ionic Announces 26% Increase in Global Mineral Resources | 12-Apr-24 | 41.9 | 1.35% | 0.57 | 1.40 |
| 20 | Global Lithium Resources | Manna | Development | Australia | Manna Lithium Project Resource Grows | 12-Jun-24 | 51.6 | 1.00% | 0.52 | 1.28 |
| 21 | Piedmont Lithium | Carolina | Development | North America | Piedmont completes bankable feasibility study of the Carolina Lithium Project | 15-Dec-21 | 44.2 | 1.08% | 0.48 | 1.17 |
| 22 | Atlantic Lithium | Ewoyaa | Development | Africa | Definitive Feasibility Study | 29-Jun-23 | 35.3 | 1.25% | 0.44 | 1.09 |
| 23 | Core Lithium | Finniss | Production | Australia | Q1 FY24 quarterly update | 27-Oct-23 | 31.1 | 1.33% | 0.41 | 1.02 |
| 24 | Critical Elements Lithium | Rose | Development | North America | Critical Elements Lithium Announces New Positive Feasibility Study | 29-Aug-23 | 32.9 | 0.92% | 0.30 | 0.75 |
| 25 | Savannah Resources | Mina do Barroso | Development | Europe | London Investor Event Presentation | 30-Jan-24 | 28.0 | 1.05% | 0.29 | 0.73 |
| 26 | Mineral Resources | Bald Hill | Production | Australia | Lithium Ore Reserve Increase of 105% at Bald Hill | 6-Jun-18 | 26.5 | 0.96% | 0.26 | 0.63 |
| 27 | Delta Lithium | Yinnetharra | Exploration | Australia | Yinnetharra Lithium Project Maiden Mineral Resource Estimate | 27-Dec-23 | 25.7 | 1.00% | 0.25 | 0.61 |
| 28 | Delta Lithium | Mount Ida | Development | Australia | Mt Ida Lithium Project Mineral Resource Estimate upgrade | 3-Oct-23 | 14.6 | 1.20% | 0.18 | 0.45 |
| 29 | Global Lithium Resources | Marble Bar | Exploration | Australia | Manna Lithium Project Resource Grows | 26-Jul-23 | 18.0 | 1.00% | 0.18 | 0.45 |
| 30 | Green Technology Metals | Root Lake | Development | North America | Significant Resource and confidence level increase | 17-Oct-23 | 14.6 | 1.21% | 0.18 | 0.44 |
| 31 | Avalon | Separation Rapids | Development | North America | Avalon announce a substantive 20% increase in deposit size`10/8/23 | 10-Aug-23 | 12.9 | 1.36% | 0.17 | 0.43 |
| 32 | Sayona Mining | Authier | Production | North America | Future Facing Commodities Conference | 5-Apr-23 | 17.1 | 1.01% | 0.17 | 0.43 |
| 33 | Arcadium Lithium | Mt Cattlin | Production | Australia | Mt Cattlin Annual Ore Resource and Reserve update at 30 June, 2023 | 1-Aug-23 | 13.3 | 1.26% | 0.17 | 0.41 |
| 34 | Liontown | Buldania | Development | Australia | Annual Report to Shareholders | 29-Sep-23 | 15.0 | 1.00% | 0.15 | 0.37 |
| 35 | Rock Tech Lithium | Georgia Lake | Development | North America | Rock Tech Lithium completes Pre-Feasibility Study for its Georgia Lake Project | 15-Nov-22 | 14.8 | 0.91% | 0.14 | 0.34 |
| 36 | European Lithium | Wolfsberg | Development | Europe | European Lithium Limited announces merger with NASDAQ listed Sizzle Acquisition Corp | 26-Oct-22 | 12.9 | 1.00% | 0.13 | 0.32 |
| 37 | Premier African Minerals | Zulu | Production | Africa | May-24 Corporate Presentation | 1-May-24 | 24.8 | 0.43% | 0.11 | 0.26 |
| 38 | Green Technology Metals | Seymour Lake | Development | North America | Seymour Resource Confidence increased ahead of preliminary economic assessment | 17-Nov-23 | 10.3 | 1.03% | 0.11 | 0.26 |
| 39 | Cygnus Metals | Pontax | Exploration | North America | Maiden Resource of 10.1Mt at 1.04% Li-O | 14-Aug-23 | 10.1 | 1.04% | 0.11 | 0.26 |
| 40 | Critical Resources | Mavis Lake | Development | North America | 8.0Mt at 10.7% Maiden Mineral Resource at Mavis Lake | 5-May-23 | 8.0 | 1.07% | 0.09 | 0.21 |
| 41 | Snow Lake Resources | Thompson Bros | Development | North America | Snow Lake Energy Presentation | 1-May-24 | 8.2 | 1.00% | 0.08 | 0.20 |
| 42 | Imagine Lithium | Jackpot | Exploration | North America | Corporate Presentation May 2023 | 1-May-23 | 6.6 | 1.01% | 0.07 | 0.16 |

Source: Company filings as at 19 June 2024. Note: Figures are rounded. Report on a 100% asset basis.

¹ Ranked by contained LCE.

² Company reporting the Mineral Resource.

³Li₂O converted to LCE using a factor of 2.473.