

Company Profile by As at 6th September 2022



OVERVIEW / FLAGSHIP PROJECT

Essential Metals Ltd (ASX: ESS) is a mineral exploration and development company, with its main focus being on its flagship project, the 100% owned Pioneer Dome Lithium Project, located in a "lithium corridor" including the Mt Marion mine operated by Mineral Resources Ltd (ASX: MIN), the Bald Hill mine operated by Alita Resources Ltd (SGX: 40F) and the Buldania project developed by Liontown Resources Ltd (ASX: LTR). ESS's assets portfolio also includes the Golden Ridge gold project (100% owned), the Acra gold project JV (30% free carried) and the Blair-Golden Ridge nickel JV (ESS 25%).

KEY ELEMENTS OF STRATEGY for PIONEER DOME

The key elements of ESS strategy are as follows:

- Increase mineral resources through extension of Pioneer Dome mineralisation or the discovery of new deposits within ESS tenement
- De-risk the project through evaluation and development studies
- 3. Advance the project toward final investment decision

KEY OUTCOMES IF SUCCESSFUL

- Advance a lithium project attractive to financiers and offtakers
- Deliver a high-quality lithium mine with strong financial returns to shareholders

CORPORATE OVERVIEW (AUD)	
Shares	247.5 million ordinary fully paid shares
Options	19.7m listed ESSO @ \$0.15 strike exp. 30 Nov 22
	2.8 unlisted at various strikes and expiries
	1.5m expiring 31 Jan 2024 @ \$0.25, \$0.35, \$0.45
	0.6m expiring 20 Sep 24 @ \$0.125, \$0.175, \$0.225
Performance	1.6m performance rights expiring 30 Jun 2024
Rights	2.1m expiring 30 Jun 2025
	0.4m expiring 30 Jun 2026
Share Price	\$0.465 as at 5 th Sep 2022
Market	\$115.1 million
Capitalisation	·
Cash	\$10.5 million as at 30 th June 2022
	+ \$3.0 million upon ESSO \$0.15 options expiring
	30 Nov 2022 being exercised
	⇒ Well-funded for exploration and
	development programs over next 12 months
	⇒ Leveraged to exploration success as well as
	the de-risking of the projects



⇒ Li prices remain strong, despite the equity market weakness

PIONEER DOME PROJECT LOCATION



The southern Yilgarn area is recognised as being well endowed with spodumene deposits, including the Bald Hill Mine, the Mt Marion Mine and the Buldania Project, all within 100km of the Pioneer Dome Lithium Project. The world-class Mt Holland deposit and the Mt Cattlin Mine are located further west and south of Pioneer Dome, respectively.

- ⇒ Tier-1 mining jurisdiction with significant infrastructure in place and close proximity (only 10 km) to regional highway between Kalgoorlie mining centre and Esperance port
- ⇒ Readily available skilled workforce, power and water
- Opportunities for consolidation with nearby lithium assets

ESS COMPANY BENCHMARKING



- Core Lithium Ltd (ASX: CXO) completed the Finniss project DFS with a mineral resource of 14.7 Mt and ore reserve of 7.4 Mt.
- Global Lithium Resources Ltd (ASX: GL1) lithium assets are made
 of the Marble Bar project (10.5 Mt @ 1.0% Li₂O) and the Manna
 project (80% of 9.9 Mt @ 1.14% Li₂O). The stage of development
 of those assets is similar to Pioneer Dome.
- Red Dirt Metals Ltd (ASX: RDT) should announce a maiden resource in Q4 2022 for the Mt Ida lithium project.
- Other companies are at exploration or resource drilling stage.
- \Rightarrow The EV/Resource multiple is A\$1,580/t Li $_2\!O$ for GL1 compared to only A\$720/t Li $_2\!O$ for ESS
- ⇒ Based on attributable mineral resources, ESS appears undervalued compared to its peers.



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PIONEER DOME PROJECT BENCHMARKING **Australian Lithium Projects** Greenbushes, Tianqi 2.00 **Mineral Resources** Mt Holland, Covalent 1.75 ithium Grade (% Li2O) Finniss, CXO Mount Marion, MIN 1.50 Tier-2 Pilgangoora, PLS Pioneer Dome, ESS Altura, PLS 1.25 Manna, GL1 Mt Cattlin, AKE Kathleen Valley, LTR 1.00 Marble Bar, GL1 Tier-1 0.75 Mines Buldania, LTR Bald Hill, 40F Projects 0.50 5 50 500 Mineral Resource Tonnage (million tonnes) - Log Scale

PIONEER DOME PROJECT HIGHLIGHTS PIONEER DOME PROJECT HIGHLIGHTS Geology In the vicinity of the project area, the Archean greenstone sequence dominates, and is broadly Mining The shallow, sub-cropping nature of the Pioneer north-south striking and westerly dipping. The Scenario Dome deposits suggests good potential for open entire greenstone sequence is intruded by a series of pegmatite dykes and sills associated with the Metallurgy Scoping study level metallurgical testwork later stage Pioneer Dome granite intrusive. These /Processing indicate Dense Media Separation (DMS) + pegmatite dykes form a swarm of intrusive bodies flotation flowsheet along a strike length of approximately 15 km along 5.6%- 6.0% Li₂O concentrate achieved the eastern edge of the granite dome. Plant throughput likely to be 1.2 Mtpa Mineral Category Li₂O % Mt Li₂O t Lode ⇒ Flow chart and processing expertise now well Resource Cade Indicated 5.4 1.30 70,000 established through a number of Australian (0.50% Li₂O cutspodumene projects 2.8 Inferred 1.18 33,000 Capex and Considering the project size, relatively low capex 29 Sep 2020) Inferred 2.3 25,000 Davy 1.13 Opex Range can be expected Inferred 0.7 8,000 Heller 1.02 Capex financeable through a combination of Total 11.2 1.21 136,000 equity, debt and pre-payments ⇒ Opportunities to increase the mineral resource Likely competitive position on the cost curve around the existing resource and elsewhere on Mining Lease Application lodged in Sep 2022 Permitting the highly prospective Pioneer Dome Project Flora and fauna study completed – no issues Hydrology study completed - multiple water mineralisation already large enough to justify sources available further evaluation through feasibility studies Mining agreement in place with the Ngadju CXO reached a final decision to mine with a 14.7 people, custodians of the land Mt mineral resource and 7.4 Mt ore reserve No environmental impediments Exploration ⇒ Supportive local community Upside: **UPCOMING NEWS FLOW** Metallurgical testwork results Up to 4km Resource expansion drill program results from the Mineral resource estimate update granite Exploration drilling leading to potential new margin is discoveries prospective exploration Scoping study to be delivered by end of 2022 upside with for spodumene Value-add news flow and milestones $450 km^2 of$ prospective bearing Feasibility study results 2023 and pegmatites ground and beyond Off-take deals ("Goldilocks 10,000m of Project financing deals drilling Zone") Multiple opportunities to add significant value in outside line with what other lithium companies have Pioneer achieved Dome