

ASX Code: ESS

#### Corporate Profile

Shares on issue: 200,817,300  
Cash: \$6.7m (31 Dec 2020)  
Debt: Nil

#### KEY PROJECTS

**LITHIUM** Pioneer Dome

**GOLD** Juglah Dome

**GOLD** Golden Ridge

#### Joint Ventures - Free Carried to a Decision to Mine

1 x lithium project  
2 x nickel projects  
4 x gold projects

#### Corporate Directory

**Non-Executive Chairman**  
Craig McGown

**Non-Executive Directors**  
Paul Payne  
Warren Hallam

**Managing Director**  
Timothy Spencer

**CFO & Company Secretary**  
Carl Travaglini

**Exploration Manager**  
Andrew Dunn

#### Investor Relations

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**12 March 2021**

## Investor presentation

Australian Energy & Minerals Conference 17-18 March 2021

The following investor presentation will be provided to attendees at the Australian Energy and Minerals Conference by the Company's Managing Director, Tim Spencer. The event details are as follows:

|              |   |
|--------------|---|
| When:        | 17-18 March 2021  |
| Where:       | Royal on the Park Hotel, 152 Alice Street, Brisbane   |
| Registration | <a href="https://www.australianenergyconference.com.au">https://www.australianenergyconference.com.au</a> |
| Attendance   | Online or in person   |

Essential Metals Managing Director, Tim Spencer, said: *"I welcome all existing and prospective shareholders (online or in person) to hear me present at 10am (AEST) on Wednesday 17 March or to have a chat with me at the Essential Metals table at the conference over the course of the two day event (17-18 March)."*

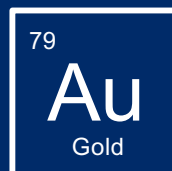
*"The Pioneer Dome Lithium Project has all the right attributes required for a successful project. It has a quality spodumene Mineral Resource and nearly 400km<sup>2</sup> of very prospective ground. It's in an easy-to-access location and is next to a main highway and is only 150km from Kalgoorlie and 275km from Esperance seaport."*



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## Exploring the heart of WA's "lithium corridor"

Targeting resource growth and new discoveries within  
the Pioneer Dome Lithium Project

### Australian Energy & Minerals Investor Conference

17-18 March 2021, Royal on the Park Hotel, Brisbane

# Forward looking statements and disclosures



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## Forward looking statements

This document may contain “forward-looking statements” and other forward looking information based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward looking information includes, among other things, statements with respect to the Company’s business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, Mineral Resources and results of exploration. Generally, this forward looking information can be identified by the use of forward- looking terminology such as ‘outlook’, ‘anticipate’, ‘project’, ‘target’, ‘likely’, ‘believe’, ‘estimate’, ‘expect’, ‘intend’, ‘may’, ‘would’, ‘could’, ‘should’, ‘scheduled’, ‘will’, ‘plan’, ‘forecast’, ‘evolve’ and similar expressions. Persons reading this document are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different. Forward looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward looking information. Forward looking information is developed based on assumptions about such risks, uncertainties and other factors, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future commodity prices; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward looking information. These and other factors should be considered carefully and readers should not place reliance on such forward looking information. Recipients of this document must make their own investigations and inquiries regarding all assumptions, risks, uncertainties and contingencies which may affect the future operations of the Company and the Company’s securities. The Company disclaims any intent or obligations to or revise any forward looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

## Exploration Results & Competent Person Statement

**Dome North Lithium Project:** The information in this presentation that relates to lithium Mineral Resource for the Dome North Lithium Project was extracted from an announcement reported to ASX on 29 September 2020 (JORC 2012) titled “Dome North Lithium Project – Resource upgrade”.

**Blair - Golden Ridge Gold/Nickel Project:** The information in this presentation that relates to exploration results was extracted from an announcement reported to ASX on 6 July 2020 titled “Golden Ridge – compelling gold targets”.

**Juglah Dome Gold Project:** The information in this presentation that relates to exploration results was extracted from the following ASX announcements: 28 August 2020 titled “Juglah Dome Project exploration commences”; 29 October 2020 titled “Juglah Dome drilling to commence in November”; 1 December 2020 titled “Drilling commences at Juglah Dome”; 10 February 2021 titled “Encouraging drill results at Juglah Dome”.

**Sinclair Caesium Mine:** The information in this presentation that relates to exploration results was extracted from an announcement reported to ASX on 12 November 2020 titled “High grade caesium intersected at Sinclair”.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements 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 announcements.

This presentation has been approved by the Company’s Board of Directors.

# Our team is active and focused on...



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**Three highly prospective 100%-owned projects in easy-to-explore, low-cost terrains near Kalgoorlie, Western Australia – a Tier-1 mining jurisdiction**

3

**Li**

Lithium

## **Pioneer Dome Project, Western Australia**

A substantial lithium Mineral Resource already defined – Spodumene, the main 'hard rock' lithium source

79

**Au**

Gold

## **Golden Ridge Project, Western Australia**

Multiple high-tenor gold targets – the goal is to unlock its potential for a large discovery

## **Juglah Dome Project, Western Australia**

Widespread significant gold-in-soil anomalism indicates 'elephant country'..!



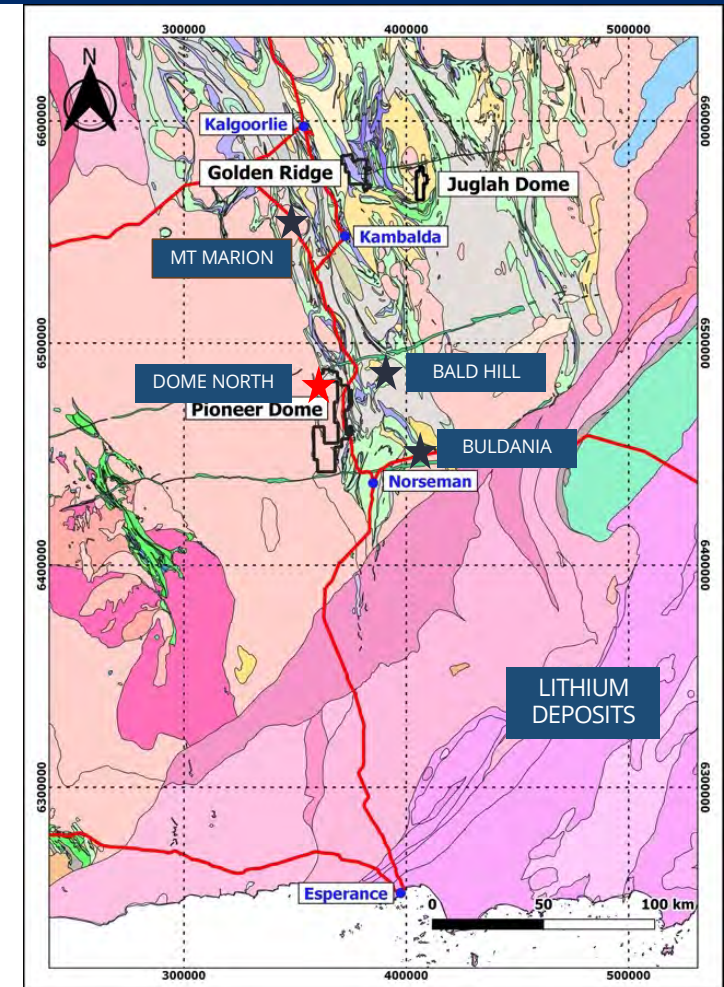
# Investment Overview



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- A well-funded and active ASX-listed explorer
- Focused on finding and producing metals that are essential for a sustainable, low-carbon future
- Three highly prospective, 100%-owned project areas in easy-to-explore, low-cost terrains near Kalgoorlie – a Tier-1 mining jurisdiction
- High quality lithium Resource: 11.2Mt at 1.21% Li<sub>2</sub>O at Pioneer Dome
- Exceptional pipeline of resource growth opportunities and exploration targets in the heart of WA's "lithium corridor"
- Major new exploration campaigns commencing soon
- Exciting gold potential at Golden Ridge and Juglah Dome Projects near Kalgoorlie
- Free-carried exposure to a significant portfolio of lithium, nickel and gold exploration projects





## Capital structure

**200.8M Shares**  
**24.6M Options**

ASX: ESS/ESSO

**A\$20M**

**Market Cap**

\$0.10/share

**A\$6.4M**

**Cash**

As at 28 Feb 2021 <sup>(1)</sup>

**Nil**

**Debt**

As at 28 Feb 2021 <sup>(1)</sup>

(1) Unaudited

## Board & Management

### Executive Team

- **Tim Spencer, Managing Director** – 25 years' experience commercial/corporate; project development in Italy, Indonesia, Brazil and Australia
- **Carl Travaglini, CFO & Company Secretary** – 12 years' experience in gold & lithium project developments
- **Andrew Dunn, Exploration Manager** – 17 years in exploration across WA & NSW

### Non-Executive Directors

- **Craig McGown, Non-Exec Chairman** – 40 years in capital markets; corporate
- **Paul Payne, Non-Exec Director** – 35 years experience: geologist; exploration, development; corporate
- **Warren Hallam, Non-Exec Director** – 35 years experience: metallurgist; management of mining operations; corporate

# Pioneer Dome Lithium Project



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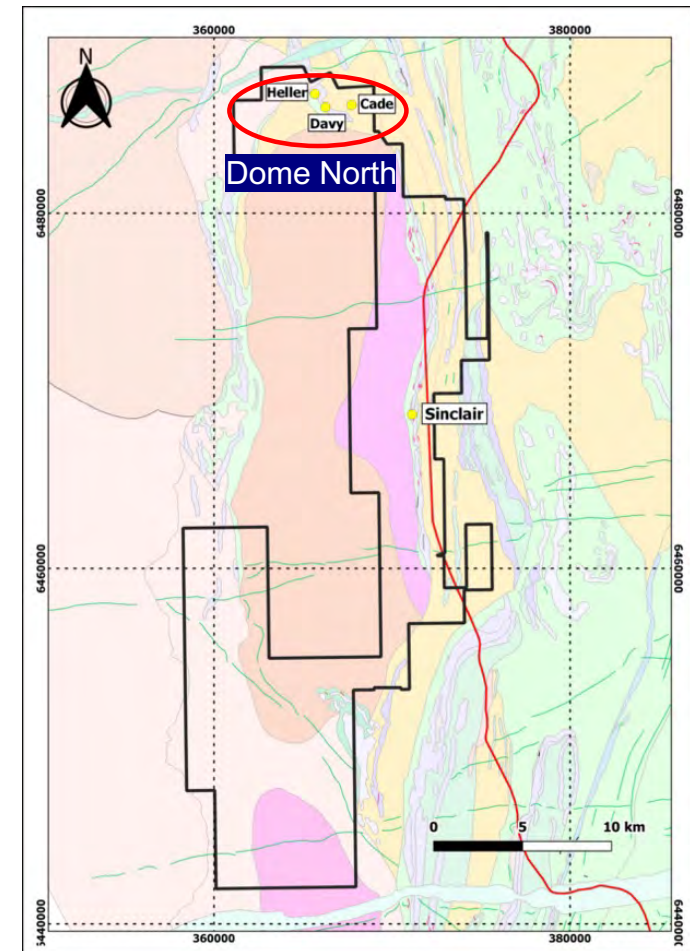
## 400km<sup>2</sup> project tenure in the 'lithium corridor'

- Mt Marion, Bald Hill and Buldania projects are all located within 100km of Pioneer Dome
- The Dome North Lithium Mineral Resource is located in the northern area

## Tier-1 location

- Perfect location to develop a mining operation
- Flat-lying, lightly wooded land with no environmental or native title complexities
- 10km from a main regional highway that connects the main mining centre of Kalgoorlie (150km) and the large dry bulk & container seaport of Esperance (275km)
- Gas pipeline and water pipeline located alongside the main highway
- Unsealed access road connects the Project to the main highway

Essential Metal is the only ASX-listed, West Australian-focused lithium explorer with a high-quality JORC lithium Resource and a market capitalisation under \$50m – we are highly leveraged to the resurgent lithium market.



Pioneer Dome Lithium Project

# Pioneer Dome Lithium Project

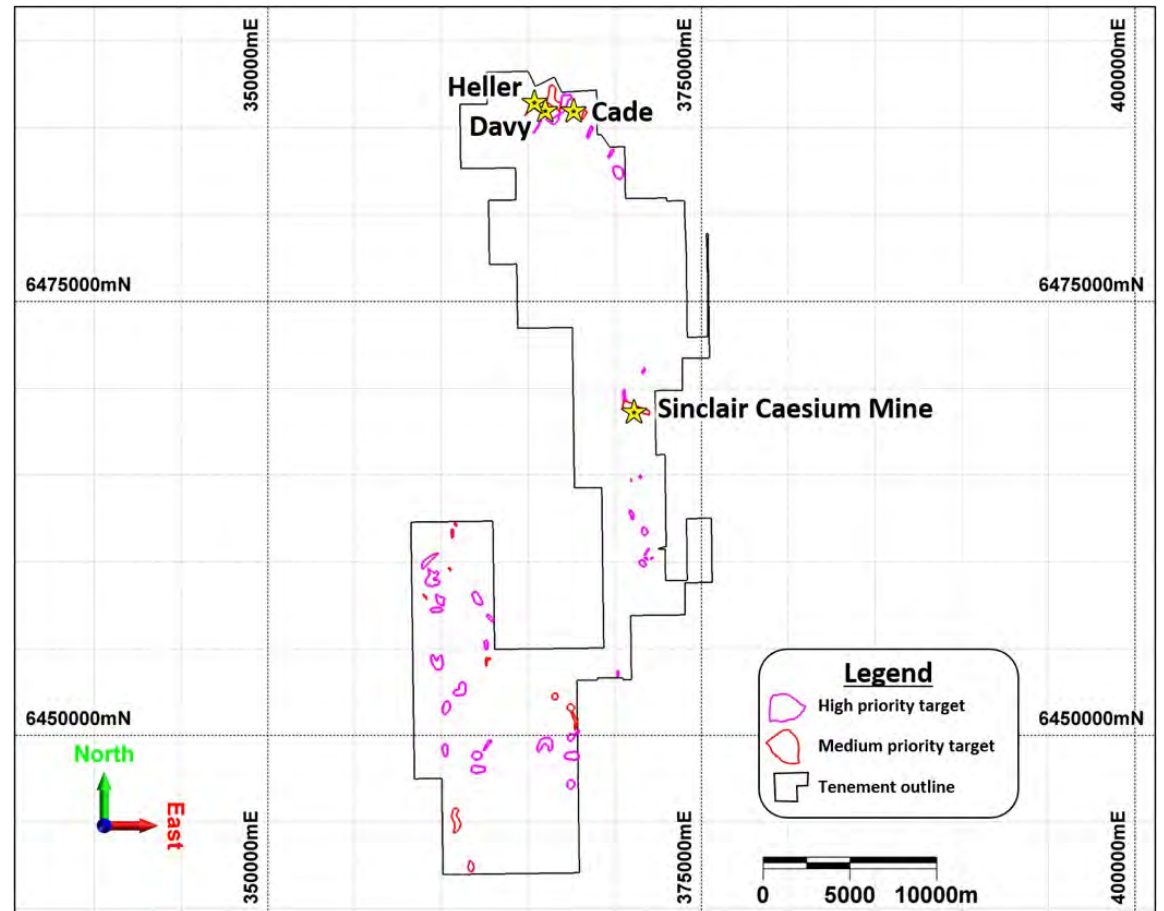


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## Excellent potential for new discoveries

- 99 lithium-caesium areas of interest now identified based on first-pass geochemistry and outcropping pegmatite occurrences
- 32 areas are considered high priority and a further 16 ranked as medium priority
- The Sinclair Caesium Mine provides obvious evidence of pegmatite fractionation and is located 20km south of the Dome North Resource - what's lies between them?





# Dome North Resource – an excellent start



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## Dome North Mineral Resource

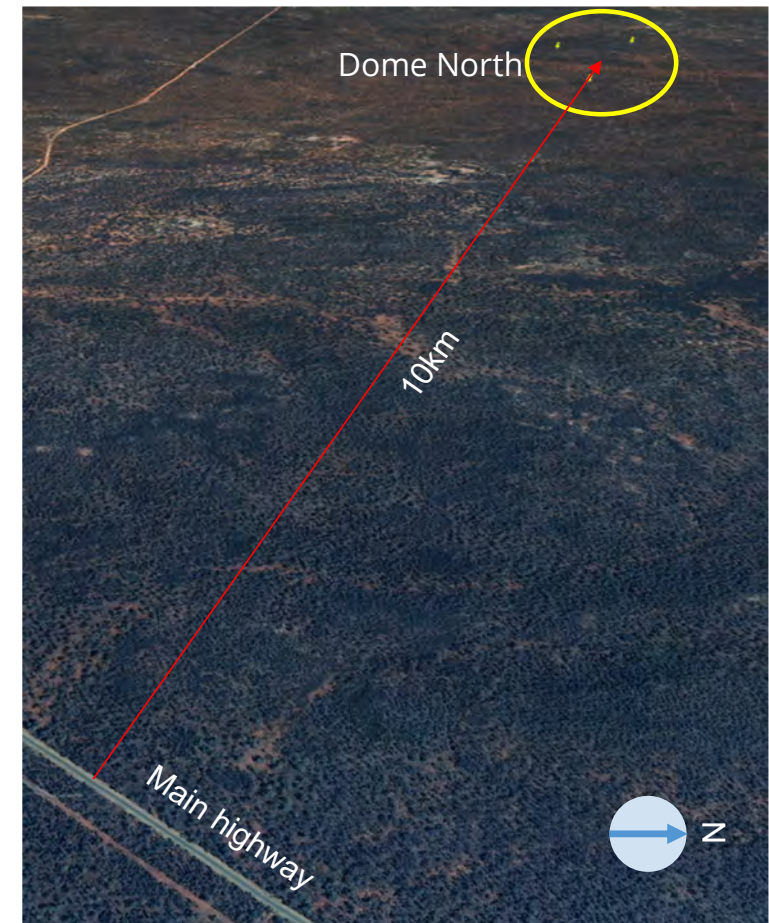
Table 2. Mineral Resource by deposit and category: Dome North Lithium Project (0.5% Li<sub>2</sub>O cut-off grade)

| Deposit      | Classification | Tonnes (Mt) | Li <sub>2</sub> O % | Ta <sub>2</sub> O <sub>5</sub> ppm | Contained Li <sub>2</sub> O (T) | Fe <sub>2</sub> O <sub>3</sub> % |
|--------------|----------------|-------------|---------------------|------------------------------------|---------------------------------|----------------------------------|
| Cade         | Indicated      | 5.4         | 1.30                | 33                                 | 70,000                          | 0.55                             |
|              | Inferred       | 2.8         | 1.18                | 33                                 | 33,000                          | 0.63                             |
| Davy         | Inferred       | 2.3         | 1.13                | 53                                 | 25,000                          | 0.68                             |
| Heller       | Inferred       | 0.7         | 1.02                | 76                                 | 8,000                           | 0.72                             |
| <b>Total</b> | <b>Total</b>   | <b>11.2</b> | <b>1.21</b>         | <b>40</b>                          | <b>136,000</b>                  | <b>0.61</b>                      |

Note: Appropriate rounding applied.

## Excellent metallurgical characteristics

- Scoping Study level metallurgical test work showed a total lithium oxide (Li<sub>2</sub>O) recovery rate of 74% was achieved using a hybrid Dense Medium Separation (DMS) + flotation flowsheet to produce a 5.6% lithia (Li<sub>2</sub>O) concentrate with 0.7% iron (Fe<sub>2</sub>O<sub>3</sub>) content
- Excellent potential for improvement with further refinement of the process techniques



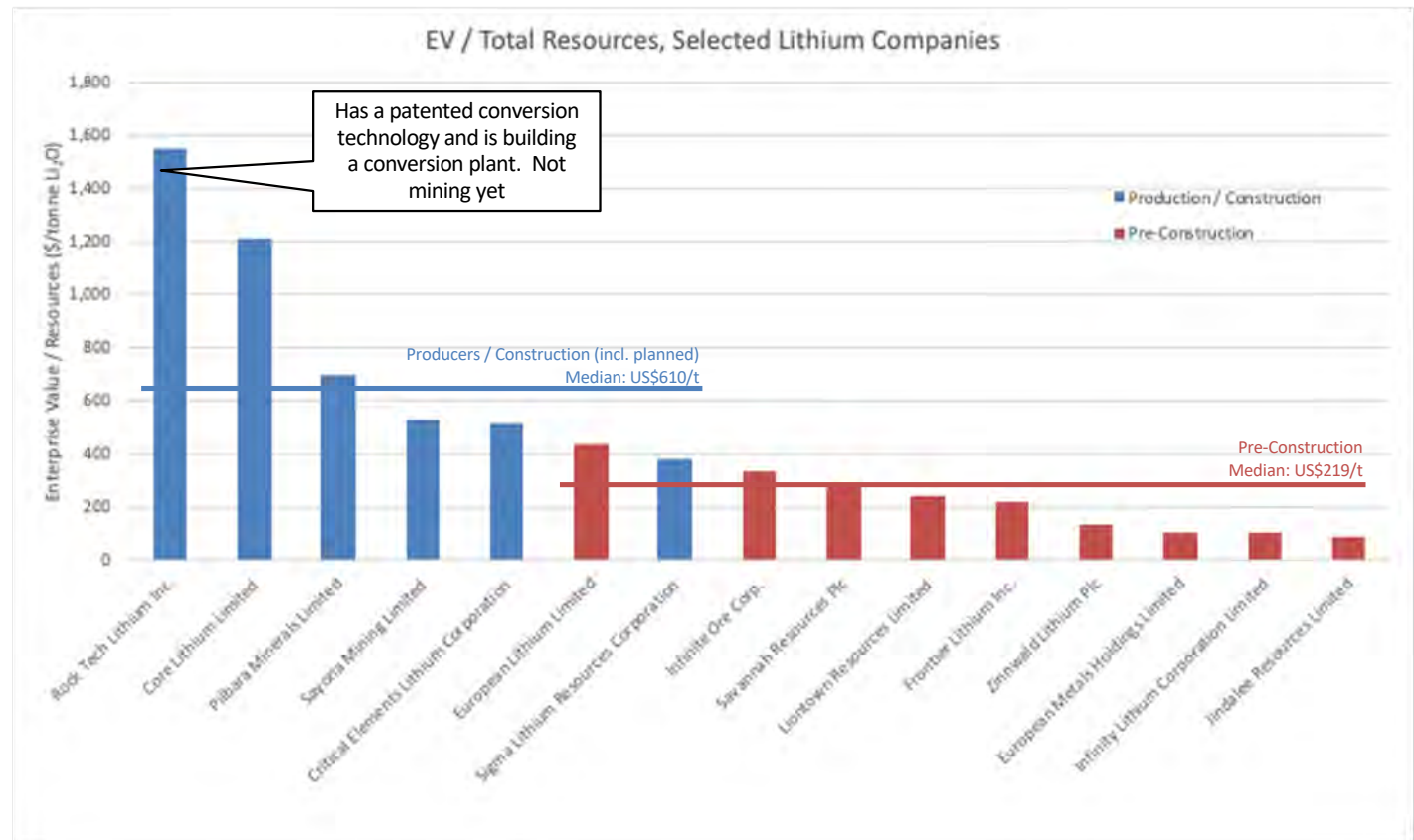
# Substantial Upside – based on peer valuations

## Lithium peers trading at ~US\$219/t Li<sub>2</sub>O (Total Resources)

- **Median values suggest that this peer group (exploration, development and pre-construction) trades at ~US\$219/t Li<sub>2</sub>O**
- Once construction begins, peers trade at ~US\$610/t
- Chart shows enterprise value divided by total Resource tonnes for hard-rock peers operating in similar jurisdictions
- Companies with substantial non-Lithium asset bases have been excluded
- Companies with manufacturing operations have been excluded

### And for Dome North???

ESS EV A\$14M / Dome North Resource  
136,000t = A\$103/t Li<sub>2</sub>O  
**~ US\$79/t Li<sub>2</sub>O** (AUDUSD 0.77)



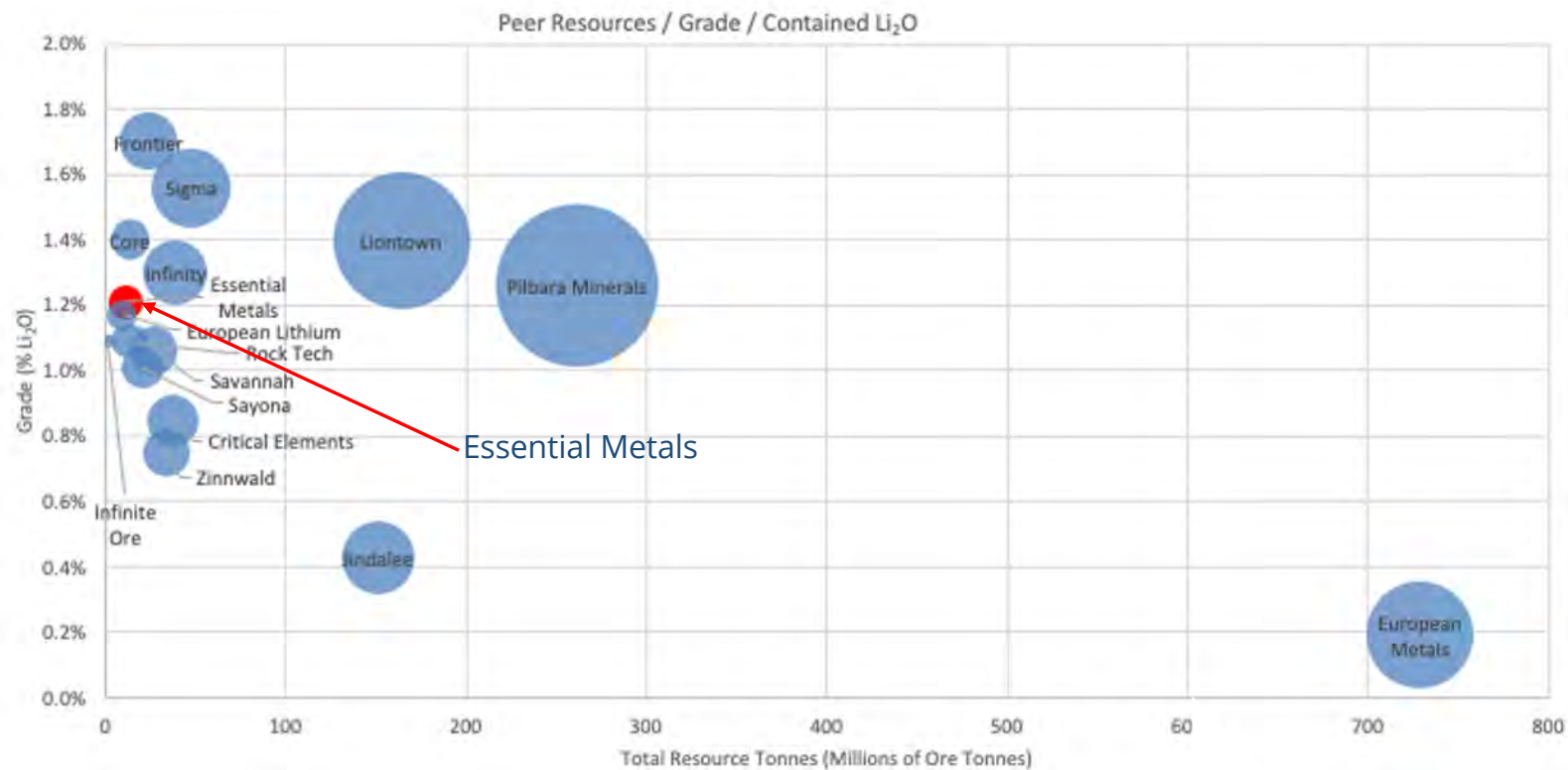
Refer to Appendix A for further information on the peer companies.

# Dome North – well positioned based on grade



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# The Cade Deposit



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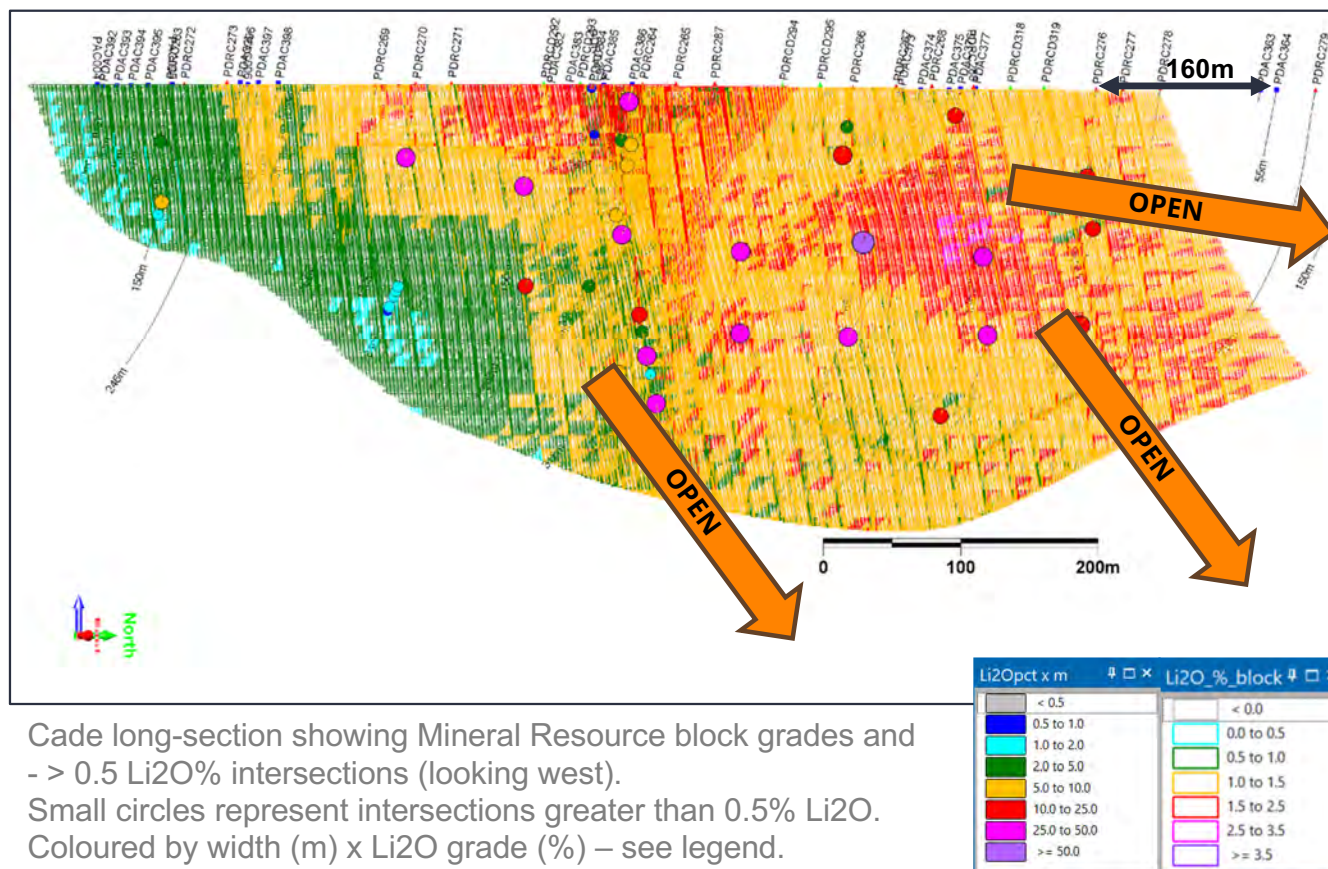
## Mineral Resource

- Cade comprises 76% of Total Resource
- Indicated 5.4Mt @ 1.3% Li<sub>2</sub>O
- Inferred 2.8Mt @ 1.18% Li<sub>2</sub>O

Intersections include:

- 30.6m @ 1.31% Li<sub>2</sub>O from 72.4m (PDRCD292)
- 22.27m @ 1.49% Li<sub>2</sub>O from 199m (PDRCD319)

- The deposit is open at depth and along strike with potential for additional mineralization in parallel pegmatites
- The best part of Cade is hosted in metasediments which comprise a large part of the Dome North area



Cade long-section showing Mineral Resource block grades and - > 0.5 Li<sub>2</sub>O% intersections (looking west). Small circles represent intersections greater than 0.5% Li<sub>2</sub>O. Coloured by width (m) x Li<sub>2</sub>O grade (%) – see legend.

# The Davy Deposit

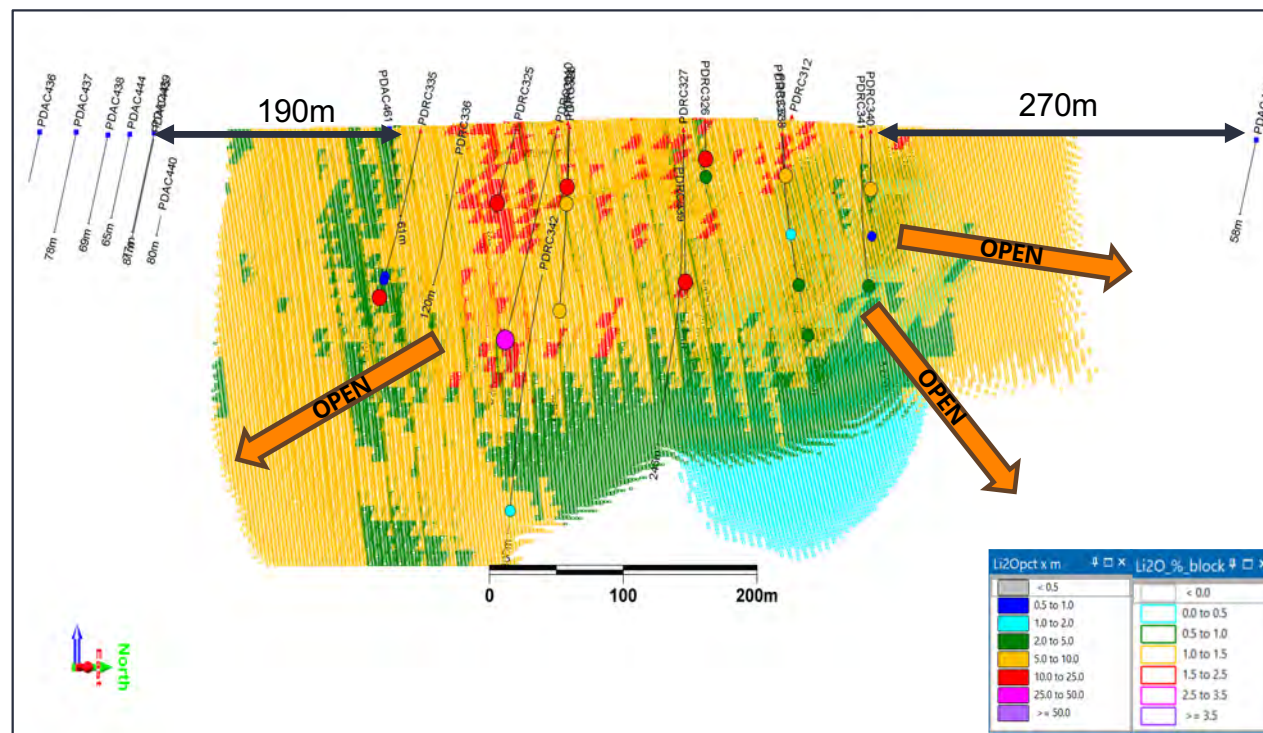


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## Mineral Resource

- Davy comprises 18% of Total Resource
- Inferred 2.3Mt @ 1.13% Li<sub>2</sub>O
- Resource based on only 15 RC holes
- The Resource is hosted in mafic and ultramafic units, however, assuming the structure persists northward there should be **opportunity in the sediments** like Cade
- **Open to the north-east** PDRC340 & PDRC341 with 6m @ 1.05 % Li<sub>2</sub>O & 4m @ 0.61 % Li<sub>2</sub>O
- **270m of untested strike** to next traverse (PDAC446 to PDAC452) to the north-east
- ~240m from PDRC335 (11m @ 1.16 % Li<sub>2</sub>O ) to southern section. Need to **test beneath** PDRC335



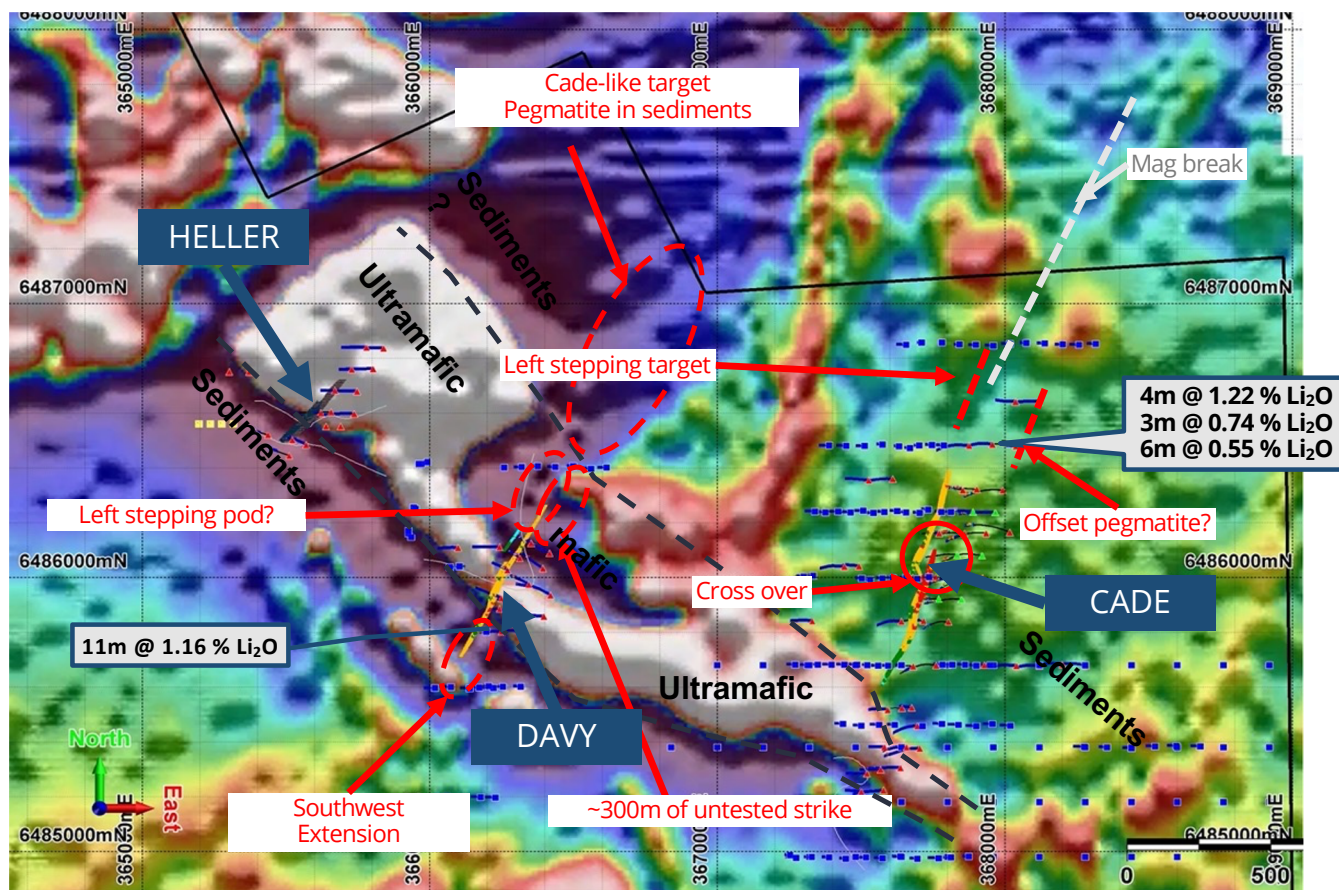
Davy long-section showing Mineral Resource block grades - > 0.5 Li<sub>2</sub>O% intersections (looking west). Small circles represent intersections greater than 0.5% Li<sub>2</sub>O. Coloured by width (m) x Li<sub>2</sub>O grade (%) – see legend..



# Dome North – significant exploration upside

## Dome North Resource growth

- Only two drill campaigns completed into three outcropping pegmatites since spodumene was discovered in June 2019, delivering an 11.2Mt Resource
- Only 14,000m drilled thus far – no drilling since February 2020 due to the downturn in lithium sentiment for most of 2020
- 10 extensional targets identified for the two main deposits – Cade and Davy
- **Drilling scheduled to commence in the June 2021 Quarter**



Dome North Mineral Resource extension targets

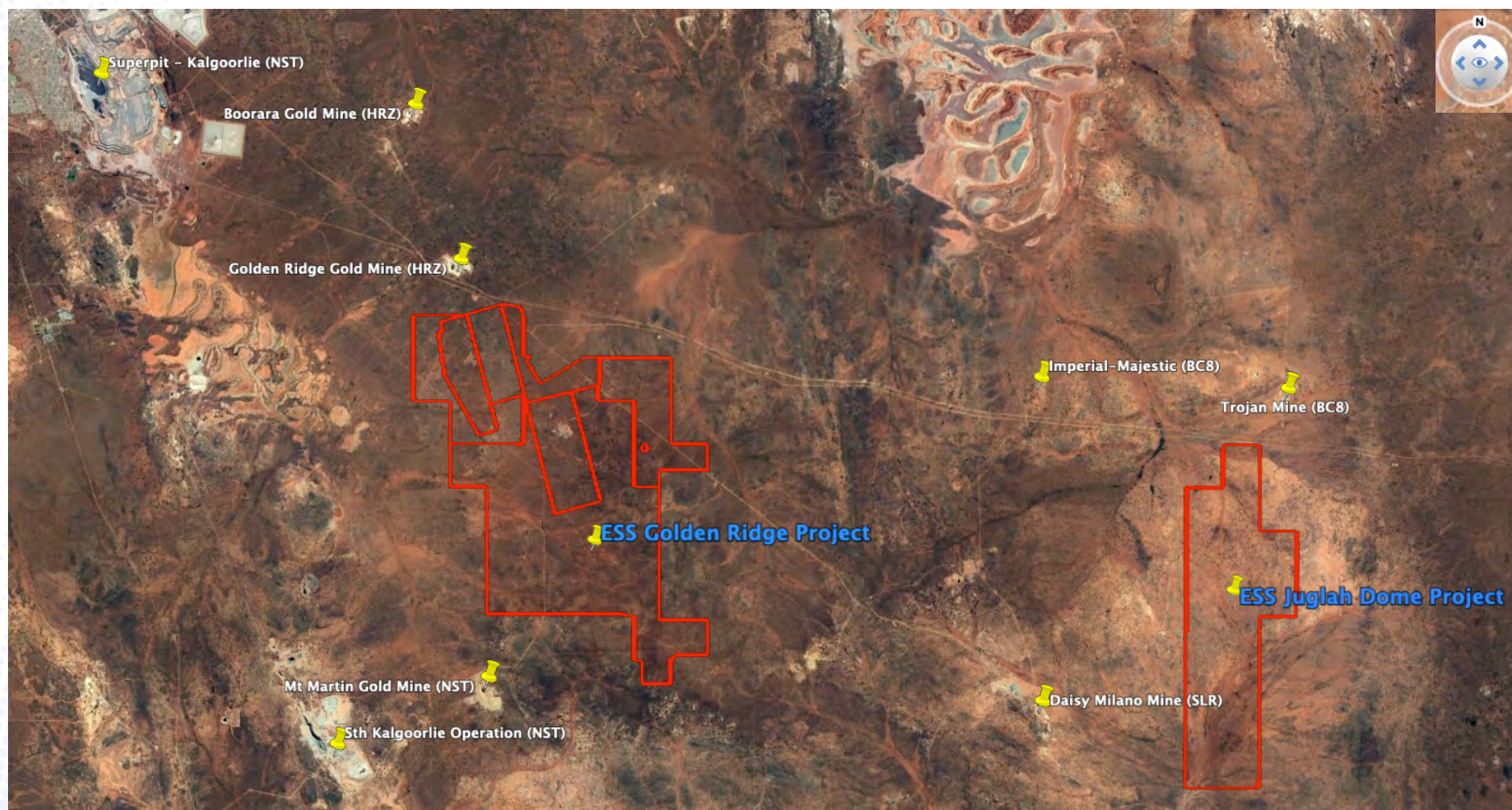


# Two Exciting Gold Projects near Kalgoorlie



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# Golden Ridge



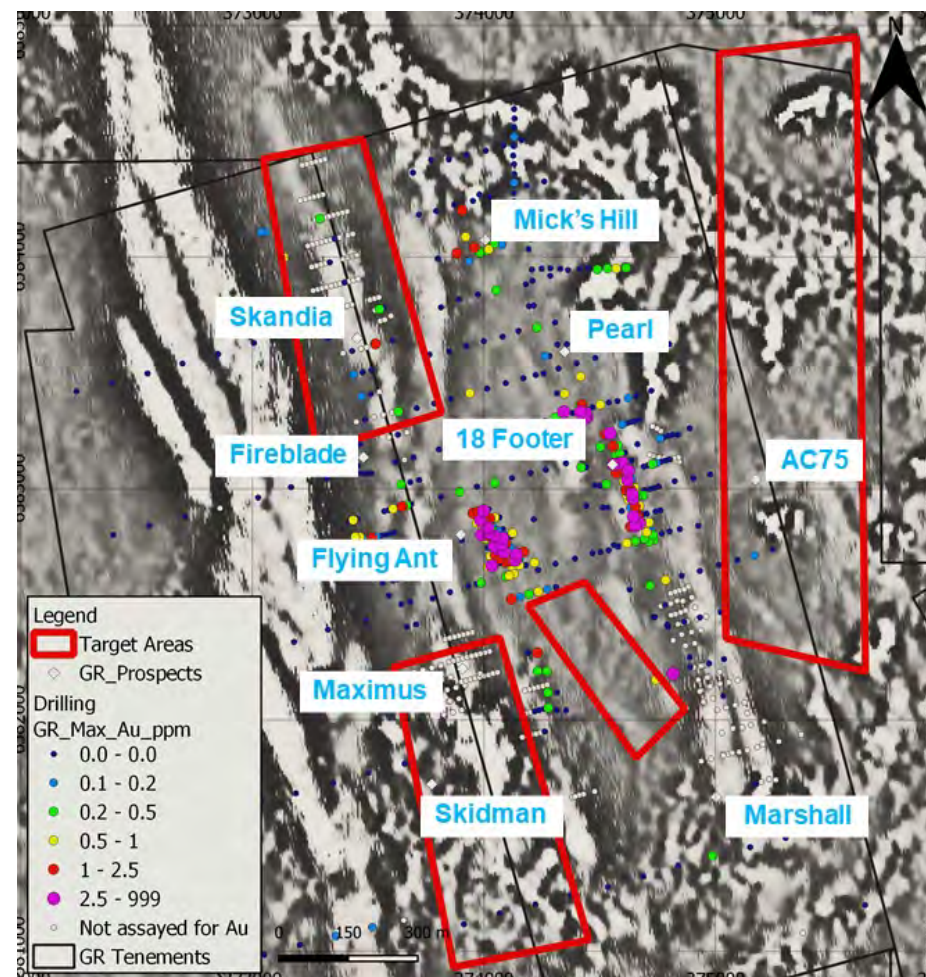
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## Multiple high tenor gold targets – with potential for a large discovery

- Project straddles the Boorara Domain in between the Menzies - Boorara Shear Zone (MBSZ) and the Mt Monger Fault. The MBSZ hosts six major gold mines including Paddington, Boorara and the Golden Ridge Gold Mine
- **Drilling planned for April**
- A number of targets exist in the northwestern portion of the project around the 18 Footer/Flying Ant prospects. Target analogues of the Golden Ridge mine (~250koz mined), to the north, exist
- Significant intersections from Flying Ant and 18-Footer prospects include:
  - **9m@3.87g/t Au** from 26m incl. 2m @ 13.95g/t Au (GOD0094) - Flying Ant
  - **21m@2.5g/t Au** from 59m incl. 9m @ 3.98g/t Au (GOC0288) - Flying Ant
  - **9m@2.44g/t Au** from 65m incl. 4m @ 4.11g/t Au (AMRC026) - 18-Footer
  - **7m@2.81g/t Au** from Surface incl. 3m @ 4.27g/t Au (GOC0264) - 18-Footer

Preliminary target areas in the north western portion of the Golden Ridge Project proximal to the 18 Footer/Flying Ant prospects.



# Juglah Dome

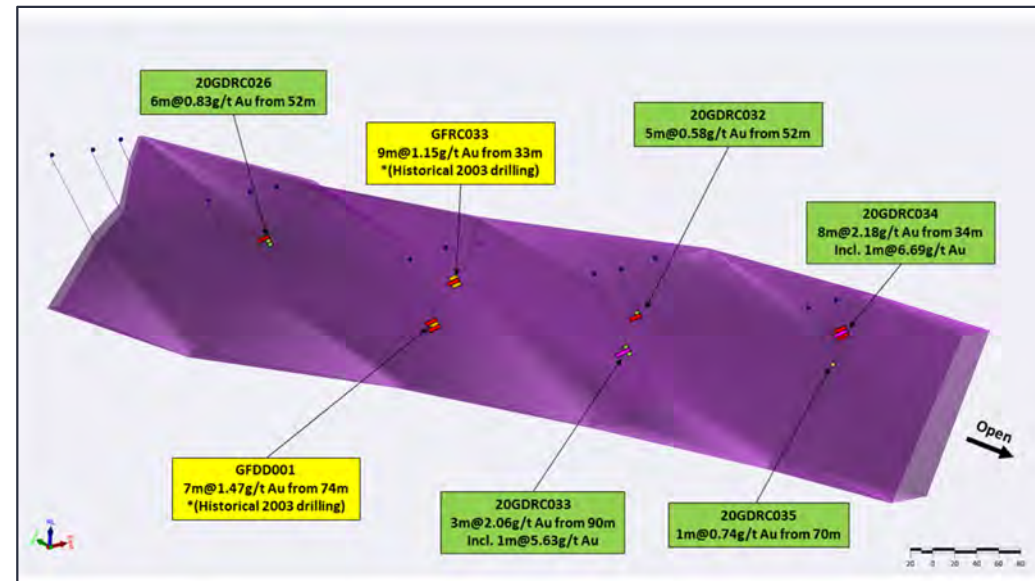


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## Widespread significant gold-in-soil anomalism indicates 'elephant country'..!

- The 23-hole/2,355m Reverse Circulation (RC) drill programme completed in December 2020 tested Gards, Golden Shovel, Moonbaker and Dwyer
- Best results returned at the Gards prospect, including:
  - **8m @ 2.18 g/t Au** from 34m including 1m @ 6.69g/t Au (20GDRC034);
  - **3m @ 2.06 g/t Au** from 90m including 1m @ 5.63g/t Au (20GDRC033); and
  - **6m @ 0.83 g/t Au** from 53m (20GDRC026)
- **Drilling is planned for April** to further test the strike extension of the Gards prospect as well as structural targets defined in other ESS drilling



Oblique long section looking northeast showing the modelled Gards Porphyry (purple wireframe) and significant intercepts from December 2020 drilling (green labels) and historic 2003 Placer Dome drilling (yellow). Mineralisation is open to the southeast

# Our passive investments include...

(No money – little time – just upside)



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## Lithium exposure

- 51% interest in the Mavis Lake Project in Canada with **International Lithium Corporation** (TSXV:ILC)\*

## Nickel exposure

- 25% free-carried interest the Blair – Golden Ridge Project Farmin/Joint Venture with **Crest Investment Group\*\***
- 20% free-carried interest (nickel only) in the Wattle Dam project with **Maximus Resources Ltd** (ASX:MXR)

## Gold exposure

- 25% free-carried interest in the Acra Joint Venture with **Northern Star Resources Ltd** (ASX:NST)
- 30% free-carried interest in the Kangan Joint Venture with **Novo Resources Corp.** (TSXV:NVO)
- 25% free-carried interest in the Balagundi Farmin/Joint Venture with **Black Cat Syndicate Ltd** (ASX:BC8)\*\*\*
- 25% free-carried interest (gold only) in the Larkinville Joint Venture with **Maximus Resources Ltd** (ASX:MXR)

### Notes

All 'free-carried' periods are to the making of a Decision to Mine or an equivalent.

\* ESS has earned its 51% interest, is the manager of the JV and has no near-medium term expenditure obligations.

\*\* ESS holds 100% of the Blair – Golden Ridge Project which is subject to a conditional farmin/joint venture agreement – refer ASX release dated 9 February 2021.

\*\*\* ESS holds 100% of the Balagundi Gold Project with Black Cat Syndicate currently in the farmin stage of earning a 75% interest.



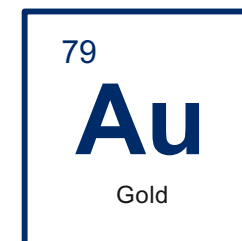
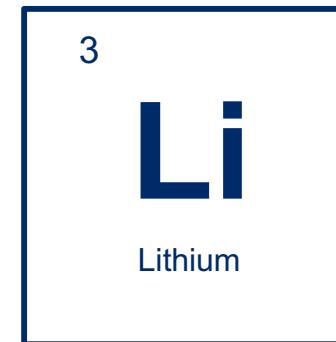
# Key Takeaways



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- Funding in place – **\$6M cash on hand**
- **Experienced Board and management team** with proven discovery and development expertise
- Projects located in **WA's premier mineral** and mining districts
- Strong focus on finding “essential” metals for a **low-carbon future**
- **Quality lithium project** with significant initial Mineral Resources with a high level of growth and upside potential
- Potential for **value uplift** as lithium Resource advances towards development
- Major new **lithium exploration programs** commencing next quarter
- **Exciting gold** exploration projects near WA's gold capital, Kalgoorlie
- **Valuable** investment and joint venture portfolio
- Focused explorer with **proven ability in making discoveries**



# Thank you



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## For further information:

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# Appendix A: Selected trading peers



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- Started with all Lithium companies
- Excluded brine assets, significant non-lithium holdings, significant presence in manufacturing, high risk project locations, EV / Resources unavailable

| Name                      | Location  | Study Stage          | Measured & Indicated (t) | Inferred (t) | Total Resource (t) | Total Resource Grade (Li2O %) | Total Reserves (t) | Notes                                   |
|---------------------------|-----------|----------------------|--------------------------|--------------|--------------------|-------------------------------|--------------------|---|
| Core Lithium              | AUS       | Construction planned | 75,800                   | 31,200       | 193,300            | 1.40%                         | 86,300             |   |
| Critical Elements Lithium | CAN       | Construction planned | 227,800                  | 68,870       | 322,430            | 0.85%                         | 25,760             |   |
| Essential Metals          | AUS       | Exploration          | 36,000                   | 70,000       | 136,000            | 1.21%                         | 0                  | Listed for ease of comparison           |
| European Lithium          | AUT       | DFS started          | 52,900                   | 20,900       | 110,300            | 1.17%                         | 36,500             |   |
| European Metals Holdings  | CZE       | DFS started          | 107,800                  | 694,820      | 1,421,000          | 0.20%                         | 618,380            |   |
| Frontier Lithium          | CAN       | PFS complete         | 115,400                  | 87,743       | 409,582            | 1.70%                         | 204,739            |   |
| Infinite Ore              | CAN       | Resource from 1950s  | 0                        | 0            | 20,000             | 1.09%                         | 20,000             | Also has gold ground (but no resource)  |
| Infinity Lithium          | ESP       | PFS complete         | 172,500                  | 105,000      | 510,000            | 1.30%                         | 232,500            |   |
| Jindalee Resources        | USA / AUS | Exploration (US)     | 0                        | 0            | 650,000            | 0.43%                         | 650,000            | Has other resources                     |
| Liontown Resources        | AUS       | PFS complete         | 974,000                  | 849,000      | 2,295,000          | 1.40%                         | 476,000            |   |
| Pilbara Minerals          | AUS       | In production        | 1,714,000                | 453,000      | 3,296,000          | 1.26%                         | 1,129,000          |   |
| Rock Tech Lithium         | CAN       | PFS complete         | 0                        | 66,500       | 144,500            | 1.09%                         | 78,000             | Building converter, patented technology |
| Savannah Resources        | POR       | DFS started          | 0                        | 158,300      | 285,900            | 1.06%                         | 127,600            |   |
| Sayona Mining             | CAN       | Construction started | 121,590                  | 52,600       | 211,000            | 1.01%                         | 36,800             | CAN spodumene, AUS Li/Au and graphite   |
| Sigma Lithium Resources   | BRZ       | Construction started | 200,700                  | 450,440      | 748,100            | 1.56%                         | 96,960             |   |
| Zinnwald Lithium          | GER       | DFS complete         | 101,000                  | 134,500      | 254,100            | 0.75%                         | 18,550             |   |

Source: Capital IQ, Company websites