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ASX Code: ESS

Corporate Profile

Shares on issue: 246,449,736
Listed Options: 20,758,418
($0.15 exercise: 30/11/22 expiry)

Cash: $11m (31 May 2022)
Debt: Nil

KEY PROJECTS

LITHIUM Pioneer Dome
GOLD Golden Ridge
GOLD Juglah Dome

Joint Ventures (ESS %)

2 x nickel projects (20-25%)*
4 x gold projects (25-30%)*
* Free carried to a decision to mine

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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West Perth, WA 6005
Australia
PO Box 1787,
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Australia

7 June 2022

Resources Rising Stars investor presentation

Essential Metals Limited (ASX: ESS) is pleased to advise that Managing Director, Timothy Spencer, will be presenting at the Resources Rising Stars Investor Conference on the Gold Coast on 7 and 8 June 2022.

Mr Spencer will deliver his presentation at 9:15am AEDT / 7:15am AWST on Wednesday 8 June 2022.

The presentation slides to be delivered by Mr Spencer are attached.

Authorised for release by the Board of Directors

For further information:
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ASX: ESS

3
Li
Lithium

79
Au
Gold

28
Ni
Nickel

Located in the core of WA's "lithium corridor"

Our strategy is to become a new force in the lithium supply chain

Resources Rising Stars – Gold Coast, Australia

7-8 June 2022

Drilling at Juglah Dome

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.

Competent Person Statements
Exploration Results: Mr Andrew Dunn (MAIG), Exploration Manager who is employed full-time by Essential Metals Limited, compiled the technical aspects of this Report. Mr Dunn is eligible to receive equity-based securities in Essential Metals Limited under the Company's employee incentive schemes. Mr Dunn is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the styles of mineralization and types of deposit under consideration and to the activity that is being reported on to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Dunn consents to the inclusion in the report of the matters in the form and context in which it appears.

Dome North Lithium Mineral Resource: The information in this presentation that relates to Mineral Resources for the Dome North Lithium Project is based on and fairly represents information compiled by Competent Persons Mr Stuart Kerr and Mr Lauritz Barnes as extracted from the report entitled "Dome North Lithium Project – Resource upgrade" created on 29 September 2020 and is available to view on www.essmetals.com.au.

Dome North Mineral Metallurgical Test Work: The information in this report that relates to metallurgical test work for the Dome North Lithium Project has been reviewed by Mr Joshua Paterson who is a member of the Australasian Institute of Mining and Metallurgy. Mr Paterson is an employee of Primero Ltd and has sufficient experience relevant to the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Paterson consents to the inclusion in the report of a summary based upon his information in the form and context in which it appears.

Reference to previous market announcements: 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, in the case of Mineral Resources, 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 Exploration Results or 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.

Highlights

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LITHIUM RESOURCE	**Essential Metal's Dome North Lithium Resource is one of only 13 JORC compliant spodumene lithium resources in Australia** **The only Australian Lithium Resource not yet committed to an offtake arrangement**
STRATEGIC LOCATION	The 100% owned Pioneer Dome Lithium Project 55km north of Norseman, WA, is next to a main highway and other key infrastructure and near (<70km) Mt Marion and Bald Hill lithium mines
FUNDED FOR UPCOMING ACTIVITIES	**Essential Metals has $11M in cash (31/05/2022)**
DEVELOPMENT READINESS	Activities are underway to get the Dome North Lithium Resource ready for development in parallel with exploration activities aimed at growing lithium resources
ESG IS ESSENTIAL	**Getting ESG right is essential for mining and Essential Metals will apply the highest ESG standards to its future mining operations**
TIMING IS RIGHT	The lithium demand outlook points to lithium deficits only becoming larger from 2024 as the global adoption of 'electrification' goes mainstream

(1) Refer Appendix A

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Corporate Overview

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Capital structure

246M Shares
21M Options
ASX: ESS/ESSO

A$124M Market Cap
$0.51/share
(03/06/2022)

A$11M Cash
as at 31 May 2022

+

$3.2M upon 21M ASX:ESSO $0.15 options expiring 30 Nov 2022 being exercised

Board & Management

Executive Team

- **Tim Spencer, Managing Director**: 30 years' experience commercial/corporate; project development in Australia, Indonesia, Brazil and Italy
- **Carl Travaglini, CFO & Company Secretary:** 15 years' experience in gold & lithium project developments
- **Andrew Dunn, Exploration Manager:** 20 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, project development; corporate
- **Warren Hallam, Non-Exec Director:** 35 years' experience: metallurgist; management, operations; project development, corporate

Investment Overview

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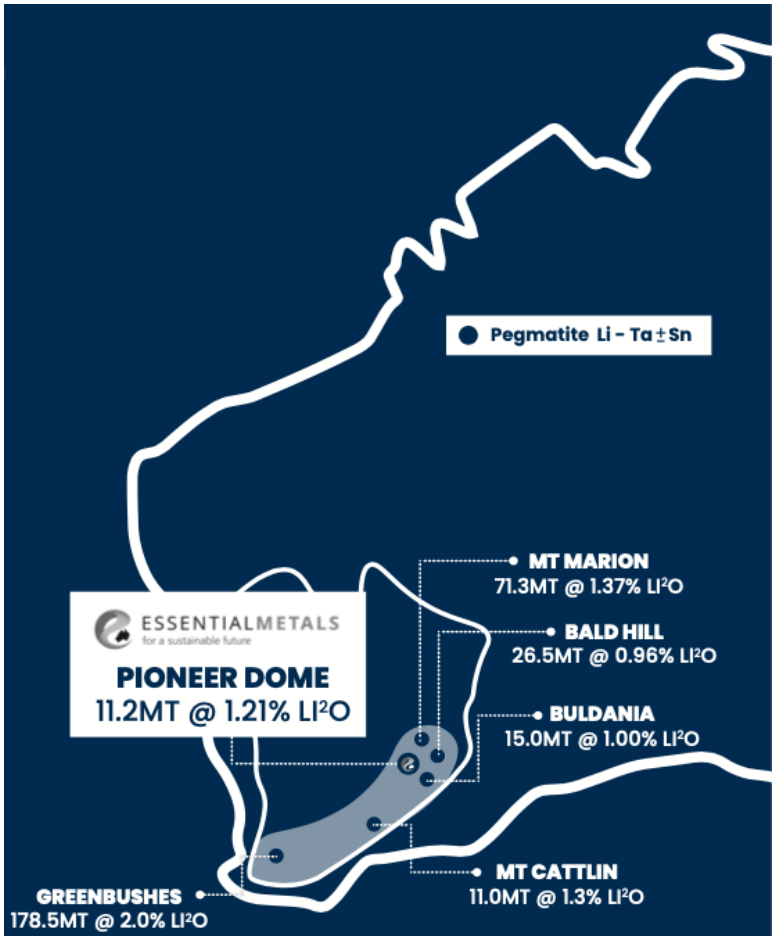
- A well-funded and active ASX-listed lithium upstream company
- Focussed on finding and producing essential metals for a sustainable, low-carbon future
- The flagship Pioneer Dome Lithium Project is in an easy-to-explore, low-cost location near Kalgoorlie – a Tier-1 mining jurisdiction
- Exceptional pipeline of resource growth opportunities and exploration targets in the core of WA's "lithium corridor"
- **High quality lithium Resource: 11.2Mt at 1.21% Li_2O at Pioneer Dome**
- Exciting potential at Golden Ridge and Juglah Dome gold projects near Kalgoorlie
- Free-carried exposure to a significant portfolio of nickel and gold exploration projects



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Analogue companies (Australian hard rock lithium pre-production projects)

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	Essential Metals (ASX:ESS)	Red Dirt Metals (ASX:RDT)	Global Lithium Resources (ASX:GL1)
Lithium Resources	11.2Mt @ 1.21% Li_2O (Refer ASX release 29/09/2020)	NO	MBLP (Pilbara) 10.5Mt @ 1.0% Li_2O Manna (Yilgarn) 9.9Mt @ 1.14% Li_2O (Refer ASX release 22/03/2022)
Lithium Reserves	No	No	No
Stage	Advanced exploration	Advanced exploration	Advanced exploration
Met test work	Scoping study level	First pass on core from one drill hole	Not yet
Process route	Likely dense medium separation &/or flotation	Not known	Not known
Offtake(s) in place	No	No	Yes
Market Cap (03/06/2022)	$124M (@$0.51/share)	$149M (@$0.49/share)	$328M (@$1.63/share)
Market Cap multiple to ESS (undiluted)	1	1.2x	2.6x

ESS has strong potential rerate its value proposition as we get Dome North development ready whilst continuing to explore for more spodumene pegmatites.

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Pioneer Dome Lithium Project

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453km² project tenure in the 'lithium corridor'

- Mt Marion, Bald Hill and Buldania projects are all located <100km by road from the Project
- The Dome North Lithium Mineral Resource is in the northern area of the Project
- The Project contains three mineralised pegmatites so far – 11Mt JORC Mineral Resource reported containing 336,000 tonnes LCE equivalent

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 mining centre of Kalgoorlie (150km to the north) and the large dry bulk & container seaport of Esperance (275km to the south)
- Gas pipeline and water pipeline located alongside the main highway
- Unsealed access road connects the Project to the main highway

Dome North Mineral Resource

Table 2. Mineral Resource by deposit and category: Dome North Lithium Project (0.5% Li_2O cut-off grade)

Deposit	Classification	Tonnes (Mt)	Li_2O %	Ta_2O_5 ppm	Contained Li_2O (T)	Fe_2O_3 %
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
Total	**Total**	**11.2**	**1.21**	**40**	**136,000**	**0.61**

Note: Appropriate rounding applied.

Excellent metallurgical characteristics

- Scoping Study level metallurgical test work on the Cade Deposit based on a hybrid Dense Medium Separation (DMS) + flotation flowsheet :

Concentrate	Grade (% Li_2O)	Grade (% Fe_2O_3)	Global Recovery (%Li_2O)
T12 Flot Con & DMS Con	5.66	1.3	82%
T15 Flot Con & DMS Con	5.65	0.7	74%

- A 'whole of ore' test achieved 66% Li_2O recovery at a grade of 6.0% Li_2O and 0.6% Fe_2O_3
- Further test work on Cade and Davy commencing in 2022 Q3

Refer ASX announcement 18 December 2020 – Dome North outstanding met test work results

Dome North Mineral Resource area

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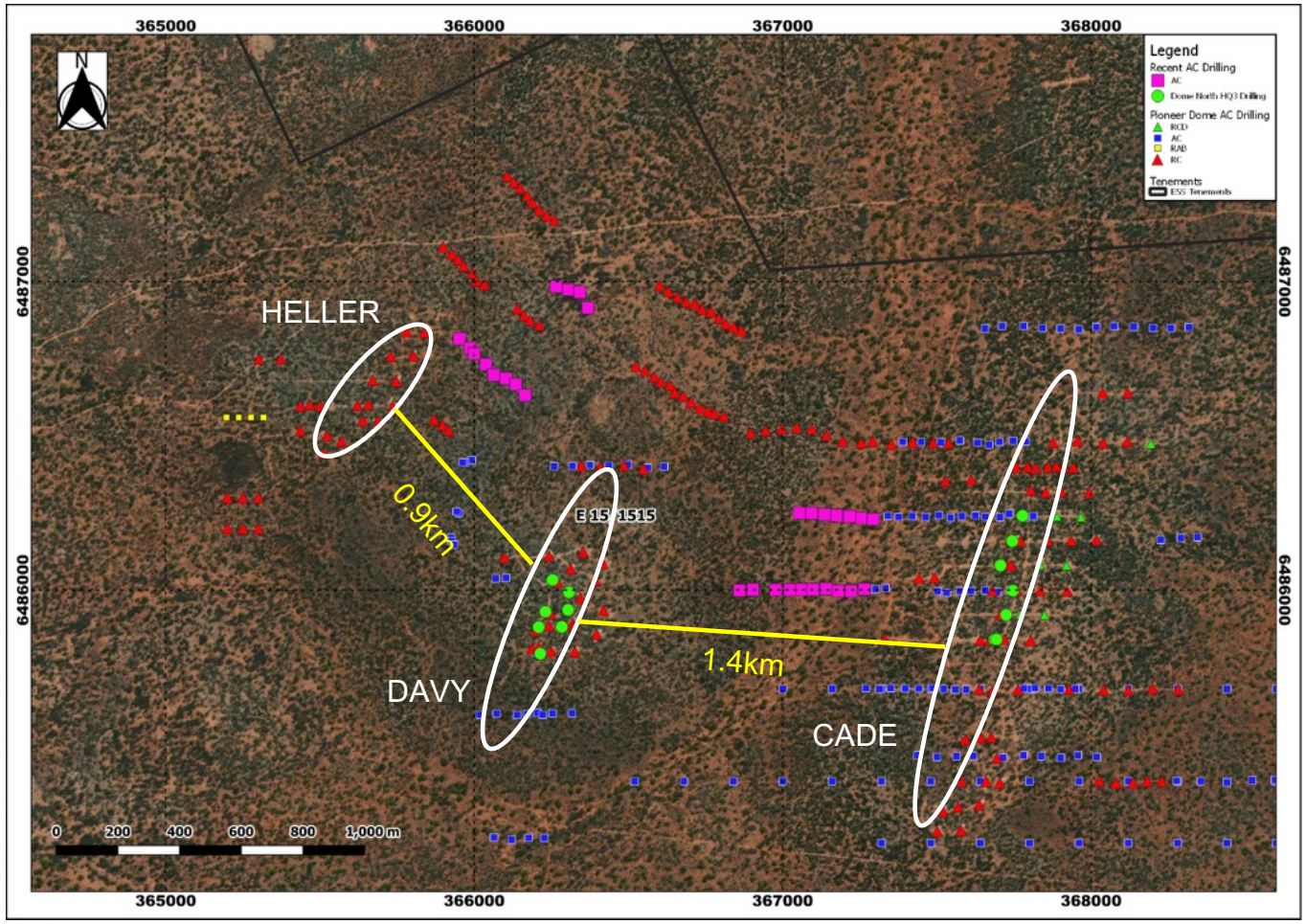

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Dome North – latest drill results just in

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Near surface high grade assays in Cade and Davy deposits*:

Cade Deposit assay results include:

- **19.2m @ 1.44% Li_2O** from 15m (PDD596)
- **9.6m @ 1.42% Li_2O** from 14.4m (PDD598)
- **23.7m @ 1.26% Li_2O** from 3.6m (PDD599)
- **18.9m @ 1.24% Li_2O** from 21.1m (PDD600)
- **14.7m @ 0.90% Li_2O** from 11.6m (PDD595)

Davy Deposit assay results include:

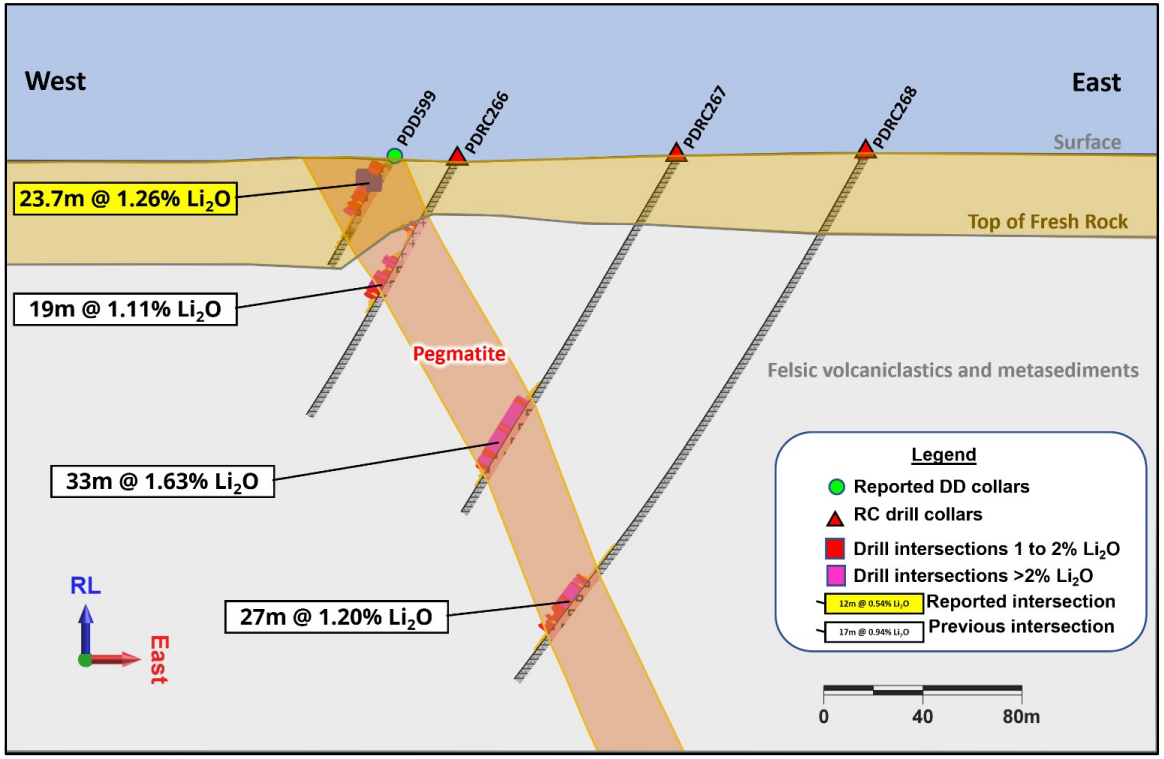
- **31.95m @ 1.24% Li_2O** from 45.4m (PDD601)
- **18.7m @ 1.05% Li_2O** from 17m (PDD603)
- **11.1m @ 1.70% Li_2O** from 99.2m (PDD604)
- **17m @ 1.32% Li_2O** from 97.1m (PDD605)

These results are very important because they show minimal lithium depletion in the weathered zone. This indicates potential for high grade mineralisation to be mined from surface with minimal overburden, having a big positive impact on the economics of the deposits.

Core samples will now be selected for metallurgical test work.

*Refer ASX release 7 June 2022 – Dome North - more high grade near-surface lithium assays

CADE DEPOSIT



Cross Section demonstrating the high grade nature of the Cade Deposit with latest drilling shown in yellow box

Resource extension drill programme underway [1]

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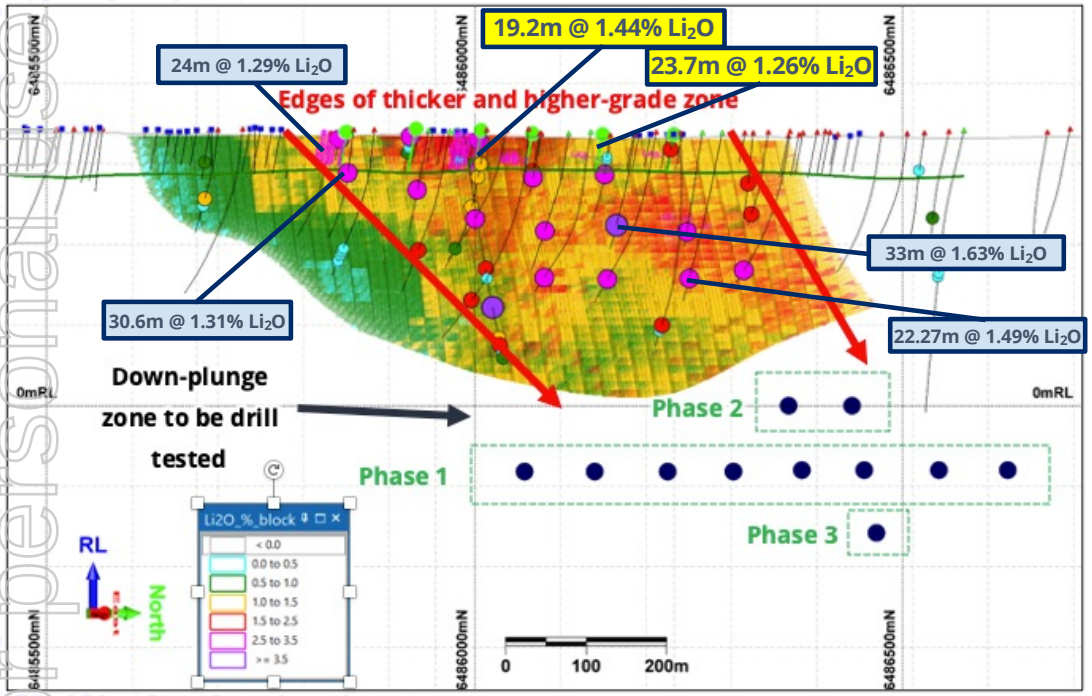
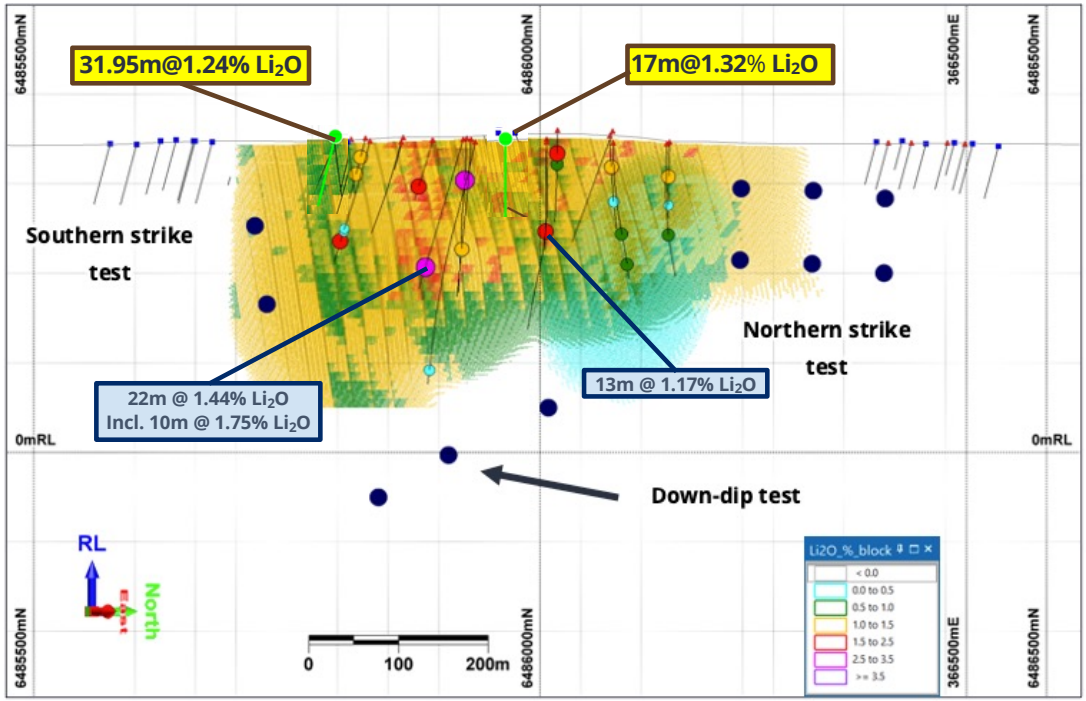
CADE DEPOSIT
Testing below the Resource



DAVY DEPOSIT
Testing below and along strike of the Resource



Cade Mineral Resource [2]

- Cade comprises 76% of Total Resource
- Indicated 5.4Mt @ 1.30% Li_2O
- Inferred 2.8Mt @ 1.18% Li_2O

Davy Mineral Resource [2]

- Davy comprises 18% of Total Resource
- Inferred 2.3Mt @ 1.13% Li_2O
- Resource based on only 15 RC holes

[1] Refer ASX announcement 31 March 2022 – "Next drill programme to grow lithium resource"
[2] Refer ASX announcement 29/09/2020 – "Dome North Lithium Project – Resource upgrade"

Dome North – getting development ready

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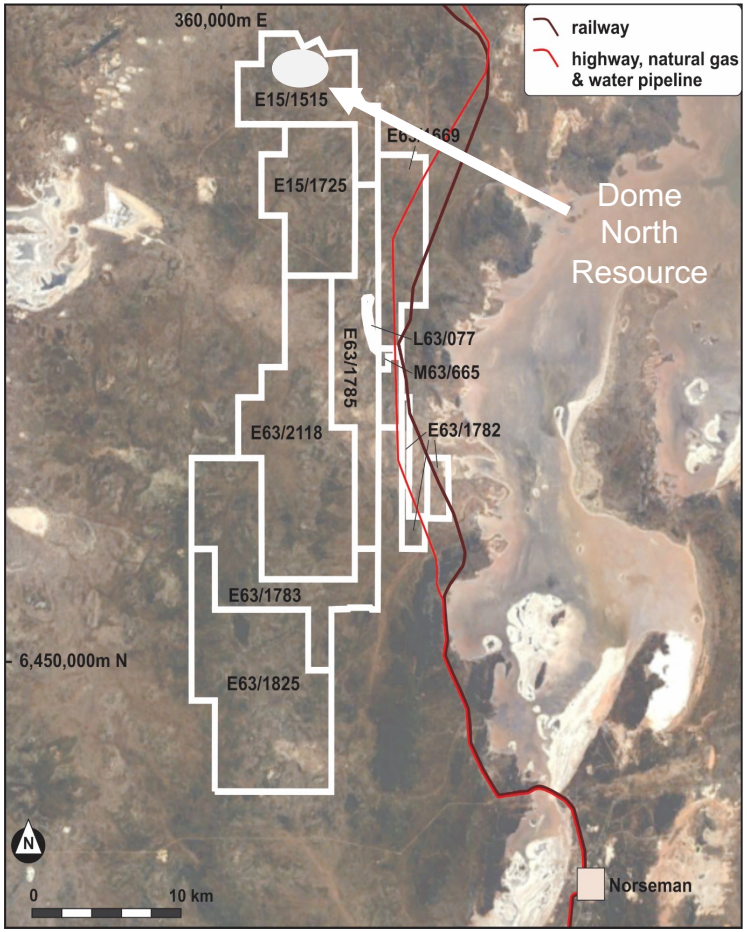
The only Australian lithium Mineral Resource not yet subject to an offtake commitment

Steps are being taken to transition the Dome North Resource area to a 'development ready' status. These steps include:

- A flora and fauna study completed – no issues
- A hydrology study completed – multiple potential water sources identified
- Additional metallurgical test work on the upper zone of Cade deposit and on Davy deposit by end-July to complement previous successful test work on Cade
- Mining agreement in place with the NNTAC, the representative body of the Ngadju people, the custodians of the land on which the project is located
- Mining lease application to be lodged at the appropriate time during 2022



The location of the tenements of the Pioneer Dome Lithium Project relative to major infrastructure

Activity timeline

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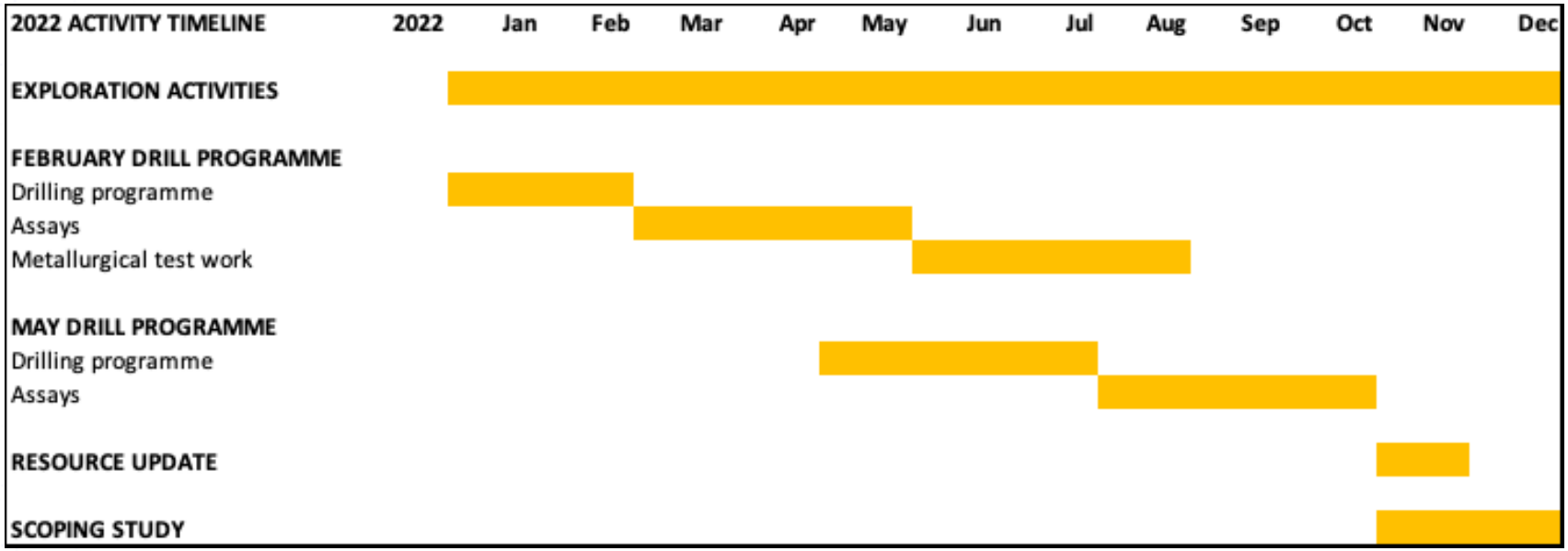

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Stepping out – significant exploration upside

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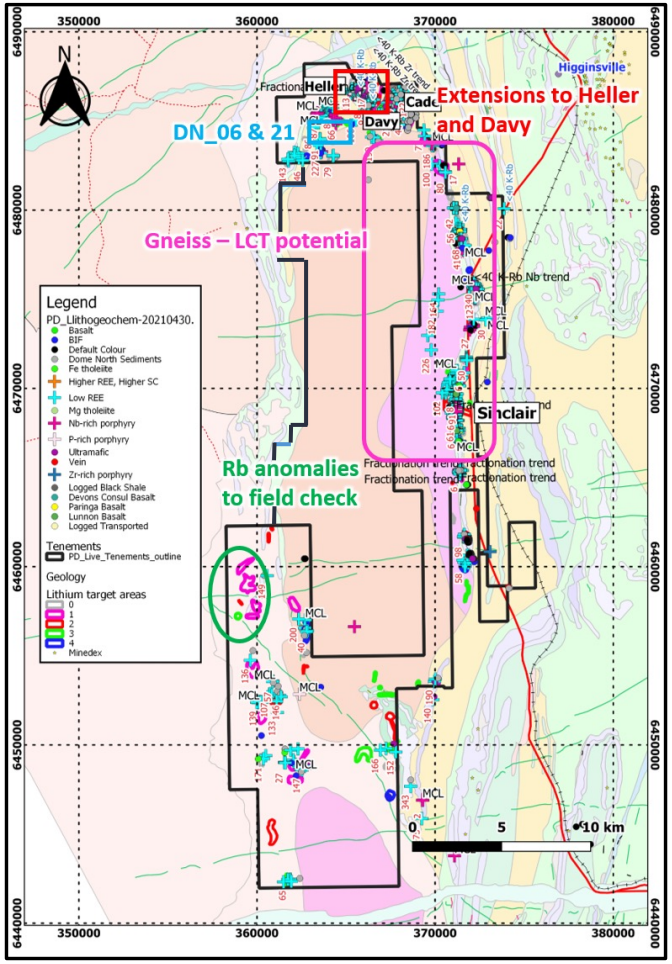
- **The Project tenure is very large…453km**
- **We've only scratched the surface**
  - First lithium focussed drilling commenced in August 2016, discovering what became the Sinclair Caesium Mine, which became the focus of the Company for the next ~2.5 years. Lithium exploration recommenced mid-2019 resulting in the discovery of the Dome North lithium deposits but was then scaled back during 2020 due to the downturn in the lithium market.
  - Thus only a short amount of time has been spent thus far on exploring for lithium.
  - The Sinclair Caesium deposit (which also contained small quantities of lithium minerals lepidolite and petalite) was hosted in a pegmatite up to ~80m in thickness located ~18km from the Dome North lithium MRE providing tangible evidence of very large fractionated pegmatites forming across a large area.
  - <10,000m of lithium focussed drilling has been undertaken in areas outside of tenement E15/1515 (which hosts the Dome North lithium MRE) and M63/665 (which hosts the Sinclair Caesium Mine).



LCT targets (coloured polygons as per legend), litho-geochemical classification (see legend), 100k interpreted geology and lesser explorer gneiss (magenta polygon)

Two Exciting Gold Projects near Kalgoorlie

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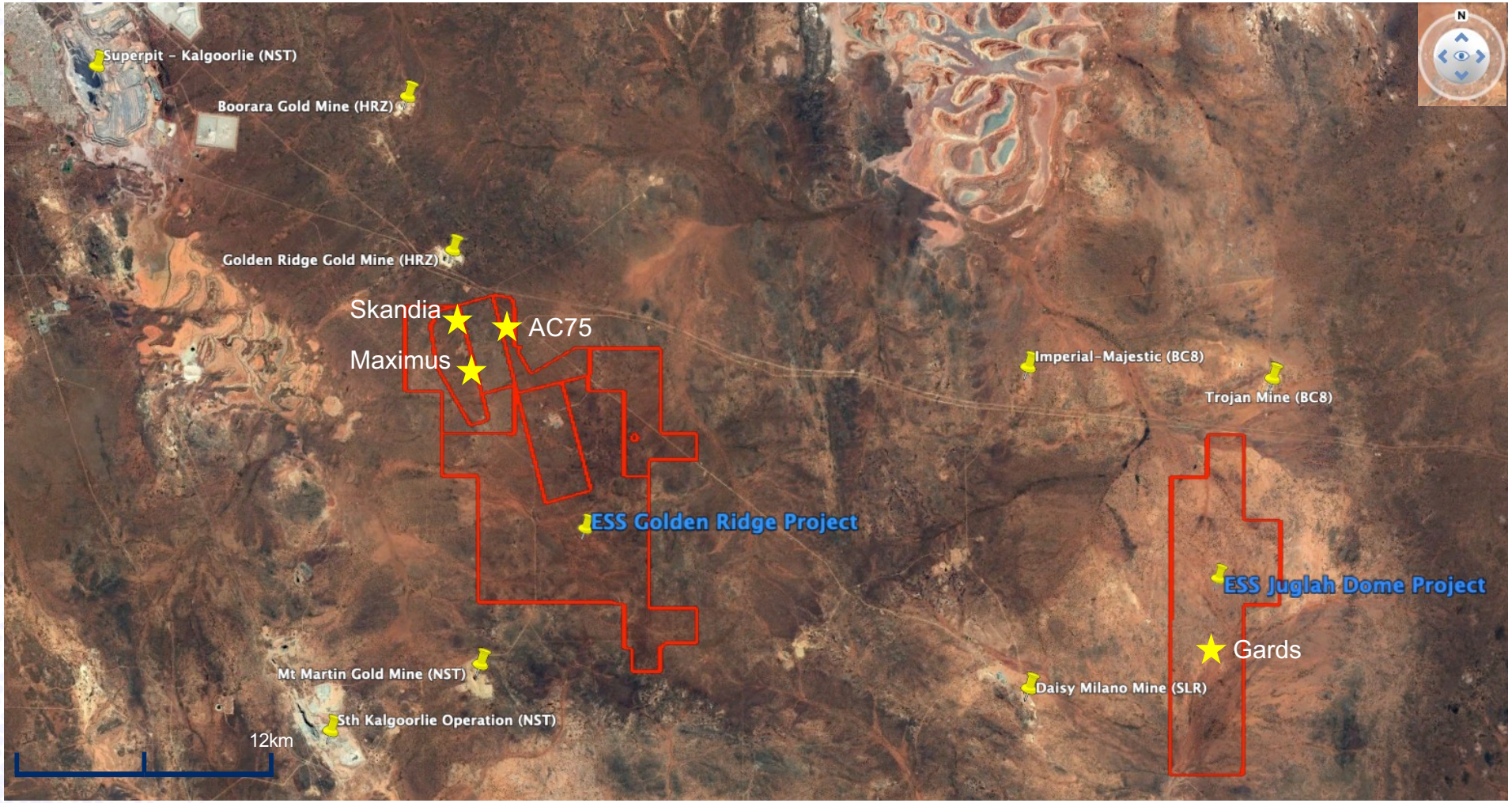

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GOLD - Golden Ridge & Juglah Dome

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GOLDEN RIDGE

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

- Project straddles the Boorara Domain 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
- Significant historical 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

  (Refer ASX announcement dated 1 April 2021 – "gold focussed drilling commences")
- The recently completed 6,000m air-core programme confirmed gold mineralisation at the Skandia, Maximus and AC75 prospects and identified prospective underexplored areas

JUGLAH DOME

The Gards porphyry now has 1.1km of strike and is still open to the south

- **A very good address**...the Juglah Dome tenement is surrounded by Black Cat Syndicate Limited (ASX:BC8) to the north and west and Silverlake Resources Limited (ASX:SLR) to the west and south
- Best results returned at the Gards prospect included:
  - **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)

  (Refer ASX announcement dated 10 February 2021 – ""Encouraging drill results from Juglah Dome")
- **22 hole Reverse Circulation drill programme just completed at Gards with assays due in June.**

Our partnered projects

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ESS also has multiple nickel and gold JV partnerships where the partner is obliged to provide funding and management with ESS free-carried up a decision to mine.

Nickel Joint Ventures

- 25% free-carried interest the Blair – Golden Ridge Project Farmin/Joint Venture with **Australian Nickel Company***
- 20% free-carried interest (nickel only) in the Wattle Dam and Larkinville projects with **Maximus Resources Ltd** (ASX:MXR)

Gold Joint Ventures

- 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 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 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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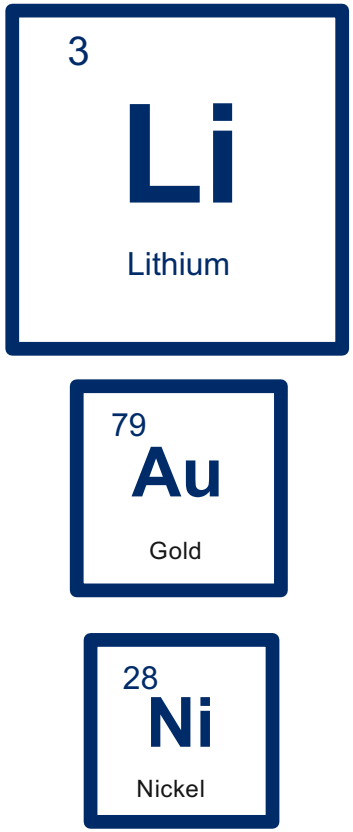
- Funding in place – **$11M cash on hand (31/05/2022)**
- **Experienced Board and management team** with proven discovery and development expertise
- Projects located in **WA's premier mineral** and mining districts
- Strong focus on finding **essential metals** for a **low-carbon future**
- **Quality lithium project in the core of WA's lithium corridor** with significant initial Mineral Resources with a high level of growth and upside potential
- **Drilling now underway** to grow the Dome North Lithium Resource – currently **11.2Mt @ 1.21% Li_2O**
- Potential for significant **value uplift** as lithium Resource advances towards development
- **Gold exposure** via exciting two gold exploration projects near WA's gold capital, Kalgoorlie and four joint ventures in the Pilbara and Eastern Goldfields
- **Nickel exposure** via two early stage highly prospective joint ventures in the Kambalda and Eastern Goldfields.



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Thank you

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