## AUSTRALIAN GRAPHITE

From Mine to Markets

**RIU Explorers Conference, Fremantle WA** 

February 2024





#### **COMPETENT PERSONS STATEMENT / JORC COMPLIANCE STATEMENT**

This announcement contains references to Mineral Resources Estimates and Exploration Results which have been extracted from previous ASX announcements as referenced. Particular attention is drawn to the ASX release dated 12 September 2023 titled 'Huge Mineral Resource increase at Springdale'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the said announcements, and in the case of estimates 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.

#### **GENERAL DISCLOSURE AND CAUTIONARY STATEMENTS**

International Graphite Limited releases the key findings of its scoping study that has been undertaken for the purpose of developing a preliminary technical and economic assessment of the potential viability of the development of a graphite mining and concentrate production operation at the Springdale Graphite Project (Springdale) located on the south coast of Western Australia (Springdale Scoping Study).

Springdale would supply graphite concentrates to a downstream processing facility located in Collie, 200km south of Perth in Western Australia that would produce battery anode materials for the lithium-ion battery industry (Collie BAM Facility).

In April 2023 International Graphite released a scoping study that considered the preliminary technical and economic assessment of the potential viability of the construction and operation of the Collie BAM Facility that treated third party concentrates (Collie BAM Facility Scoping Study).

The completion of the Springdale Scoping Study allows production from Springdale to replace the third party concentrates used in the Collie BAM Facility Scoping Study with concentrates sourced from Springdale.

The Collie BAM Facilities has been designed around processing a 95% graphite concentrate. The ore source does not materially change the flowsheet assumptions at this level of graphite concentrate. There are no adverse impurities in the Springdale concentrate relative to imported concentrate that would require tailoring of the facilities accordingly. As the scope of the facilities (i.e. processing capacity) have not changed and the quantities of finished products being sold have not changed, there are accordingly no changes to labour, power consumption, maintenance, consumables, and general overheads and haulage. The Company has also reviewed general construction market conditions and conditions on hand in the Collie region since Q1 2023 and determined there are no indicators suggesting project implementation costs have materially changed in this period.

With the exception of foreign currency exchange rate, pricing from the Collie BAM Facility Scoping Study remains valid at the date of this report and there have been no changes to plant design or flowsheet assumptions. This ASX release should be read in conjunction with the ASX release dated 26 April 2023 for further particulars regarding the processing flowsheet for the Collie BAM Facility.

The substitution of graphite concentrate supply source lowers the forecast operating costs for the Collie BAM Facility. Capital cost inputs to the Collie BAM Facility Scoping Study remain unchanged.

The combination of the Springdale Scoping Study and the Collie BAM Facility Scoping Study is referred to herein as the Springdale–Collie Integrated Mine to Market Scoping Study.

The outcomes, production target and forecast financial information referred to in this release are based on low level technical and economic assessments that are insufficient to support estimation of Ore Reserves.

The Springdale-Collie Integrated Mine to Market Scoping Study is presented in Australian dollars to an accuracy level of +/- 35% with a 90% level of confidence.

While each of the JORC modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before International Graphite will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case.



The production targets stated in this presentation are based on International Graphite's current expectations of future results or events and should not be relied upon by investors when making investment decisions. Further evaluation work and studies are required to establish sufficient confidence that production targets will be met. Accordingly, given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Integrated Mine to Market Scoping Study. Given that the results are subject to the qualifications above (including assumptions as to accuracy and confidence tolerances) any results reported in this release should be considered as approximates and subject to variances having regard for the assumptions referred to in this release.

In the first ten years of the Springdale Scoping Study production plan approximately 86% of the Mineral Resources schedule for extraction are currently classified as Indicated and 14% as Inferred. A valuation table is provided showing the financial viability of the project over this operating period. Of the Mineral Resources scheduled for extraction over 15 years in the Springdale Scoping Study production plan approximately 72% are currently classified as Indicated, including 81% in the first 13 years of the period modelled.

International Graphite confirms that the financial viability of Springdale and Collie BAM Facility is not dependent on the inclusion of Inferred Resources in the production schedule.

The Company has concluded that it has reasonable grounds for disclosing production targets which include a proportion of Inferred material. However, 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 that production targets themselves will be realised.

The Mineral Resources underpinning the production targets in the Springdale Scoping Study have been prepared by a Competent Person in accordance with the requirements of the JORC Code (2012). For full details of the Mineral Resources estimate, please refer to International Graphite's ASX release dated 12th September 2023, released to ASX under the title "Huge Mineral Resource increase at Springdale".

The Mineral Resource estimate was prepared by independent consultancies OMNI GeoX Pty Ltd and Trepanier Pty Ltd and Mr. Peter Langworthy of OMNI GeoX Pty Ltd and Mr Lauritz Barnes of Trepanier are named as Competent Persons. International Graphite confirms that it is not aware of any new information or data that materially affects the information included in that release and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not been changed.

To achieve the potential mine development outcomes indicated in the Springdale – Collie Integrated Mine to Market Scoping Study, funding in the order of A\$76 million will likely be required to develop Springdale and between A\$124 million and \$341 million (depending upon the finished product to be produced) will be required to develop the Collie BAM Facility.

Investors should note that there is no certainty that the Company will be able to raise funding when needed, however the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this presentation and believes that it has a "reasonable basis" to expect it will be able to fund the development of Springdale and the Collie BAM Facility.

It is also possible that such funding may only be available on terms which are dilutive to, or otherwise affect the value of, International Graphite's existing shares. It is also possible that International Graphite could pursue other 'value realization' strategies such as sale, partial sale or joint venture of the project. If it does, this could materially reduce International Graphite's proportionate ownership of the assets. International Graphite has concluded that it has a reasonable basis for providing these forward-looking statements and the forecast financial information included in this release. This includes a reasonable basis to expect that it will be able to fund the development of Springdale and the Collie BAM Facility upon successful delivery of key development milestones as and when required.

The detailed reasons for these conclusions are outlined throughout the ASX release dated 29 January 2024. While International Graphite considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Integrated Mine to Market Scoping Study will be achieved.

A summary of the Integrated Mine to Market Scoping Study highlights is shown in the body of the ASX release dated 29 January 2024. All financials are provided in Australian dollars unless stated otherwise.



#### **FORWARD LOOKING STATEMENTS**

Some of the statements contained in this document are forward looking statements. Forward looking statements include but are not limited to, statements concerning estimates of tonnages, expected costs, statements relating to the continued advancement of International Graphite's projects and other statements which are not historical facts. When used in this document, and on other published information of International Graphite, the words such as "aim", "could", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Although International Graphite believes that its expectations reflected in the forward-looking statements are reasonable, such statements involve risk and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Various factors could cause actual results to differ from these forward-looking statements include the potential that International Graphite's projects may experience technical, geological, metallurgical and mechanical problems, changes in product prices and other risks not anticipated by International Graphite. International Graphite believes that it has a reasonable basis for making the forward-looking statements in this presentation, including with respect to any mining of mineralised material, modifying factors, production targets and operating cost estimates. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of International Graphite. Actual values, results or events may be materially different to those expressed or implied. Given these uncertainties, investors are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this document speak only at the date of issue. Subject to any continuing obligations under applicable law, International Graphite does not undertake any obligation to update or revise any information or any of the forward-lo



#### Acknowledgement of Country

International Graphite acknowledges the Traditional Custodians of Country throughout Australia, particularly the Whadjuk, Willman, and Wudjari Peoples of the Noongar Nation, and recognises their continuing connection to lands, waters and communities. We pay our respects to Aboriginal and Torres Strait Islander cultures and to Elders past and present.





### Micronised graphite production at Collie

200tpa plant commissioned

- Producing sample product for customer acceptance and sales
- Sales agreements anticipated Q3 2024
- Expansion to nominal ~4,000tpa, AUD\$12.5M











## Micronised graphite products from Collie

24/7 operations Q3 2025

- Broad range of battery / energy storage and industrial uses eg thermal management, lubricants, engineered products, polymers and battery cathodes
- Australian and international customers
- Average market price US\$1,750/t US\$8,500/t (standard -> high purity range)
- Operating costs US\$1,500/t US\$1,850/t (varies by product)
- Product range standard and high purity micronised graphite flake 5-45um (D90)









# Springdale Graphite Project Location and support infrastructure



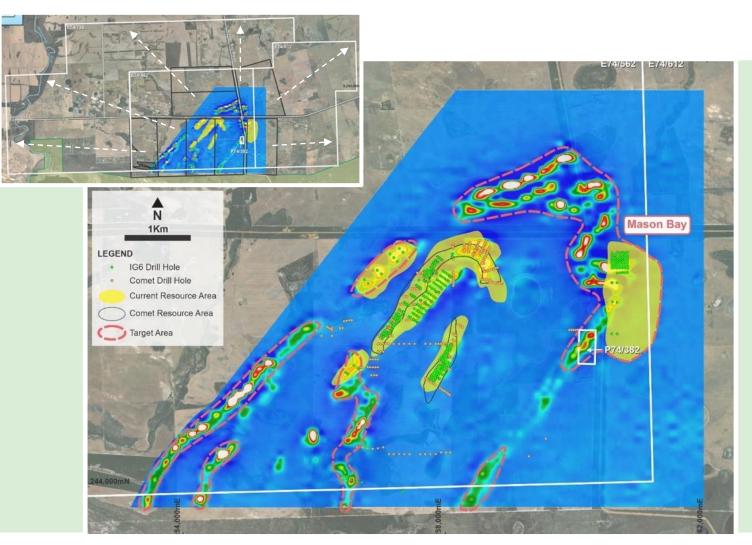


## **Springdale Graphite Project**

JORC 2012 Mineral Resource Estimate

2% cut-off	Springdale Graphite Project September 2023		
	Tonnes (Mt)	Graphite (TGC%)	Contained Graphite (Mt)
Indicated	11.5	7.5	0.9
Inferred	37.8	6.1	2.3
Total	49.3	6.5	3.2

5% cut-off	Springdale Graphite Project September 2023		
	Tonnes (Mt)	Graphite (TGC%)	Contained Graphite (Mt)
Indicated	7.9	9.3	0.7
Inferred	20.1	8.5	1.7
Total	28.0	8.7	2.4

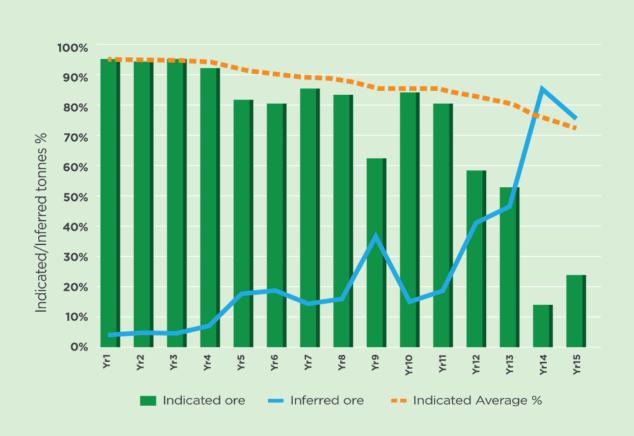


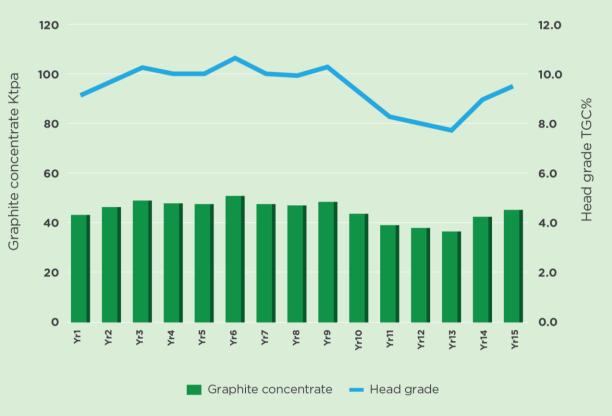
\*Refer ASX announcement dated 12 September 2023 for full JORC compliant supporting tables and disclosures



#### **Springdale Graphite Project**

Mining – 500Ktpa ore for processing Open pit conventional day shift operations

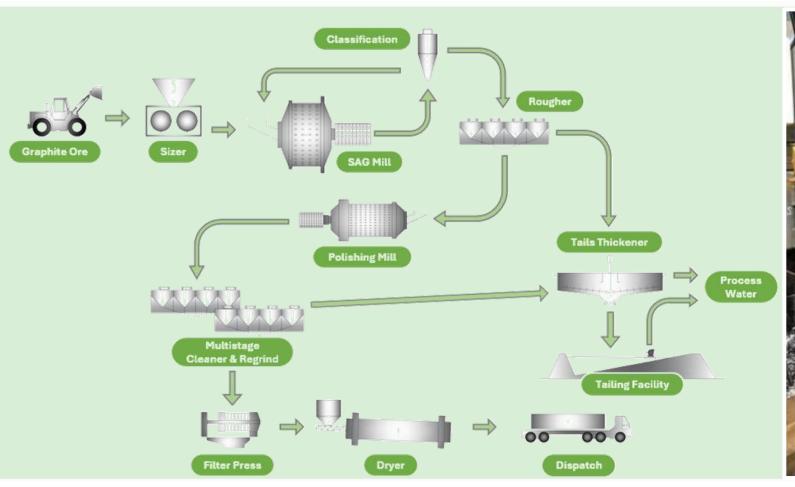






## **Springdale Graphite Project**

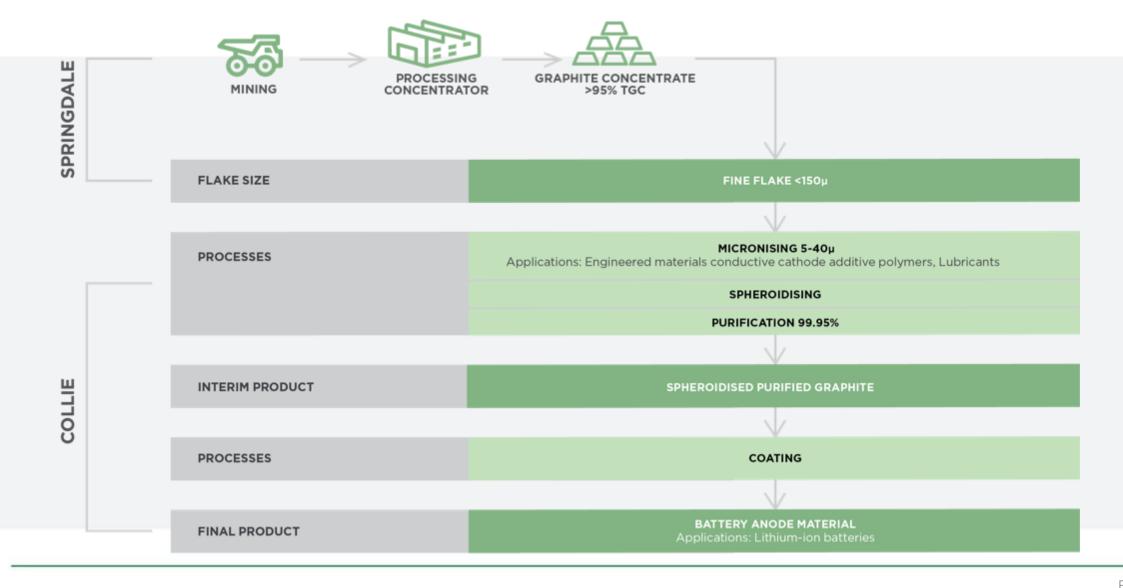
500Ktpa concentrator







## Capturing full value of the graphite resource





#### Downstream Processing & Flowsheet R&D

Pilot plant installed at Collie

- First pilot micronising and spheroidising equipment commissioned in 2022
- Thermal purification
- Samples produced using imported concentrates to tailor output to market specifications
- Sizing and distribution of spheroidised graphite achieved quality needed for battery anode and energy storage











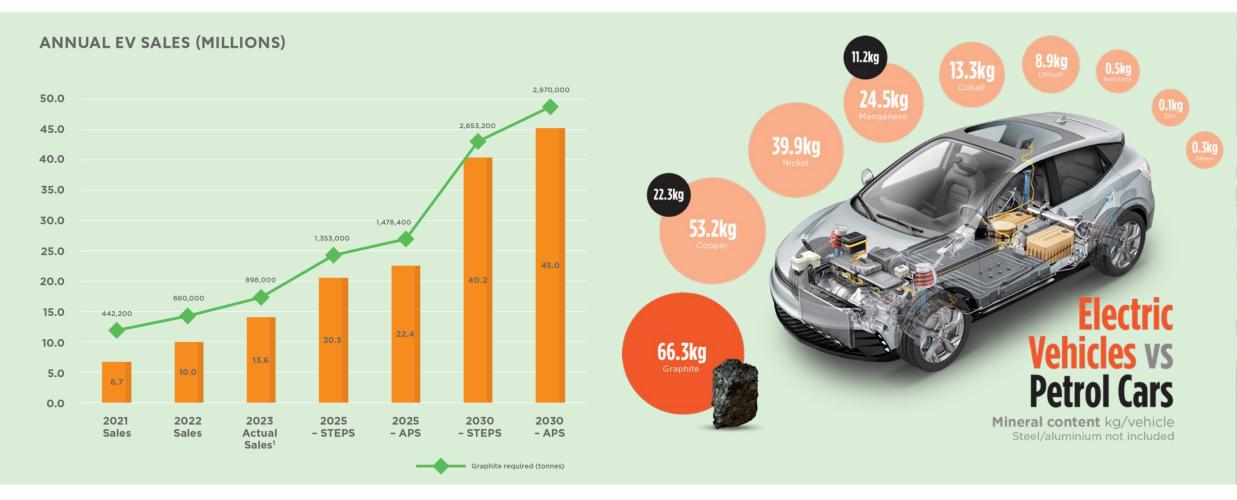






#### EV sales driving lithium-ion battery demand

Macro trajectory shows 13-fold increase by 2030 EVs to be 35% of all vehicle sales in ten years



<sup>&</sup>lt;sup>1</sup> Reuters 11 January 2024



## **Integrated Mine to Markets Scoping Study** Key findings – first 15 years of operations

#### **SPRINGDALE**



**Total Mineral Resource** 49.3Mt @ 6.5% TGC or

28.0Mt @ 8.7% TGC

7.5Mt of ore mined @ 9.5% TGC

~15% of resource scheduled

> Multi-decade mine life

#### **SPRINGDALE**



500Ktpa concentrator

40-50Ktpa concentrate

AISC lowest third on global cost curve @ US\$485/t concentrate

CAPEX: A\$76M including 25% contingency and pre-strip

#### COLLIE







#### 20Ktpa UPSG

17Ktpa micronised byproduct

CAPEX: A\$124M NPV: A\$375M IRR: 36% AISC: US\$1,603/t

**Annual EBITDA: A\$78M** 

**Battery Materials** 

#### COLLIE



#### 18Ktpa CPSG

17Ktpa micronised byproduct

CAPEX: A\$217M NPV: A\$603M IRR: 31% AISC: US\$2,699/t

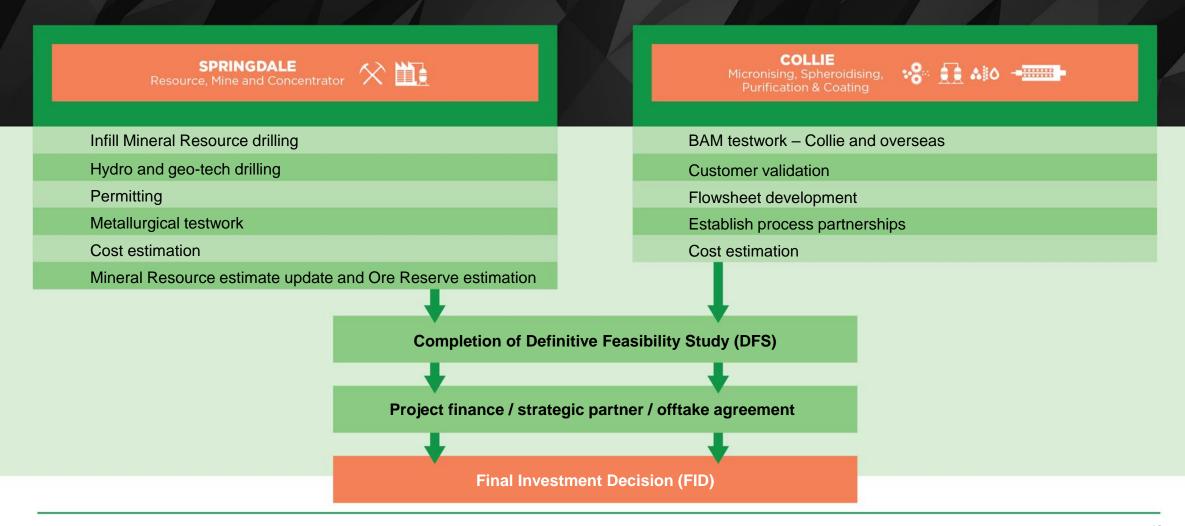
**Annual EBITDA:** A\$142M

**Battery Materials** 

\*Refer ASX announcement dated 29 January 2024 for full supporting disclosures



## Springdale – Collie Mine to Markets Next steps in 2024





## Corporate

#### Excellent value opportunity

Shares on issue	166.2M
Cash at 31 December 2023 and government commitments due	\$2.0M
Market Capitalisation	\$25.9M
KMP Options (5 year term, ex price \$0.30 - \$0.40 / share)	8.0M
Advisor Options (3 year term, ex price \$0.30 - \$0.40 / share) (1)	10.2M
KMP Performance Rights with various milestone and share price hurdles (1)	17.5M
Comet Resources Limited	24%
Board and management (fully diluted)	41%



Directors: Matthew O'Kane, Phil Hearse (Chair), David Pass, Andrew Worland (MD & CEO)

## Highlights

Producing micronised graphite in Collie

Developing a world class mine at Springdale

Downstream graphite processing in Collie

Premium location in Western Australia

Outstanding economics

- Long life operations
- Global growth markets



