

9 November 2023 ASX:BCA

Corporate Presentation Update

Black Canyon (ASX: BCA) is pleased to release the following updated Company Presentation summarising results from recent exploration discoveries, battery grade HPMSM testwork and general market information update.

The presentation will be available from the company's website at www.blackcanyon.com.au.

This announcement has been approved by the Board of Black Canyon Limited.

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Pilbara Focused Manganese Developer & Explorer

November 2023

ASX:BCA
BLACKCANYON.COM.AU





Disclaimer & Forward Looking Statements

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This document has been prepared as a summary only, and does not contain all information about the Company's assets and liabilities, financial position and prospects and the rights and liabilities attaching to the Company's securities. This document should be read in conjunction with any other reports and information provided or released by the Company.

Some of the statements contained in this presentation are forward-looking statements. Forward looking statements include but are not limited to, statements concerning estimates of expected costs, statements relating to the advancement of the Company's investments and other statements which are not historical facts. Although the Company 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 the Company's projects may experience technical, geological, metallurgical and mechanical problems, changes in product prices and other risks not anticipated by the Company or disclosed in the Company's published material.

Competent Persons Statement

The information in this report that relates to exploration results and exploration targets and results is based upon information reviewed by Mr Brendan Cummins who is a member of the Australian Institute of Geoscientists (AIG). Mr Cummins is an Executive Director of Black Canyon Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Cummins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Scoping Study Cautionary Statement

The Scoping Study referred to in this presentation has been undertaken for the purpose evaluating the potential development of the Flanagan Bore Manganese Project, Pilbara region, Western Australia. It is a preliminary technical and economic study of the potential viability of the Flanagan Bore Manganese Project. The Scoping Study outcomes, Production Targets and forecast financial information referred to in the release are based on low level technical and economic assessments that are insufficient to support estimation of Ore Reserves. The Scoping Study is presented to an accuracy level of +/- 35%. While each of the 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 and appropriate studies are required before Black Canyon will be in a position to estimate Ore Reserves or to provide any assurance of any economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. All (100%) of the Mineral Resources scheduled for extraction over the 20 year mine life in Scoping Study production targets are classified as Indicated. Only 40% of the Global Mineral Resource has been scheduled for mining in this Scoping Study. No Inferred Mineral Resources have been used in the Scoping Study.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). For full details on the Mineral Resource estimate, please refer to the ASX announcement of 13 April 2022. Black Canyon 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. This Scoping Study is based on the material assumptions outlined in the announcement. These include assumptions about the availability of funding. While Black Canyon considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding in the order of \$44 million will likely be required. Investors should note that that there is no certainty that Black Canyon will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Black Canyon's existing shares. It is also possible that Black Canyon could pursue other strategies such as project finance, strategic partners, a sale or partial sale of its interest in the Flanagan Bore Project. The Flanagan Bore Project is part of the Carawine JV"), with Carawine Resources Ltd ("CWX" ASX:CWX). The respective interests of each party currently being Black Canyon 75% and CWX 25%. Black Canyon is the manager of the joint venture, with both parties deemed to be contributing to JV expenditure according to their interests. This announcement convard-looking statements and believes it has a "reasonable basis" to expect it will be able to fund development of the Flanagan Bore Managese Project. However, a number of factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely of the results of this study.



Manganese Explorer and Developer



Manganese Focused

in the steel industry
and critical for
Cathodes in Electric
Vehicle
Li-lon batteries



Growth Potential

Significant discoveries across the Balfour Manganese Field with MRE expansion underway Substantial MRE totalling 171 Mt @ 10.3% Mn, with a high-grade component of 40Mt @ 13.0% Mn



Development Options

- Traditional manganese concentrate for the Mn alloying industry
 Downstream HPMSM
 - Downstream HPMSM processing for EV battery precursor material



Premier Location

Tier 1 location – WA
Projects located in East
Pilbara, existing Mn mines
of Woodie Woodie,
Butcherbird and export
infrastructure at
Port Hedland



Corporate Overview

BCA

ASX Code

\$9.9m

Market Cap (as at 03/11/2023)

\$1.9m

Cash (End of Sept Quarter) \$8.0m

Enterprise Value

66m

Shares on Issue

1.0m

Unlisted Options (\$0.25 exercise, exp 5/05/2024)

7.0m

Unlisted Options (\$0.28 exercise, exp 27/07/2025)

Share Price Performance



Black Canyon Shareholders

11%

BCA Board &

Management

15%

Small Cap Institutions Other and Funds Shareholders

74%

Top 20 shareholders – 41%



Graham Ascough (Non-Executive Chairman)

Geophysicist

Mr Ascough is a resources executive and geophysicist with more than 30 years' experience. He is presently Non-Executive Chairman of Musgrave Minerals Ltd, Sunstone Metals Ltd and PNX Metals Ltd.



Simon Taylor (Non-Executive Director)

Geologist

Mr Taylor is a resources industry executive with over 30 years' experience in geology, finance and corporate management at CEO and Board levels. He is also a Non-Executive Director Stellar Resources Ltd and Petratherm Ltd



Brendan Cummins (Executive Director)

Geologist

Mr Cummins has over 25 years' experience across precious, base metals and bulk commodities. Extensive experience in resource development, feasibility, project development, environmental approvals and permitting.



Adrian Hill (Non-Executive Director)

Finance

Mr Hill is a senior executive with over 25 years' experience in strategic and finance roles in the resources, energy infrastructure and investment banking industries. He has an established record in strategy development, corporate structuring and capital raising.



Manganese Fundamentals

Essential for steel and critical for EV Li-ion batteries

Manganese (Mn) is the fourth most consumed metal by tonnage with 60Mt tonnes of ore mined annually



Approximately 90% is used in steel manufacturing with Mn alloys added to prevent corrosion, resist abrasion, and increase hardenability.



NMC batteries contain 10 to 30% manganese that equates to 10 - 60kg manganese depending on battery chemistry and pack size



Mn ore is smeltered to make a ferro or silico manganese alloy used in steel production (15kg Mn/t rebar).



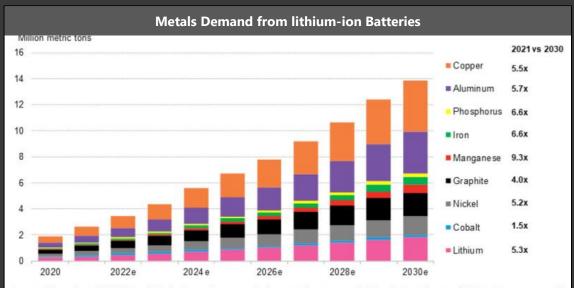
Baseload demand for manganese ores continues from China with the emergence of India



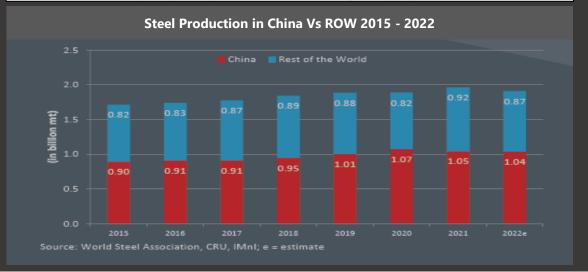
Growth of LFMP, high lithium-manganese and sodium-based chemistries



Bloomberg/NEF estimate 9.3x demand for manganese required for Li-Ion batteries by 2030



Source: BloombergNEF. Note: Metals demand occurs at mine mouth, one-year before battery demand. All metals expressed in metric tons of contained metal, except lithium, which is in lithium carbonate equivalent (LCE).

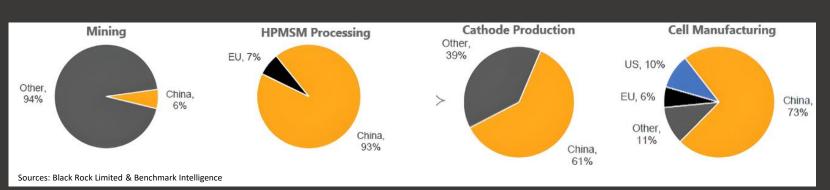


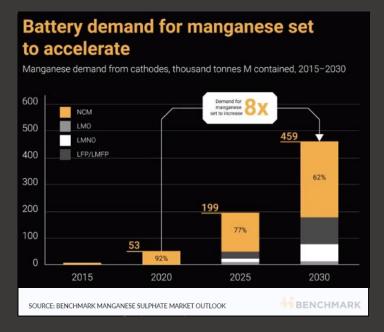


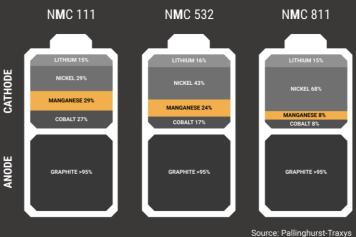
Manganese - Critical Energy Metal

More manganese required to feed the battery technology evolution

- Development of more battery manufacturing capacity in the USA and Europe with the Inflation Reduction Act and Critical Raw Materials Act respectively
- Svolt unveiled the Dragon Armour (Dec 2022) high manganese iron-nickel cells achieve a range of greater then 900km with mass production expected in 2024*
- Umicore (Feb 2023) starts industrialization of its leading manganese-rich HLM (high lithium, manganese 60%) battery with production planned to commence in 2026**
- ▶ Gotion High-Tech (May 2023) announces the Astroinno LFMP battery with a range up to 1000km, new battery pack design and planned mass production in 2024***
- Samsung SDI (Sept 2023) announce its LFMP battery with the manganese infused LFP battery to increase energy density by about 15% to 20% at a similar price****
- ▶ Sodium based batteries with up to 28% Mn content are being further investigated







Sources: * https://www.autoevolution.com/news/svolt-develops-the-dragon-armor-battery-pack-and-promises-1000-km-range-206712.html

^{**}https://www.umicore.com/en/newsroom/news/umicore-starts-industrialization-of-manganese-rich-battery-materials-technology-for-electric-vehicles

^{***}https://thedriven.io/2023/05/24/breakthrough-ev-battery-pack-could-last-2-million-kms-or-130-years-of-average-driving/

BCA Downstream HPMSM Testwork

Stage 1 Evaluate ore suitability (2022)

Initial leach tests yielded a 93% extraction rate

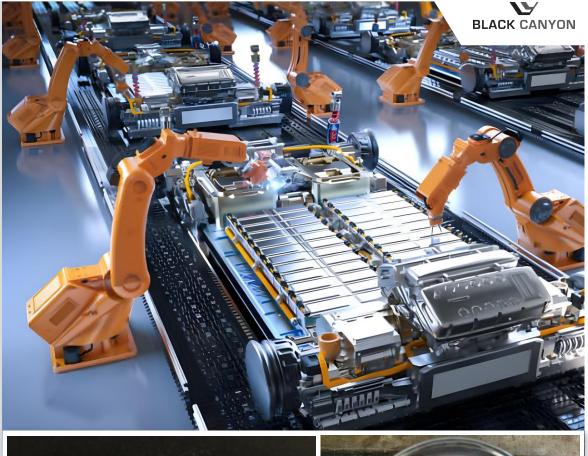
Crystallised Manganese Sulphate crystals containing >32% Mn which >99% Mn Sulphate purity. Comparable to the typical 32% Mn content of battery grade HPMSM but required further purification to reduce elemental impurities

Stage 2 Battery Grade HPMSM Experimental Flowsheet (2023)

- Expanded HPMSM Strategy across the Balfour Mn Field
- Leach tests yielded up to 99% extraction rate
- Completed multistage stage purification to remove Na, Al, and K, then Fe and Al and basemetals. Single stage solvent extraction (SX) to selectively target manganese extraction, followed by crystallisation.
- Achieved 32% Mn, >99% Mn Sulphate purity and within specification impurity levels (FastMarkets specification MB-MN-0008) from KR1 feedstock

Stage 3 Upscale Battery Grade HPMSM flowsheet & Pilot Plant (2024)

- ▶ Sample selection, scoping and quotation process
- Larger scale samples to continue flowsheet and pilot plant design

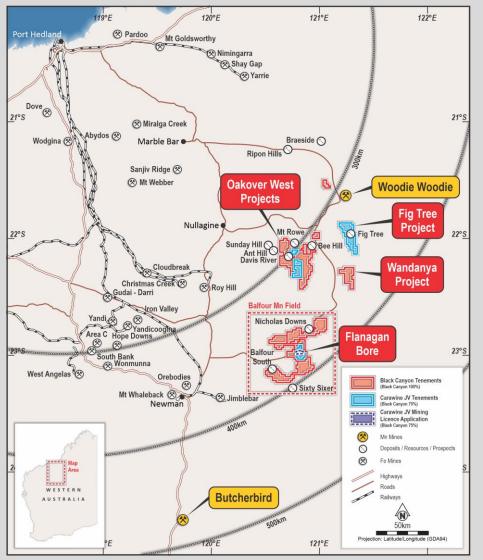


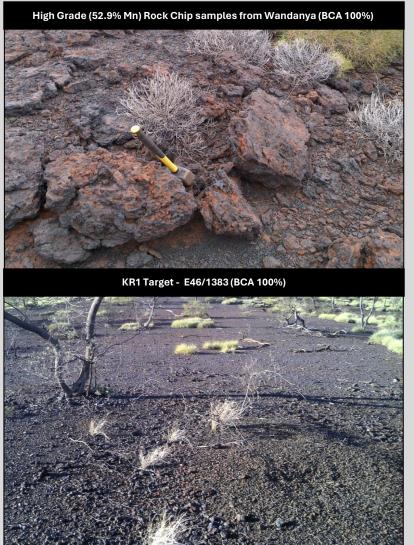






Asset Overview – 2,400km² under tenure





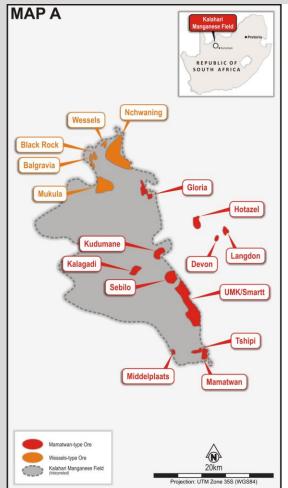




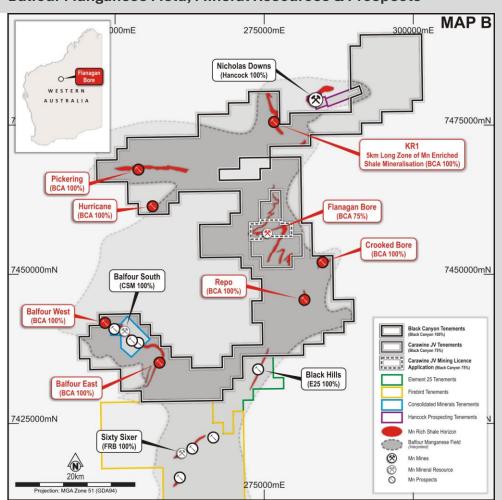
Potential for Global Scale Discoveries

Parameter	Kalahari	Balfour
Basin Scale	35km x 15km	70km x 30km
Manganese Ore type	Carbonate & Oxide	Oxide
Benchmark Price (CIF) (12 months to Feb 2023 IMNL)	36-38% Mn US\$4.60 DMTU	44% Mn US\$5.80 DMTU
Establishment date	1960's to 2010 (> 20 mines)	2010 (1 mine)
Development stage	Mature	Emerging
Resource Grades	33-44% Mn	10-20% Mn
Ore Processing	Limited	DMS upgrade
Concentrate Grade	36-38% Mn	30-33% Mn
Mine depths	100 to 300m (OP & UG)	0 to 40m
Distance from Port	1000km	600km
Transport logistics	Train and Truck	Truck

Kalahari Manganese Field & Mines



Balfour Manganese Field, Mineral Resources & Prospects





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2023 Exploration and Development Activities

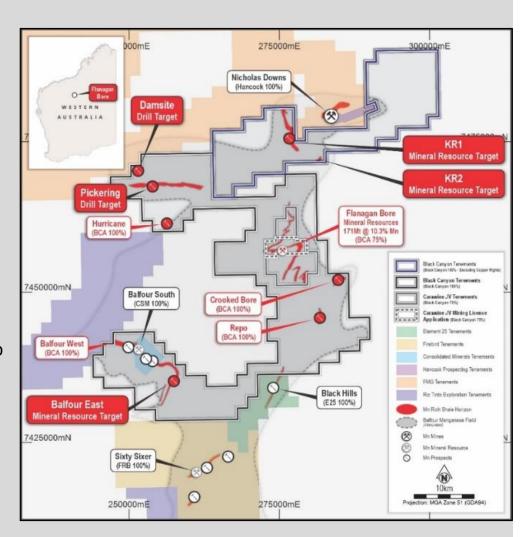
BCA 100% Tenements

Discovery and Mineral Resource drilling:

- Drilled multiple quality targets across the Balfour Manganese Field to benchmark scale, grade and product specifications
- High success rate with 5 out of 6 targets delivering manganese enriched shale intersects
- Demonstrated scale of the region with high potential to build significant mineral inventory
- Define Mineral Resources to support various mining scenarios including potentially larger scale Hub/Spoke style model
- ▶ Delineated multiple HPMSM feedstock targets at KR1, KR2, Balfour East, Damsite and Pickering. Delivered battery grade HPMSM from KR1
- Wandanya high-grade rock chip samples (> 50% Mn) and completed follow-up mapping, further sampling and ground geophysics

BCA JV 75% tenements

- Exploration over existing targets Fig Tree and Lidar surveys followed by field assessments
- Baseline Environmental and Permitting activities at Flanagan Bore





KR1 Discovery (BCA 100%)

Mineral Resource Potential

- Drill assays confirm the KR1 manganese discovery has a cross strike width of between 200 to 500m, a strike extent of at least 2400m and open to the northwest
- Leaching testwork extracted 97% Mn from KR1 material, which is part of the expanded High Purity Manganese Sulphate (HPMSM) variability study.
- Purification and crystallisation stages have been completed delivering battery grade > 99% HPMSM purity and 32% Mn

KRRC025 15m @ 18.6% Mn from 2m, including:

7m @ 26% Mn from 10m

KRRC027 23m @ 12.2% Mn from 11m, including:

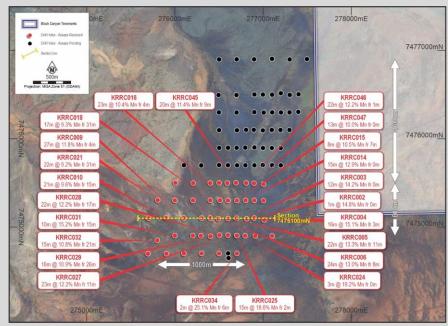
4m @ 18.4% Mn from 12m

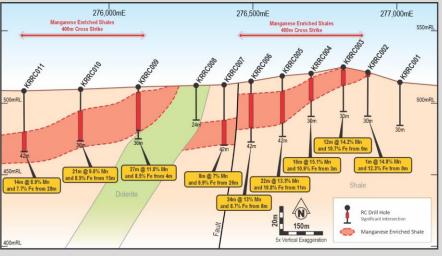
KRRC031 10m @ 15.2% Mn from 15m, including:

4m @ 18% Mn from 15m

KRRC046 22m @ 12.2% Mn from 1m, including:

3m @ 18% Mn from 1m







KR2 Discovery (BCA 100%)

Mineral Resource Potential

▶ Thick manganese enriched shale mineralisation encountered from surface. Results confirm the KR2 manganese discovery has a cross strike width of between 400 to 500m and a strike extent of at least 800m. Mineralisation extends 10m to 35m downhole with four holes ending in manganese enriched shale

O KRRC099 27m @ 13.4% Mn from surface including:

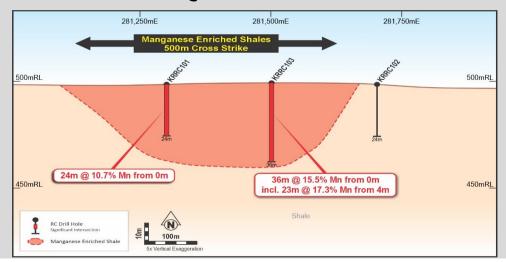
15m @ 16.3% Mn from 5m

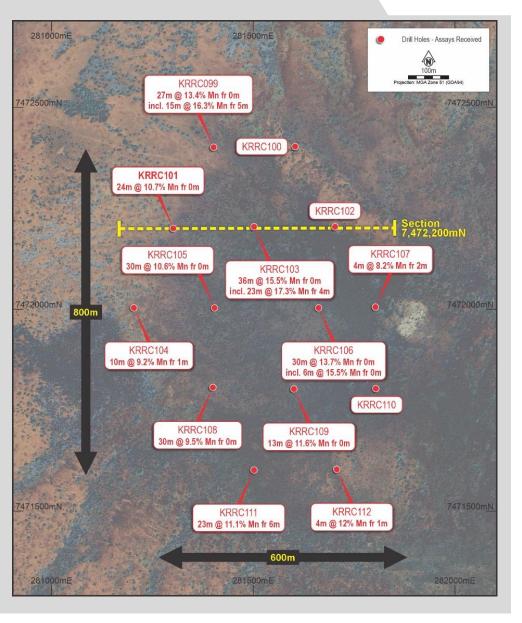
KRRC103 36m @ 15.5% Mn from surface, including:

23m @ 17.3% Mn from 4m

KRRC106 30m @ 13.7% Mn from surface, including:

6m @ 15.5% Mn from surface





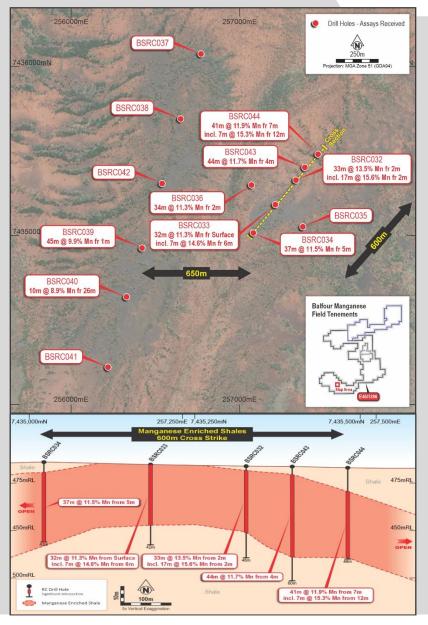


Balfour East Discovery (BCA 100%)

Mineral Resource and Exploration Target Potential

- ▶ Results demonstrate thick manganese enriched shale mineralisation from first pass reconnaissance drilling. Assay results confirm a cross strike width of between 200m to 300m and at least 600m of strike extent.
- ▶ The mineralisation appears to be open in all direction apart to the SE where a single hole has been drilled. There remains significant potential to extend the mineralisation footprint at Balfour East

0	BSRC032	33m @ 13.5% Mn from 2m including,
		17m @ 15.6% Mn from 2m
0	BSRC033	32m @ 11.3% Mn from surface including,
		7m @ 14.6% Mn from 6m
0	BSRC034	37m @ 11.5% Mn from 5m until end of hole
0	BSRC039	45m @ 9.9% Mn from 1m
0	BSRC044	41m @ 11.9% Mn from 7m including
		7m @ 15.3% Mn from 12m





Damsite Discovery (BCA 100%)

Mineral Resource

- Results confirm the Damsite manganese discovery has a cross strike width of 300m, a strike extent of at least 500m and is open to the north
- Mineralisation is between 10 and 24m thickness downhole with multiple holes ending mineralisation

PKRC002 22m @ 12.8% Mn from surface including:

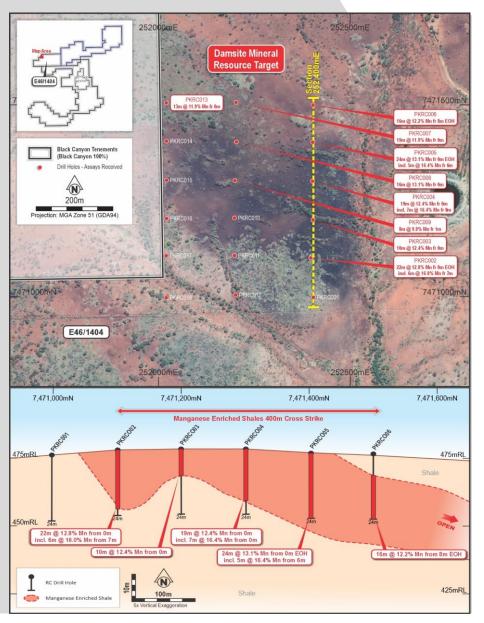
6m @ 16.0% Mn from 7m

PKRC004 19m @ 12.4% Mn from surface including:

7m @ 16.4% Mn from 0m

PKRC005 24m @ 13.1% Mn from surface until EOH including:

5m @ 16.4% Mn from 6m





Pickering Discovery (BCA 100%)

Exploration Target Potential

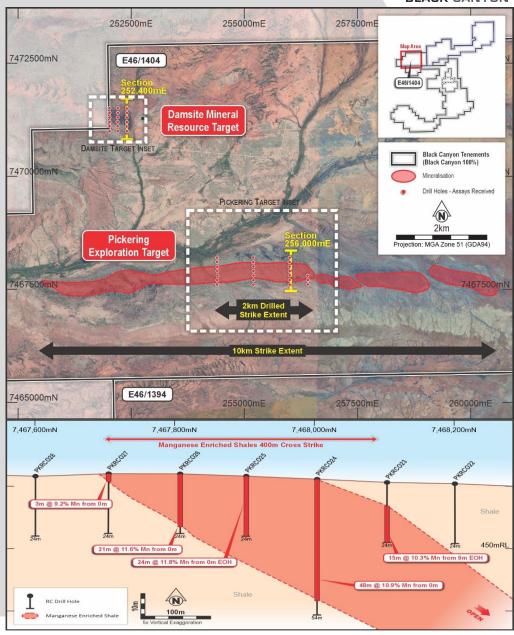
- Results confirm the Pickering manganese discovery has a cross strike width of between 300 to 500m and a drilled strike extent of at least 2,000m
- ▶ The overall Pickering target can be traced along strike for about 10km so there remains significant potential to complete further drilling to expand the target size.
- ▶ The mineralised shale at Pickering is between 300 and 500m wide, extending 10m to 48m downhole with a high portion of holes ending in mineralisation.

PKRC019 24m @ 11.1% Mn from surface until EOH

PKRC024 48m @ 10.9% Mn from surface

PKRC032 24m @ 11.5% Mn from surface until EOH

PKRC039 24m @ 11.3% Mn from surface until EOH



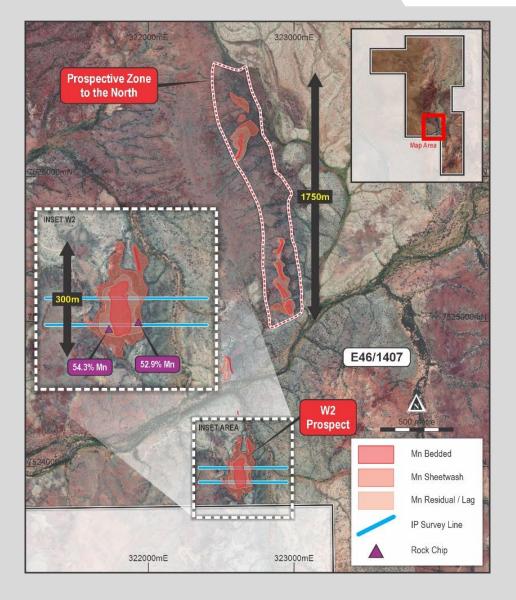


Wandanya (BCA 100%)

High-grade potential Discovery

- Reconnaissance sampling over the Wandanya (E46/1407) tenement (BCA 100%) delivered high-grade surface rock chip samples up to 54% manganese.
- Two samples taken 100m apart (across strike) returned 52.9% and 54.3% Mn from an outcrop that is approximately 300m long and 150m wide at the W2 prospect.
- Other samples targeting manganese across the tenement ranged between 12.2% and 33.5% Mn.
- No previous surface sampling or historic drilling has been completed over the outcropping mineralisation.
- Completed additional mapping, sampling and IP to generate potential drill targets subject to Heritage Surveys







Flanagan Bore - 171Mt @ 10.3% Mn for 17.7Mt of contained Mn (BCA 75%)

Outcropping Discovery With Scale, Grade & Thickness

- Delivers a large-scale, high quality Measured and Indicated Mineral Resource from surface with outcropping higher-grade zones with impressive geological and grade continuity
- Higher grade zone across LR1 and FB3 comprising 40 Mt @ 13% Mn which is positive for resource optimisation, processing and mining scenarios

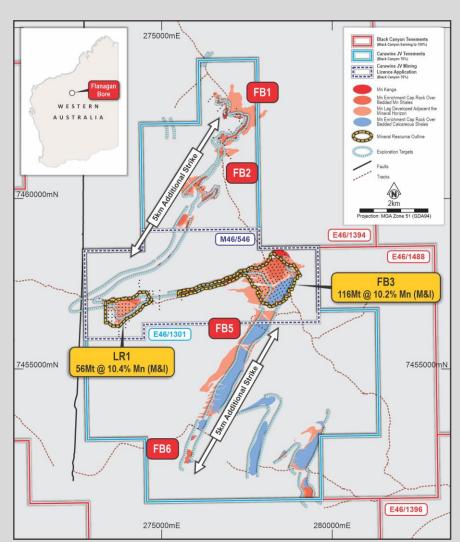
Mineral Resource Summary at LR1 and FB31 (BCA 75%)

Deposit	Mineral	Material	In Situ				
	Resource	(Mt)	Mn (Mt)	Mn (%)	Fe (%)	Si (%)	Al (%)
FB3	Measured	52	6	10.5	10.4	16.9	4.3
LR1	Measured	47	5	10.3	8.4	16.7	4.6
T otal	Measured	100	10	10.4	9.4	16.8	4.4
FB3	Indicated	63	6	10.0	9.6	16.8	4.4
LR1	Indicated	8	1	11.3	9.4	6.9	1.8
T otal	Indicated	72	7	10.1	9.6	15.7	4.1
Grand Total		171	17.7	10.3	9.5	16.4	4.3

Notes: (1) Mineral resources reported at a cut-off grade of 7% Mn

Summary of Mineral Resources ⁽¹⁾							
Deposit	Mineral	Material	In Situ				
	Resource	(Mt)	Mn (Mt)	Mn (%)	Fe (%)	Si (%)	Al (%)
FB3	Measured	14	2	13.2	11.5	18.2	4.5
LR1	Measured	11	1	13.1	9.7	16.8	4.5
Total	Measured	25	3	13.1	10.7	17.5	4.5
FB3	Indicated	10	1	12.7	10.8	18.1	4.8
LR1	Indicated	5	1	12.9	9.9	6.1	1.6
Total	Indicated	15	2	12.8	10.5	14.5	3.8
Grand Total		40	5	13.0	10.6	16.4	4.3

Notes: (1) Mineral resources reported at a cut-off grade of 11% Mn





Flanagan Bore - Positive Metallurgical Studies

Crushing and washing testwork

Significant manganese grade uplifts from feed grades of 11% and 15% Mn upgraded to approximately 23% and 24% Mn through scrubbing and washing - an important first step for beneficiation.

Pre-Feasibility level Heavy Liquid Separation Test work

- Significant manganese concentrates results from lump (8-25mm) and fines (1-8mm) testwork includes
 - LR01 lump product 32.2% Mn
 - LR01 fines product 31.4% Mn
 - o FB03 lump product 33.2% Mn
 - o FB03 fines product 33.4% Mn
- Significant manganese concentrates results from fines (1-8mm) testwork includes:
 - LR01 fines only product 32.1% Mn
 - FB03 fines only product 33.0% Mn
- Overall recoveries across the fines testwork average 70% which are in line with the Scoping Study assumption





Flanagan Bore attractive Scoping Study Results

Key Financial and Project Metrics

\$134
Million

PRE-TAX NPV

67%

PRE-TAX IRR

20

Year

MINE LIFE

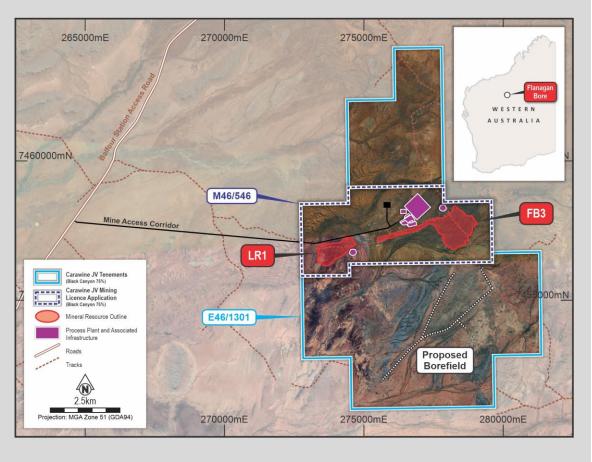
\$32.1 Million

AVE ANNUAL CASHFLOW (years 1-4)

\$44
Million

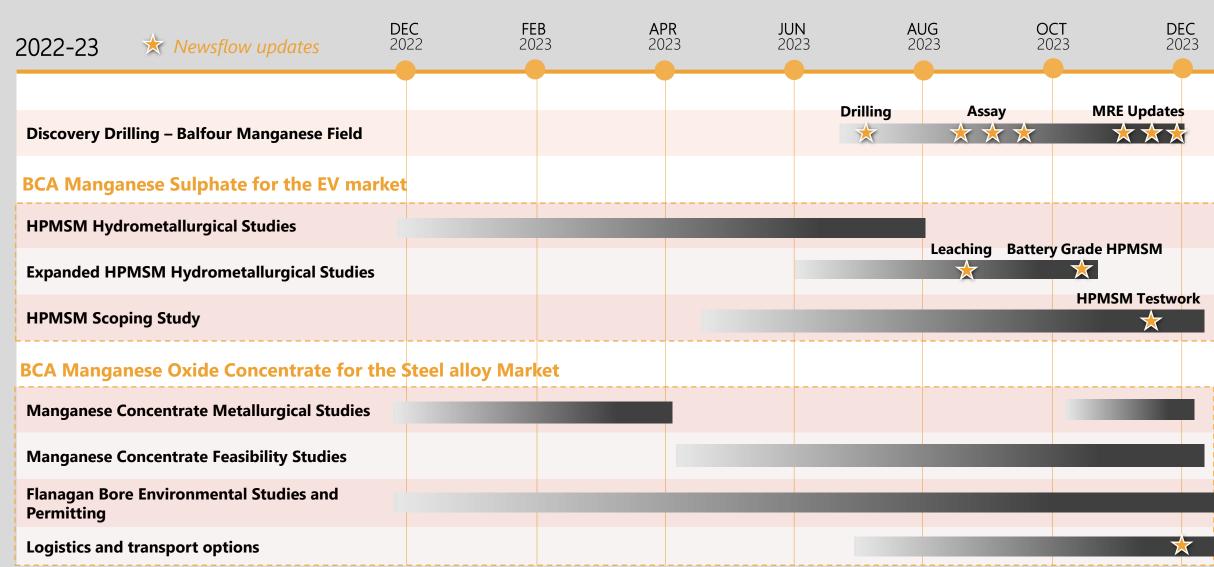
CAPITAL COST

<2
YEARS
PAYBACK PERIOD





News flow



INVESTOR PRESENTATION

20



Forward Execution Plan

Exploration and Pre-Development

- Discover Global Scale Mineral Resources
- Assess development pathway through feasibility and testwork
- ► Team development and project implementation plan
- Ensure social license to operate through environmental approvals, stakeholder engagement and ESG principals
- Partnerships with Strategic Investors and/or Project Enablers for Mn concentrates and HPMSM

Operations

Manganese Concentrate

- Establish Long Mine Life Ore Reserves single operation or hub and spoke model
- Detailed project construction and commissioning plan
- Reduce technical risk resources, processing and transport
- Cost efficient development and operations
- Engage with top tier counter parties
- Become a reliable & sought after supplier of Manganese Concentrates

Downstream

High Purity Manganese Sulphate

- Reliable Manganese Feedstock from Operations or dedicated fastrack pits
- Reduce technical risk through hydrometallurgical flowsheet development and Feasibility Studies
- Engage with end users for Partnerships and product qualification
- Develop HPMSM Pilot Plant operations
- Determine plant site location factors with strategic partners
- Become a reliable, low carbon supplier of HPMSM

Why invest in Black Canyon?



Manganese is essential to the steel industry and a critical battery mineral, with strong growth forecast



Clear strategy to add value & grow the Company through discovery, development & downstream processing



Significant exploration programs completed in 2023 across the Balfour Manganese Field



Delivering results – Discoveries, MRE upgrades, positive Scoping Study, ML application lodged, commencement of further mine development studies and produced battery grade HPMSM.



Expanded downstream strategy, HPMSM to facilitate global feedstock supply diversification supporting a value-add strategy. Seeking Strategic partnerships for Mn concentrates and HPMSM





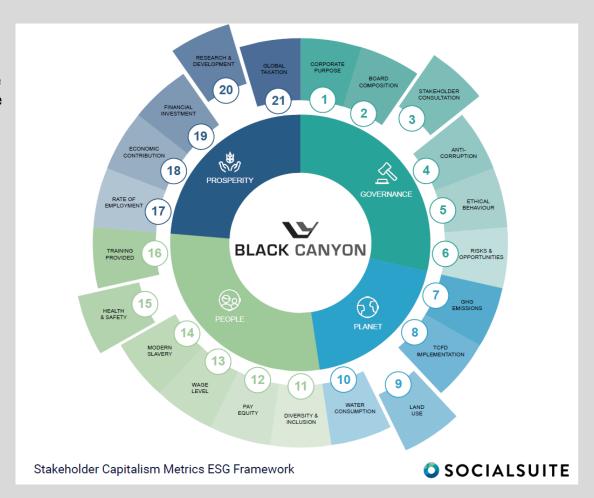
ESG – Partnered With SocialSuite

Highlights and achievments

- Partnered with Socialsuite to commence ESG reporting against the World Economic Forum (WEF) Stakeholder Capitalism Framework
- Commenced wider community engagement Heritage surveys conducted on site prior to drilling, involving Traditional Owners. Cultural Monitors on site for drill line clearing activities
- Engagement with wider community including pastoralists and local prospectors
- ► Ensuring Environmental Compliance

Focus areas for 2023/2024

- Baseline studies to understand the current environment including land, water, flora, fauna and social surroundings
- Wider community stakeholder engagement (ongoing)
- Health & Safety policies/procedures to ensure compliance and a safe work environment for employees and contractors
- Strong management and effective deployment of capital
- ▶ LifeCycle Assessments (LCA) to establish carbon footprint as the project develops





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