29	30	28	27		79	47
Cu	Zn	Ni	Co	PGE	Au	Ag
Copper	Zinc	Nickel	Cobalt	PGE	Gold	Silver

BUILDING TOMORROW'S MINES TODAY

Orion Minerals

Errol Smart - *Managing Director and CEO*

March 2025

ASX: ORN | JSE: ORN

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This presentation contains summary information about Orion Minerals Ltd and its subsidiaries (Orion or Company) and their activities and is current as of 31 January 2025. The information in this presentation is a general background and does not purport to be complete or provide all information that an investor should consider when making an investment decision.

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- may include, among other things, statements regarding targets, estimates and assumptions in respect of metal production and prices, operating costs and results, capital expenditures, mineral reserves and mineral resources and anticipated grades and recovery rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions.

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Orion is not aware of any new information or data that materially affects the information for the Mineral Resource and confirms that all material assumptions and technical parameters underpinning the estimates in the relevant Orion ASX releases (as referenced in the presentation) continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Person's findings are presented have not materially changed.

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Competent Person Statement

The information in this presentation that relates to Orion's Exploration Results is a compilation of previously released reports to ASX by Orion Minerals on 25 July 2023, 17 August 2020, 6 August 2020, 6 May 2020, 9 March 2020, 3 September 2019, 8 July 2019 and compiled by Mr Paul Matthews (Pr.Sci.Nat.), a Competent Person who is a member of the South African Council for Natural Scientific Professionals, a Recognised Professional Organisation (**RPO**). Mr Matthews is a full-time employee of Orion. Mr Matthews has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Matthews consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to Orion's Mineral Resource for the Prieska Copper Zinc Mine, is a compilation of previously released reports to the ASX by Orion and is based on information compiled by Mr Sean Duggan, a Competent Person who is a Director and Principal Analyst at Z Star Mineral Resource Consultants (Pty) Ltd. Mr Duggan (Pr.Sci.Nat) is registered with the South African Council for Natural Scientific Professionals, an RPO. Mr Duggan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Duggan consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to the Ore Reserves for Orion's Prieska Copper Zinc Mine, is a compilation of previously released reports to the ASX by Orion and is based on mining-related information incorporated under the supervision of Mr William Gillespie, a Competent Person who was, at the time of preparation and release, a fellow of the Institute of Materials, Minerals and Mining (IMMM), an RPO. Mr Gillespie had sufficient experience that is relevant for the Ore Reserve aspects of the release as Competent Person. Mr Gillespie was an employee of A & B Global Mining Consultants (Pty) Ltd. Mr Gillespie had sufficient experience that is relevant to the type of mining and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Orion confirms that the information prepared under the supervision of Mr Gillespie remains factually correct and it is not aware of any information that materially affects the Ore Reserves announced.

The information in this presentation that relates to Orion's Mineral Resource for the Okiep Copper Project, is a compilation of previously released reports to the ASX by Orion and is based on information compiled and assessed under the supervision of Dr Dion Brandt, Concession Creek Consulting CC. Dr Brandt (Pri. Sci. Nat.) is registered with the South African Council for Natural Scientific Professionals, an ROPO. Dr Brandt has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Dr Brandt consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to Orion's Mineral Resource for the Jacomynspan Project, is a compilation of previously released reports to the ASX by Orion and is based on information complied and assessed under the supervision of Mr Jeremy Witley, a Principal Resource Consultant at the MSA Group Pty Ltd. Mr Witley (Pri. Sci. Nat.) is registered with the South African Council for Natural Scientific Professionals, a RPO. Mr Witley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Witley consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

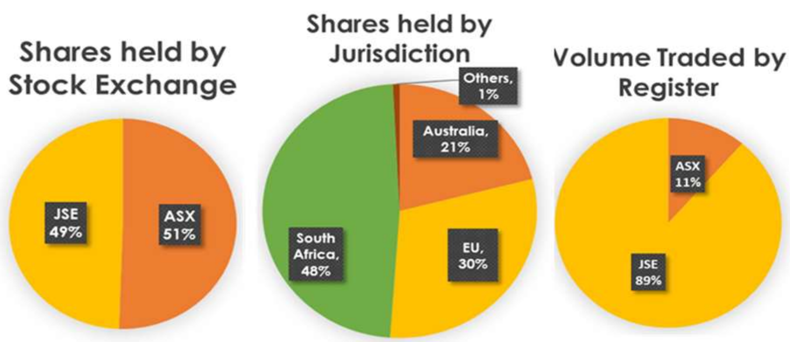
Orion confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the Mineral Resource and Mineral Reserve estimates in the relevant market announcements continue to apply and have not materially changed. Orion confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

All announcements are available to view on Orion's website: http://www.orionminerals.com.au/investors/asx-jse-announcements/

COMPANY SNAPSHOT

Capital Structure Summary	Current
Shares on issue (13 Mar'25) [1]	6,850M
Options on issue (13 Mar'25)	274M
Cash on hand (31 Dec'24)	AUD6.3M (USD3.9M)
IDC Shareholder Loan [2]	AUD6.1M (USD3.8M)
PCZM Project Financing [3]	AUD31.3M (USD19.7M)
Market capitalisation (AUD1.6cps) [4]	**AUD110M (USD69M)**

Significant Shareholders	Current Share Issue %
Tembo Capital (EU/Netherlands)	15.8
Delphi Group (EU/Germany)	11.7
Clover Alloys (SA) (South Africa)	7.8
Fairtree Capital (South Africa)	6.1
Orion Directors (excluding M Palmer) (South Africa & Australia)	1.7
Total	**43.1**



Board of Directors	Senior Management
Denis Waddell, Chairman	Peet van Coller, CFO
Errol Smart, MD & CEO	Martin Bouwmeester, Company Secretary
Godfrey Gomwe, NED	Marcus Birch, Executive: Sustainability and Business Support
Anthony Lennox, NED	Avishkar Nagaser, Executive: Corporate Communication & Investor Relations
Patience Mpofu, NED	John Paul Hunt, Executive: Exploration
Mark Palmer, NED	Nelson Mosiapoa, Group Corporate Social Responsibility Advisor

1. Orion is acquiring the controlling interest in the Okiep Copper Project. The purchase consideration payable by Orion is ~ZAR60M (~$4.9M), which purchase consideration will be adjusted in certain inflation-related respects and settled partly in cash ~ZAR13M (~$1.1M) and partly by way of Orion Shares ~ZAR47M (~$3.8M). The first phase of settlement, totaling ~ZAR46M (~$3.8M), was completed in May'24 by way of cash payment of ZAR11M and the issue of 206.6M (ZAR35M) Orion Shares. Settlement of second and third phases are pending, subject to certain completion conditions. Share settlement for the second and third phases will include ~70M Orion Shares (~$1.2M). Refer ASX/JSE releases 17 Apr'24, 8 May'24 and 18 Oct'24 for further detail.
2. Refer to Orion's 31 Dec'24 Interim Financial Report for information on the agreement for pre-development funding at the Okiep Copper Project entered into with the Industrial Development Corporation of South Africa Limited (**IDC**). Balance shown as at 31 Dec'24.
3. The Prieska Copper Zinc Mine (**PCZM**) project has two funding agreements in place, being the ZAR250M (~$20M) IDC Convertible Loan and the $10M (~ZAR122M) Triple Flag early Funding Arrangement (together **PCZM Project Financing**). Refer to 31 Dec'24 Interim Financial Report for further detail regarding PCZM Project Financing. Balance shown as at 31 Dec'24.
4. Volume weighted average price (30 day) at 13 Mar'25 of ORN Shares trading on the ASX and JSE.

OUR MISSION

FULLY INTEGRATED FROM EXPLORATION TO MARKET

Orion Minerals

PRODUCING FUTURE FACING METAL PRODUCTS

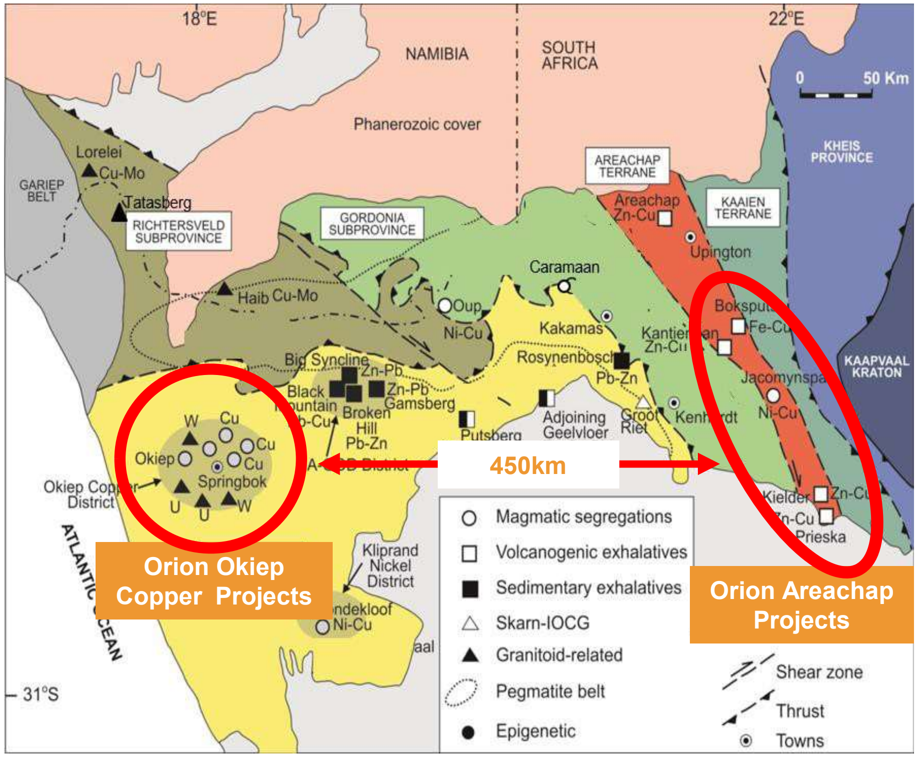
ESG CERTIFIED METALS, TRACKED AND VERIFIED FROM EXPLORATION TO SALE

FOCUS ON TWO HIGHLY PROSPECTIVE
SOUTH AFRICAN MINERAL DISTRICTS

Orion Minerals

Brownfields success being followed by greenfields exploration

3,582km^2 of prime mining and exploration rights



Mineral Resources

Orion Minerals

Prieska Copper Zinc Mine – Mineral Resource (Effective Date 25 July 2023)

Resource	Classification	Tonnes	Cu (tonnes)	Cu (%)	Zn (tonnes)	Zn (%)
Deep Sulphide Resource	Indicated	19,000,000	220,000	1.17	670,000	3.60
	Inferred	10,000,000	120,000	1.1	420,000	4.1
+ 105m Level Resource	Indicated	1,900,000	34,000	1.82	32,000	1.70
	Inferred	400,000	4,000	1.0	3,000	0.8
Total	**Indicated**	**20,000,000**	**250,000**	**1.23**	**700,000**	**3.43**
Total	**Inferred**	**11,000,000**	**120,000**	**1.1**	**420,000**	**4.0**
Grand Total		**31,000,000**	**370,000**	**1.2**	**1,100,000**	**3.6**

Notes: Deep Sulphide Resource bottom cut-off = 4% Equivalent Zn; +105m Level Mineral Resource bottom cut-off = 0.3% Cu.
Tonnes are rounded to second significant figure, which may result in rounding errors.

Flat Mines Area of the Okiep Copper Project – Mineral Resource (Effective Date 28 August 2023)

Resource	Classification	Tonnes	Cu (tonnes)	Cu (%)
Flat Mine North	Measured	440,000	5,000	1.13
	Indicated	940,000	13,000	1.42
	Inferred	200,000	4,000	1.5
Flat Mine East	Indicated	3,400,000	47,000	1.37
	Inferred	1,000,000	9,000	1.0
Flat Mine South	Indicated	2,600,000	35,000	1.35
	Inferred	800,000	13,000	1.6
Total	Measured	**440,000**	**5,000**	**1.13**
Total	**Indicated**	**6,900,000**	**95,000**	**1.37**
Total	**Inferred**	**2,000,000**	**26,000**	**1.3**
Grand Total		**9,340,000**	**126,000**	**1.35**

Notes: *Numbers may not add up due to rounding in accordance with the JORC Code guidance.*
Resources are reported at a 0.7% Cu cut-off grade.

Refer to Annual Report to Shareholders 2024 – published on the ASX on 20 September 2024

29 Cu Copper | 30 Zn Zinc | 28 Ni Nickel | 27 Co Cobalt | PGE PGE | 79 Au Gold | 47 Ag Silver

PRIESKA COPPER ZINC MINE (PCZM)

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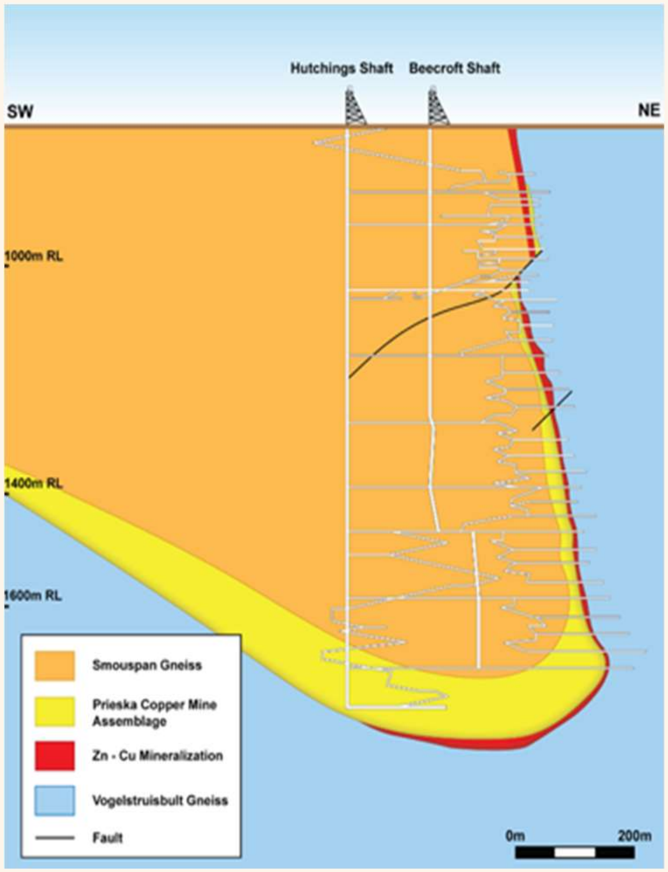
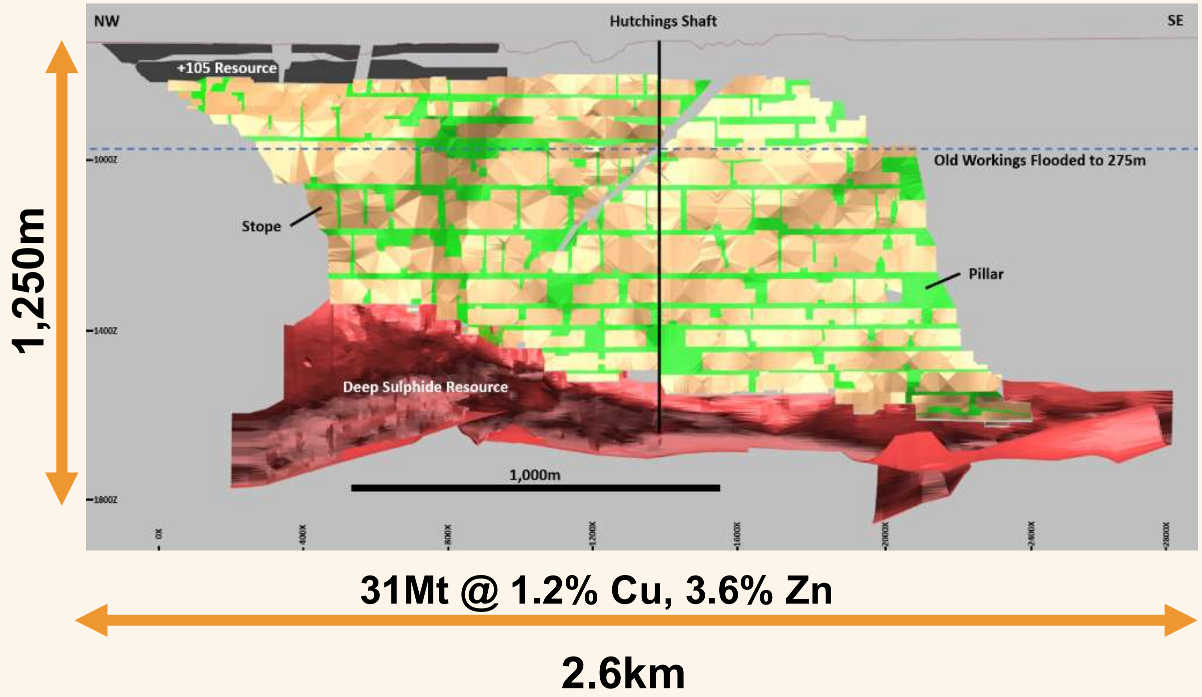
PCZM
CROSS AND LONG SECTIONS





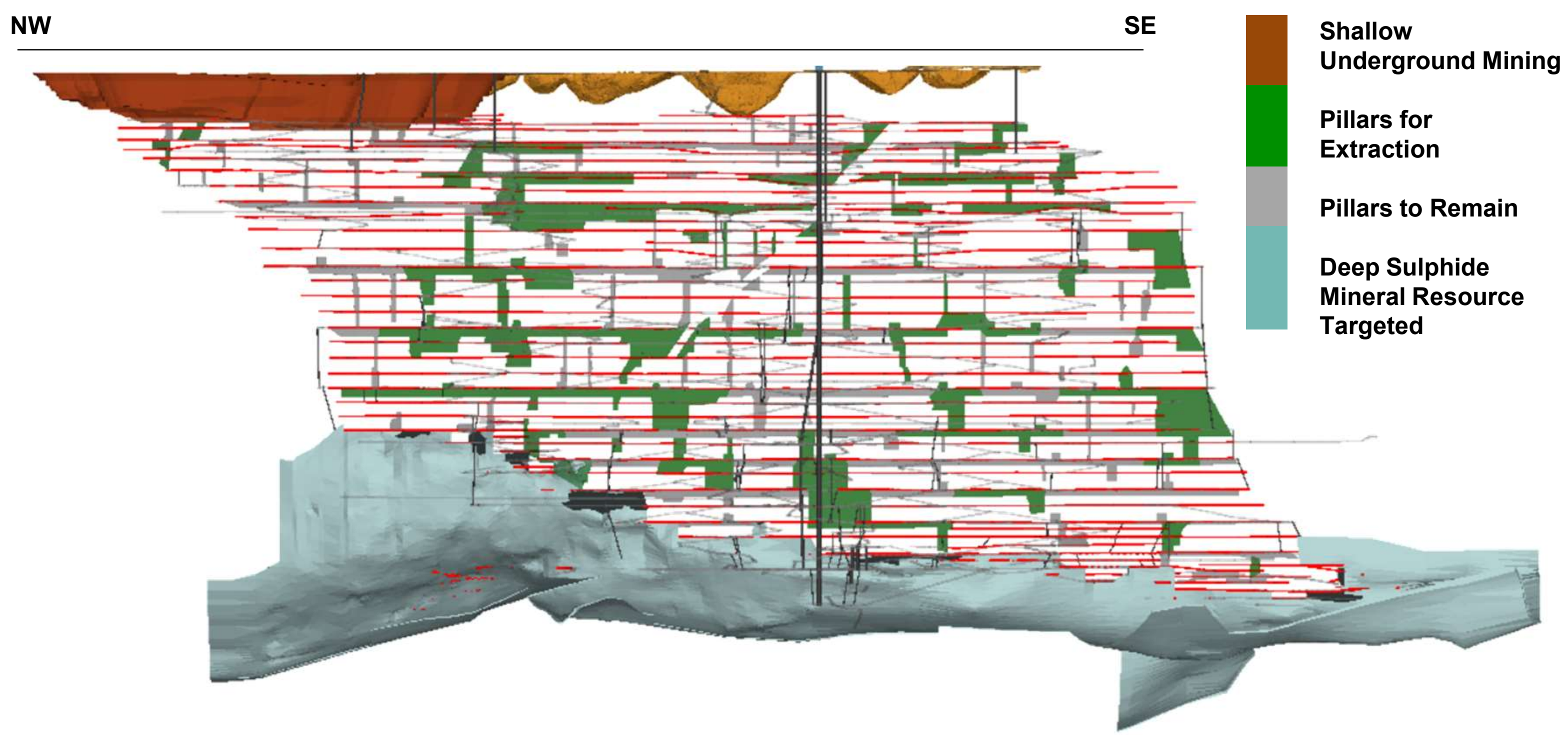
PHASED DEVELOPMENT STRATEGY

PATH TO 22KT COPPER AND 65KT ZINC

Orion Minerals

Phase 1: Shallow Mining Plan aims to target mining from shallow underground, while dewatering underway – producing a bulk concentrate

Phase 2: Deeps Mining Plan – building up to annual production of 22kt copper and 65kt zinc



Refer to ASX/JSE release 25 July 2023

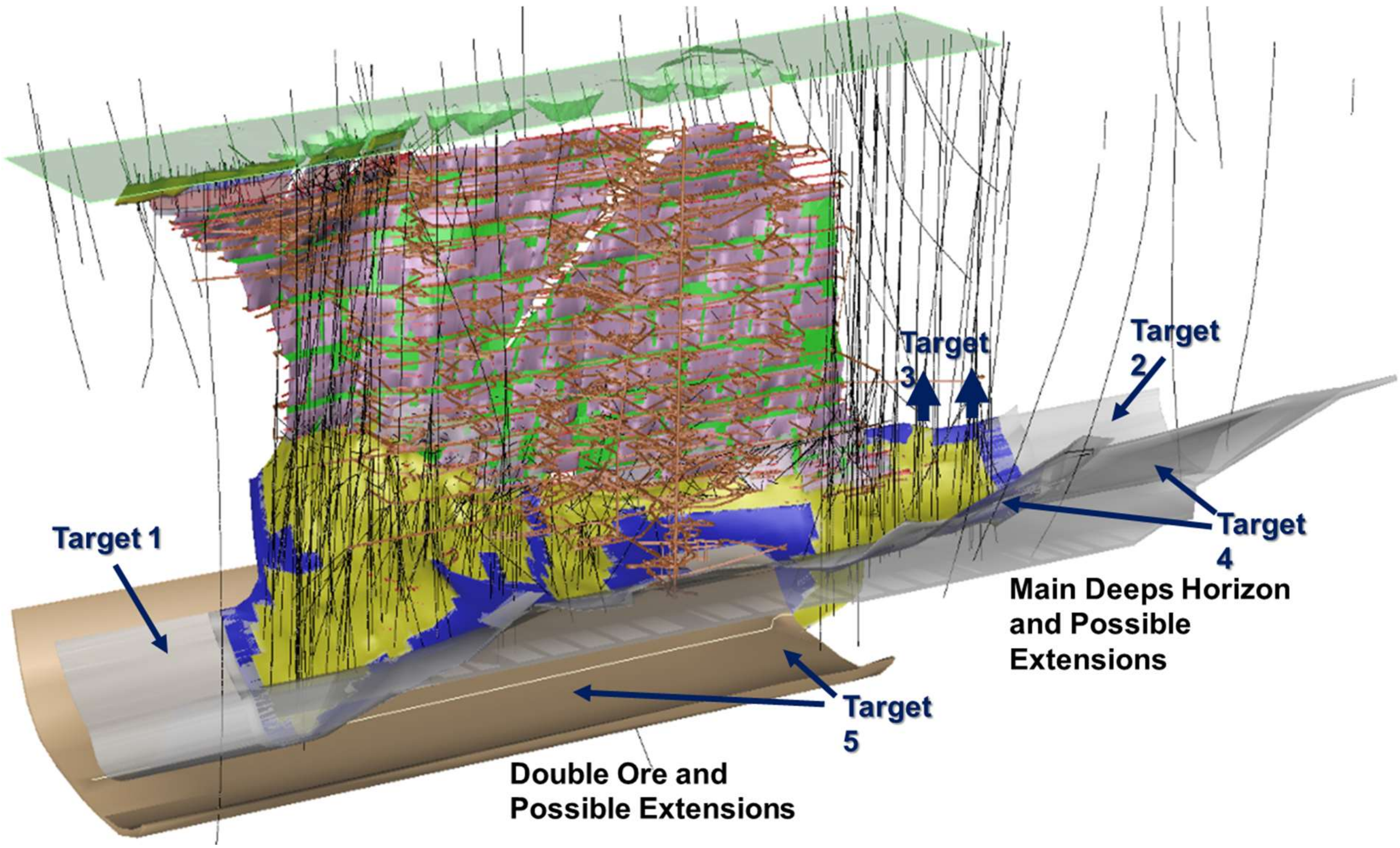
PCZM: PROJECT STATUS

Orion Minerals

- Definitive Feasibility Study expected by end of March 2025 quarter
- Fully permitted
- Trial mining successfully completed
- Power - fully connected to the Eskom grid, electricity supply agreement in place
- Process water - pumping and pipeline in place from Orange River
- Mine dewatering and forced evaporation mechanical and electrical infrastructure successfully installed
- Starter TSF being constructed
- Key site team employed
- Supply chain and logistics established

PCZM UPSIDE POTENTIAL

DEEP SULPHIDE EXTENSIONS (30-50% RESOURCE UPSIDE)



29 Cu Copper	30 Zn Zinc	28 Ni Nickel	27 Co Cobalt	PGE PGE	79 Au Gold	47 Ag Silver

OKIEP COPPER PROJECT (OCP)

Building Tomorrow's Mines Today

Orion Minerals

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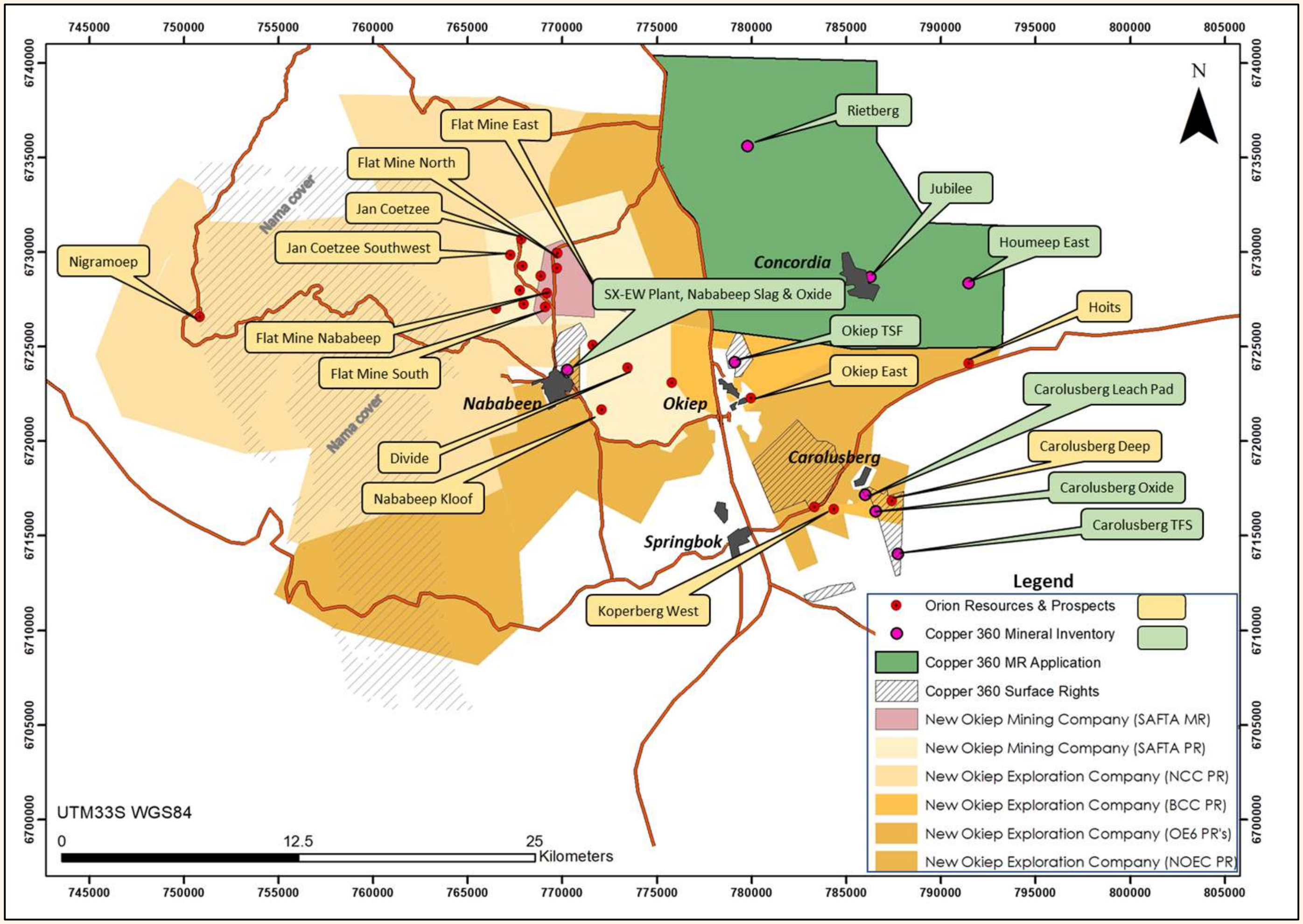
OKIEP COPPER PROJECT (OCP)

SIGNIFICANT UPSIDE POTENTIAL



Mineralised intrusive bodies intrude structures aligned in east-west trending structural corridors

25% of mineralised corridors hidden under thin surface cover

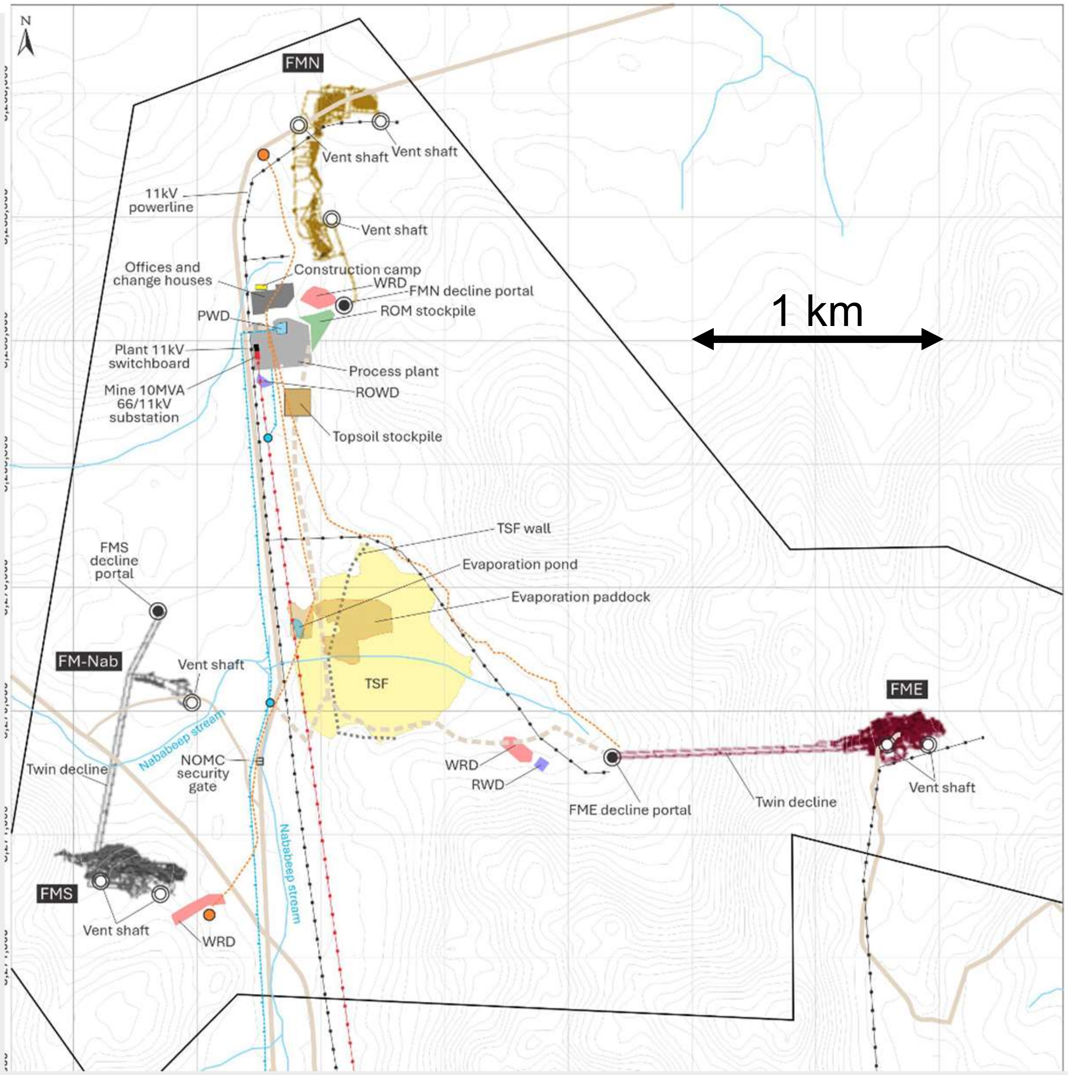
Modern geophysics expected to assist in detecting mineralisation underneath the thin cover

Orion has now proved the existence of a Ni rich sulphide mineralisation phase, not previously targeted

OCP

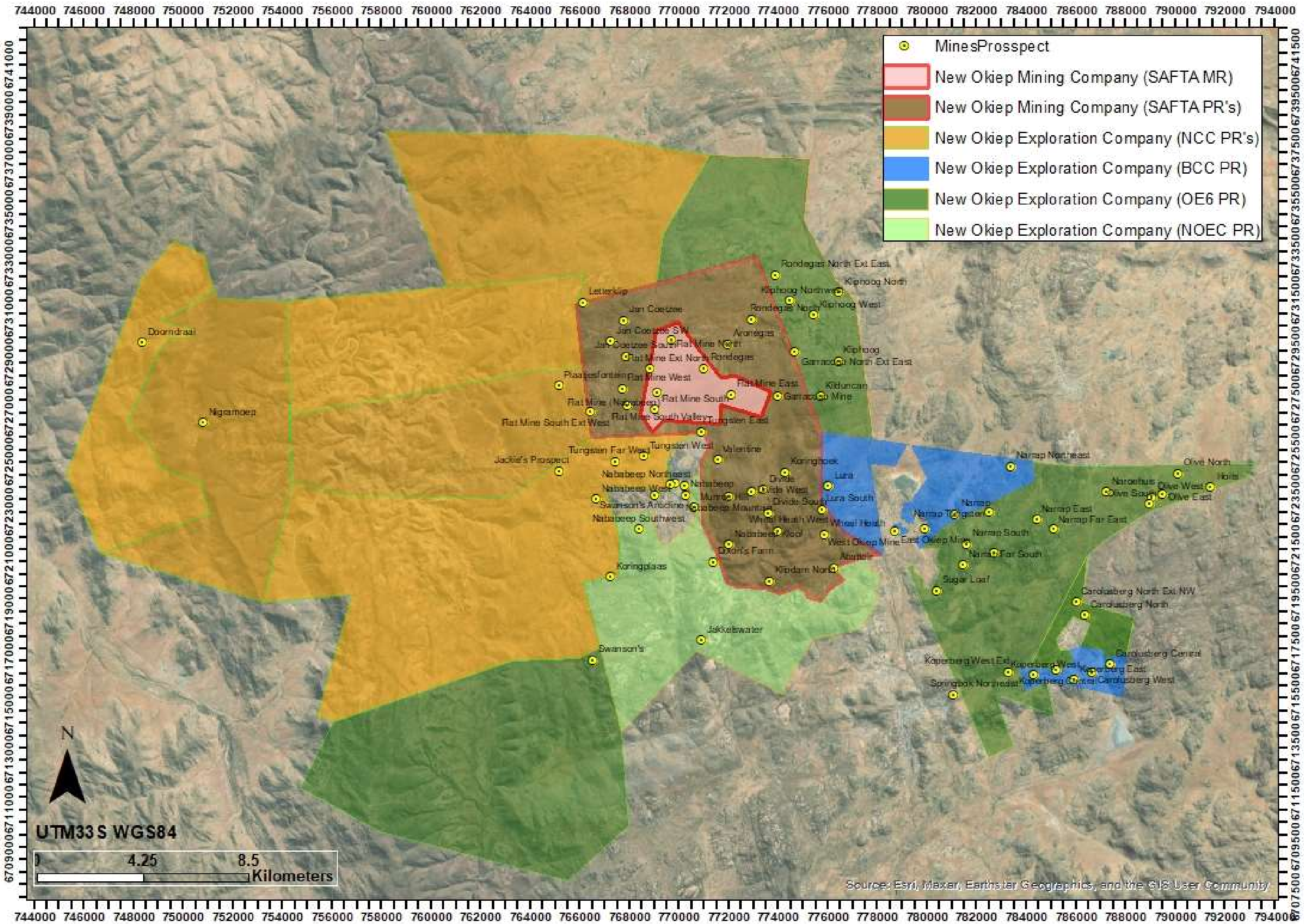
STARTER MINE WITH SIGNICANT GROWTH POTENTIAL

- DFS for Flat Mines Project expected by end March 2025
- Phased development approach
    - Low capital commitment to get into production
    - Build up to annual nameplate capacity of 9.5kt copper
- Fully permitted
- Establish a profitable operation at a viable scale to serve as an anchor operation to support future exploration efforts



OCP GROWTH POTENTIAL
c.6400 DRILLHOLES / c.860,000m DRILLED

Orion Minerals



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