

# RE-INVENTING MINING FOR THE ELECTRIFICATION OF EVERYTHING

Corporate Presentation  
August 2023



NYSE AMERICAN & TSX: IE

 **Ivanhoe**  
ELECTRIC

TYPHOON II

POWER OUTPUT CONTROL UNIT

TYPHOON II

HIGH POWER TRANSFORMER





# Ivanhoe Electric – Unique Investment Opportunity



- ⚡ Founded by Executive Chairman, Robert Friedland
- ⚡ Experienced executive management team
- ⚡ Combination of advanced technologies and electric metals opportunities
- ⚡ High-quality portfolio of electric metals assets in the United States, highlighted by Santa Cruz (AZ) and Tintic (UT)
- ⚡ Experienced exploration team focused on identifying electric metals deposits

**US-Based, Electric Metals Exploration Company with Significant Proprietary Technology Platform**



# Experienced Executive Management Team



**Robert Friedland**  
**Founder, Executive Chairman**

- ⚡ Industry-leading company builder, entrepreneurial explorer and technology innovator



**Taylor Melvin**  
**President & CEO**

- ⚡ 20+ years combined with JP Morgan investment banking and Freeport-McMoRan



**Quentin Markin**  
**EVP, Business Development and Strategy Execution**

- ⚡ 23 years as mining and M&A lawyer at Stikeman Elliott, including 15 years as Partner



**Jordan Neeser**  
**Chief Financial Officer**

- ⚡ Former Group Controller and Director, Business Development at First Quantum and CFO at Gold Standard Ventures



**Graham Boyd**  
**SVP, Exploration**

- ⚡ 16+ years as geologist, part of the Ivanhoe team that discovered the Merlin deposit in Australia

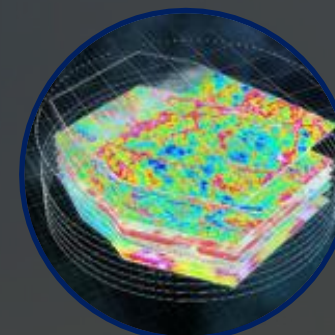


**Cassandra Joseph**  
**General Counsel and Corporate Secretary**

- ⚡ 20+ years as legal professional in US mining industry



# Typhoon™ & CGI – A Powerful Tool for Resource Discovery



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## Typhoon™

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- ⚡ Accurate and powerful proprietary geophysical survey technology based on I-Pulse technology
- ⚡ Successfully used to accelerate the exploration process to lower costs
- ⚡ Potential to discover deposits otherwise thought to be undetectable

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## Computational Geosciences Inc. (CGI)

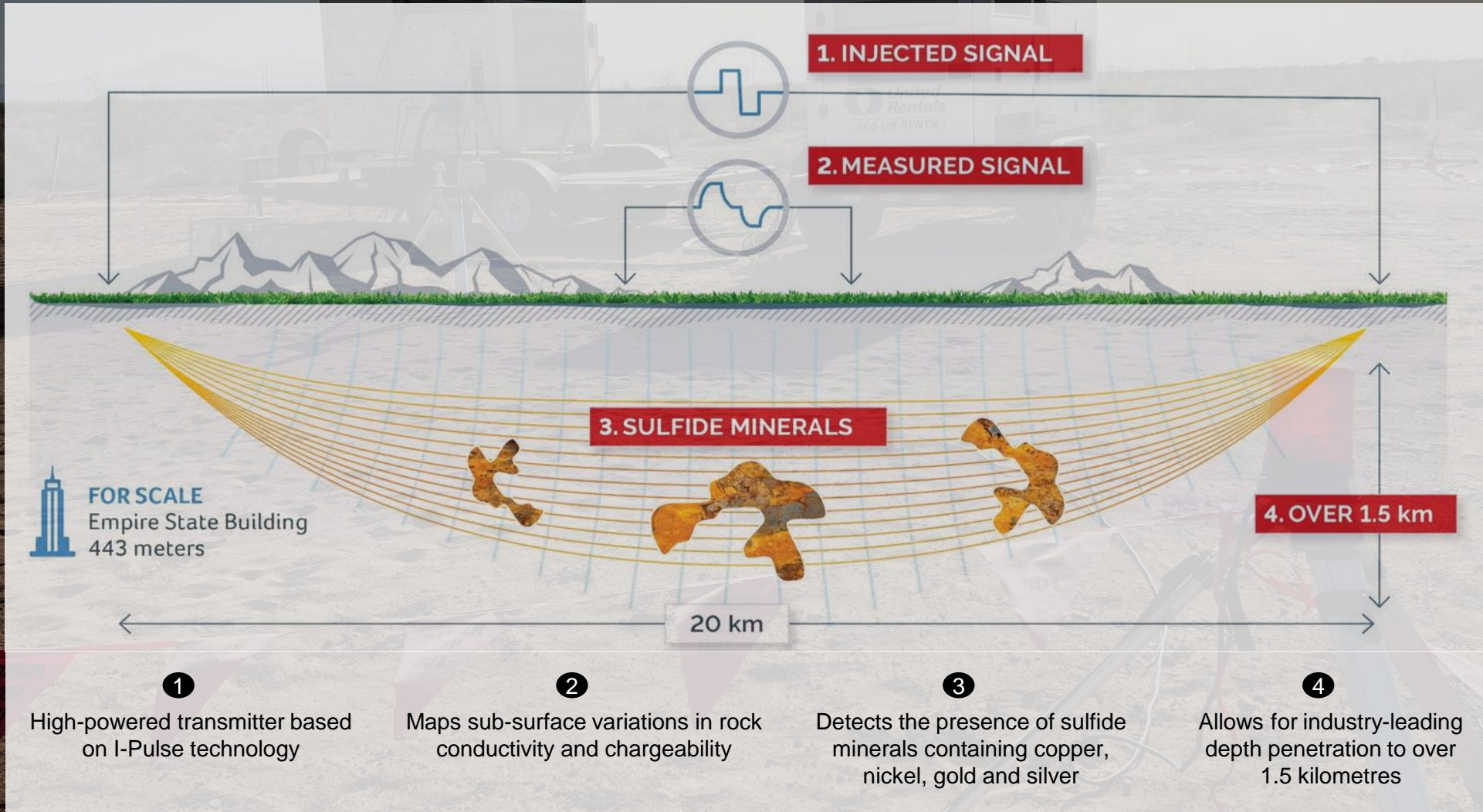
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- ⚡ Advanced data analytics, geophysical modeling and artificial intelligence for water, oil and minerals discoveries
- ⚡ Only product that can process the full spectrum of geophysical datasets produced by Typhoon™ into 3D images



# Typhoon™ – For the Next Generation of Discovery

Typhoon™ allows us to potentially discover deposits otherwise thought to be undetectable through conventional survey methods and technology





# Ivanhoe Electric & Ma'aden – 50/50 JV to Explore in Saudi Arabia



- ⚡ Typhoon™ will be deployed on a wide scale covering ~48,500 km<sup>2</sup> of the underexplored Arabian Shield
- ⚡ \$127.1 million investment by Ma'aden into Ivanhoe Electric to fund the JV and Ivanhoe Electric's US projects
  - ⚡ \$66 million to fund the JV, including \$13 million to build 3 new generation Typhoon™ units
- ⚡ Ma'aden has become a 9.9% shareholder in Ivanhoe Electric



# VRB Energy – Proven Grid-Scale Battery Technology

Scaleable, long-life, long-duration energy storage



## Proprietary Technology

- ⚡ Low-cost ion-exchange membrane, long-life electrolyte formulation and innovative flow cell design
- ⚡ VRB's electrolyte is non-toxic, non-flammable and 100% reusable

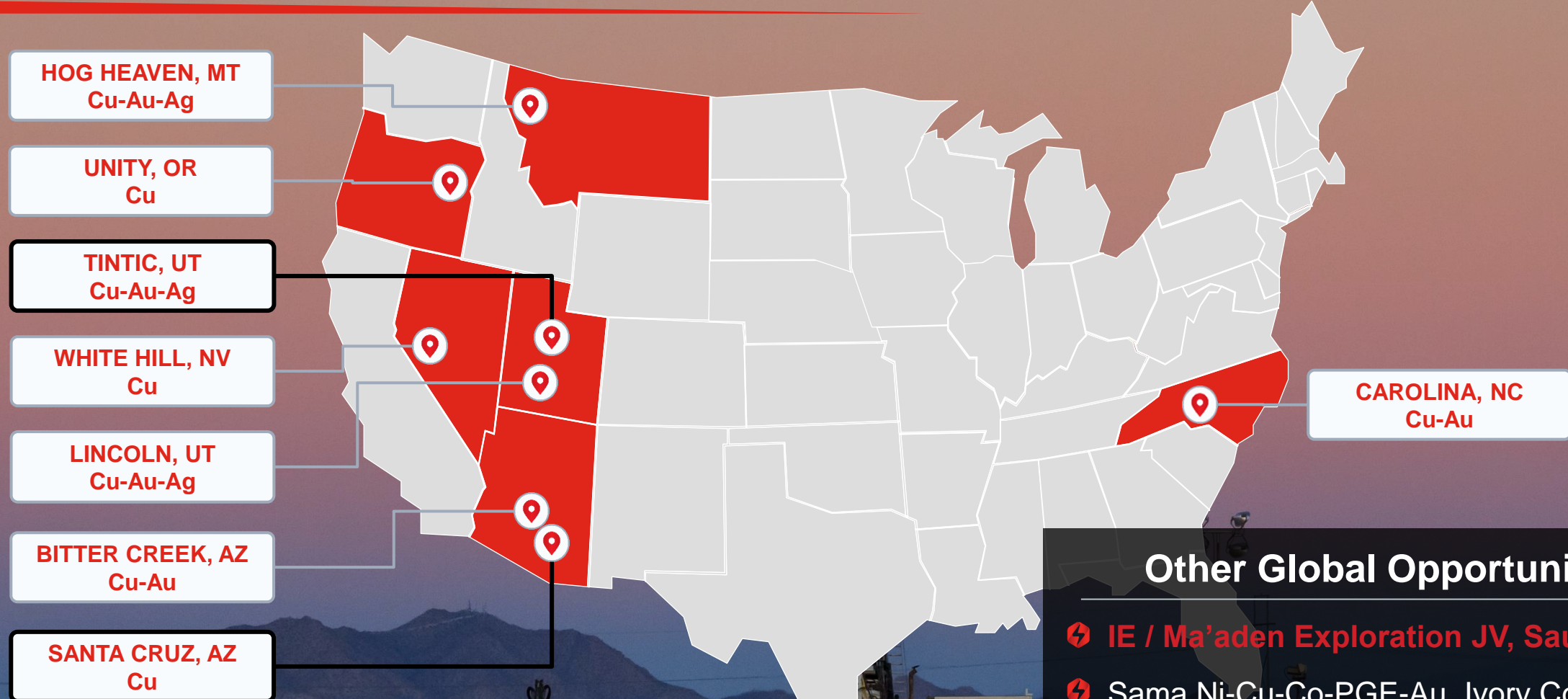


## Proven Commercial-Scale Product

- ⚡ Over 500 MWh installed or in development, and over 1 million hours of testing and operation



# US-Focused Portfolio Provides Exposure to Major Discovery Potential



## Other Global Opportunities

- ⚡ IE / Ma'aden Exploration JV, Saudi Arabia
- ⚡ Sama Ni-Cu-Co-PGE-Au, Ivory Coast
- ⚡ Cordoba / San Matias Cu-Au-Ag, Colombia
- ⚡ Kaizen / Pinaya Cu-Au, Peru



# Santa Cruz – The Next Generation of USA Development Projects

⚡ Large, high-grade copper resource

⚡ Expansion potential on private land

⚡ Technology-enabled exploration

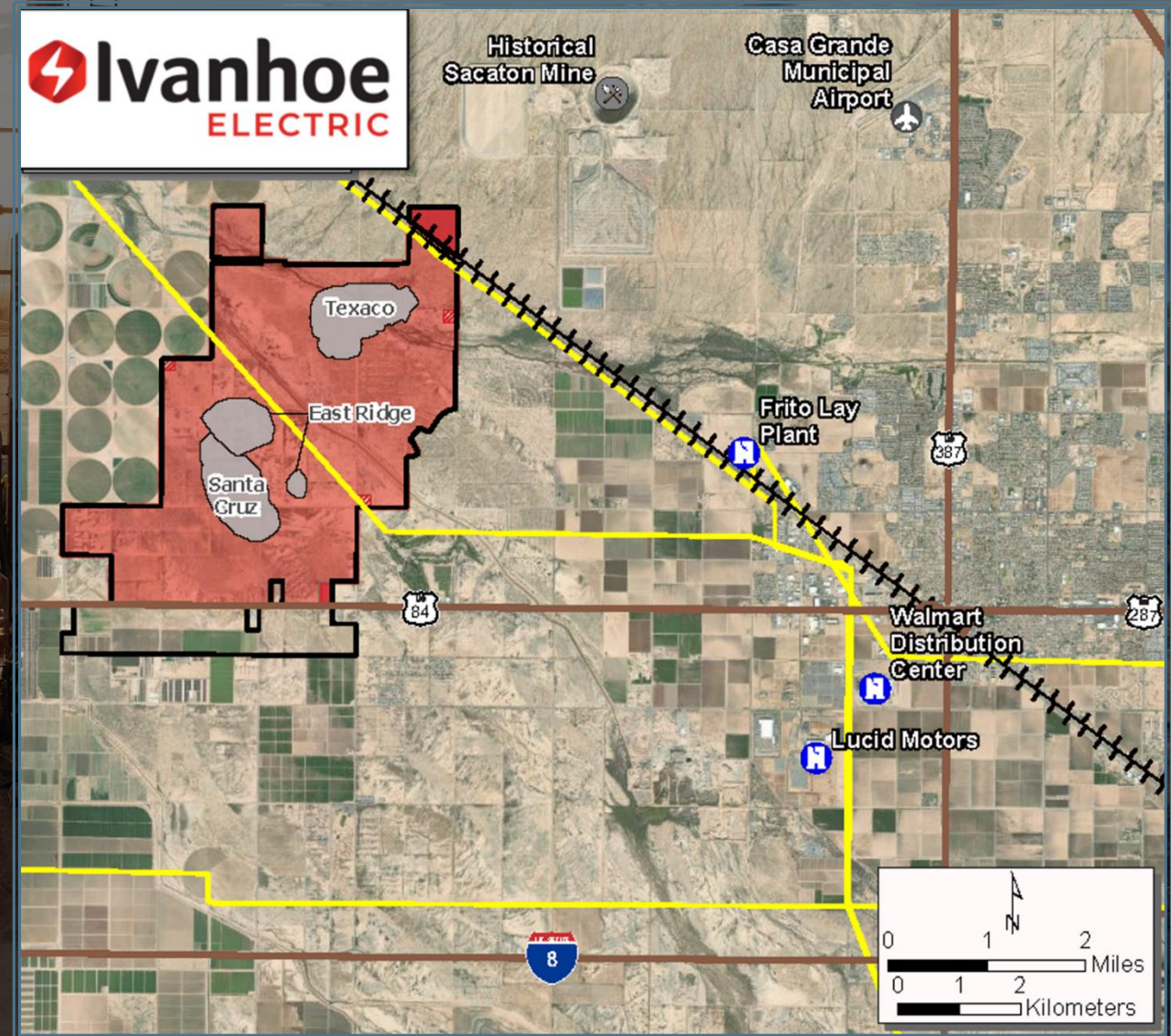
⚡ Renewable energy integration opportunity





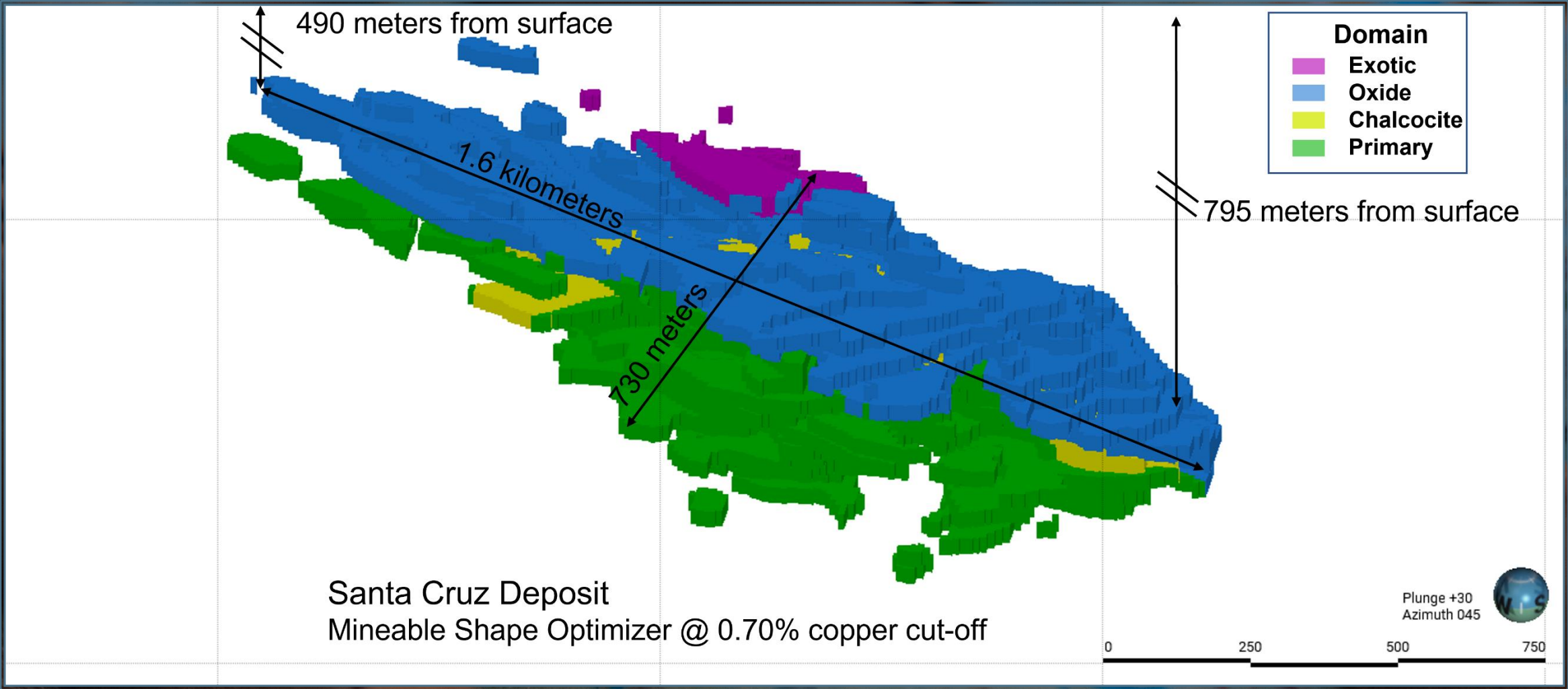
# Agreements to Own a Complete Private Land Package & Mineral Rights

- ⚡ 5,975 acres of private land encompassing the entire project
- ⚡ Includes associated water rights
- ⚡ Option to acquire all mineral titles contiguous with surface land
- ⚡ Excellent access to nearby rail, interstate highways and electric transmission lines



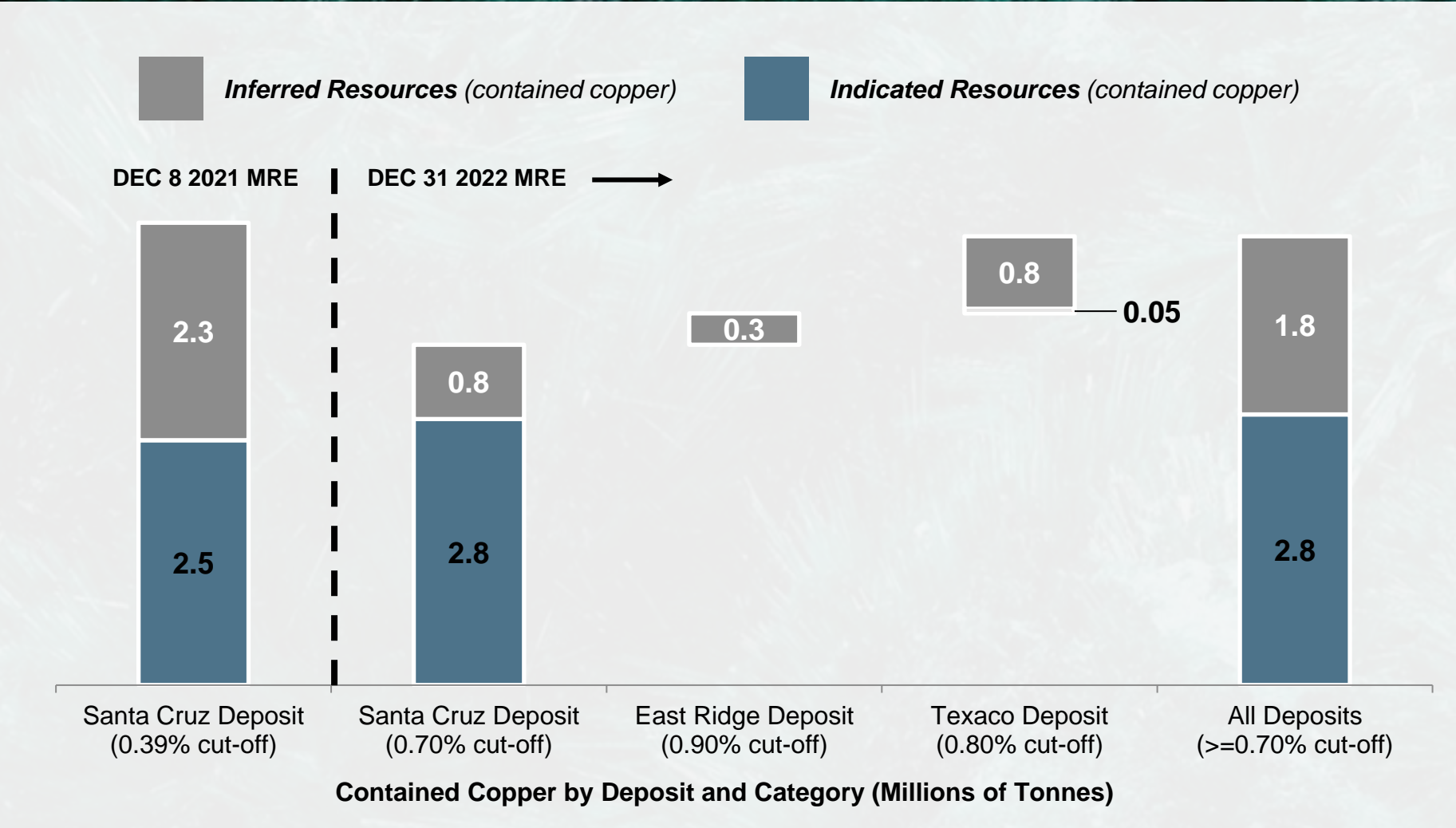


# High-Grade Exotic, Oxide and Chalcocite Zones will be the Focus of the Initial Assessment



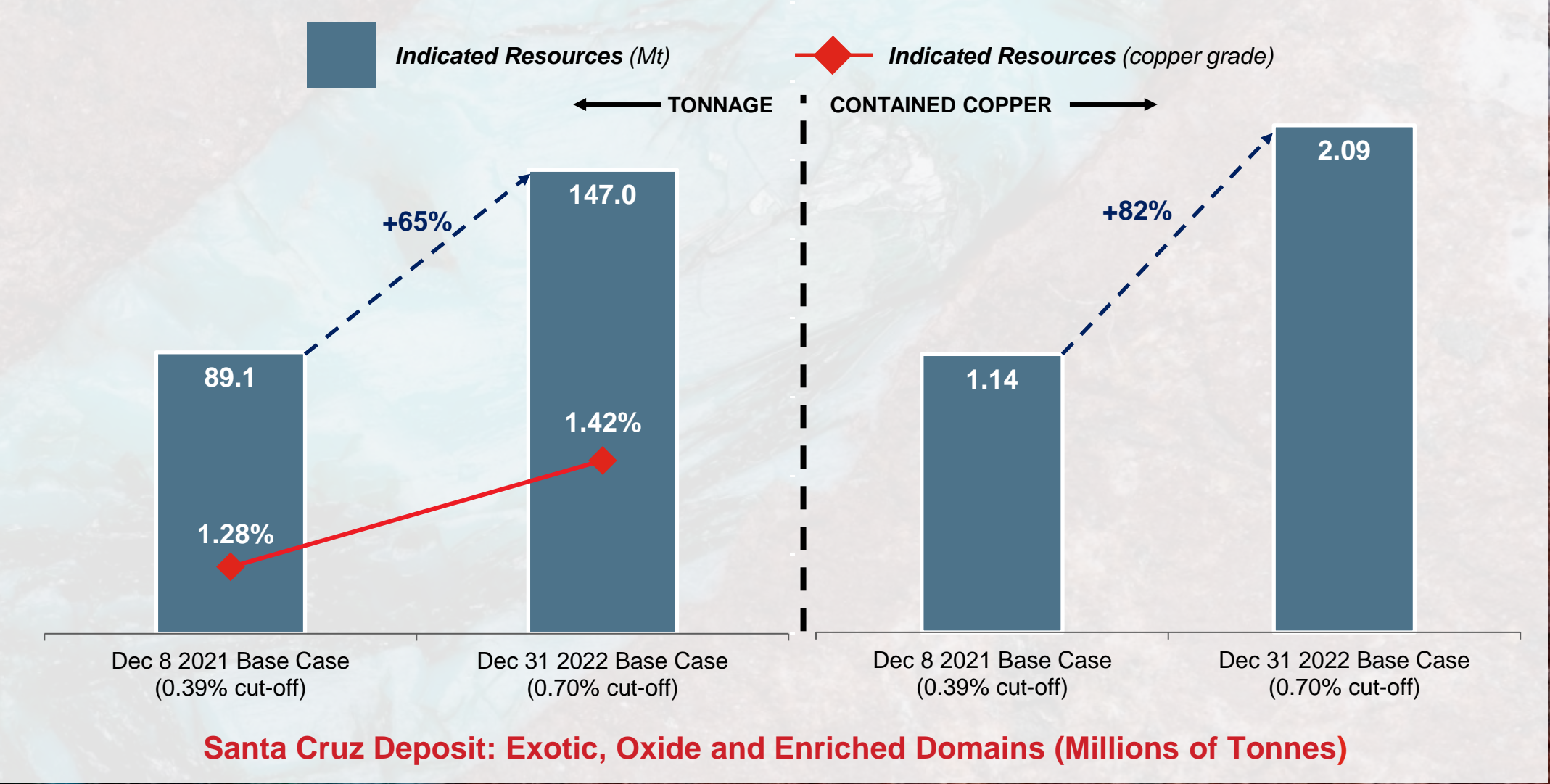


# Significant Resource Upgrade at the Santa Cruz Copper Project



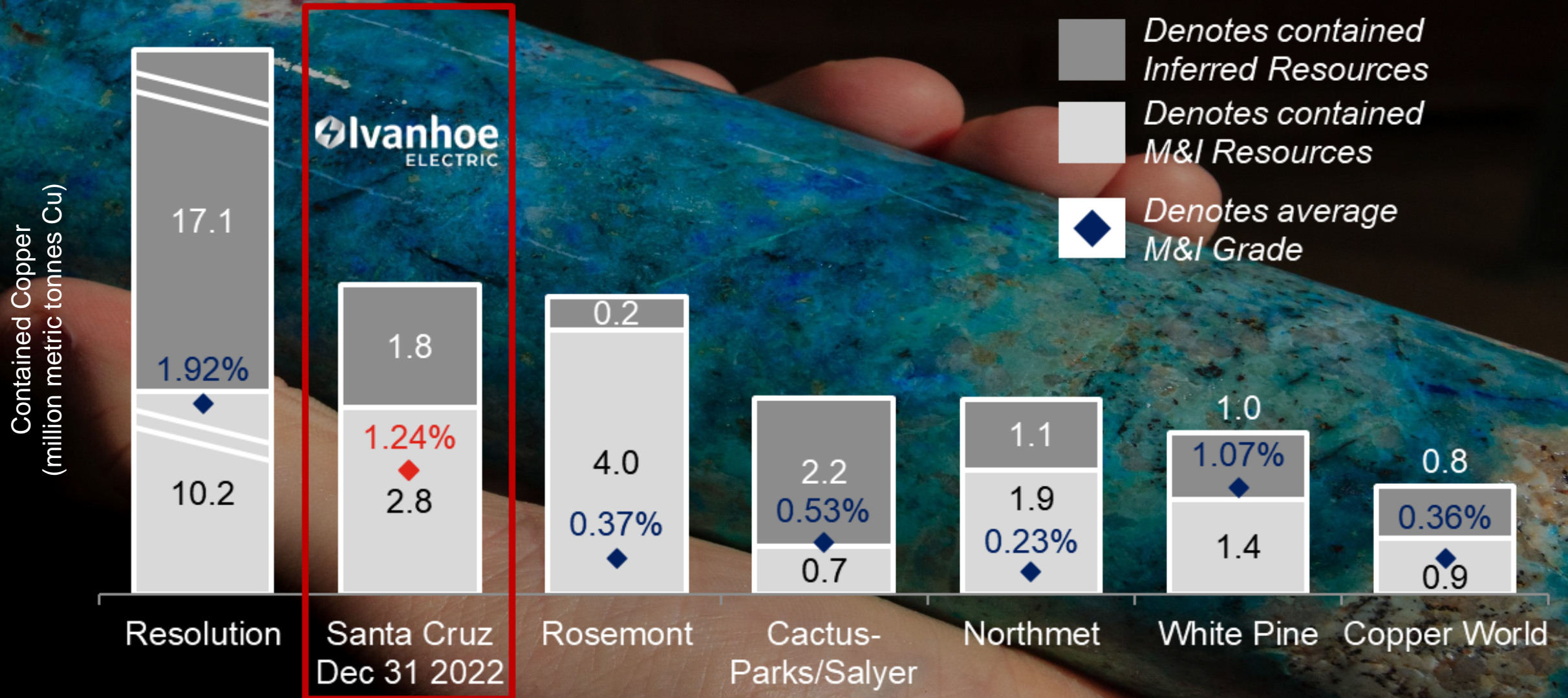


# 65% Increase in Tonnage and 82% Increase in Total Contained Copper in Indicated Resources Across Soluble Copper Domains





# A Significant Undeveloped Copper Deposit in the Continental US





# Tintic – Technology-Enabled Exploration in a Historic Mining District

⚡ Copper, gold and silver project

⚡ Historic district, consolidated land

⚡ 60 km south of Bingham Canyon

⚡ Identified Typhoon™ anomalies appear similar in scale and geologic characteristics to Bingham Canyon

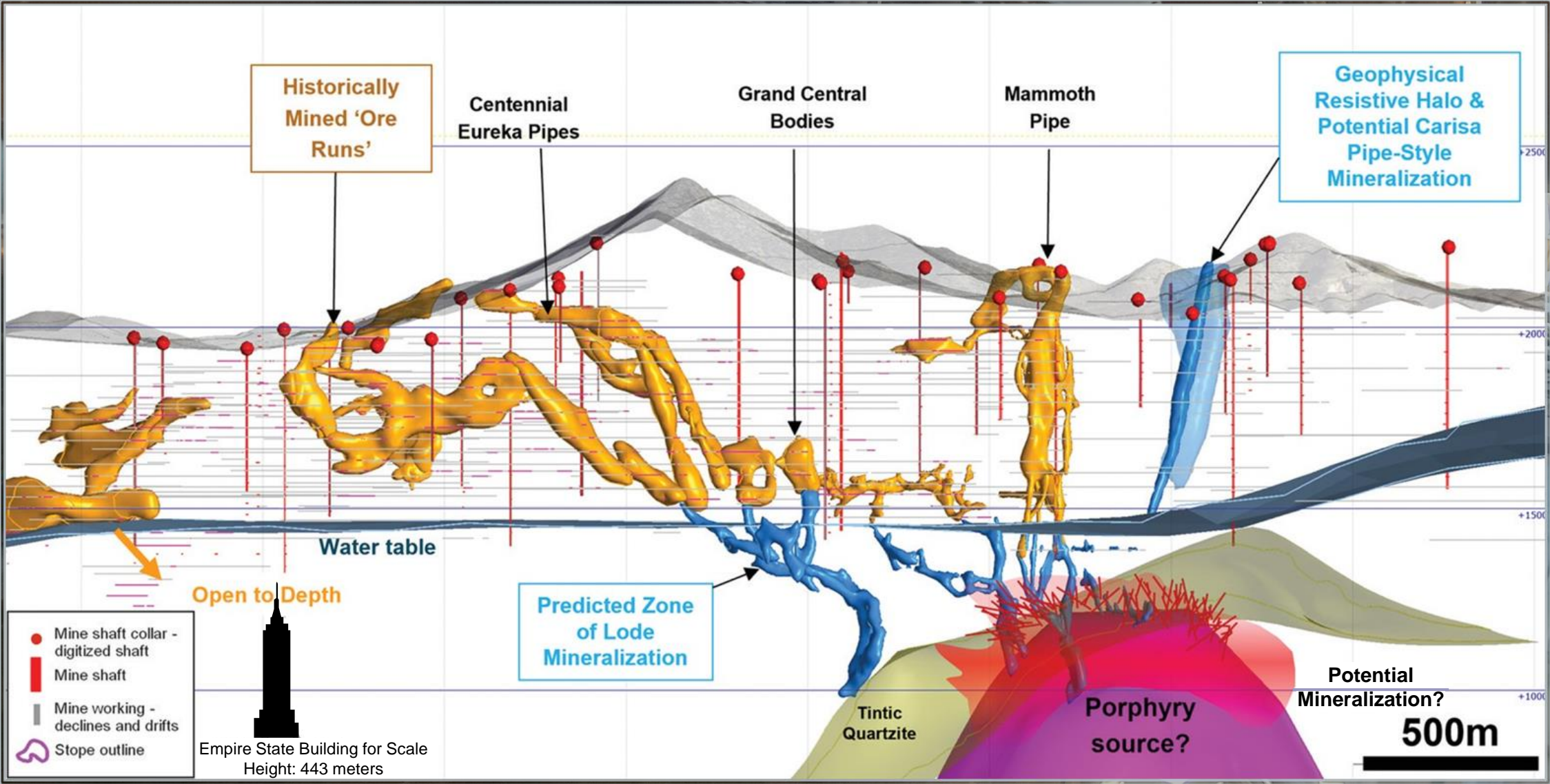
⚡ Renewable energy integration opportunity





# Lode Gold-Silver with Evidence of Porphyry Copper

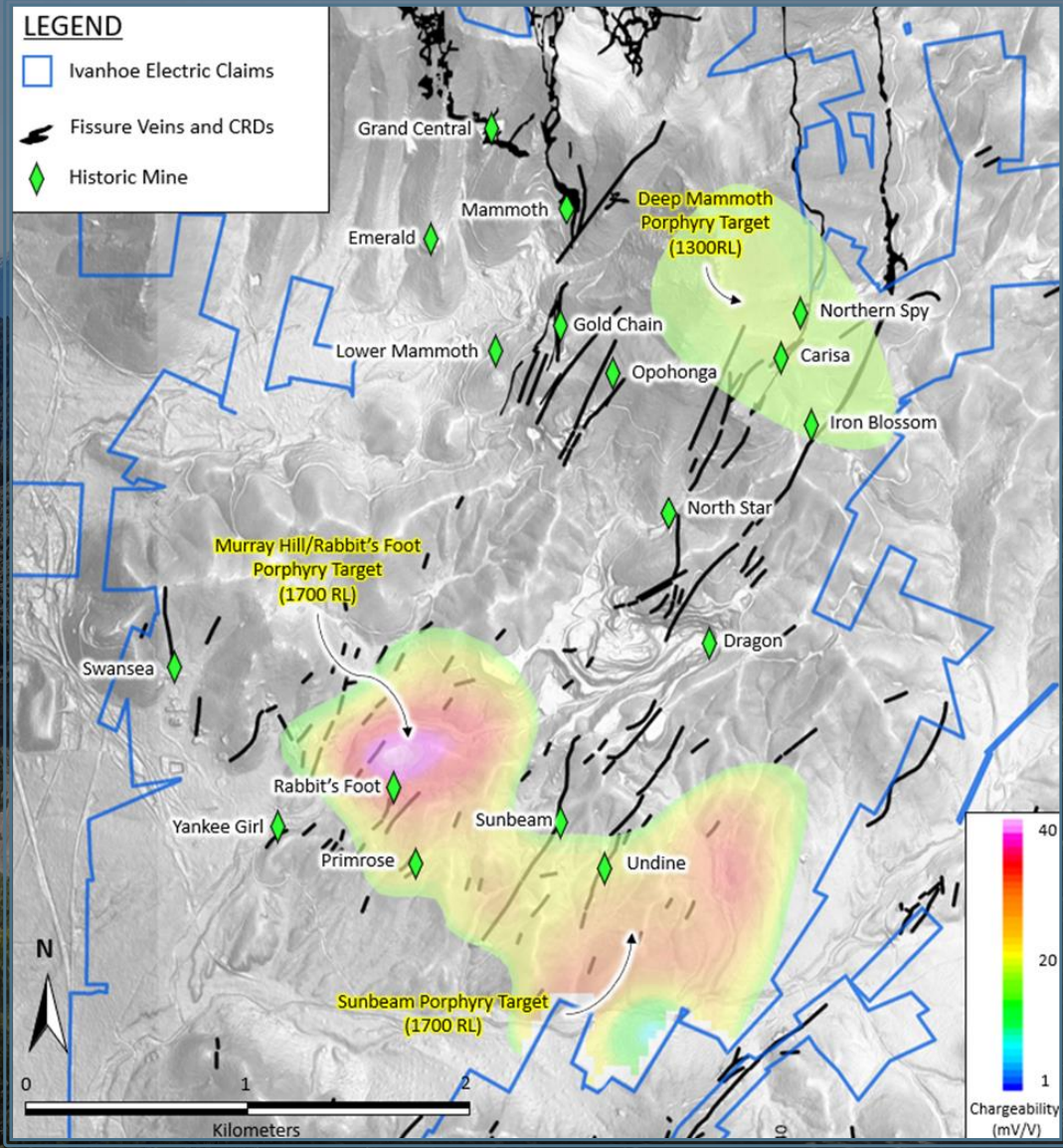
Historical mining stopped at the water table, but mineralization is believed to continue to depth





# Tintic Typhoon™ Survey

72 km<sup>2</sup> 3D Induced Polarization survey – Ivanhoe Electric believes this is the largest of its kind ever completed





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## Forward Looking Statements

This presentation contains “forward looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Those statements include, but are not limited to, statements with respect to: estimated calculations of mineral reserves and resources at the Company’s properties, plans and objectives, industry trends, the Company’s requirements for additional capital, treatment under applicable government regimes for permitting or attaining approvals, government regulation, environmental risks, title disputes or claims, synergies of potential future acquisitions and the Company’s anticipated uses of the net proceeds from its initial public offering. In some cases, recipients of this presentation can identify these statements by forward looking words such as “may,” “might,” “could,” “should,” “would,” “achieve,” “budget,” “scheduled,” “forecasts,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or “continue,” the negative of these terms and other comparable terminology. These forward looking statements may include projections of the Company’s future financial performance, the Company’s anticipated growth strategies and anticipated trends in the Company’s industry. All forward looking statements speak only as of the date on which they are made. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions concerning future events that are difficult to predict. Therefore, actual future events or results may differ materially from these statements. The Company believes that the factors that could cause its actual results to differ materially from those expressed or implied by forward looking statements include: the Company’s mineral projects are all at the exploration stage; the Company has no mineral reserves; the Company has a limited operating history on which to base an evaluation of the Company’s business and prospects; the Company depends on its material projects for its future operations; the Company’s mineral resource calculations at the Santa Cruz Project are only estimates; actual capital costs, operating costs, production and economic returns may differ significantly from those the Company has anticipated; the title to some of the mineral properties may be uncertain or defective; the Company’s business is subject to changes in the prices of copper, gold, silver, nickel, cobalt, vanadium and platinum group metals; the Company has claims and legal proceedings against it; the Company’s business is subject to significant risk and hazards associated with mining operations; the Company’s failure to identify attractive acquisition candidates or joint ventures with strategic partners or its inability to successfully integrate acquired mineral properties or successfully manage joint ventures impacts the Company’s business; the Company’s business is extensively regulated by the United States and foreign governments as well as local governments; the requirements that the Company obtains, maintains and renews environmental, construction and mining permits are often a costly and time consuming process; the Company’s non-U.S. operations are subject to additional political, economic and other uncertainties not generally associated with domestic operations and the Company’s operations may be impacted by the COVID 19 pandemic, including impacts to the availability of its workforce, government orders that may require temporary suspension of operations, and the global economy. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements included in this presentation. These risks and uncertainties, as well as other risks of which the Company is not aware or which the Company currently does not believe to be material, may cause the Company’s actual and future results to be materially different than those expressed in the Company’s forward looking statements. For a detailed discussion of the risk factors that could affect the Company’s actual results, please refer to the heading “Summary of Risk Factors” in the Company’s 10-K for the year ended

December 2022 and any reports that the Company has filed or may file with the Securities and Exchange Commission (the “SEC”), which are available on the SEC’s website at [www.sec.gov](http://www.sec.gov). The Company cautions recipients of this presentation not to place undue reliance on these forward looking statements. The Company does not undertake any obligation to make any revisions to these forward looking statements to reflect events or circumstances after the date of this presentation or to reflect the occurrence of unanticipated events, except as required by law. All written and oral forward looking statements attributable to the Company, or persons acting on its behalf, are expressly qualified in their entirety by these cautionary statements. Recipients of this presentation should evaluate all forward looking statements made in this presentation in the context of these risks and uncertainties.

## Market and Industry Data

This presentation includes market and industry data and forecasts obtained from independent research reports, publicly available information, various industry publications, other published industry sources or internal data and estimates. Independent research reports, industry publications and other published industry sources generally indicate that the information contained therein was obtained from sources believed to be reliable, but do not guarantee the accuracy and completeness of such information. Although the Company believes that the publications and reports are reliable, the Company has not independently verified the data. Internal data, estimates and forecasts are based on information obtained from trade and business organizations and other contacts in the markets in which we operate and the Company’s understanding of industry conditions. Although the Company believes that such information is reliable, we have not had such information verified by any independent sources. As a result, Recipients of this presentation should be aware that any such information and data set forth in this presentation, and estimates and beliefs based on such information and data, are uncertain and may not be reliable.



## Scientific and Technical Information

The December 31, 2022 Mineral Resource Estimate and other scientific and technical information in this presentation related thereto has been prepared and approved by Christian Ballard, P.Geo. Nordmin Engineering Ltd. and James J. Moore (P.E.), Met Engineering, LLC. Both individuals are Qualified Persons within the meaning of National Instrument 43-101 ("NI 43-101") and Regulation S-K, subpart 1300 promulgated by the U.S. Securities Exchange Commission ("Reg S-K"). Both are considered independent under both standards.

Glen Kuntz, P.Geo, Senior Vice President of Mine Development of Ivanhoe Electric has reviewed and approved other scientific and technical information contained in this presentation. Mr. Kuntz is a Qualified Person under both NI 43-101 and S-K 1300. Mr. Kuntz is not independent of Ivanhoe Electric as he is an employee of the corporation.

Ivanhoe Electric has had prepared an independent technical report summary for the Santa Cruz Project prepared under SEC Regulation S-K, Subpart 1300 and an independent technical report prepared under Canadian National Instrument 43-101. The reports are available on the company's website, on EDGAR and on the company's SEDAR profile:

- "Mineral Resource Estimate Update and S-K 1300 Technical Report Summary for the Santa Cruz, Texaco, and East Ridge Deposits, Arizona, USA," authored by Nordmin Engineering Ltd. ("Nordmin") and Met Engineering LLC ("Met Engineering"). Current to December 31, 2022, and dated February 14, 2023.
- "Mineral Resource Estimate Update and NI 43-101 Technical Report for The Santa Cruz, Texaco, and East Ridge Deposits, Arizona, USA," prepared by Nordmin and Met Engineering with an effective date of December 31, 2022, and an issue date of March 14, 2023.

The existing technical report includes relevant information regarding the assumptions, parameters and methods of the December 8, 2021 mineral resource estimates on the Santa Cruz Project cited in this presentation, as well as information regarding data verification, exploration procedures and other matters relevant to the scientific and technical disclosure contained in this presentation.

## Notes on Santa Cruz Mineral Resources

1. The Mineral Resources in this Estimate were independently prepared, including estimation and classification, by Nordmin Engineering Ltd. and in accordance with the definitions for Mineral Resources in S-K 1300.
2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. This estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
3. Verification included multiple site visits to inspect drilling, logging, density measurement procedures and sampling procedures, and a review of the control sample results used to assess laboratory assay quality. In addition, a random selection of the drill hole database results was compared with the original records.
4. The Mineral Resources in this estimate for the Santa Cruz, East Ridge, and Texaco Deposits used Datamine Studio RMTM software to create the block models.
5. The Mineral Resources are current to December 31, 2022.
6. Underground-constrained Mineral Resources for the Santa Cruz Deposit are reported at a cut-off grade of 0.70% total copper, Texaco Deposit are reported at a cut-off grade of 0.80% total copper and East Ridge Deposit are reported at a cut-off grade of 0.90% total copper. The cut-off grade reflects total operating costs to define reasonable prospects for eventual economic extracted by conventional underground mining methods with a maximum production rate of 15,000 tonnes/day. All material within mineable shape-optimized wireframes has been included in the Mineral Resource.
7. Underground mineable shape optimization parameters include a long-term copper price of \$3.70/lb, process recovery of 94%, direct mining costs between \$24.50-\$40.00/processed tonne reflecting various mining method costs (long hole or room and pillar), general and administration cost of \$4.00/tonne processed, offsite costs between \$3.29 – \$4.67/tonne processed, along with variable royalties between 5.00-6.96% NSR and a mining recovery of 100%.
8. Specific Gravity was applied using weighted averages by Deposit Sub-Domain.
9. All figures are rounded to reflect the relative accuracy of the estimates, and totals may not add correctly.
10. Excludes unclassified mineralization located along edges of the Santa Cruz, East Ridge, and Texaco Deposits where drill density is poor.
11. Report from within a mineralization envelope accounting for mineral continuity.
12. Total soluble copper means the addition of sequential acid soluble copper and sequential cyanide soluble copper assays. Total soluble copper is not reported for the Primary Domain.





For more information,  
visit [www.IvanhoeElectric.com](http://www.IvanhoeElectric.com)

