NovaC&pper

BEECHMONT PORPHYRY-EPITHERMAL SYSTEM CORPORATE PRESENTATION | NOV 2023

Strategic Exploration in Atlantic Canada COPPER | GOLD | MOLYBDENUM | RHENIUM | SILVER | COBALT | PYROPHYLLITE This presentation is an introduction to **Nova Copper Inc.** ("Nova Copper" or "the Company") and the Nova Copper Project Portfolio, including the Beechmont Cu-Au-Mo Deposit ("the Deposit"), and is intended for sophisticated and qualified readers only. The contents of this technical presentation are not to be relied upon for investment purposes.



CORE VALUES & SUSTAINABILITY

Nova Copper is a privately held junior mining company focused on responsible exploration and development of precious and critical minerals in Atlantic Canada. The Company commits to continuously exceed ESG targets and initiatives set for the mining industry.



- \checkmark Low impact exploration:
 - Near surface mineral deposits with significant room for growth
 - Existing access roads
 - Modern pole and three-phase hydropower lines on location
 - 15 km to rail and deep-sea ports and existing commodity terminals
- ✓ Critical mineral by-products of cobalt and molybdenum available from mining the project's copper

SOCIAL

- ✓ Ongoing engagement with local First Nations, communities and suppliers
- ✓ Supportive, progressive stakeholders familiar with exploration and mining
- ✓ Local, eager workforce
- Commitment to human rights; diversity, equity, and inclusion
- Existing community mining operations and infrastructure



GOVERNANCE



- ✓ Corporate transparency
- ✓ Relevant professional association memberships
- ✓ Planned policies and accountability committees for:
 - Compliance
 - Diversity, Equity and Inclusion
 - Environmental Practices
 - Heath and Safety
 - Sustainability (e.g., MAC-TSM)



THE GREEN REVOLUTION – COPPER



VITAL TO GREEN ENERGY AND INFRASTRUCTURE

Copper is driving climate change solutions in renewable technologies, energy and infrastructure – it is the most efficient conductor of heat and electricity and is 100% recyclable.

SECURE AND GROWING DEMAND

Copper is at a 10 year high (breaking record prices twice in 2021, peaking at \$4.76/lb or \$10,476/Mt), with annual global consumption of 28 million tonnes and demand forecasted to increase another 50% by 2050



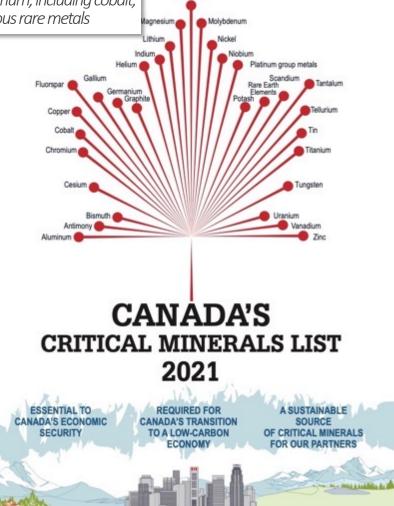
ESSENTIAL FOR HEALTH AND WELL BEING

Copper is antimicrobial eliminating up to 99.9% of harmful bacteria and viruses on copper-infused surfaces. It is also known to promote the synthesis of collagen, among other human health benefits.

Copper is the 'new oil', [it is] the most strategically important commodity and it's really King to [the net zero emissions] story.



Nova Copper's Projects contain Critical Minerals aside from copper and molybdenum, including cobalt, zinc and various rare metals



Manganese

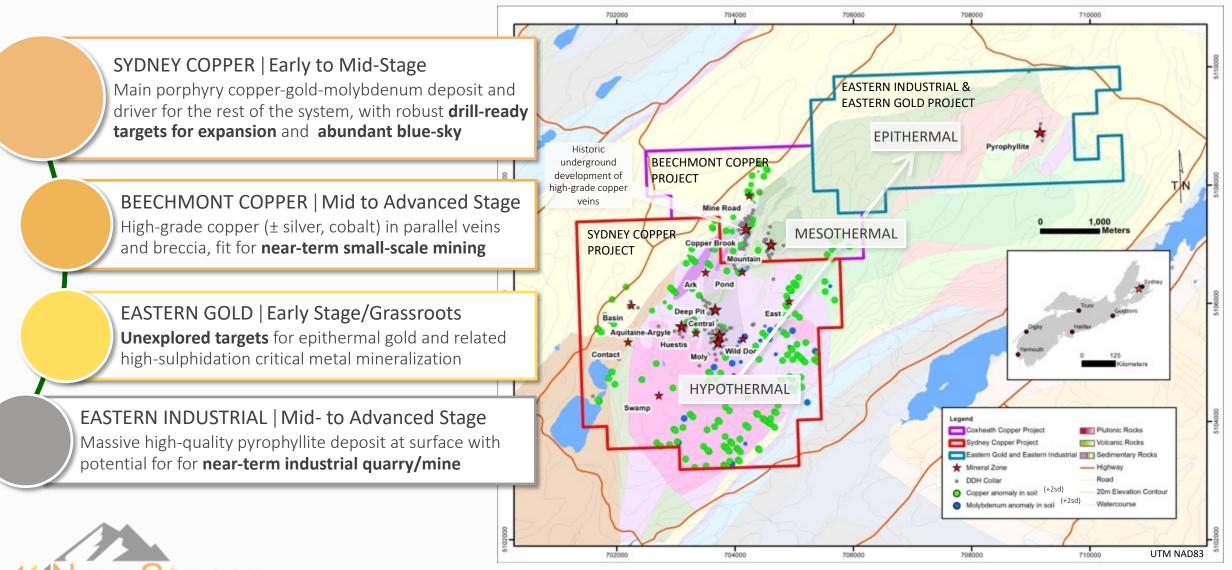
REQUIRED FOR THE CLEAN ENERGY TRANSITION

LOCATION & INFRASTRUCTURE



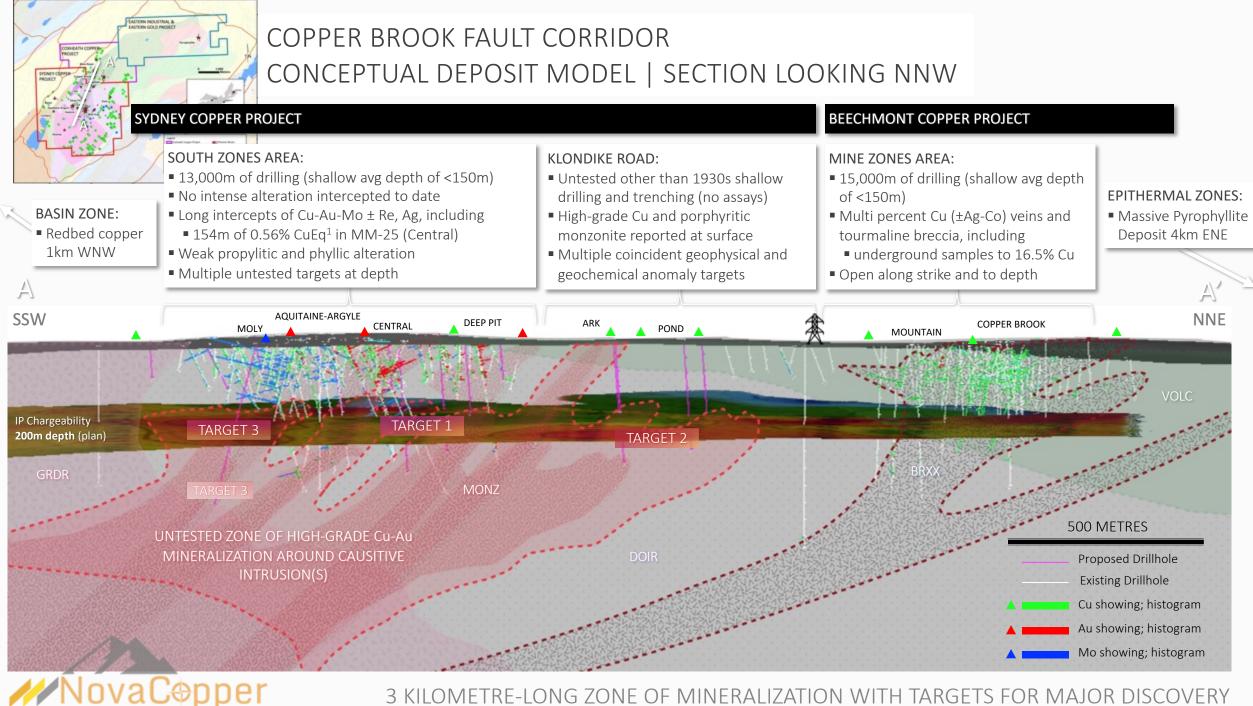
PROJECT PORTFOLIO

Nova Copper has 100% control and ownership of four strategic developments related to an intact porphyry-epithermal system spread out over a contiguous 30 square-kilometre property near mining-friendly Sydney, Nova Scotia. Development boundaries are based on geochemical signatures and current stage of exploration. The portfolio includes the **Beechmont Cu-Au-Mo Porphyry Deposit** as well as the historic Coxheath Copper Mine, hosting multi-percent copper values in spectacular veins of tourmaline, bornite, and chalcopyrite.



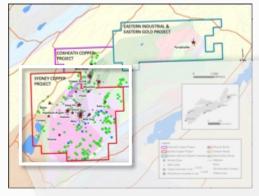
STRATEGIC DEVELOPMENTS AT VARIOUS STAGES OF THE MINING LIFE CYCLE

PRESERVED PORPHYRY-EPITHERMAL SYSTEM



¹ Copper Equivalent (CuEq) calculated using \$4/lb copper, \$1,800/oz gold, \$22/oz silver, \$30/lb molybdenum, and \$727/lb rhenium

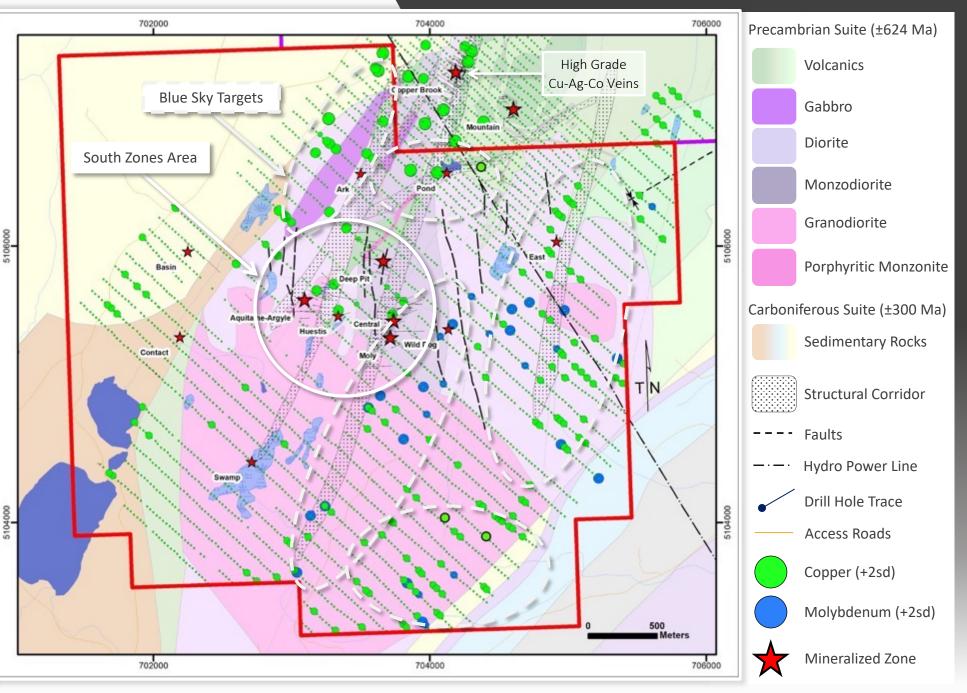
SYDNEY COPPER PROJECT



HIGHLIGHTS:

- ✓ 15km² road accessible property
- ✓ 13,000m of drilling
- ✓ Multiple geochemical and geophysical surveys
- ✓ On trend with highgrade Cu-Ag-Co veins of Copper Brook
- ✓ South Zones Area identified as potential porphyry centre
- ✓ Abundant Blue Sky Targets





SIZABLE PORPHYRY Cu-Au-Mo DEPOSIT WITH ABUNDANT BLUE-SKY



SOUTH ZONES AREA:

- Parallel structures linking multiple phases of mineralization
- ✓ Higher temperature porphyry alteration
- ✓ Long Cu-Au-Mo drill intercepts at shallow levels
- ✓ Metal zonation of Cu+Au and Cu+Mo (±Re, Ag)
- ✓ Mineralization open laterally and to depth
- ✓ Robust targets around <u>untested</u> geophysical anomalies



HIGH-GRADE PORPHYRY CENTRE YET

ZONES AREA

SYDNEY COPPER PROJECT

TO BE DISCOVERED

¹ Copper Equivalent (CuEq) calculated using \$4/lb copper, \$1,800/oz gold, \$22/oz silver, \$30/lb molybdenum, and \$727/lb rhenium

DEEP PIT ZONE: SYN-MINERAL PORPHYRITIC DYKES

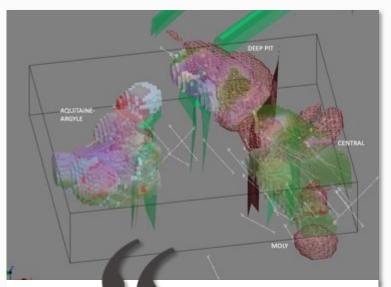
SYDNEY COPPER PROJECT

2021

2024

2024

2024/



Phase I exploration aims to identify a high-grade porphyry centre responsible for mineralization in the South Zones Area, while Phase II will connect and expand known zones laterally and to depth, culminating in an inaugural mineral resource estimate.

– Harry Cabrita, President & CEO Nova Copper Digitization of historical data [COMPLETED]

- \checkmark Comprehensive compilation and verification of >100 years of data
- \checkmark Inaugural use of 3D modelling software to identify new opportunities

Historical Core Re-Log and Infill Assay Program [COMPLETED]

- \checkmark >3,700m of new geological, magnetic and spectral data
- ✓ >2,200m of new geochemical data (notably missing Au, Re, Cu, Mo, Ag)
- ✓ Identification of robust and untested porphyry-centre targets

Phase I – South Zones Area Exploration [CALLING FOR PARTICIPATION]

- Diamond drilling of newly identified porphyry Cu-Au-Mo targets
- Trenching to further extend high grade sheeted veins at surface
- Technical Report and Resource Drilling Recommendations

Phase II – South Zones Area Exploration and Definition

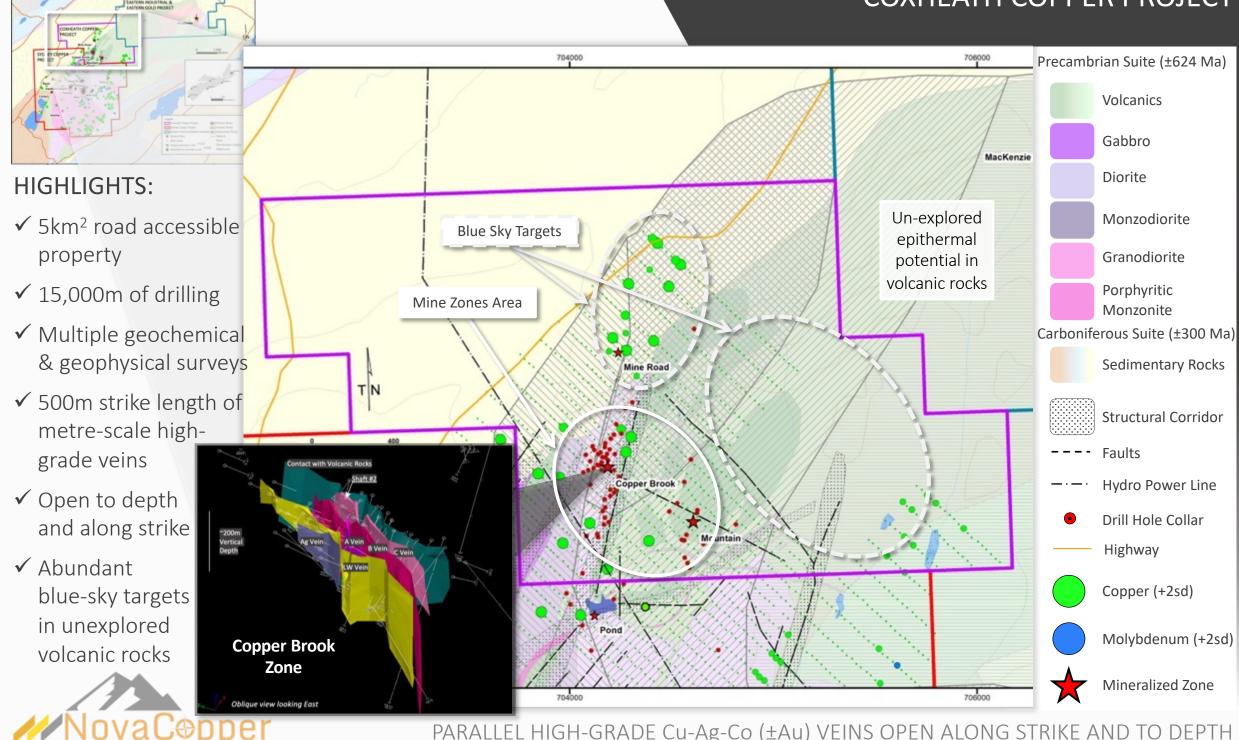
- Infill and exploratory drilling focused on growing the resource
- New Discoveries Blue-sky drilling outside of the South Zones Area

South Zones Area NI 43-101 Technical Report & MRE

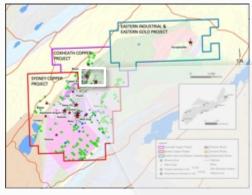
 Inaugural Mineral Resource Estimate for the Coxheath Cu-Au-Mo (± Ag, Re) Deposit and Conceptual Economic Assessment

DRILL-READY CRITICAL MINERALS AMENABLE TO YEAR-ROUND EXPLORATION

COXHEATH COPPER PROJECT



PARALLEL HIGH-GRADE Cu-Ag-Co (±Au) VEINS OPEN ALONG STRIKE AND TO DEPTH





COPPER BROOK ZONE:

- Extensive analysis on tailing characteristics
- ✓ Pre-optimization bench-scale metallurgical study achieved 30.19% copper concentration with 92.69% copper recovery (2007)
- ✓ Cobalt associated with the majority of sulphide concentrates
- Meets and exceeds copper import specifications for Chinese and European Union zone markets
- ✓ Historical estimate of 220,000 tonnes at 2.2% Cu² (not including accessory metals or drilling after 2007)



BEECHMONT COPPER PROJECT



QUALITY CONCENTRATE POSITIONED FOR DOMESTIC AND INTERNATIONAL MARKETS

²A qualified person has not completed sufficient work to confirm the results of this internal mineral inventory estimate. The Company is not treating this as current mineral resource estimate, but is considered relevant as a guide to future exploration and are included for reference purposes only.

BEECHMONT COPPER PROJECT

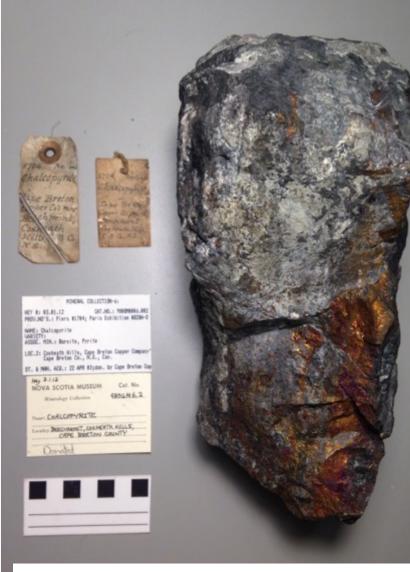
2022

2024

2024

2024

2025



World Class Copper Ore Specimen from the Beechmont Copper Project first displayed in 1901

NovaCopper

Digitization of historical data [COMPLETE]

- ✓ Comprehensive compilation and verification of >100 years of data
- ✓ Use of 3D modelling software to identify new opportunities

Permitting and Engineering [IN PROGRESS]

- Finalization of land agreements and extraction permits
- Mining engineering and geotechnical evaluation

10,000 tonne Bulk Sample

- Confirm surface model and grades for small-scale mining
- Updated metallurgical and processing data

Exploration Program

- Surface trenching and soil sampling
- Diamond drilling to expand and update resource

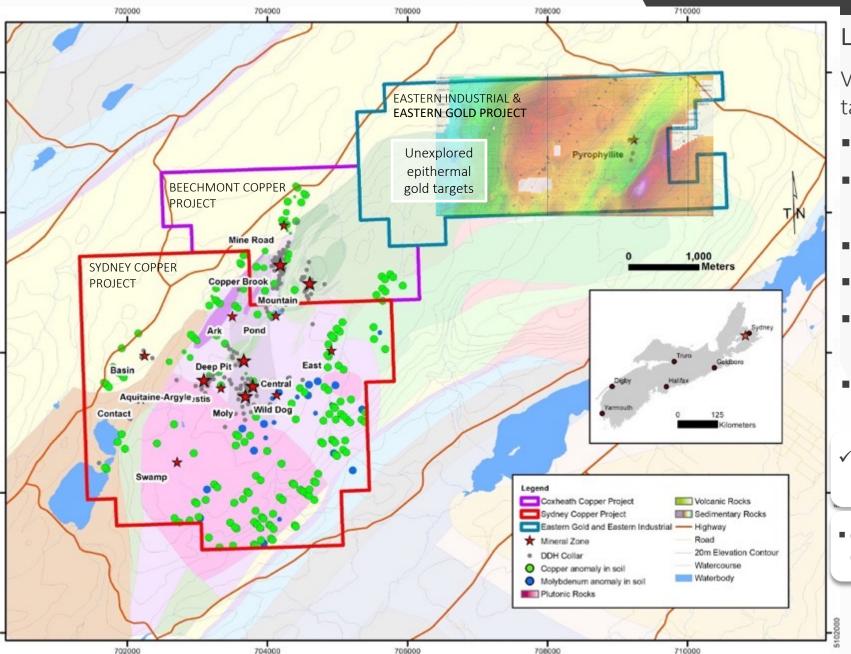
Small Scale Mine Production

- Phase I 60,000 tonnes at 2.2% Cu² (± Ag, Co)
- Phase II 160,000 tonnes at 2.2% Cu² (± Ag, Co)

NEAR-TERM CRITICAL MINERALS MINING OPPORTUNITY

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EASTERN GOLD PROJECT



706000

704000

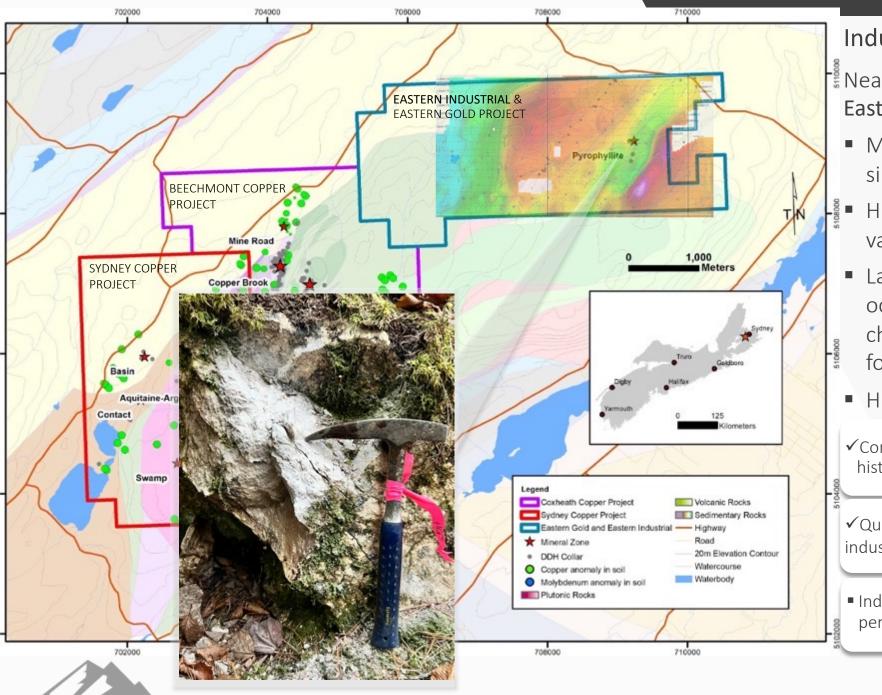
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Linked Epithermal Deposit

Vast area of gold and base metal targets at the **Eastern Gold Project**:

- 10km² road accessible property
- Genetic link to porphyry copper system to the southwest
- Pyrite occurrences noted at surface
- High sulphidation alteration
- Airborne EM geophysics show areas of intense magnetic lows
- Unexplored terrain dominates the Project area
- ✓ Compilation and digitization of historical data Grassroots exploration program to determine mineral potential

VAST AREA OF UNTAPPED EPITHERMAL POTENTIAL



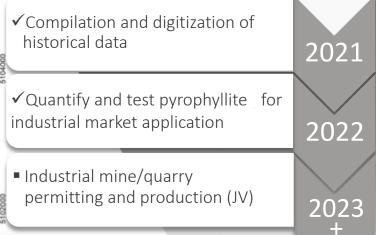
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EASTERN INDUSTRIAL PROJECT

Industrial Pyrophyllite

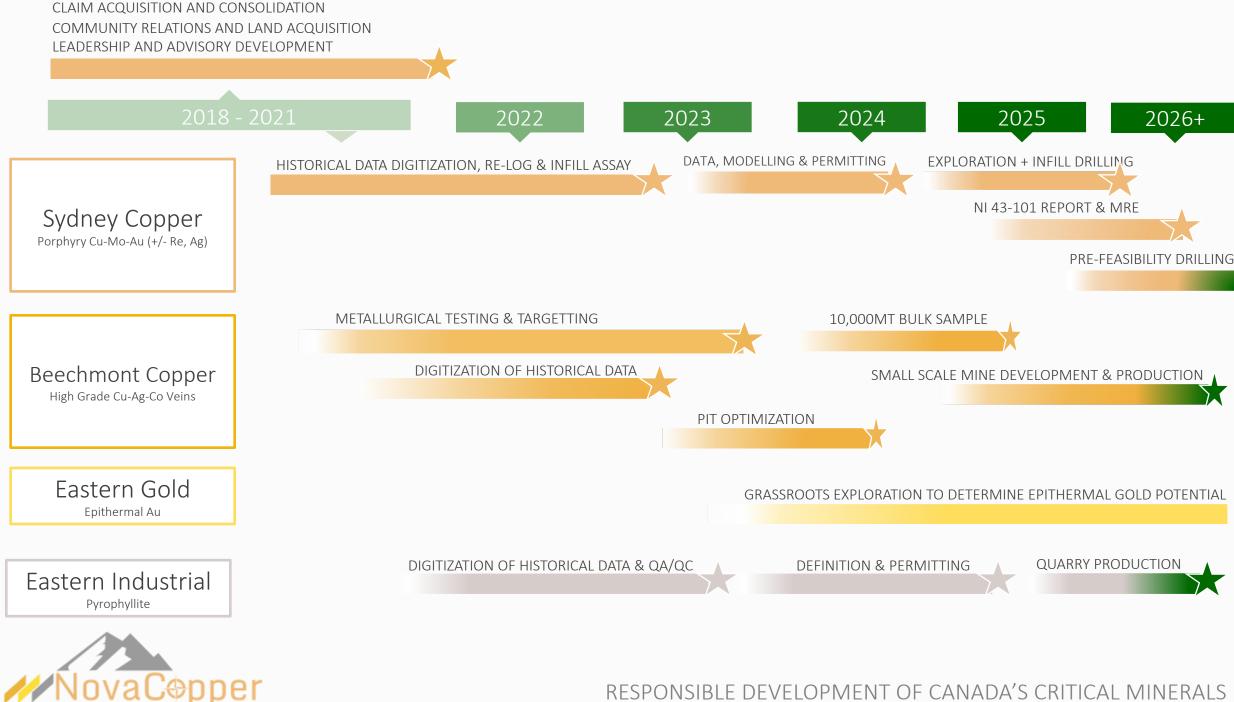
*Near-term mining opportunity at the **Eastern Industrial Project**:

- Massive epithermal aluminumsilicate clay deposit at surface
- High quality material suitable for various industrial applications
- Large footprint of historical occurrences and co-incident chargeability low, indicating room for major expansion
- Historic trenching and quarrying



NEAR TERM INDUSTRIAL MINING OPPORTUNITY

PORTFOLIO PRODUCTION ROADMAP



RESPONSIBLE DEVELOPMENT OF CANADA'S CRITICAL MINERALS

THE NOVA COPPER ADVANTAGE

LOCATION

- ✓ Temperate maritime climate amenable to **year-round operations**
- \checkmark Low-cost drilling and exploration
- \checkmark Existing extraction permits and a long history of mines and quarries in the area

INFRASTRUCTURE

- \checkmark Paved, government-maintained roads access the property
- \checkmark New three-phase hydro power lines cross the property
- ✓ Rail and three deep-sea cargo ports with commodity terminals less than 15 kilometres away

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG)

- ✓ Safe and stable mining jurisdiction [Nova Scotia, Canada]
- ✓ Supportive, progressive stakeholders familiar with exploration and mining
- \checkmark Commitment to sustainable mining initiatives with a focus on positive social impact
- \checkmark Net Zero Carbon opportunity with less Capex per pound of copper to be produced
- \checkmark Responsible, experienced Management with proven success

ASSETS

- ✓ Large precious and critical mineral portfolio of an intact porphyry-epithermal system:
 - Porphyry Cu-Au-Mo ±Re Deposit with robust targets for expansion and ample blue-sky
 - Mesothermal Cu-Ag-Co veins, open to depth and fit for near term small-scale mining
 - Vast area of unexplored epithermal gold and base metal opportunity
 - High quality pyrophyllite deposit, potential for near term industrial quarry
- ✓ 100% owned and controlled by Nova Copper
 - \checkmark Newly compiled and digitized data from over 100 years of exploration
 - ✓ Recent re-log and infill assay program successfully identified new porphyry targets in the South Zones Area supported by syn-mineral dykes, retrograde alteration and stockwork veining that were not characterized or tested in previous drill campaigns

The Nova Copper Project Portfolio displays all features typical of largetonnage porphyry copper systems, but is underexplored outside of the historically mined deposits. The property contains widespread mineralization boasting highgrade copper and cobalt in the Copper Brook Zone; anomalous gold, molybdenum, and rhenium along with copper in the South Zones Area; and untapped epithermal gold prospects to the northeast. Conceptual resource estimates are set to expand substantially with additional drilling around known zones, where a significant discovery is imminent.

> – Jesse Halle, VP Exploration Nova Copper



LEADERSHIP & ADVISORY TEAM



Veteran crude oil and mining resource executive, explorer, and industrialist with over 25 years at the helm of companies and projects spanning four continents, typically in jurisdictions with operational complexities. Harry is an innovative and energetic senior leader who brings vast experience and skill in managing business operations, creating value, and driving results across all functions. He is experienced in building teams and aligning them around a common goal to drive long term value into projects and the communities in

Harry Cabrita PRESIDENT & CEO

which they exist.



Jesse Halle (PGeo) **VP EXPLORATION**

Over 25 years of experience in exploration management including technical senior/officer roles for junior mining companies as well as President and co-founder of Halle Geological Services Ltd. Jesse holds a B.Sc in Environmental Science from the University of Toronto and a B.Sc in Geology from Lakehead University. He has since worked on numerous base and precious metal deposits in Canada and Alaska, helping advance multiple porphyry copper-gold projects in Yukon and BC, including the Casino deposit and the Copper Mountain mine.



Geologist and Managing Director at Halle Geological Services Ltd with over a decade of successful exploration and program management experience focused on porphyry copper-gold systems in BC and Yukon, as well as mining and exploration projects in Africa, Alaska, and Eastern Canada, including operations management in industrial mining and processing. Emily holds a B.Comm and a B.Sc in Geology from Saint Mary's University, is a certified Project Management Professional, and a Fellow for the Society of Economic Geologists.

Emily Halle (PMP) **VP OPERATIONS**



Over four years aiding with NOVA's business and sustainable mining development. Environmental Scientist with a background of building environmental water monitoring programs, sustainable finance and renewable energy projects. She worked on various environmental teams for the Halifax Regional Municipality, the Canadian Federal Government (SDTC) and Net Zero Atlantic (Formally known as OERA). Savanna holds a B.Sc in Environmental Science and Business from

Savanna Cabrita, BSc Dalhousie University. She earned distinction list, an EIA Certificate and SUSTAINABILITY & ESG completed the exclusive Co-operative Program



LEVERAGING EXPERIENCE AND OPPORTUNITY TO ADVANCE CRITICAL MINERAL PROJECTS

LEADERSHIP & ADVISORY TEAM cont'd



Geoscientist with over 15 years of exploration experience conducting successful grassroots and brownfield programs specializing in porphyry, epithermal gold and volcanogenic massive sulfide deposits. Dr. Barresi obtained his B.Sc from Saint Mary's University and Ph.D from Dalhousie University and is involved in various exploration companies at the executive level including Director at ArcWest Exploration, past President and Director of QuestEx Gold and Copper Exploration, and Technical Advisor at Triumph Gold (past President and Director).

Dr Tony Barresi (PGeo) TECHNICAL ADVISOR



GOVERNMENT &

STRATEGIC ADVISOR

Rob's diverse professional experience over the past 25 years includes being an interim chief executive officer in the international education sector, a communications agency co-owner and public relations practice leader and a press secretary/communications director working alongside elected officials and staff in Halifax and Ottawa, including the Premier of Nova Scotia and Conservative Members of Parliament. Through his own public affairs consultancy, Rob provides communications and public affairs counsel and support to senior leaders in a wide range of sectors. Outside of politics and business, Rob is an active community volunteer with extensive board governance experience.



Jim Horwich (CPA, CA) CORPORATE & FINANCIAL ADVISOR

Private enterprise and family wealth coach, specializing in serving the interests of privately held businesses and their families. Jim's experience and knowledge builds layers of insight and allows for the development of practical solutions to the many obstacles faced along the journey to prosperity. Jim is a graduate of Dalhousie University and a Chartered Public Accountant. Jim is a proud volunteer and community leader, serving on many Boards over the course of his career including: The Parkinson Society of Canada, Parkinson's Society Maritime Region, and the Nova Scotia College of Art and Design.

Nova Copper is building a diverse and adaptive team of industry experts, community leaders, and rising talent with over one hundred combined years of global experience in successful natural resource exploration, extraction, financial markets, management and logistics.

– Harry Cabrita, President & CEO Nova Copper



LEVERAGING EXPERIENCE AND OPPORTUNITY TO ADVANCE CRITICAL MINERAL PROJECTS

