



Block RS-12V Polymetallic Project in Arabian-Nubian Shield, Portsudan Sudan



Author: BN Energy

Created with Pi

CONTENTS

1. Executive Summary: A Tier-1 Asset in the Making

2. Geological Setting

3. Mineralization & Bonanza-Grade Zones

4. Project Potentiality

**5. Preliminary Economic Assessment (PEA)
Outlook**

6. Forward Plan & Path to Value Creation

Conclusion

01

Executive Summary: A Tier-1 Asset in the Making

Executive Summary: A Tier-1 Asset in the Making

The Block RS-12V project hosts a confirmed, bonanza-grade polymetallic mineralizing system within the world-class Arabian-Nubian Shield. Surface sampling has returned exceptional results, including 7.81% Cu, 3.31 g/t Au, and >1% Ni. The project's unparalleled advantage is its proximity to export infrastructure, located just 42 km from the deep-water Port Sudan via paved highway. This combination of exceptional grade and minimal logistics cost creates a compelling opportunity for developing a low-cost, high-margin, multi-metal mining operation.



02

Geological Setting

Geological Setting

The project is situated within the Nakasib Suture Zone, a major geological boundary in the Arabian-Nubian Shield known for hosting significant gold and volcanogenic massive sulfide (VMS) deposits.

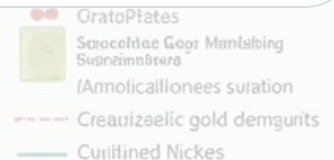
Host Rocks

Ophiolitic sequences (ultramafics, gabbro), metavolcanics, and metasediments.

Tectonic History

The suture zone represents a closed ocean basin, creating ideal conditions for the formation of:

- Orogenic Gold Deposits in shear zones.
- Volcanogenic Massive Sulfide (VMS) Deposits (Copper-Zinc-Gold).
- Magmatic Nickel Sulfide Deposits within ultramafic intrusions.



03

Mineralization & Bonanza-Grade Zones

Mineralization & Bonanza-Grade Zones

Assay results from 26 surface samples confirm three distinct, potentially overprinting, mineralization styles:

Mineralization Style	Key Results	Significance
VMS Copper-Gold	7.81% Cu, 2.85 g/t Au (RS-21)	Defines bonanza-grade copper intersections. Grades are an order of magnitude higher than typical economic cut-off grades (~0.5% Cu).
	7.17% Cu, 2.01 g/t Au (RS-18)	
	6.31% Cu, 3.31 g/t Au (RS-22)	
Orogenic Gold	3.31 g/t Au (RS-22)	High-grade gold mineralization, strongly correlated with Arsenic (As), indicative of arsenopyrite-hosted gold.
	3.06 g/t Au (RS-11)	
	2.92 g/t Au (RS-16)	
Magmatic Nickel-Cobalt	>1% Ni (widespread)	Indicates a significant nickel sulfide system within the ophiolitic sequence.
	131 ppm Co (RS-21)	
	98 ppm Co (RS-18)	

04

Project Potentiality

Project Potentiality

The potential of Block RS-12V is multi-faceted:

Near-Term Potential

High-grade, near-surface gold and copper starter pits offering rapid cash flow and low initial strip ratios.

Long-Term Potential

A large-scale, integrated mining complex feeding a central processing facility from multiple open pits and underground mines targeting VMS and nickel sulfide lenses.

Strategic Potential

A reliable, future source of critical minerals (Cu, Ni, Co) for global energy transition supply chains, with a path to ultra-low carbon intensity.

Exploration Upside

The current results are from a limited surface sampling program. The potential for major resource expansion through systematic drilling is exceptional.

05

Preliminary Economic Assessment (PEA) Outlook



Preliminary Economic Assessment (PEA) Outlook

A formal PEA will be initiated following a maiden drilling campaign. Preliminary scoping-level assumptions indicate robust economics:



A. Operating Cost Advantages:

1

Logistics

\~42km trucking to port vs. industry averages of 150km+. This translates to \~\$10-15/t saved in concentrate shipping costs.

2

Mining

High-grade surface mineralization allows for a high-margin starter pit, reducing initial capital intensity.

3

Processing

Potential for a simple flotation circuit to produce separate saleable copper and nickel concentrates.

B. Capital Cost Advantages (CAPEX):

Infrastructure

Significant savings due to minimal required road construction, proximity to grid power, and short pipeline/transport corridors.

Phased Development

Phase 1 (Gold) cash flow can fund expansion to Phase 2 (Cu-Ni Concentrator).



C. Revenue Enhancements:

1

Grade

Bonanza-grade copper directly increases revenue per tonne and margin, providing a buffer against commodity price downturns.

2

By-Credits

Gold and silver credits in copper concentrate, and cobalt credits in nickel concentrate, will significantly enhance net smelter revenue.

3

"Green Premium"

Solar-powered processing could enable premium offtake agreements for low-carbon copper and nickel.

Preliminary Financial Metric Targets (Post-Drill Resource):

1

Pre-Tax NPV (8% Discount): >\$3.9 Billion

2

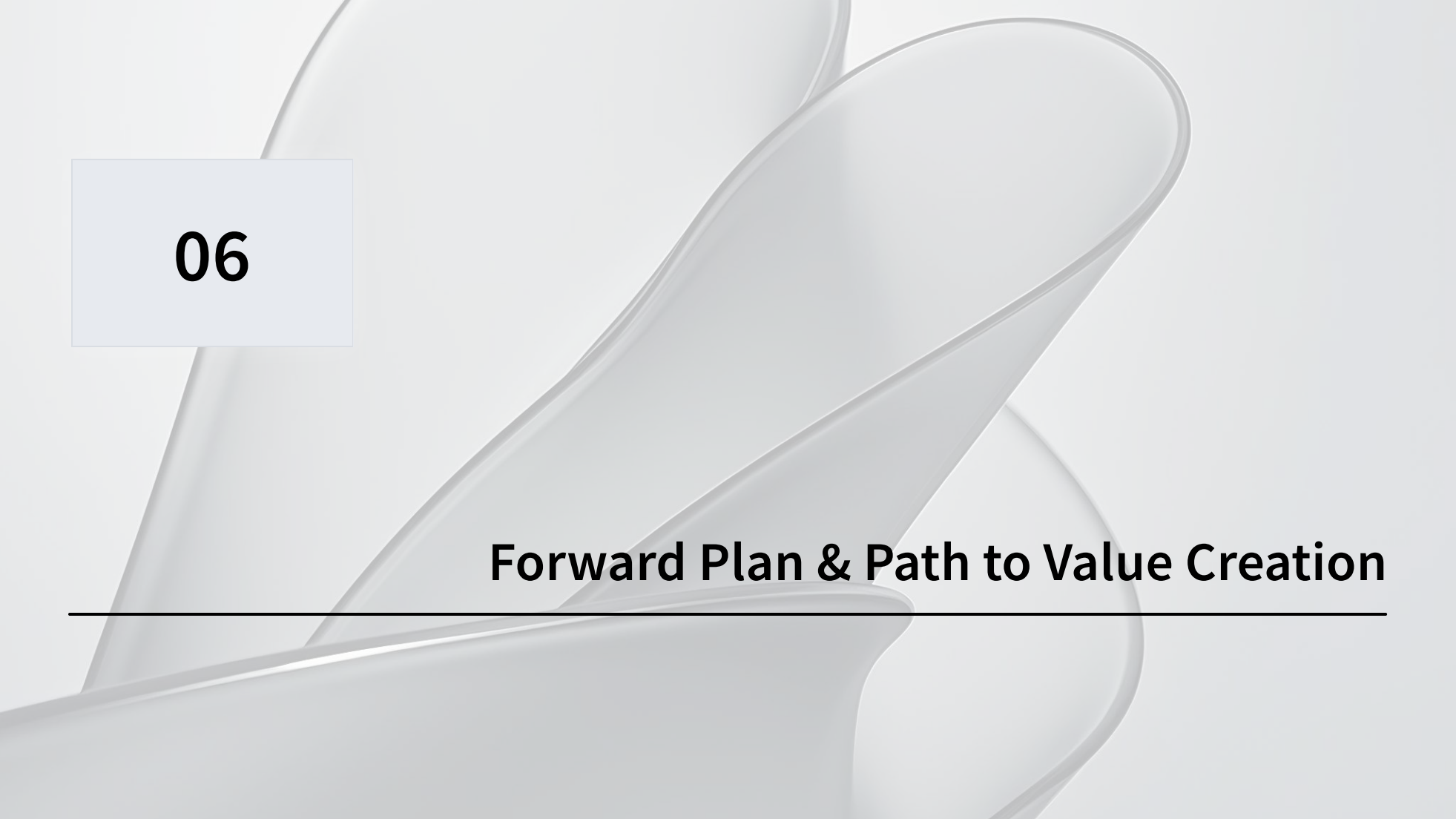
Internal Rate of Return (IRR): >28%

3

Initial CAPEX (Phase 1): ~\$200 - \$210 Million

4

Payback Period: <3 years from initial production



06

Forward Plan & Path to Value Creation

Forward Plan & Path to Value Creation

1

Immediate (Next 6 months):

- Detailed ground geophysics (Magnetics, IP, EM) to define drill targets.
- Large-scale soil sampling program.
- Secure drilling permits.

2

Phase 1 (2026):

- Maiden diamond drill program (\~5,000m).
- Maiden JORC/NI 43-101 Resource Estimate.
- Commence PEA study.

3

Phase 2 (2027-2028):

- Feasibility Study.
- Project Financing & Offtake Agreements.
- Construction Decision.

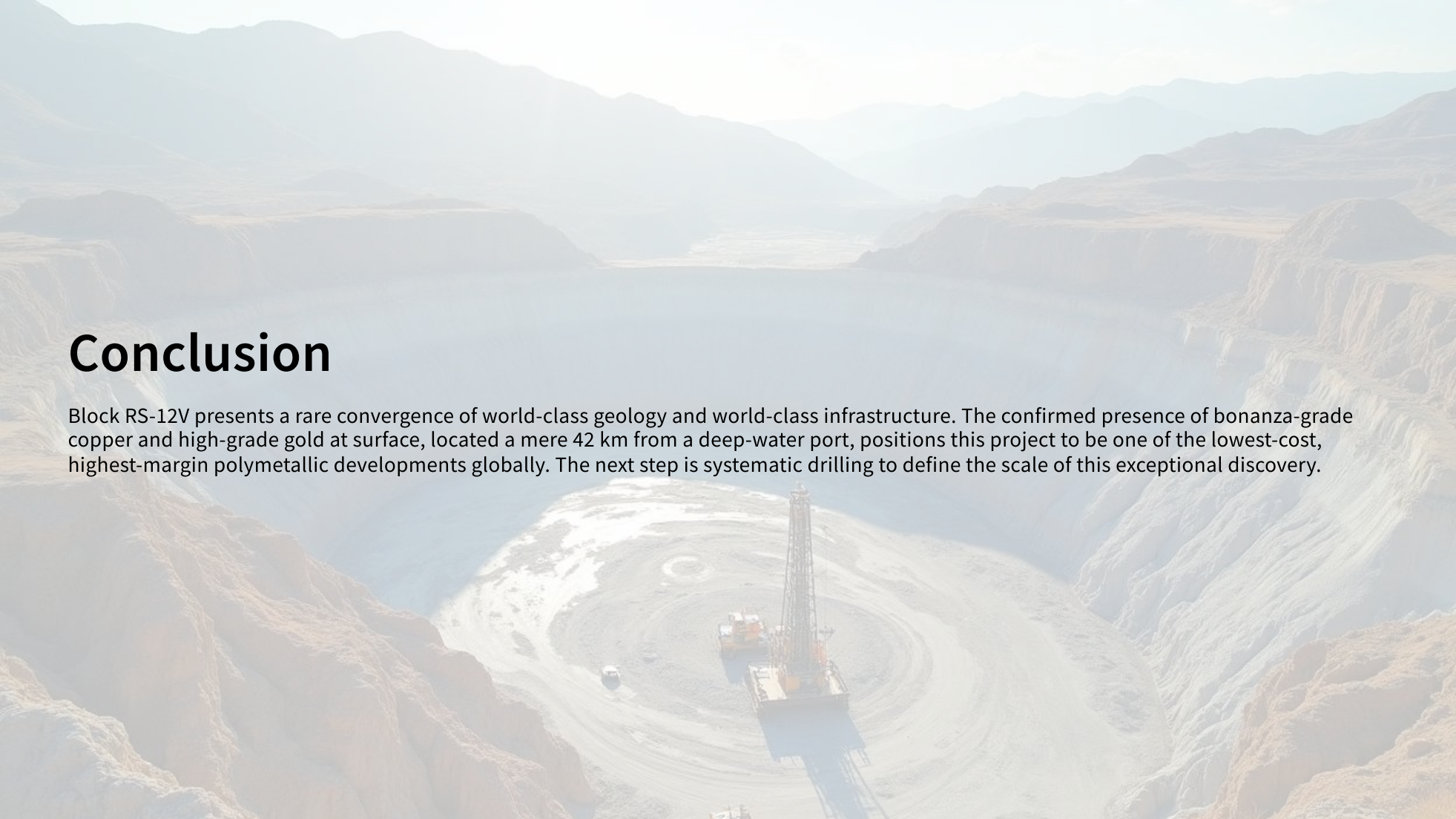


07

Conclusion

Conclusion

Block RS-12V presents a rare convergence of world-class geology and world-class infrastructure. The confirmed presence of bonanza-grade copper and high-grade gold at surface, located a mere 42 km from a deep-water port, positions this project to be one of the lowest-cost, highest-margin polymetallic developments globally. The next step is systematic drilling to define the scale of this exceptional discovery.



The background features several overlapping, translucent, light-gray shapes that resemble smooth, flowing ribbons or liquid droplets. These shapes are layered, creating a sense of depth and movement. The central text 'Thank You' is superimposed on these shapes.

Thank You