



BLACKSTONE
MINERALS

Looking forward.
Mining green.



Blackstone Minerals

Company Presentation

ASX:BSX

Our Global Nickel Focused Portfolio

Ta Khoa Nickel Project Ni Mine restart	
Location	Son La, Vietnam
Ownership	90%
Stage	PFS; DFS underway
Resources	485kt Contained Ni @ 0.37% Ni; Sulphide

Ta Khoa Refinery Project Ni Refinery	
Location	Son La, Vietnam
Ownership	100%
Stage	PFS; DFS nearing completion
Capacity	40ktpa Ni, scalable
Product	pCAM (NCM cathode precursors)

Corazon Mining (ASX: CZN) Ni exploration	
Location	Manitoba, Canada
Ownership	~17%
Resources	Lynn Lake Project 117kt Contained Ni @ 0.72% Ni; Sulphide

Flying Nickel (TSXV: FLYN) Ni exploration	
Location	Manitoba, Canada
Ownership	~8%
Resources	Minago Project 472kt Contained Ni @ 0.74% Ni; Sulphide

REGIONAL PROCESSING HUB	
Location	Central Manitoba

CORPORATE HEAD OFFICE	
Location	Perth, Australia

NICO Resources (ASX: NC1) Ni Mine development	
Location	Western Australia, Australia
Ownership	~15%
Project	Wingellina Ni-Co Project
Stage	PFS; DFS in 2024
Resources	2Mt Contained Ni @ 0.91% Ni; Nickeliferous limonite

BSX

ASX Code

BLSTF

OTCQX Code

473.7m

Shares on Issue

A\$0.09

Last Share Price
(23 November 2023)

A\$45m

Market
Capitalisation

~A\$10.65m

Cash as at
30 June 2023

~A\$9m

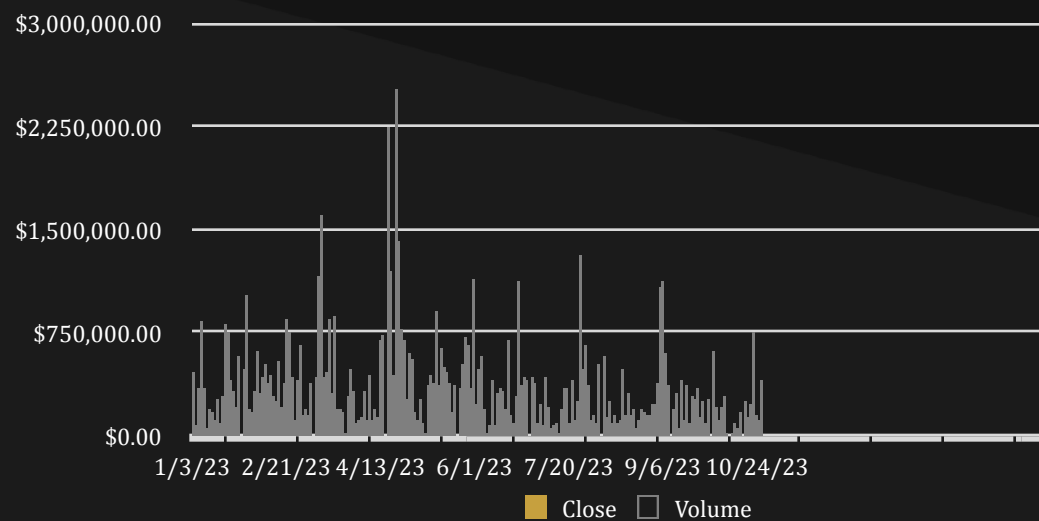
Listed Investments
(25 October 2023)

62.6%

Top 20
Shareholders

253k

3-month Avg Daily
Vol. (shares)



BOARD OF DIRECTORS



Scott Williamson

Managing
Director



Hamish Halliday

Non-Executive
Chair



Dr Frank Bierlein

Non-Executive
Director



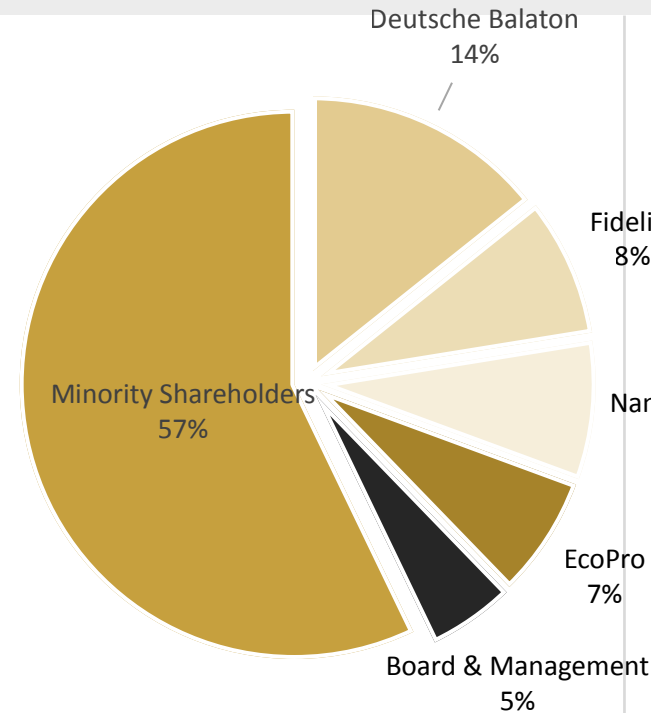
Alison Gaines

Non-Executive
Director



Daniel Lougher

Non-Executive
Director



ANALYST COVERAGE



Blackstone Minerals

Looking forward.
Mining green.

1

Integrated producer of low cost, low carbon nickel

- Low carbon production (9.8kg CO₂/kg pCAM²)
- Integrated mining and refining (pCAM)
- 485kt of nickel sulphide resources¹

2

Nickel market entering structural deficit

- Battery nickel demand to grow 950% by 2040³
- Deficit for battery grade Ni by 2024²
- Bifurcation of market expected due to ESG

3

Vietnam is a burgeoning EV hub

- Over 20 active mines (public and private)
- Burgeoning hub of technology and EVs
- Growth in FDI from \$0.4B in 2010 to \$27.72B in 2022⁴



■ Ta Khoa Nickel Project (Upstream)

- Mine restart with DFS underway
- Reserve: 48.7Mt at 0.43% Ni for 210kt Ni
- Resource: 130Mt at 0.37% Ni for 485kt Ni
- By-products (Cu, Co, PGEs)
- Open pit (low strip (2.9:1)) and underground
- Hydro power (grid)

■ Ta Khoa Refinery Project (Downstream)

- DFS nearing completion
- Piloting Complete
- Refinery producing pCAM (NCM 811)
- Incorporates 3rd party feed
- Scalable, 40ktpa of Ni per train

Other interests

- Gold Bridge (100%)
- Nico (~15%)
- Corazon (~17%)
- Flying nickel (~7%)
- Codrus (46%)

Note 1: refer to ASX announcement 23 December 2021 "Ta Khoa Mineral Resource Update"

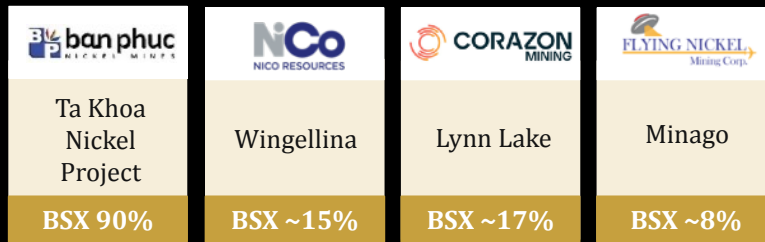
Note 2: Precursor Cathode Active Material (pCAM) based on NCM811 Chemistry

Note 3: Benchmark Minerals, Q4 2022

Note 4: Ministry of Planning and Investment (as of 20 December 2022)

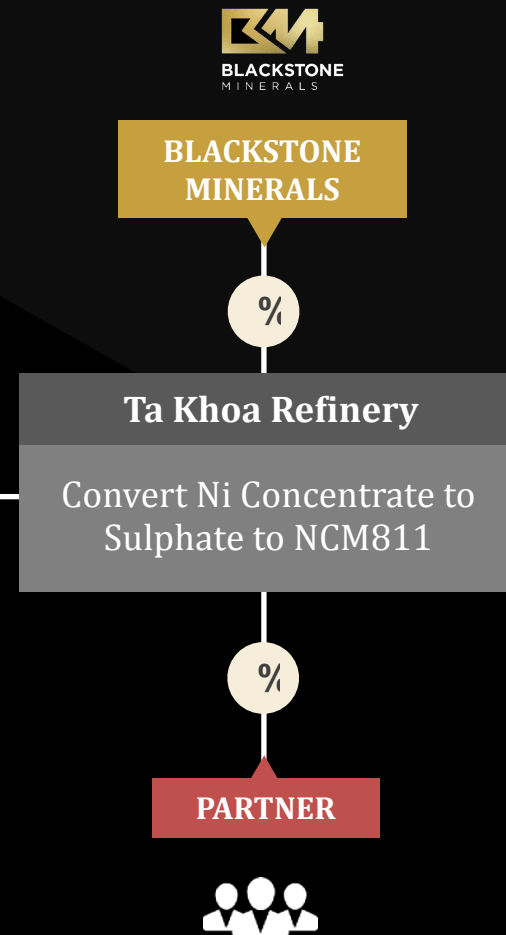
Vertically Integrated Business Model

UPSTREAM BUSINESS



**THIRD PARTY
CONCENTRATE
FEED PROVIDERS**

DOWNSTREAM BUSINESS



**Targeting Global
Lithium-ion battery
and EV market**



High Nickel Cathode

By 2028, 50% of global demand for batteries will contain high nickel NCM cathodes¹

>40ktpa
Nickel in
Precursor

Net Zero Advantage Green Nickel™

Blackstone Minerals has the opportunity
to build a net zero operation

LOW CARBON
NICKEL

CIRCULAR
ECONOMY

ENVIRONMENTAL
STEWARDSHIP

SOCIALLY
RESPONSIBLE

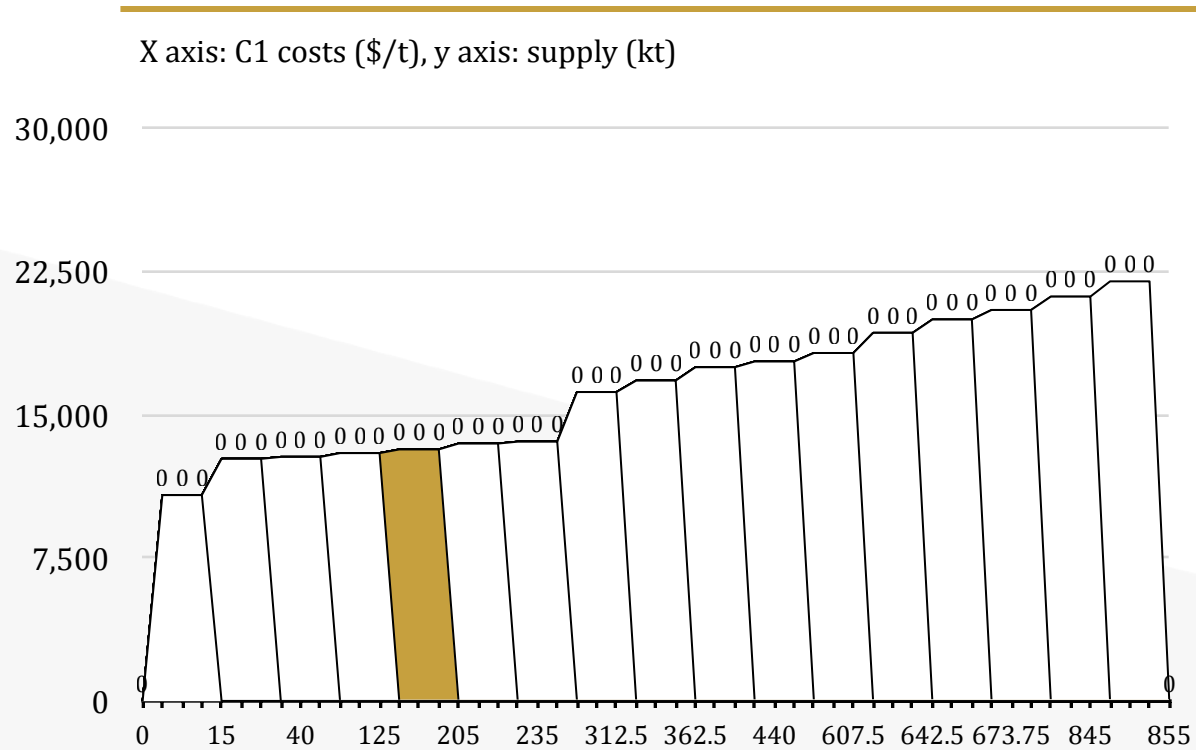
ROBUST
GOVERNANCE



GREEN NICKEL™

Nickel Sulphate cost curve

First quartile positioning for Ta Khoa nickel sulphate

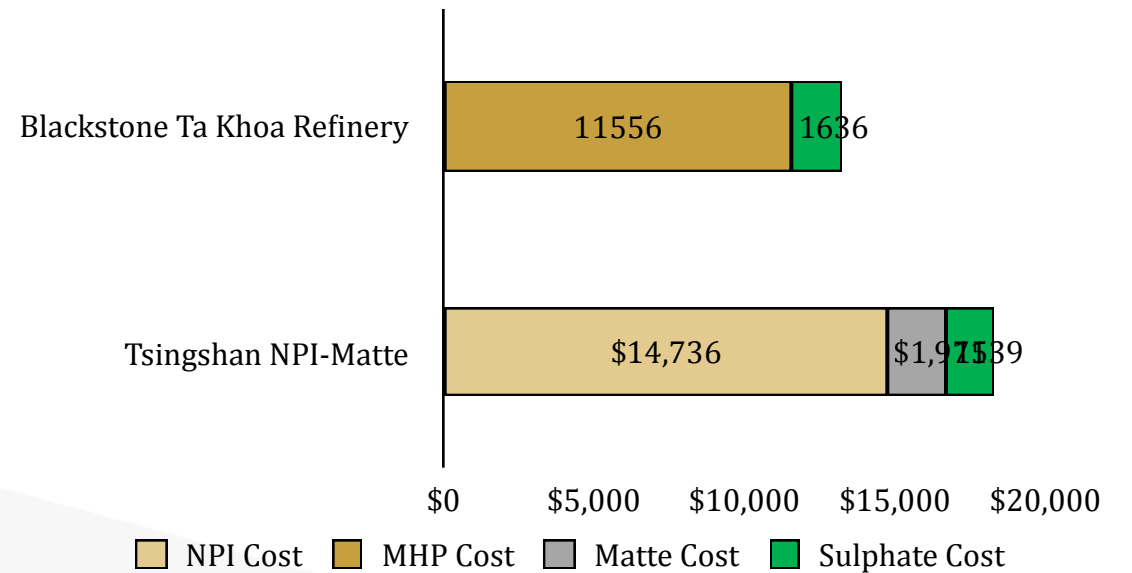


Source: Trafigura trading division (July 2022) and BSX

Cost Comparison, Ta Khoa vs Indonesian NPI-Matte

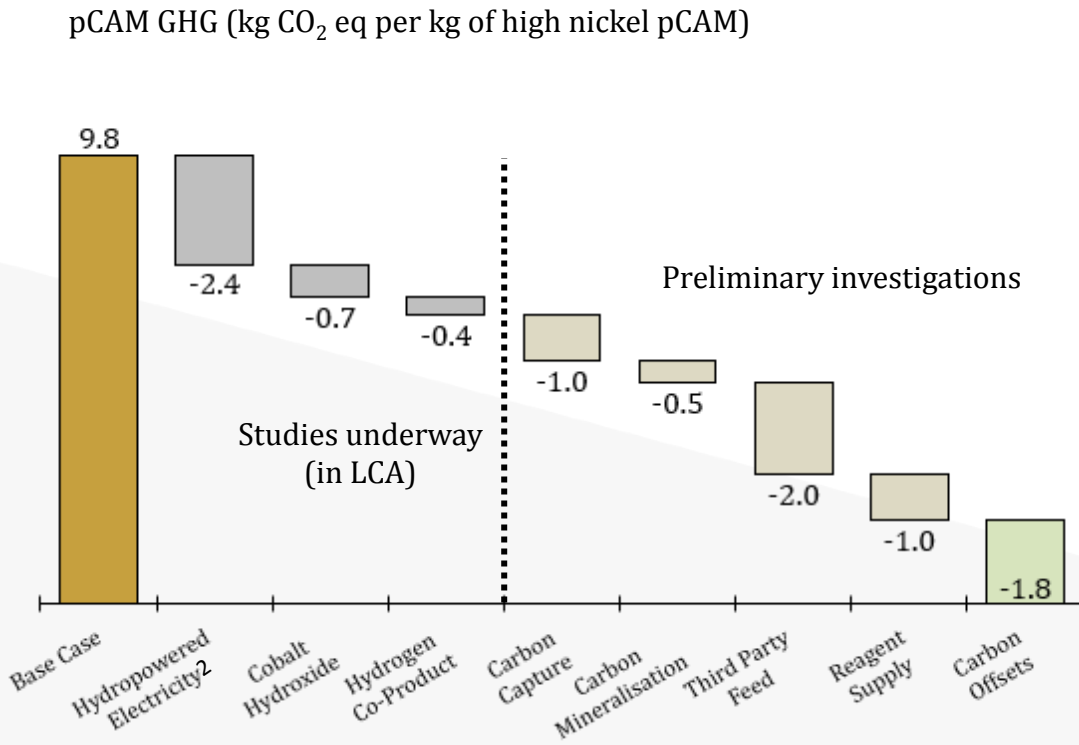
Competitive cost advantage

Sulphate Stage Cost comparison (All in Sustaining Cost, US\$/t Ni in sulphate)



Road-map to Net Zero

LCA analysis identified clear and achievable pathway to net zero



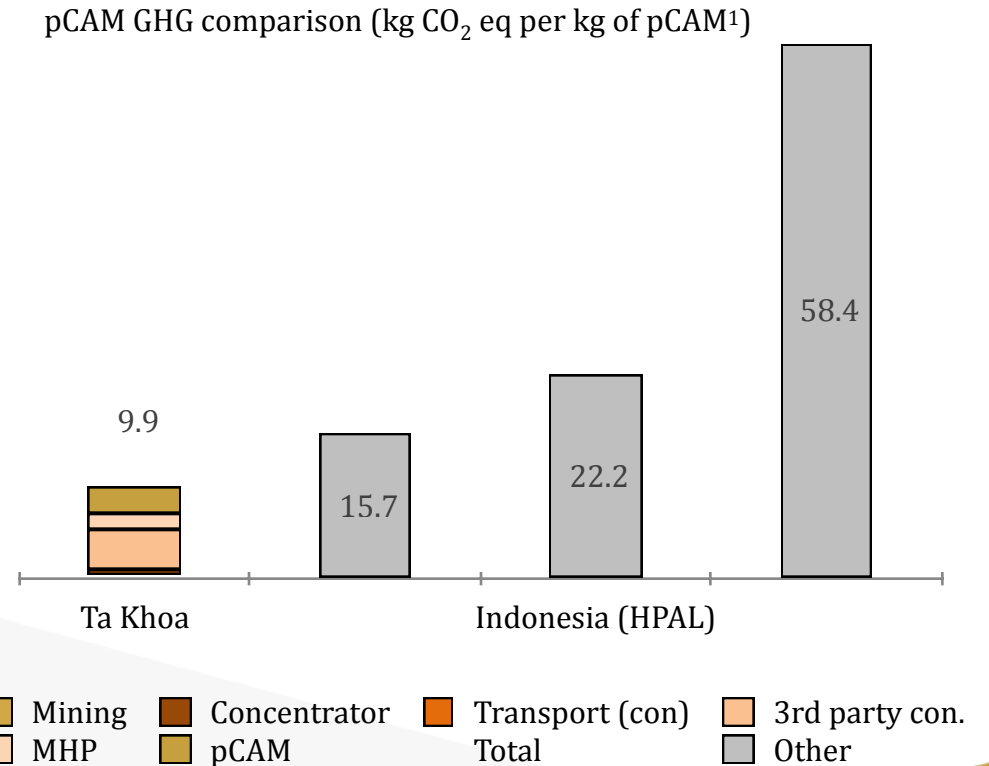
Source: Minviro, July 2022

Notes:

1. Based on generic NCM811 Cathode Chemistry
2. Blackstone is seeking Power Purchase Agreements (PPA) with Vietnamese Hydro-power providers to secure 100% renewable power

Life cycle analysis peer comparison

Bifurcation of demand expected along ESG lines



Ta Khoa Nickel Resource

Premier Nickel sulphide district

1 Mineralised district

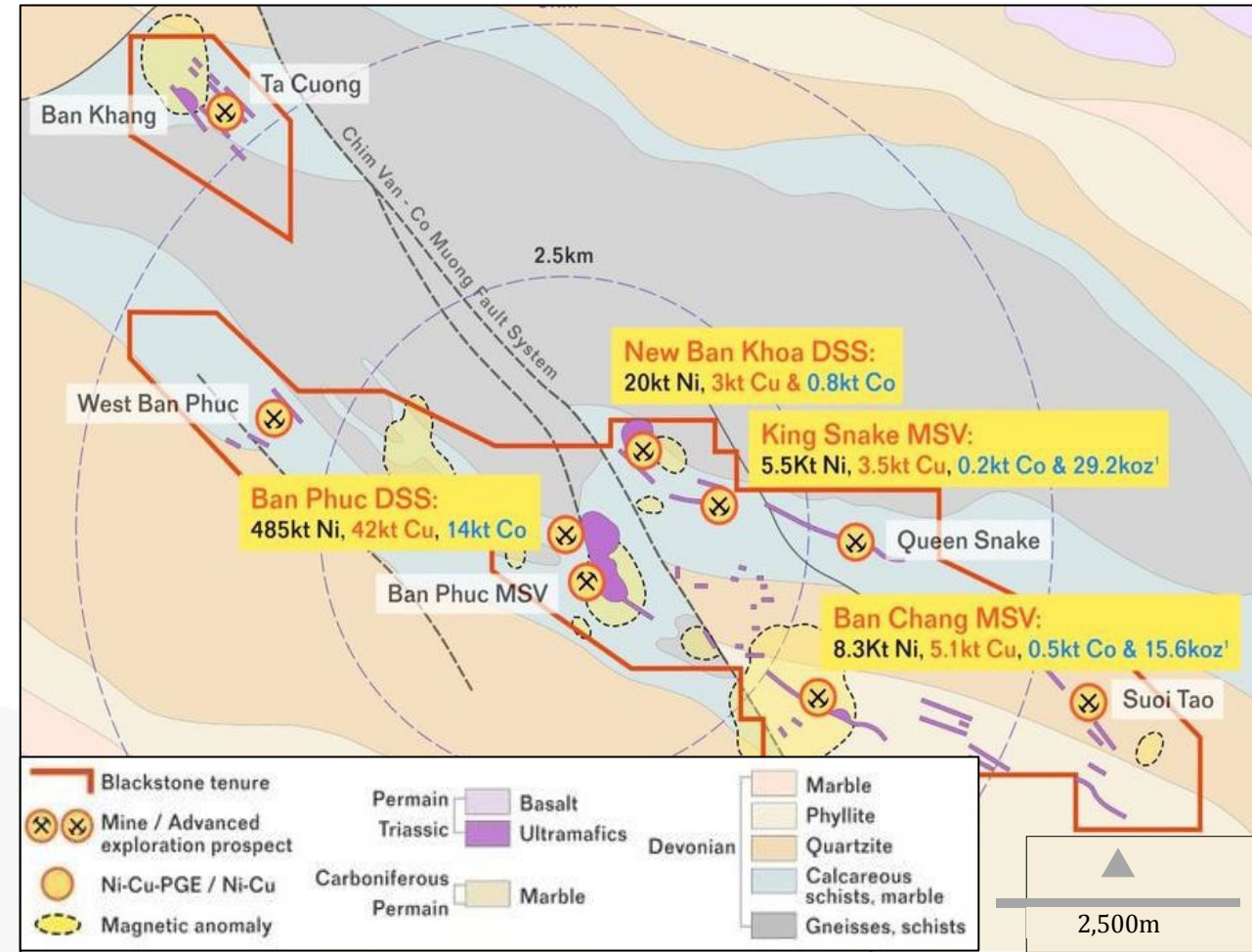
- Ta Khoa **Resource** (MI+I): **130 Mt** at 0.37% Ni (**485kt Ni**)¹
- Ban Phuc **Resource** (MI+I): **123 Mt** at 0.37% Ni (**452kt Ni**)¹
- Experienced geology and exploration teams

2 Exploration targets

- Several targets within Blackstone tenure
- Exploration supported by Government partnership
- Huge unexplored region, with multiple drill ready targets

Ta Khoa Project Resources	Mt	Ni (%)	Cu (%)	Co (%)	Ni (kt)	Cu (kt)	Co (kt)
Indicated Resources	102	0.38	0.03	0.01	383	27	10
Inferred Resources	28	0.36	0.05	0.01	102	14	3
Total	130	0.37	0.02	0.01	485	41	13

Note 1: refer to ASX announcement 23 December 2021 "Ta Khoa Mineral Resource Update"



Ta Khoa Nickel Project

Baseload feed for Refinery

1

Large reserve and mining inventory

- Probable Reserve¹: **48.7Mt** at 0.43% Ni for **210kt Ni**
- Mining inventory of **64.5Mt** at 0.41% Ni for **265kt Ni**
- Excludes Ban Khoa and other developing prospects

Open Pit Design

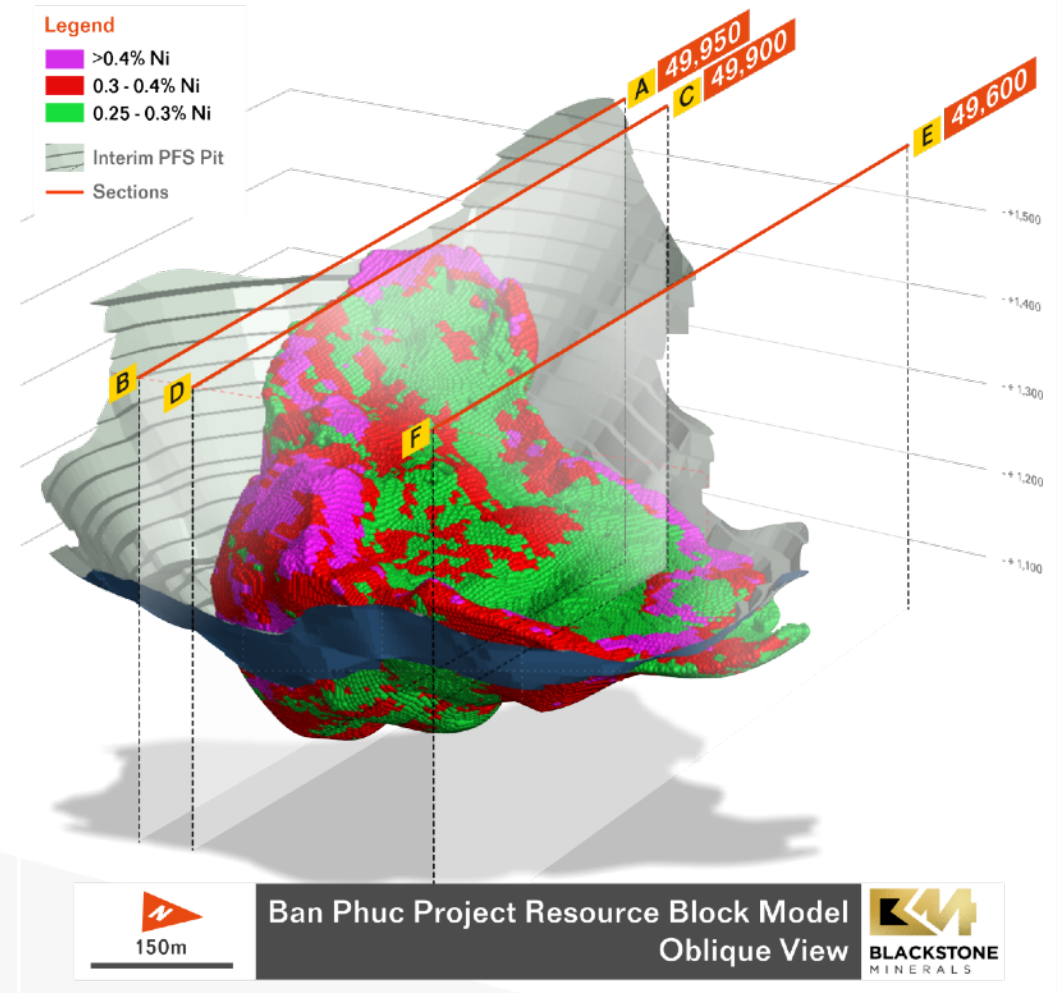
2

- Average LOM production of ~18ktpa Ni in concentrate
- 10 year life of mine, with 2 year ramp up
- Low life of mine strip ratio of 2.9:1 (waste:ore)

Established mining operation

3

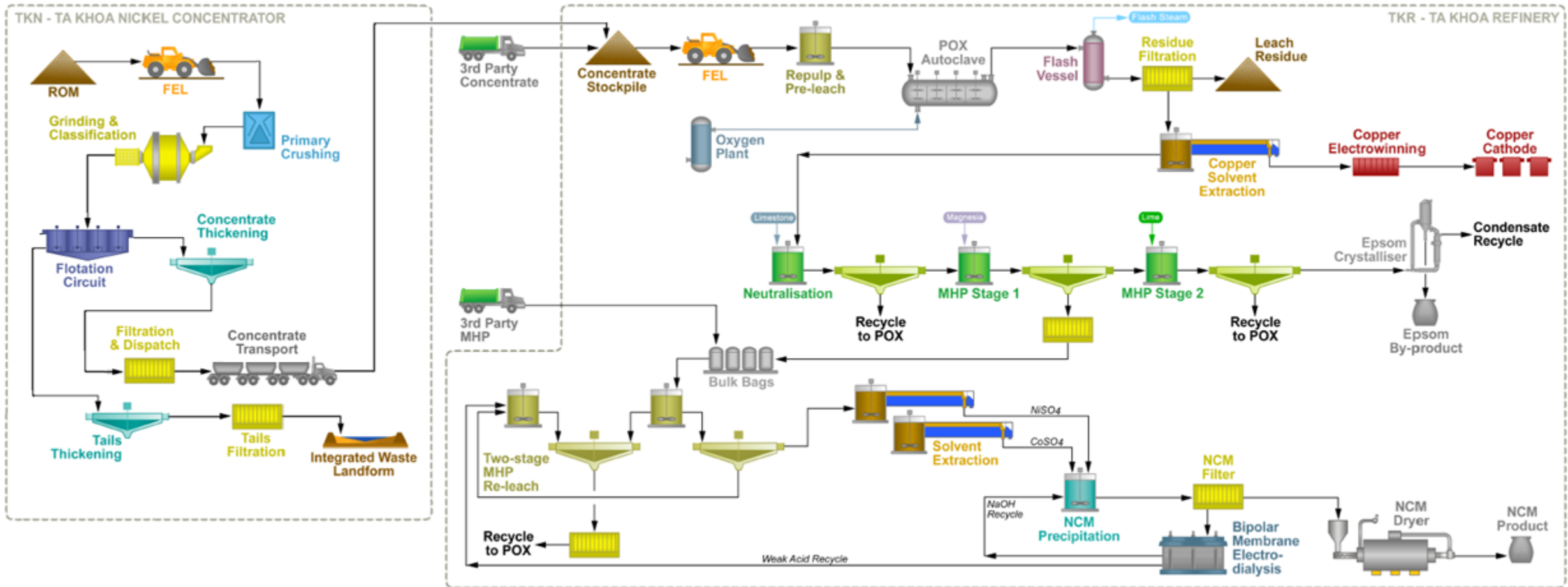
- Existing camp, underground operation, 450ktpa Mill
- Supportive community and government
- MSV restart scenarios under consideration



Note 1: refer to ASX announcement 28 February 2022 "Expanded Ta Khoa Nickel Project Delivers Outstanding Value for Blackstone's Vertically Integrated Business"

Ta Khoa Project

Overall Project Process flow Diagram

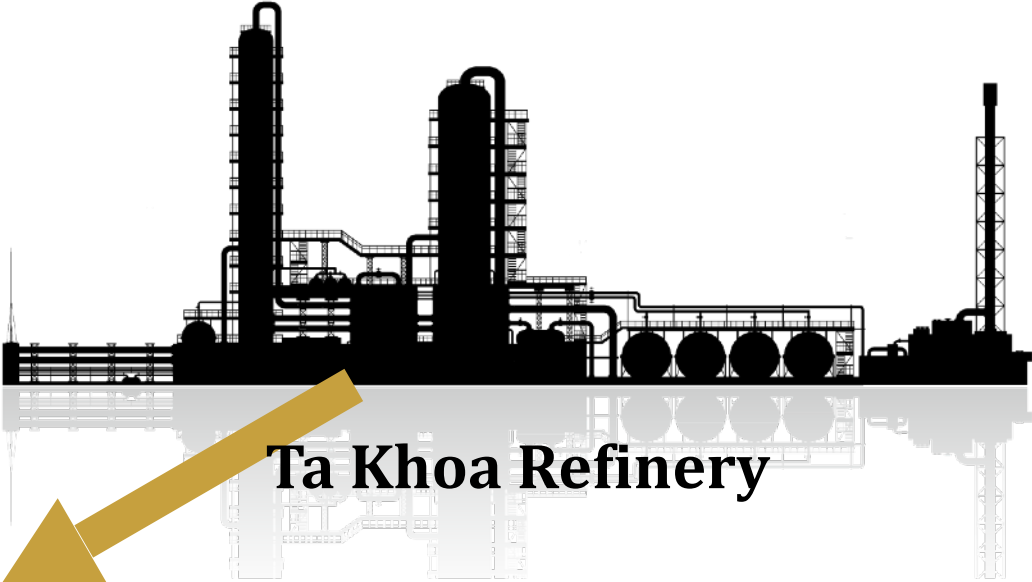


Nickel Concentrate

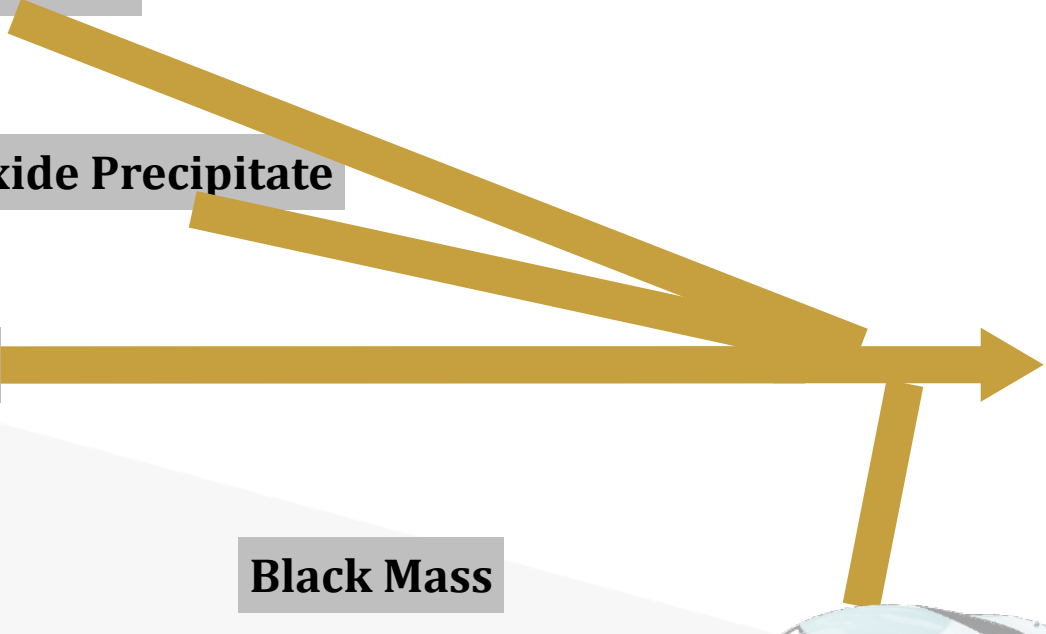
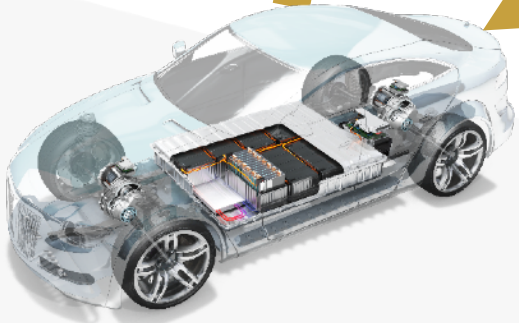
Mixed Hydroxide Precipitate

Nickel Matte

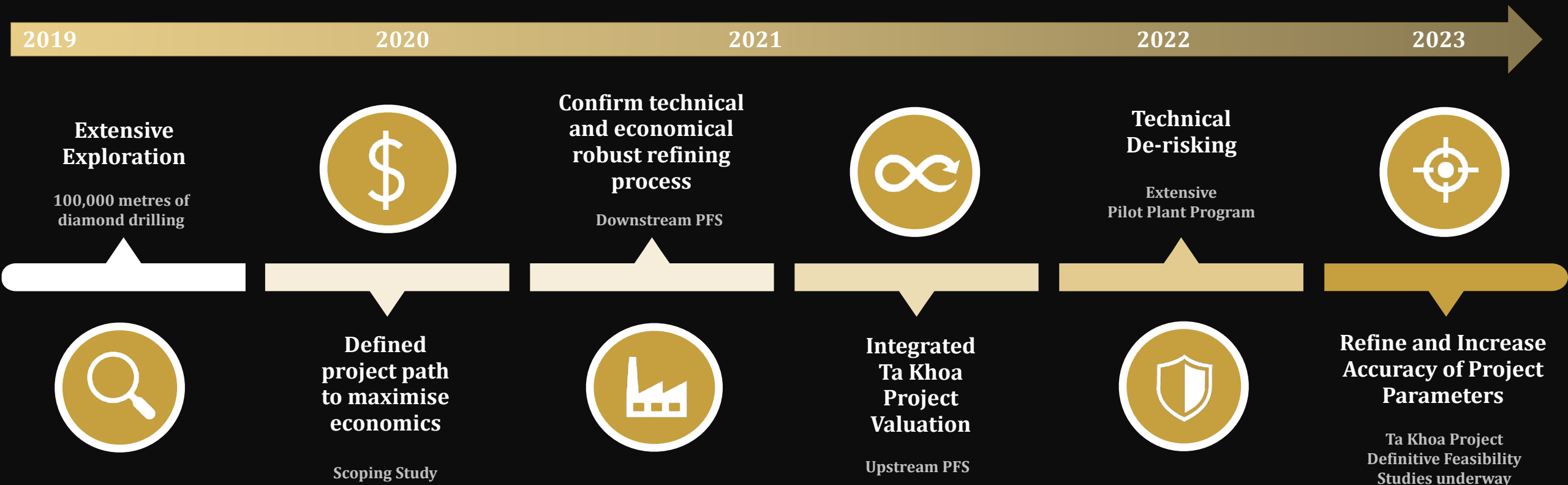
Black Mass



Ta Khoa Refinery

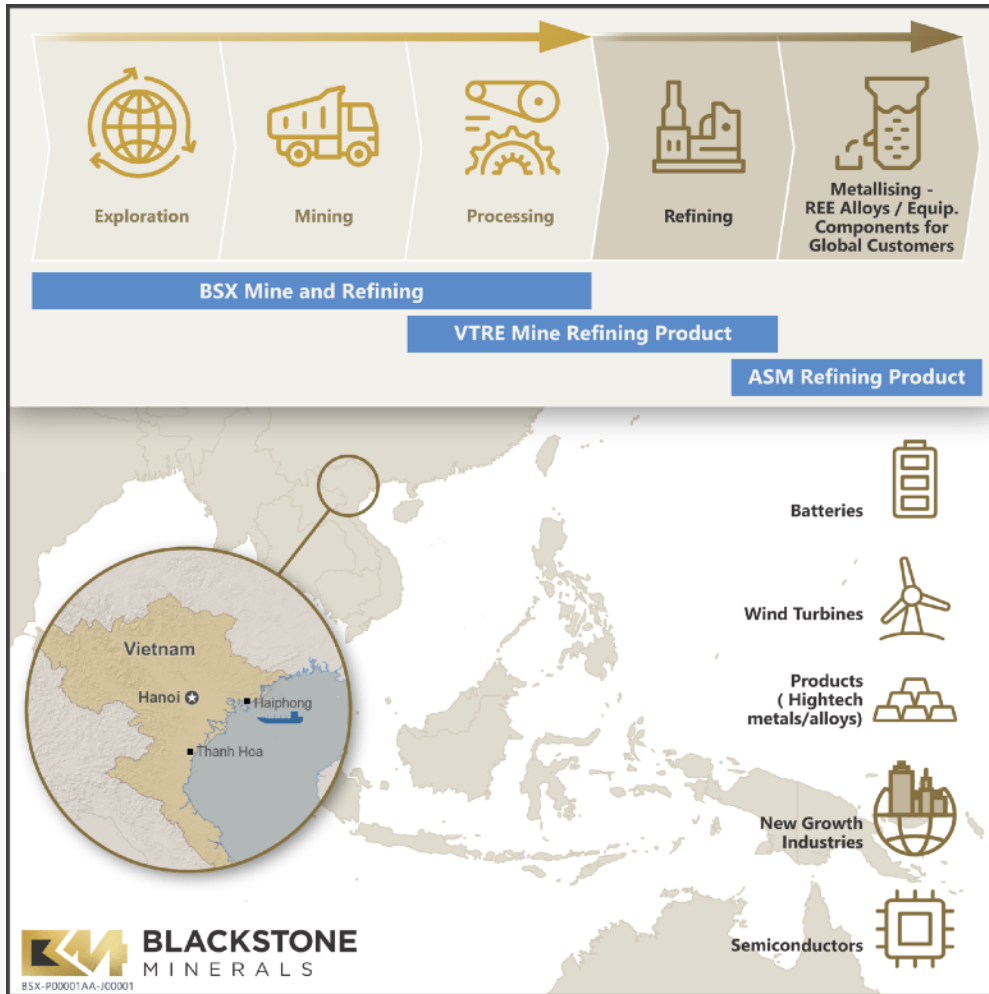


MILESTONES ACHIEVED FOR BLACKSTONE



Vietnam Rare Earth Supply Chain

Well positioned to develop a world class Rare Earth Supply Chain



- **Familiarity with Operating in Vietnam**

We have a demonstrated capability to explore, secure mining licenses and advance permitting.

- **Supply Chain Knowledge and Experience**

We are familiar with Corporate structures required to advance partnerships.

- **Assets Available**

We have existing spare equipment and assets, and the BPNM concentrator could also be used to concentrate Dong Pao Ores¹.

- **Proven Technology**

A tried and tested flowsheet utilising a refinery that has been in operation for over 12 years.

- **“Ready to Go”**

With the approval of the National Mineral Master Plan, issuing of mining concessions and the development of the country’s rare earth business will be expedited.

Investment Summary



Vertically integrated mining and refining business model using hydro-electric power



Globally relevant nickel sulphide mineral resource and probable reserve



First quartile cost position with lowest carbon footprint



Partnership based model involving debt and equity participation



Blackstone strategy being delivered into rising macroeconomic environment



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