



Looking forward.
Mining green.

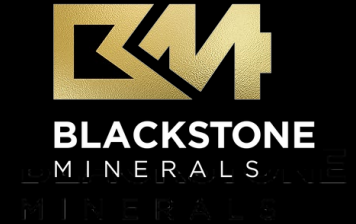


Blackstone Minerals

Company presentation

16 September 2022
ASX : BSX

Important information and disclaimers



The PFS referred to in this Presentation is the study of the potential viability of the Ta Khoa Refinery Project. It has been undertaken to understand the technical and economic viability of the TKP:

The Company has concluded that it has a reasonable basis for providing the forward-looking statements included in this announcement. The reasons for this conclusion are outlined throughout this announcement. However, the assumptions and results of the PFS set out above and elsewhere in this announcement ("PFS Parameters") have been developed through feasibility work completed to the level of AACE / AusIMM Class 4 (+/-25% accuracy) and the use of macroeconomic assumptions. For the avoidance of doubt, investors are advised that the PFS Parameters do not constitute a production forecast or a target in relation any mineral resources associated with the Company. The Company wishes to expressly clarify that the PFS Parameters are based on the expected grade of nickel, cobalt and copper that is reliant upon 3PF for which there is currently no supply agreement. The PFS Parameters have been disclosed by Blackstone to provide investors with an intended scale and nature of the Project.

The PFS referred to in this announcement has been undertaken to assess the technical and financial viability of the Project. Further evaluation work, including a Definitive Feasibility Study ("DFS") is required before the Company will be in a position to provide any assurance of an economic development case. These include assumptions about the availability of funding and the pricing received for the Ta Khoa Project products. While the Company consider all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by this PFS will be achieved. To achieve the outcomes in this PFS, the pre-production capital (including contingency) of US\$491m, additional capital for pre-commitment activities such as a DFS, pilot plant development and working capital is likely to be required.

Investors should note that there is no certainty that the Company will be able to raise this amount of funding required when needed. It is also possible that such funding will only be available via equity placement which may have a dilutive effect on the Company's share value. The Company may also pursue other strategies in order to realise the value of the Ta Khoa Refinery Project, such as a sale, partial sale or joint venture of the Ta Khoa Refinery Project. If this occurs, this could materially reduce the Company's proportionate share of ownership of the Ta Khoa Refinery Project. Accordingly, given the uncertainties involved, investors should not make any investment decisions based solely on the results of the PFS.

This report contains certain forward-looking statements. The words "expect", "forecast", "should", "projected", "could", "may", "predict", "plan", "will" and other similar expressions are intended to identify forward looking statements. Indications of, and guidance on, future earnings, cash flow costs and financial position and performance are also forward-looking statements. Forward looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward looking statements may be affected by a range of variables that could cause actual results or trends to differ materially. These variations, if materially adverse, may affect the timing or the feasibility of the development of the Ta Khoa Nickel Project.

Development approvals and investment permits will be sought from the relevant Vietnamese authorities concurrent to studies being completed. Delays in any one of these key activities could result in a delay to the commencement of construction (planned for 2023). This could lead on to a delay to first production, currently planned for 2025. It is expected that the Company's stakeholder and community engagement programs will reduce the risk of project delays. Please note these dates are indicative only.

The JORC-compliant Mineral Resource estimate forms the basis for the PFS Study in the market announcement dated 28 February 2022. The viability of the development scenario envisaged in the PFS Study therefore does not depend on Inferred Mineral Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. The Inferred Mineral Resources are not the determining factors in project viability. Please refer to the Cautionary Statement in the PFS Study market announcement dated 28 February 2022.

Exploration Results:

The information in this document that relates to Exploration Results and Exploration Targets is based on information compiled by Mr. Chris Ramsay, Manager of Resource Geology for the Company and a Member of The Australasian Institute of Mining and Metallurgy. Mr. Ramsay has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Ramsay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mineral Resources:

Blackstone Minerals provided an update of the company's Minerals Resources on December 23rd, 2021. Among the four prospects included in the recent Mineral Resource update, was an update of the Ban Phuc Mineral Resource. The Ban Phuc Mineral Resource is the basis of the 'Ore Reserve' (Ban Chang and King Snake Prospects were assessed in the Pre-Feasibility Study and their limited contribution is noted and the prospects are not included in the 'Ore Reserve'). The new and updated Mineral Resource was prepared by Optiro Pty Ltd in 2021. Full JORC disclosure can be found on the company's website (refer Dec 23rd, 2021).

Ore Reserves:

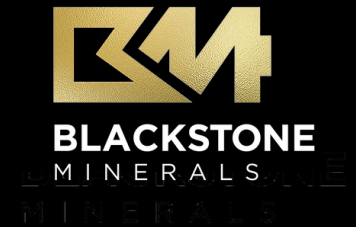
The information in this document which relates Ore Reserves for the Ban Phuc deposit was presented via an ASX Announcement dated 28 February 2021 (Ta Khoa Maiden DSS Ore Reserve). The disclosure and competency statement for the new reserve can be found on the company's website. The disclosure includes - Sections 4 of 'JORC Table 1', (Section 4 'Estimation and Reporting of Ore Reserves') prepared by Optimize Group (Toronto, Canada)).

No New Information:

The Company confirms that it is not aware of any new information or data that materially affects the information including in the original market announcements or the information on this page, and in the case of estimates of Mineral Resources and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

The Company confirms that the form and context in which the Competent Persons' finding are presented have not been materially modified from the original market announcements.

Welcome



Company overview

Market opportunity

Project update

Other information

Closing remarks

Ta Khoa Project ('TKP')

Vietnam

Blackstone Minerals

Looking forward.
Mining green.



1

Integrated producer of low-emission nickel

- Integrated **mining** and **refining** (pCAM output)
- **Hydro-electric power** from the grid
- **485kt of nickel sulphide resources**¹
- **Exceptional LCA** (9.8kg CO₂/kg NCM811)

2

Nickel market entering structural deficit

- Battery nickel demand to grow 260% by 2040²
- Nickel market to be in supply deficit by 2028²
- **Deficit for battery grade Ni by 2024**²
- Bifurcation of market expected along ESG lines

3

Vietnam is a burgeoning EV hub

- **Vietnam is an established mining jurisdiction**
- Over 200 active mines (public and private)
- **Burgeoning hub of technology and EVs**
- Growth in FDI from \$1.3B in 2000 to \$15.3B in 2020³



■ Upstream (90%)

- DFS underway
- Reserve: 48.7Mt @ 0.43% Ni
- Resource: 130Mt @ 0.44% NiEQ (inc. reserve)
- By-products (Cu, Co, Mn)
- Open pit (low strip (2.9:1)) and underground
- Hydro power (grid)

■ Downstream (100%)

- DFS underway
- Production of pCAM
- Incorporates 3rd party feed
- >40ktpa of NiEQ.

Other interests

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

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

Note 2: Benchmark Minerals, Q1 2022

Note 3: World Bank (2022)

Corporate overview



ASX share code

BSX

Market capitalisation

\$102M¹

Share price

\$0.22¹

Cash (30 June 2022)

\$34.0M

Shares on issue

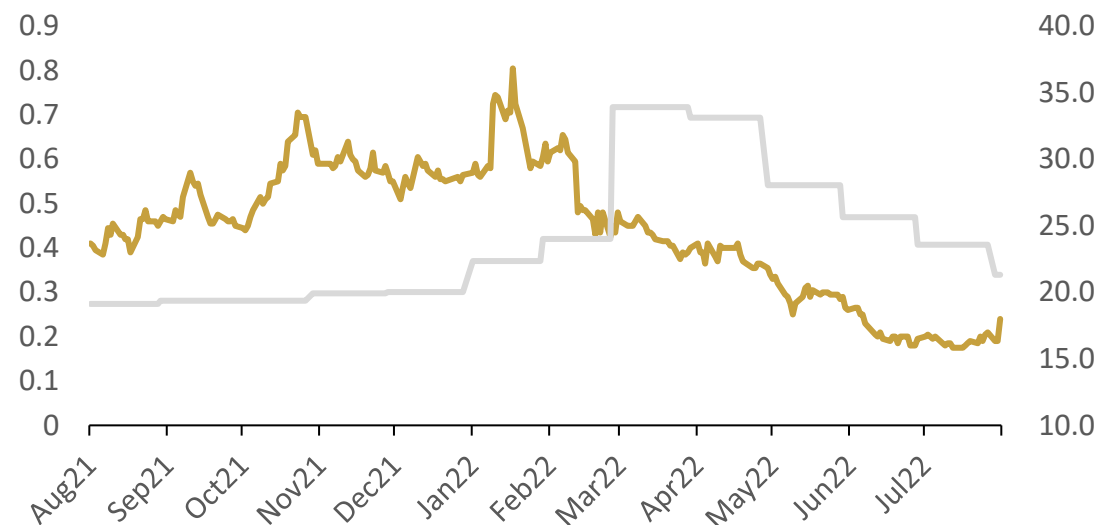
471.4M²

Auditor

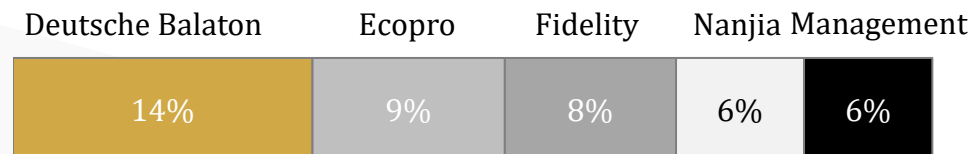
EY

BSX share price (\$/share)

Monthly LME Ni (\$k/t)



Largest shareholders (at 30 June 2022)



Note 1: As at 23 August 2022, Note 2: as at 30 June 2022

Corporate overview



Chairman



Hamish Halliday

Mr. Halliday is a Geologist with a Bachelor of Science and has over 20 years of corporate and technical experience in the mining industry. Mr. Halliday has founded and held executive and non-executive directorships with a number of successful listed exploration companies including Adamus Resources Ltd. He was CEO of Adamus from its inception through to successful completion of a feasibility study which is now in production.

MD & CEO



Scott Williamson

Mr. Williamson is a mining engineer with a Bachelor of Commerce degree from the West Australian School of Mines (WASM). Mr. Williamson has over 10 years' experience in the mining and finance sectors across a variety of technical and corporate roles, recently Investor Relations Manager at Resolute Mining Ltd and a senior Analyst at Hartley's.

Non-exec Director



Dr. Frank Bierlein

Dr Frank is a geologist with 30 years of technical and corporate experience, focusing on grass roots to mine-stage mineral exploration, target generation, project management and oversight, due diligence studies, mineral prospectivity analysis, metallogenic framework studies, and mineral resources market & investment analysis.

Non-exec Director



Allison Gaines

Ms. Gaines is a board advisor and Australian non-executive director with strong commercial skills and international experience. She has recently established her own board governance advisory firm after fourteen years with Gerard Daniels, a Perth headquartered international search and board consulting firm where she was recently global Chief Executive Officer, responsible for the Perth, Sydney, London and Houston offices.

Non-exec Director



Hoirim Jung

Mr. Jung has over 10 years financial management experience, specifically in financing and feasibility studies for new projects. He joined EcoPro in 2016 where his accomplishments include successfully dealing with the initial public offering of subsidiary EcoPro BM (KOSDAQ: 247540).

Vietnam

Open for business

1

Increasingly attractive FDI candidate

- FDI of \$15.8B in 2020 – increased from \$1.3B in 2000¹
- World Bank ease of doing business¹ (70); Indonesia (73), Brazil (124)
- Over 200 operating mines

2

Cost competitive

- Vietnam's labor costs are half of China's at US\$2.99 per hour²
- Regulated electricity pricing; USD 6.3 cents – USD 10.75 cents per kWh²
- One of the lowest cost countries for delivery of capital projects³

3

Leader in renewable energy

- National grid is 30 per cent hydro and 24 per cent solar²
- Higher exposure to hydroelectricity exists in Northern Vietnam
- Power source accounts for 27% of GHG in a typical EV

4

Ban Phuc is a brownfield project

- Asia Mineral Resources operated successfully between 2013 – 2016
- Put into care and maintenance given 2016 prices (\$9k/t)
- Attractive corporate tax incentives available to TKP

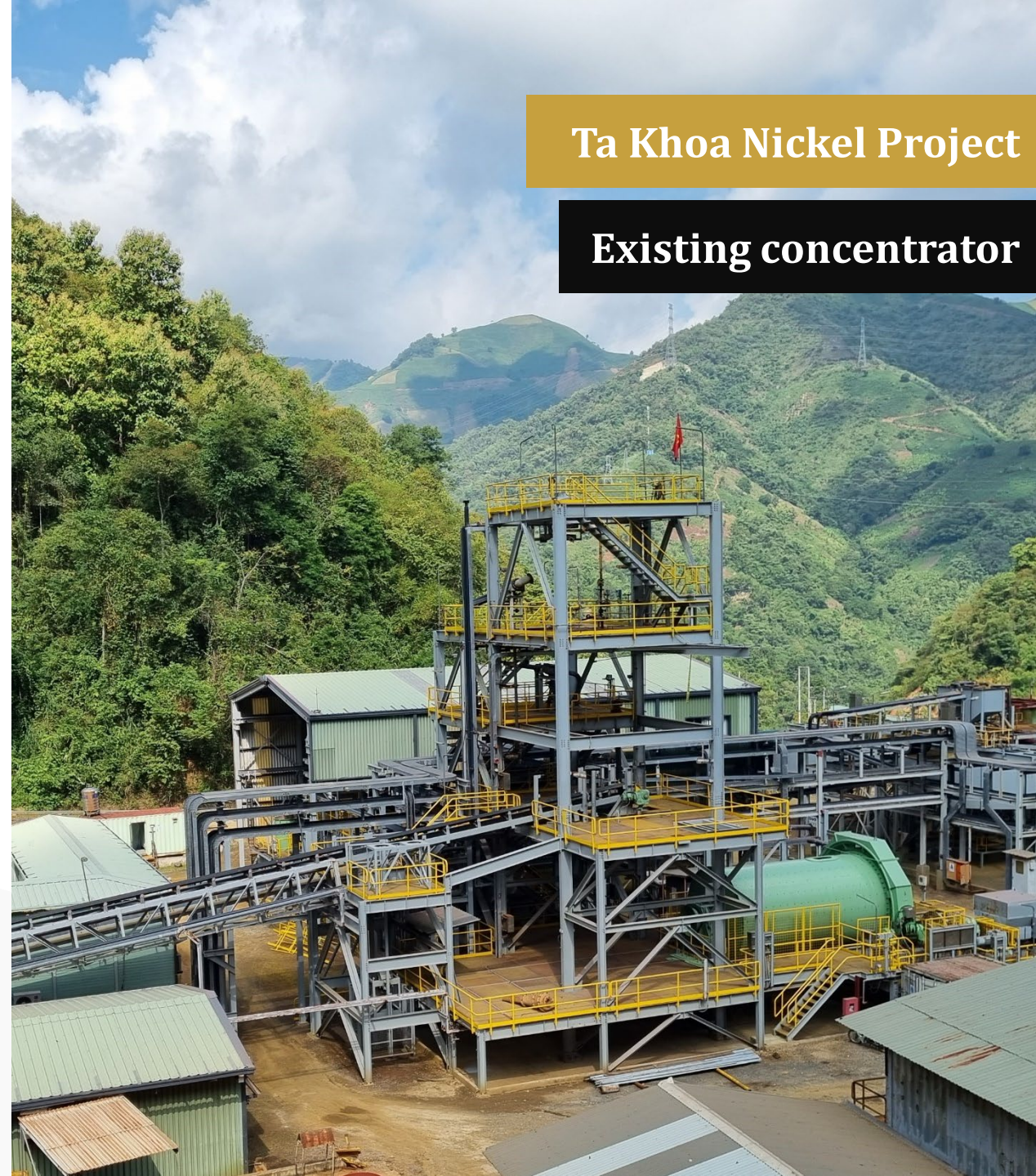
Note 1: World Bank (2022)

Note 2: US trade office (2022)

Note 3: Arcadis, International Construction Cost Index (2021)

Ta Khoa Nickel Project

Existing concentrator

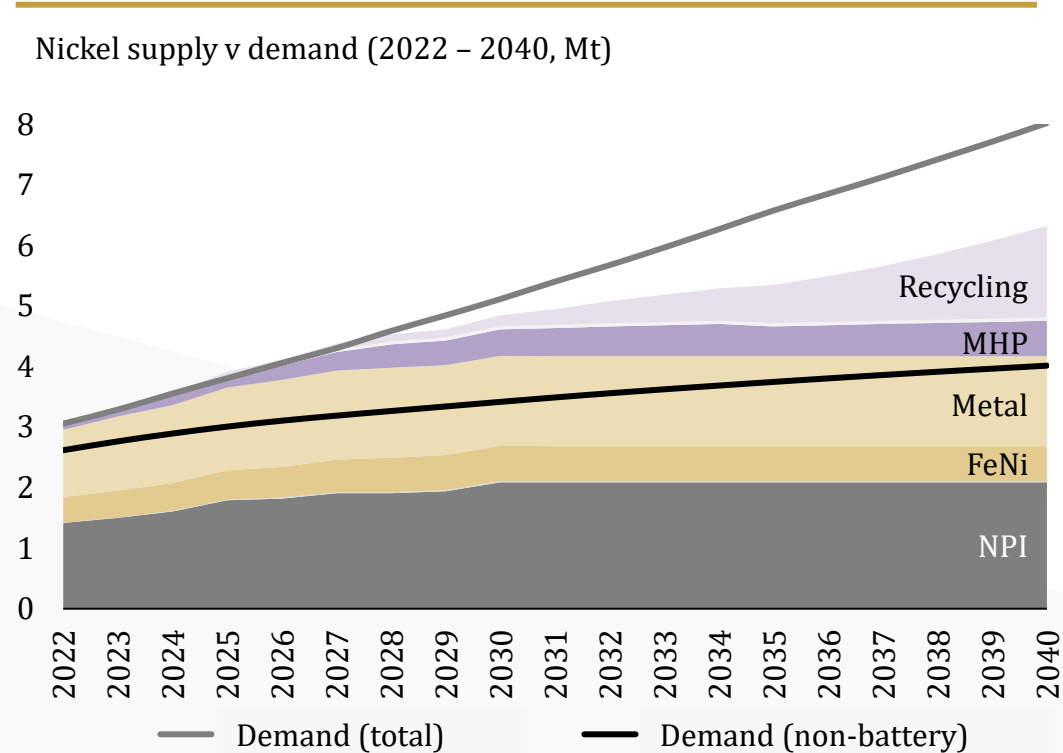


Nickel market outlook



Supply / demand outlook

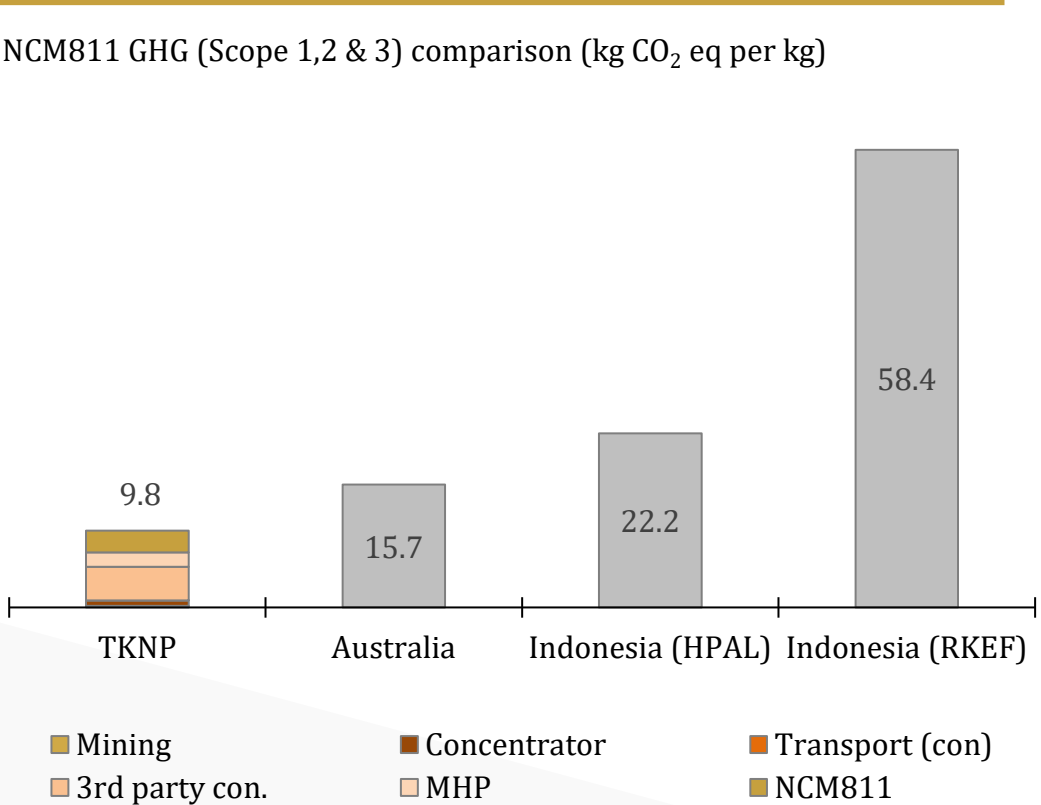
Deficit exacerbated for battery grade nickel



Source: Benchmark Minerals, Q1 2022

Life cycle analysis ('LCA') by supply source

Bifurcation of demand expected along ESG lines



Source: Minviro, September 2022

Project overview

DFS underway for integrated operation



485kt Ni

8Mtpa

400ktpa

>80ktpa

Mining

- **Open cut** for **DSS** coupled with **underground** for **MSV**
- **Low strip** (2.9:1.0, W:O)
- Regional exploration, equity interests and M&A to supplement
- Member of **Electric Mine Consortium**

Concentrator

- Supplement **existing 0.5Mtpa concentrator**
- Recoveries of >60% targeted
- **Pilot plant** operational on-site using available bulk sample & MSV feed
- Abundant **water** and **hydro power**

Refining

- **Hydromet flowsheet**
- Feedstock from TKP and **third-party feed**
- **Agnostic to feed** (3rd party con, MHP, matte and black mass)
- **Pilot plant** at ALS underway (nickel con to metal sulphate)

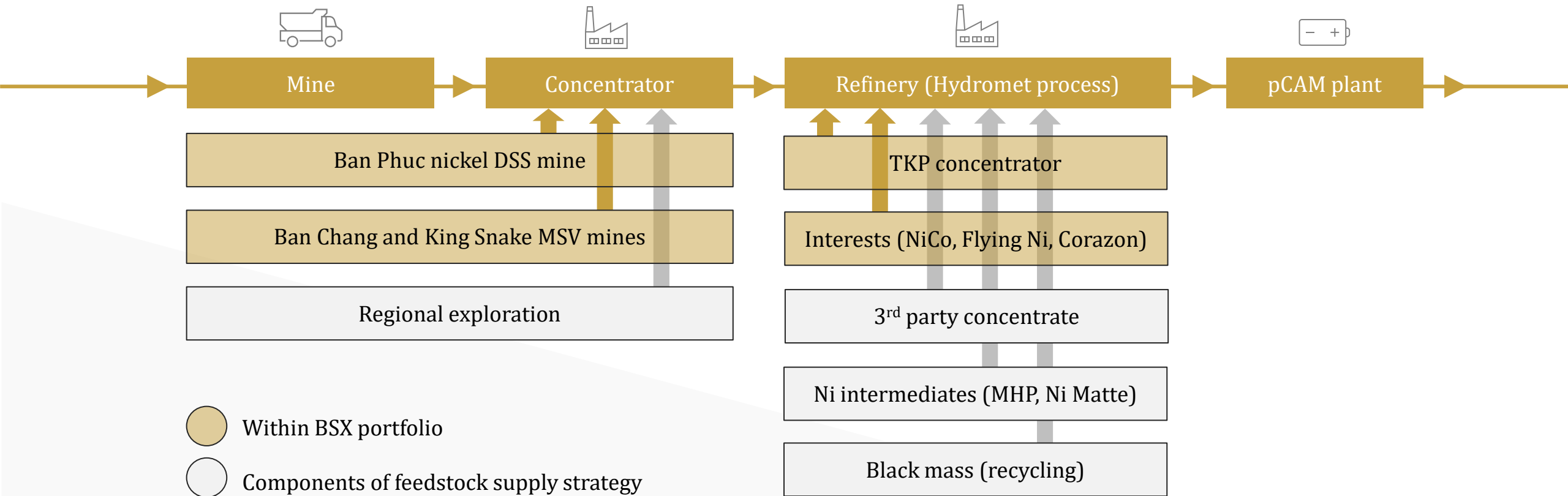
Precursor

- To be developed with **partner technology**
- Expectation to offtake domestically and abroad for **EV batteries**
- Trade-off underway concerning plant location options

Green Nickel™ – NCM811 from TKP will have a lower carbon intensity than majority of industry¹

Project overview

Refinery designed for multiple feed sources



Project overview

Development / DFS update (August 2022)



Mining

Concentrator

Refining

Precursor

1. Partnerships: engagement to reach a final JV structure, DFS objectives and investment contribution

2. Staged development: supported by Wood, evaluation of staged options (inc. refinery acceleration)

3. Infrastructure: optimisation of project footprint and impact on feed stock and product logistics

4. Prioritisation: reduction in spend while maintaining critical path items (test work, permitting, environmental)

Note 1: refer to ASX announcement 1 August 2022 *"Ta Khoa Project Development Update"*

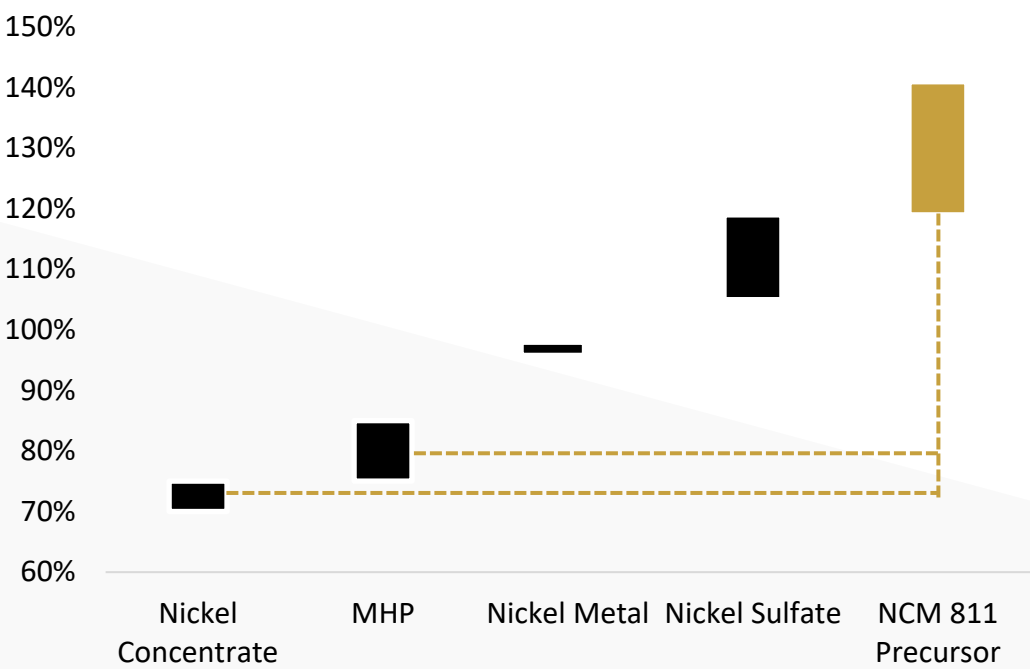
Project overview

Versatile business model



The TKR design will enable the production of multiple products, including NCM 811 which attracts a strong premium to metal prices.

Illustration of nickel product payability vs metal spot price



Blackstone will be able to process and upgrade a number of products, including nickel concentrate and mixed hydroxide precipitate (MHP)



Hydrometallurgical downstream process enables Blackstone to accept low-cost nickel concentrates undesirable to the traditional pyrometallurgical downstream process route



Blackstone will be able to blend different feedstocks to optimise operational and cost performances, and capture significant premiums on the sale of NCM precursor products

Source: SMM (Shanghai Metals Market), Benchmark Mineral Intelligence

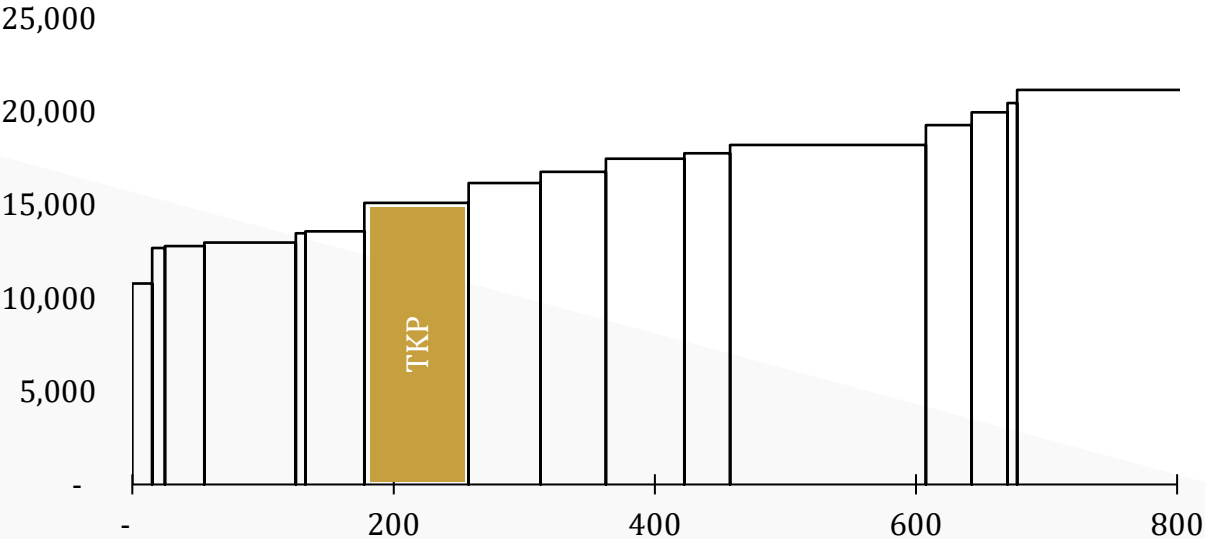
Project comparison

Leading cost and ESG positioning



Nickel (sulphate) cost curve
 First to second quartile positioning for TKP

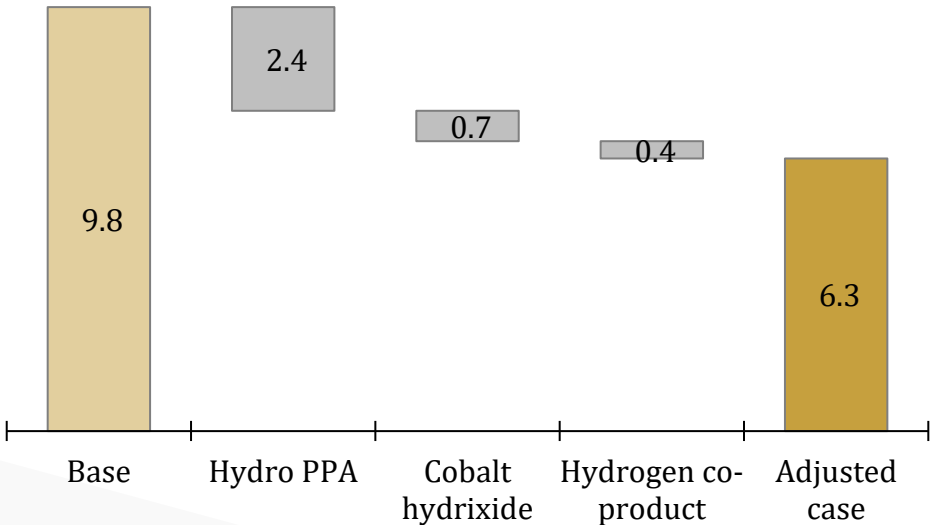
X axis: costs (all-in, inc. susex) (\$/t) 2022\$, y axis: supply (kt)



Source: Trafigura trading division (“Nickel Market Outlook July 2022”) and BSX

Life cycle analysis by area
 Opportunities to reduce LCA to 6.3kg of CO₂/t NCM 811

NCM811 GHG (kg CO₂ eq per kg of NCM811)

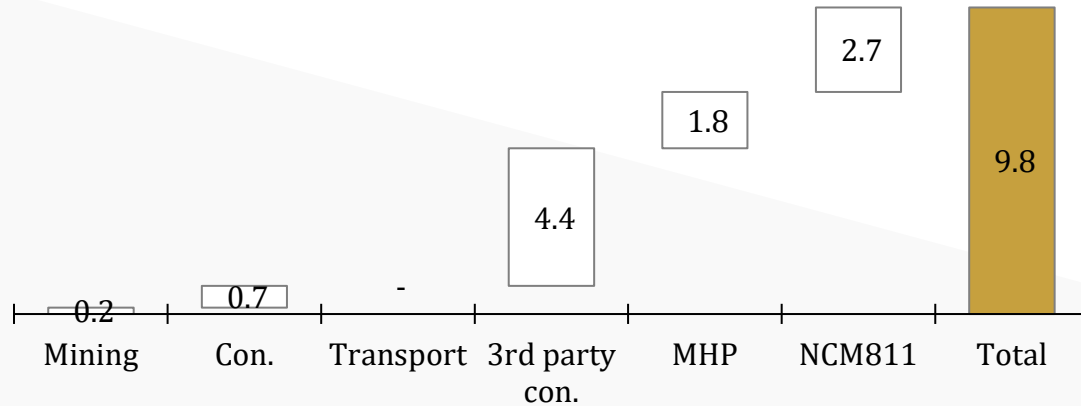


Source: Minviro, September 2022

Ta Khoa Project (TKP)

Lowest CO₂ pCAM flowsheet

- Life Cycle Assessment (LCA), conducted by Minviro
- Result of 9.8 kg CO₂ eq. per kg pCAM for TKP, which is substantially lower than existing production pathways¹ in terms of Global Warming Potential (GWP)
- Opportunities exist to reduce further to 6.3kg CO₂ eq. per kg pCAM
- Components of LCA / GWP of TKP (kg CO₂ eq. per kg pCAM)



Note 1: The GWP impact of TKP was compared to other nickel-bearing products produced from: Nickel sulphide ore in Australia using smelting and refining; HPAL processing of laterite ores in New Caledonia; and RKEF production processes produced from laterite resources in Indonesia
Source: Minviro, September 2022

Ta Khoa Nickel Project

Key LCA components

1

Energy source

- Hydroelectricity sourced from the grid

2

Flowsheet design

- Ni sulphide, hydromet flowsheet to produce NCM

3

Water

- 83% of water consumption recycled

Resource

Nickel sulphide district

1 Mineralised district

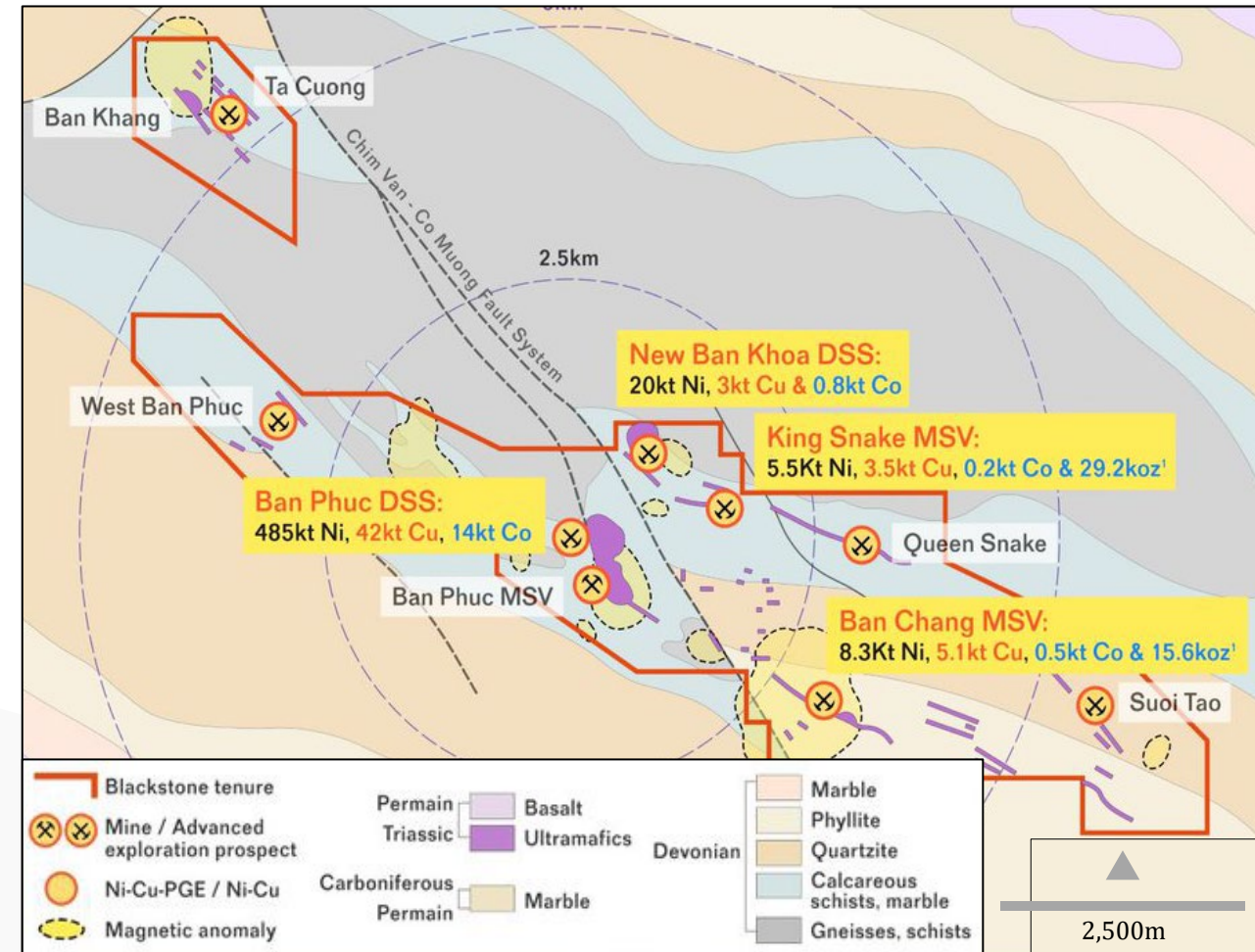
- Ban Phuc: 123 Mt at 0.43% NiEQ (523kt NiEQ¹)
- Ban Phuc: 102Mt at 0.44% NiEQ is indicated
- District: 130Mt at 0.44% NiEQ (571kt NiEQ¹)

2 Exploration targets

- Several targets within Blackstone tenure
- Exploration supported by Government partnership
- Exploration to recommence post DFS geotech drilling

3 Parallel mining of DSS and MSV

- Low life of mine strip ratio (2.9:1.0 , waste:ore)
- DSS located near surface, open pit depth of 470m
- Supplemented by MSV (King Snake, Ban Chang)



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

Resource comparison

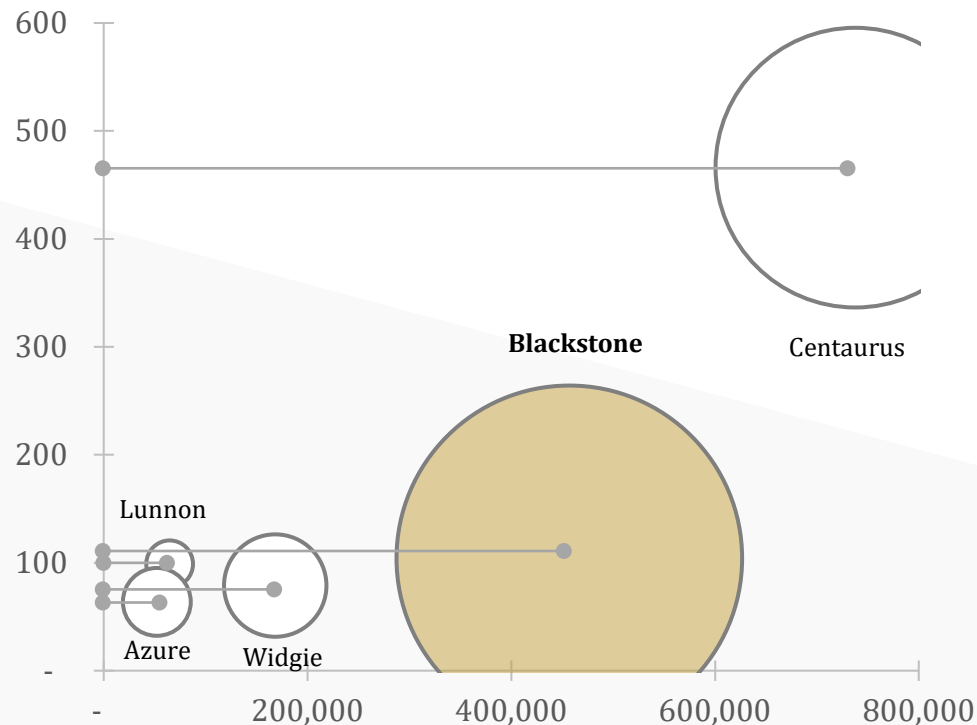
Nickel resource peer group



Select ASX listed nickel sulphide resources for (JORC compliant)

Nickel resource size v market capitalisation; by-products have not been included in resource or grade values

X axis: resource (contained Ni, t), Y axis: market cap (A\$M, 30/08/22), bubble size: ore (t)



Note 1: market capitalisation as at 30 August 2022

Owner	Indicated		Inferred		Total		Market cap ¹
	Mt	Ni %	Mt	Ni %	Mt	Ni %	
Centaurus	43	0.9%	37	0.9%	81	0.9%	466
Blackstone	102	0.4%	21	0.3%	123	0.4%	104
Lunnon	1	3.2%	1	2.5%	2	2.9%	99
Widgie Nickel Ltd	2	1.9%	9	1.5%	11	1.6%	79
Azure Minerals	4	1.2%	1	0.9%	5	1.1%	64

Sources (refers to releases by each company): [Centaurus] Mineral resource and ore reserve statement (accessed 22/08/2022), [Blackstone] Blackstone Completes PFS at Ta Khoa Nickel Project (ASX announcement 28 February 2022), [Lunnon] Mineral resource and ore reserve statement (accessed 30/08/2022), [Widgie] Corporate Presentation 2 August 2022, [Azure] Mineral resource and ore reserve statement (accessed 30/08/2022)



Vin Fast

Dinh Vu, Hai Phong

Northern Vietnam

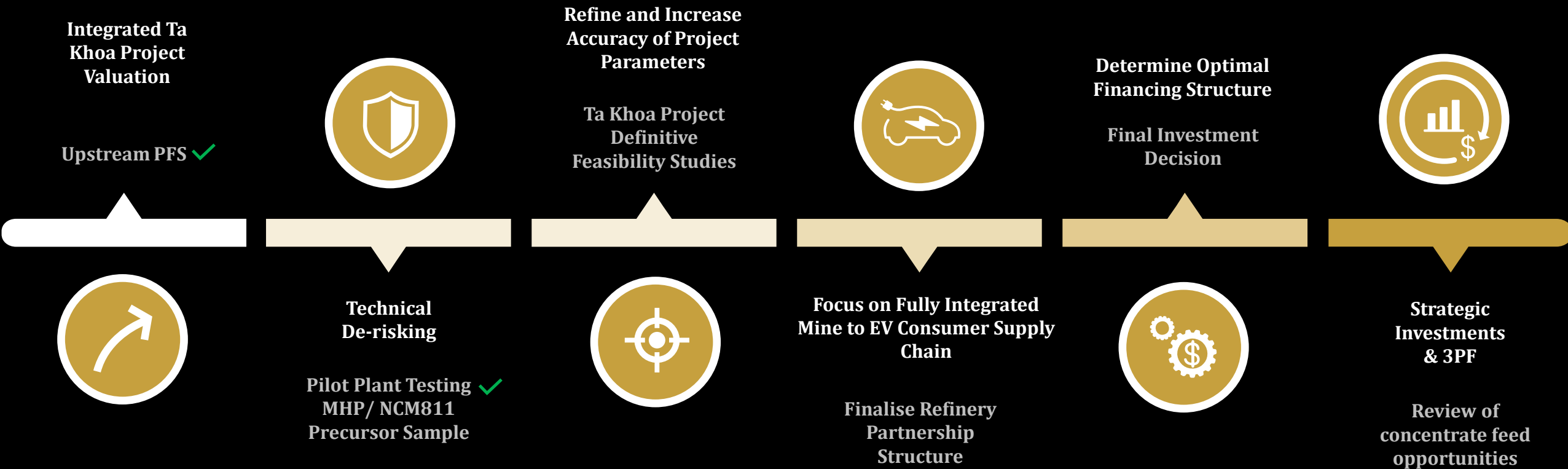
Vietnam and Vin Fast

Developing an EV hub



Domestic OEM	Market capitalisation
Vin Fast	\$32B
Battery cell subsidiary	% of domestic GDP
VinES	>1.5%
Key market	MoU signed with BSX
USA	May 2022

Next 12 months for Blackstone



Blackstone Minerals

Looking forward.
Mining green.

1

Resource

- 485kt nickel sulphide project
- Valuable exploration & equity interests

2

Integrated low-emission operation

- Mining and refining to pCAM
- Exceptional LCA (9.8kg CO₂/kg NCM811)

3

Partnerships

- Advanced OEM and technology partnerships
- Support debt and equity funding (60:40 targeted)

4

Vietnam

- Attractive FDI candidate (including tax incentives)
- Regional EV hub being developed



TKP

Site core shed



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