BLACKSTONE MINERALS

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BSX INVESTOR PRESENTATION

ASX:BSX

OCTOBER 2020

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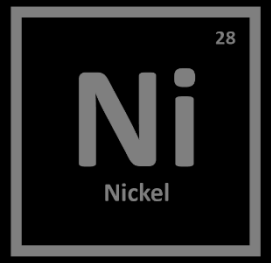
The Scoping Study at Ta Khoa, referred to in this announcement, has been undertaken to determine the potential to restart the Ta Khoa Nickel-Cu-PGE project and develop downstream processing infrastructure in Vietnam to produce a downstream nickel and cobalt product to supply Asia's growing lithium-ion battery industry. The Scoping Study is a preliminary technical and economic study of the potential viability of those projects based on low level technical and economic assessments (+/- 40% accuracy) that are not sufficient to support the estimation of Ore Reserves. Mining and processing rates of 2Mtpa, 4Mtpa and 6Mtpa have been examined within this Scoping Study. The 2Mtpa case was considered to be sub-optimum in terms of being able to delivery sufficient product to secure superior offtake terms.

Further evaluation work and appropriate studies are required before Blackstone is in a position to estimate any Ore Reserves or to provide any assurance of an economic development case.
The JORC-compliant Mineral Resource estimate forms the basis for the Scoping Study that is the subject of this announcement. Over the life of mine considered in the Scoping Study, 83% of the processed Mineral Resource originates from Indicated Mineral Resources and 17% from Inferred Mineral Resources; 76% of the processed Mineral Resource during the payback period will be from Indicated Mineral Resources. The viability of the development scenario envisaged in the Scoping 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.
This Scoping Study was completed to an overall +/- 40% accuracy using the key parameters and assumptions outlined elsewhere in this announcement. Due to the sensitivity of the project to operating costs the Company has decided to present the results as a range based on the operating cost estimate (OPEX) and OPEX +/- 10% as this is felt to be an appropriate treatment for the level of study. Assumptions also include assumptions about the availability of funding. While Blackstone considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by this study will be achieved. To achieve the range of outcomes indicated in the Scoping Study, further funding will be required in the order of US$314 million to construct the mine, process facilities and project infrastructure including upstream and downstream processing plants. Investors should note that there is no certainty that Blackstone will be able to raise that amount of funding when needed. It is also possible that such funding will only be available on terms that may be dilutive to or otherwise affect the value of Blackstone's existing shares.

It is also possible that Blackstone pursues other 'value realisation' strategies such as a sale or partial sale of its interest in the Project.
Blackstone concluded it has a reasonable basis for providing these forward-looking statements and believes it has reasonable basis to expect it will be able to fund development of the project. However, a number of factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of this study. The project development schedule assumes the completion of a Pre-Feasibility Study (PFS) by early 2021 and a DFS by late 2021. Development approvals and investment permits will be sought from the relevant Vietnamese authorities in early 2021. Delays in any one of these key activities could result in a delay to the commencement of construction (planned for early 2022). This could lead on to a delay to first production, planned for 2023. The Company's stakeholder and community engagement programs will reduce the risk of project delays. Please note these dates are indicative only.
It is anticipated that finance will be sourced through a combination of equity and debt instruments from existing shareholders, new equity investment and debt providers. In April this year, the Company completed a A$6.8 million investment from EcoPro Co Limited, the world's second largest nickel-rich cathode materials manufacturer and recently completed a further A$21 million institutional capital raising. The Board considers that the Company has sufficient cash on hand to undertake the next stage of planned work programs, including the completion of a Definitive Feasibility Study (DFS), continued metallurgical testing and the commencement of further technical studies.

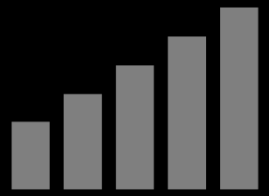
Cautionary Statement

SCOPING STUDY – KEY HIGHLIGHTS



12.7ktpa

Annual production of nickel over an 8.5 year mine life



US$3.3b

of gross revenue

US$1.2b

of net pre-tax cashflow

US$665m

pre-tax NPV[8]

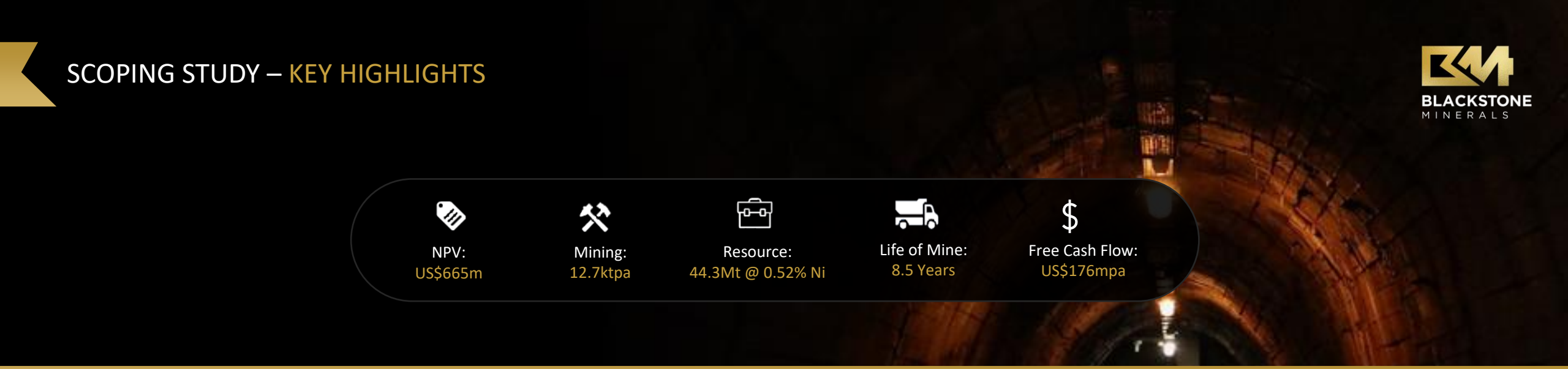
45%

IRR

2.5 year

payback period

SCOPING STUDY – KEY HIGHLIGHTS



NPV:	Mining:	Resource:	Life of Mine:	Free Cash Flow:
US$665m	12.7ktpa	44.3Mt @ 0.52% Ni	8.5 Years	US$176mpa

- Maiden Ban Phuc DSS indicated resource of 44.3Mt @ 0.52% Ni for **229kt Ni** and Inferred Mineral Resource of 14.3Mt @ 0.35% Ni for **50kt Ni;**
- Annual production of **12.7ktpa Ni over 8.5-year** project life;
- Gross Revenue of US$3.27 billion;
- Net pre-tax cashflow of US$1.2 billion;
- **Pre-tax cashflow of US$176mpa**;
- **Pre-tax $NPV_{8\%}$ of US$665m and 45% IRR**;
- **Capital Payback Period of 2.5 years**;
- Economically robust nickel sulfide project able to produce downstream nickel: cobalt: manganese (NCM) **Precursor products for the Lithium-ion battery industry**;
- Downstream processing utilises existing well-tested technology;
- Blackstone's downstream **NCM Precursor product significantly improves the payability of nickel**, from ~70-80% to ~125-135% of LME metal prices;
- Upside opportunities include staged capex, by-product credits (including copper, gold, platinum, palladium and rhodium), King Cobra Discovery Zone (KCZ), Ban Chang, Ta Cuong and 25 untested massive sulfide vein (MSV) targets.

SCOPING STUDY – PROJECT TEAM

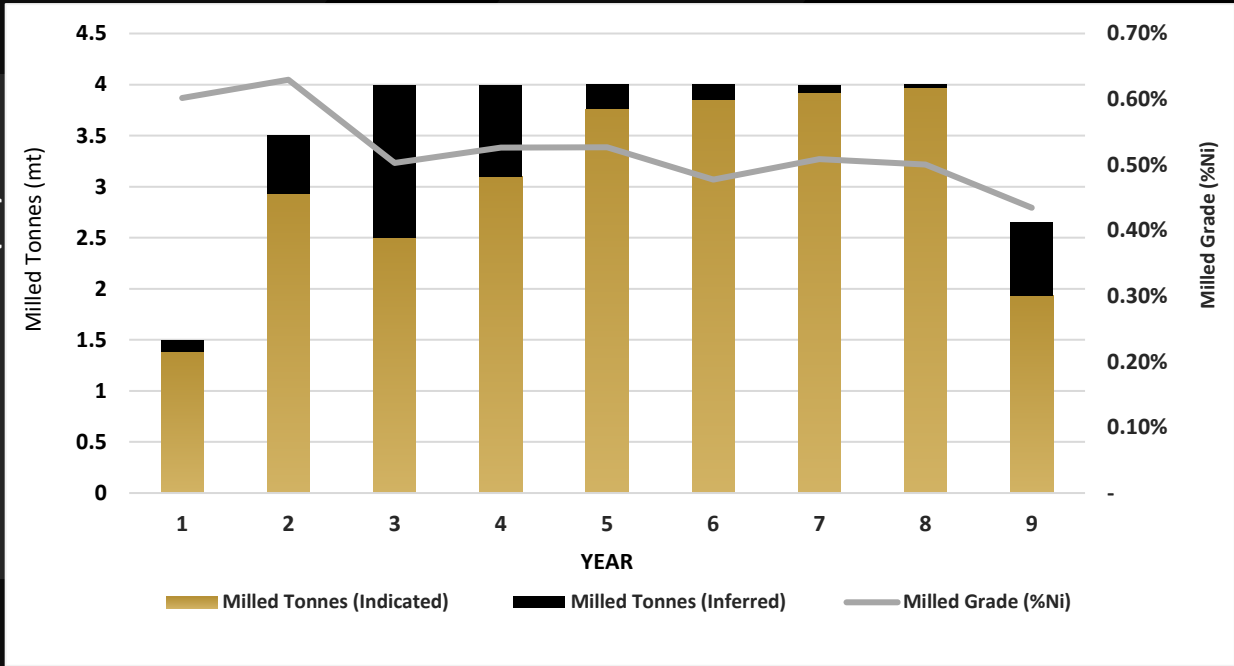
Contributor	Role
Dr Stuart Owen – Blackstone Minerals **Dr Dinh Huu Minh – Blackstone Minerals**	Geology
Scott Williamson – Blackstone Minerals	Mining
Steve Ennor – Blackstone Minerals	Mineral Processing
Ian McKenzie – Optimize Group	Independent Consulting & Review
BM Geological Services (BMGS)	Mineral Resource Modelling
Pells Sullivan Meynink (PSM)	Geotechnical Engineering
Mining Plus	Mining Engineering
Whittle Consulting	Integrated Strategic Planning
ConnectivIQ	Financial Modelling
Como Engineers	Upstream Processing
Simulus Engineers	Downstream Processing
ALS Metallurgy	Upstream Metallurgical Testwork
Simulus Laboratories	Downstream Metallurgical Testwork

SCOPING STUDY – OPERATIONAL OUTCOMES

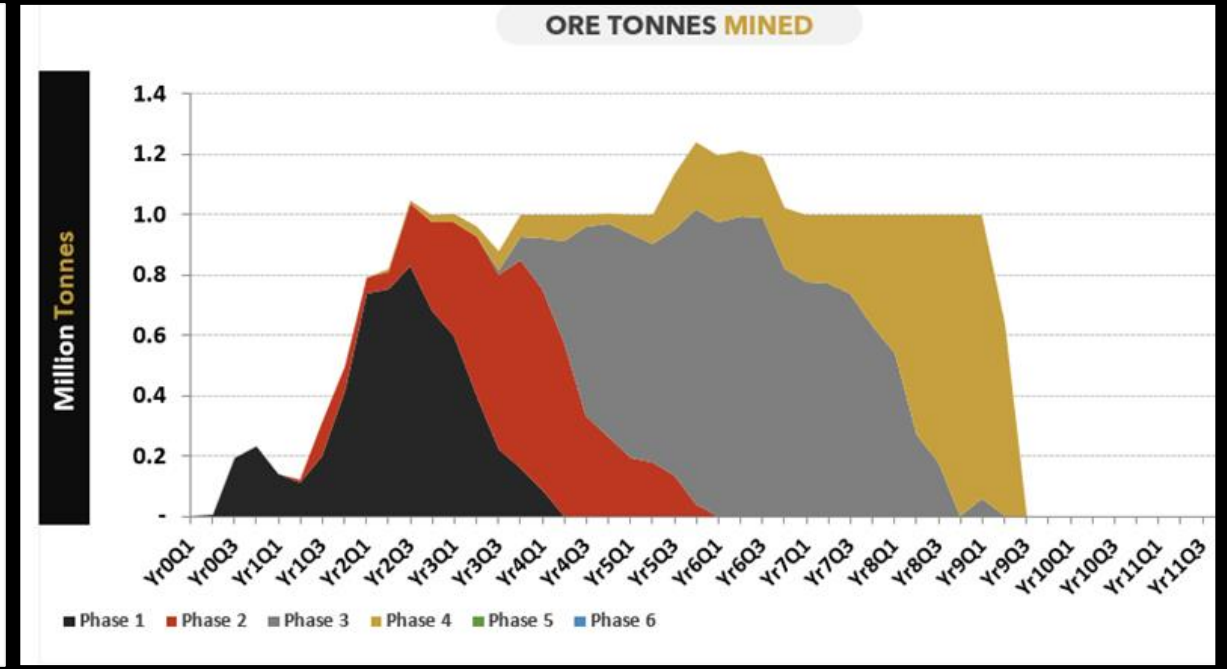
Key Operational Outcomes		
	4Mtpa Base Case	6 Mtpa
Ore Mined (Mt)	~31.6Mt	~44.5Mt
Head Grade (%)	~0.52%	~0.47%
Metallurgical Recovery (%)	~65.9%	~59.6%
Strip Ratio (Waste (t): ore (t))	~6.1:1	~4.1:1
Mining Cost (US$/t ore)	US$12.00 - 14.70	US$8.75 - 10.70
Processing Cost (US$/t ore)	US$10.70 - 13.00	US$9.85 - 12.05
Refining Cost (US$/t ore)	US$19.50 - 23.80	US$15.45 - 18.85
Project Life	~8.5 years	~8.25 years
Nickel Production	~108kt	~124kt
Annual Nickel Production	~12.7ktpa	~15ktpa
NCM Production	~213kt	~245kt
Annual NCM Production	~25ktpa	~29.7ktpa

SCOPING STUDY – OPERATIONAL OUTCOMES

MILLED TONNES (Mt)



Milled Tonnes & Grade

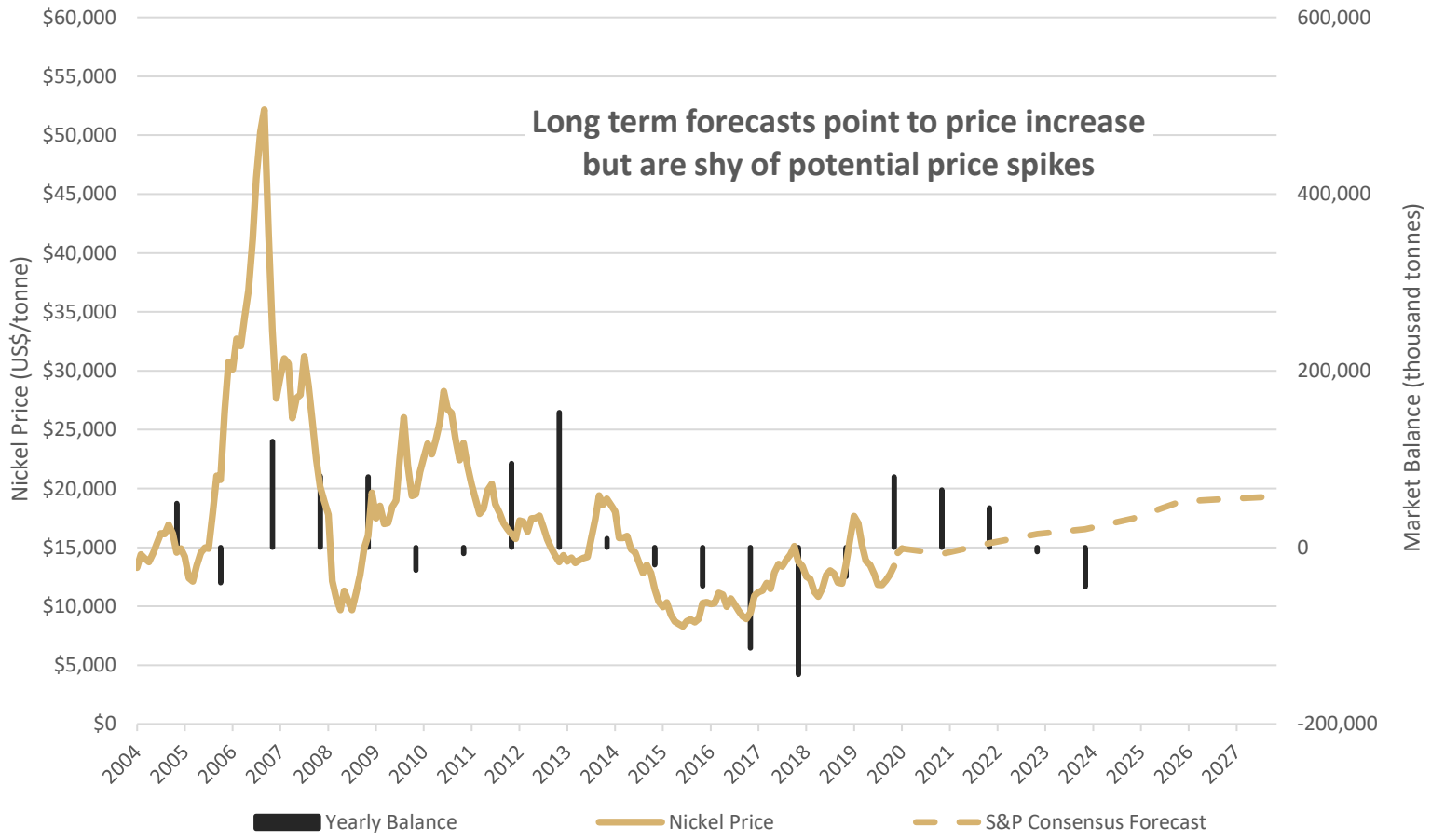


Ore Tonnes mined - Stages 1 to 4

SCOPING STUDY – FINANCIAL OUTCOMES

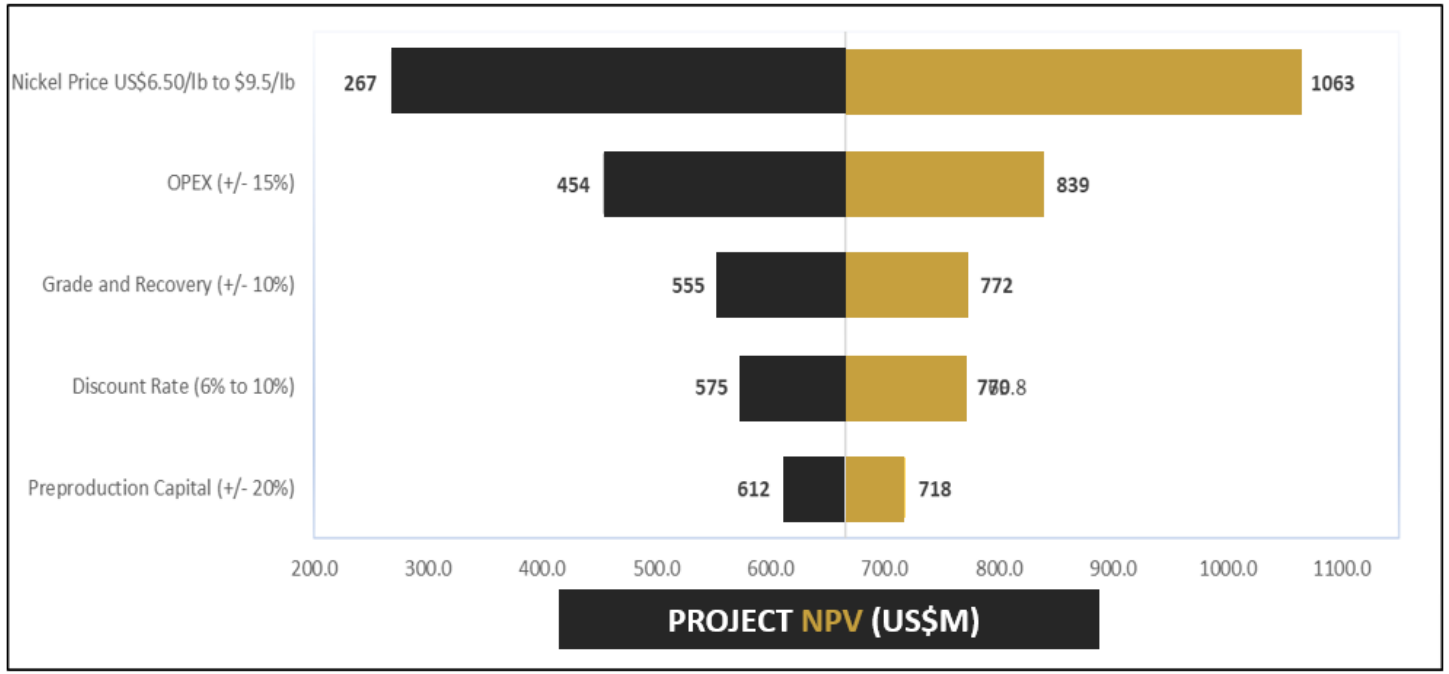
Key Financial Outcomes		
	4Mtpa Base Case	6 Mtpa
Pre-Production Capital Cost (US$m)	US$314	US$356
Precursor NCM Price (US$/lb NCM)	US$6.96	US$6.96
C1 Cash Costs (US$/lb NCM)	US$3.00 - 3.70	US$3.00 - 3.60
All-in Sustaining Costs (US$/lb NCM)	US$3.40 - 4.10	US$3.30 - 4.00
Gross Revenue (US$mpa)	US$350 - 430	US$410 - 500
Pre-Tax Cashflow (US$mpa)	US$155 - 210	US$200 - 255
Pre-Tax NPV (US$m)	US$550 – 780	US$645 - 907
IRR (%)	38 – 50	36 – 49
Capital Payback Period (Years)	~2.5 years	~2.5 years

LONG TERM SUPPLY & DEMAND PRICE FORECAST



Source: INSG, LME, S&P Global, Terra Studio

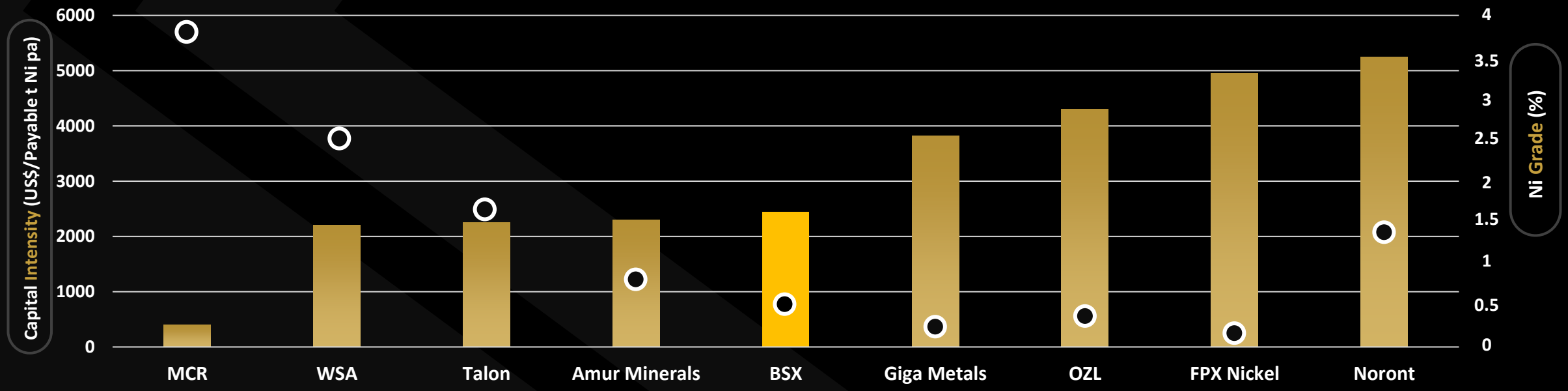
SCOPING STUDY – SENSITIVITY ANALYSIS – KEY DRIVERS



		Nickel Price (US$/lb)						
	NPV (US$m)	6.5	7.0	7.5	8.0	8.5	9.0	9.5
Discount Rate	6%	330	476	623	770	917	1,063	1,210
	7%	297	437	576	**716**	855	994	1,134
	8%	267	400	**532**	**665**	**798**	930	1,063
	9%	240	366	492	**618**	744	870	997
	10%	214	334	454	575	695	815	935

SCOPING STUDY – GLOBAL NICKEL SULFIDE PROJECT PEER COMPARISON

Project	Mincor	Western Areas	Talon	Amur Minerals	Blackstone	Giga Metals	Oz Minerals	FPX Nickel	Noront
Nickel Price Assumptions (US$/lb)	7.14	7.50	8.00	8.00	8.00	8.50	7.60	9.39	8.22
Concentrator	✓ (BHP)	✓	✗	✗	✓	✗	✗	✗	✗
Country	Australia	Australia	USA	Russia	Vietnam	Canada	Australia	Canada	Canada
Mining	Underground	Underground	Underground	Open Pit	Open Pit	Open Pit	Open Pit	Open Pit	Underground



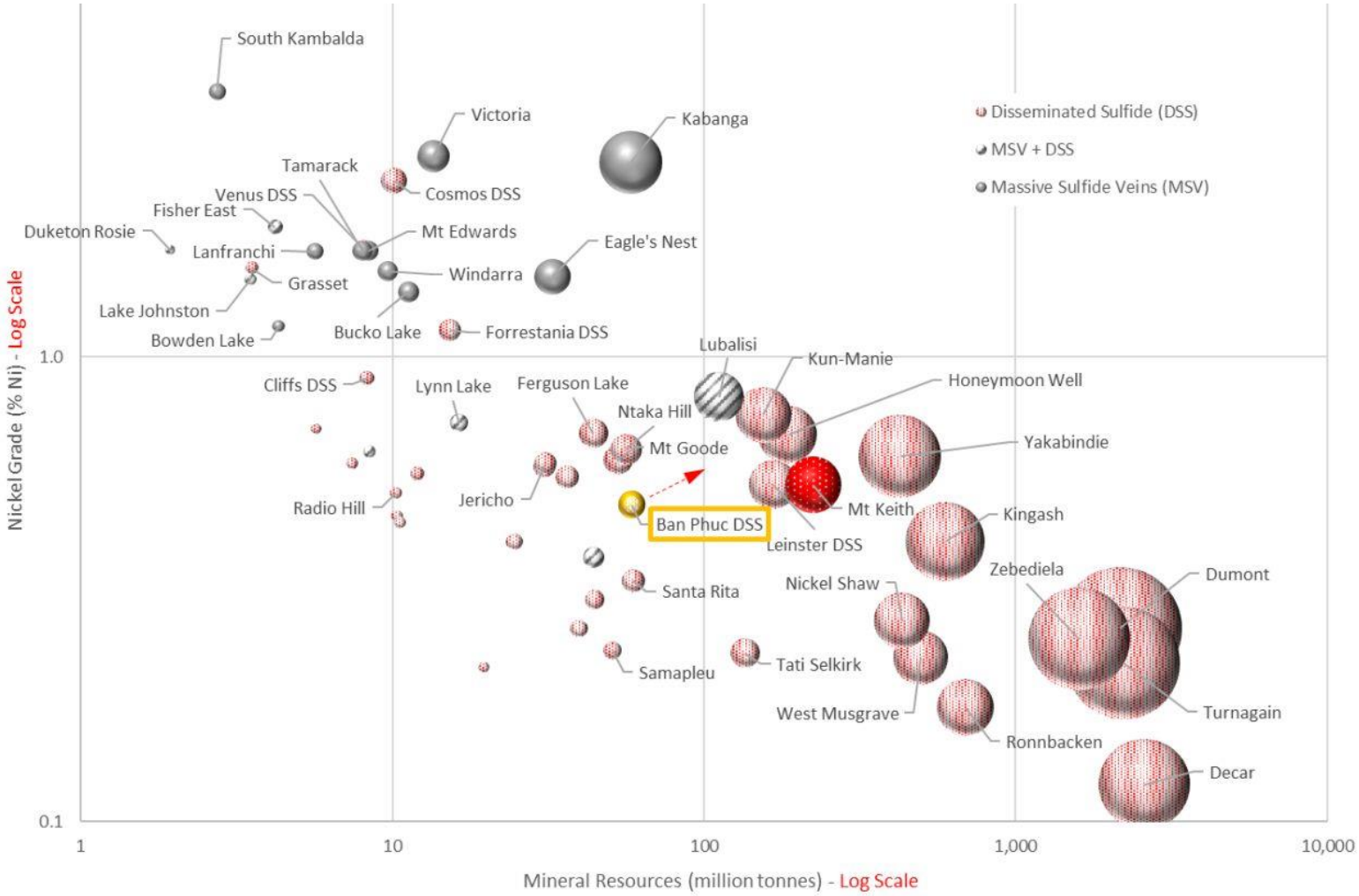
Source: Company Announcements, Talon Metals

MINERAL RESOURCES

Lower cut off Ni%	Indicated Resources											
	Mt	Ni %	Cu %	Co %	Pd g/t	Pt g/t	S %	Ni t	Cu t	Co t	Pd oz	Pt oz
0.3	**44**	**0.52**	**0.06**	**0.01**	**0.11**	**0.09**	**0.45**	**230,000**	**27,000**	**5,800**	**160,000**	**130,000**
0.4	33	0.57	0.07	0.01	0.12	0.1	0.5	190,000	23,000	4,200	130,000	100,000
0.5	19	0.67	0.09	0.01	0.14	0.11	0.58	130,000	16,000	2,600	83,000	67,000
0.6	9.8	0.78	0.11	0.02	0.15	0.12	0.66	77,000	11,000	1,500	47,000	38,000
0.7	5.4	0.89	0.13	0.02	0.16	0.13	0.75	48,000	7,200	860	27,000	22,000
0.8	3.2	1	0.15	0.02	0.16	0.13	0.81	32,000	4,700	540	17,000	14,000
0.9	1.9	1.09	0.16	0.02	0.17	0.14	0.86	21,000	3,100	350	11,000	8,700
1	1.2	1.19	0.17	0.02	0.18	0.15	0.9	14,000	2,100	230	7,000	5,700

Lower cut off Ni%	Inferred Resources											
	Mt	Ni %	Cu %	Co %	Pd g/t	Pt g/t	S %	Ni t	Cu t	Co t	Pd oz	Pt oz
0.3	**14**	**0.35**	**0.01**	**0.01**	**0.03**	**0.03**	**0.13**	**51,000**	**1,600**	**1,100**	**12,000**	**15,000**
0.4	1.1	0.45	0.03	0.01	0.04	0.04	0.24	4,900	310	100	1,300	1,300
0.5	0	0.58	0.07	0.01	0.06	0.05	0.37	760	90	10	230	210
0.6	0	0.67	0.1	0.01	0.06	0.05	0.48	290	40	10	80	70
0.7	0	0.83	0.16	0.02	0.06	0.05	0.73	49	10	-	10	10
0.8	0	0.86	0.17	0.02	0.07	0.05	0.78	38	10	-	10	10
0.9	0	0	0	0	0	0	0	-	-	-	-	-

MINERAL RESOURCE – UNDEVELOPED NICKEL SULFIDE PROJECTS

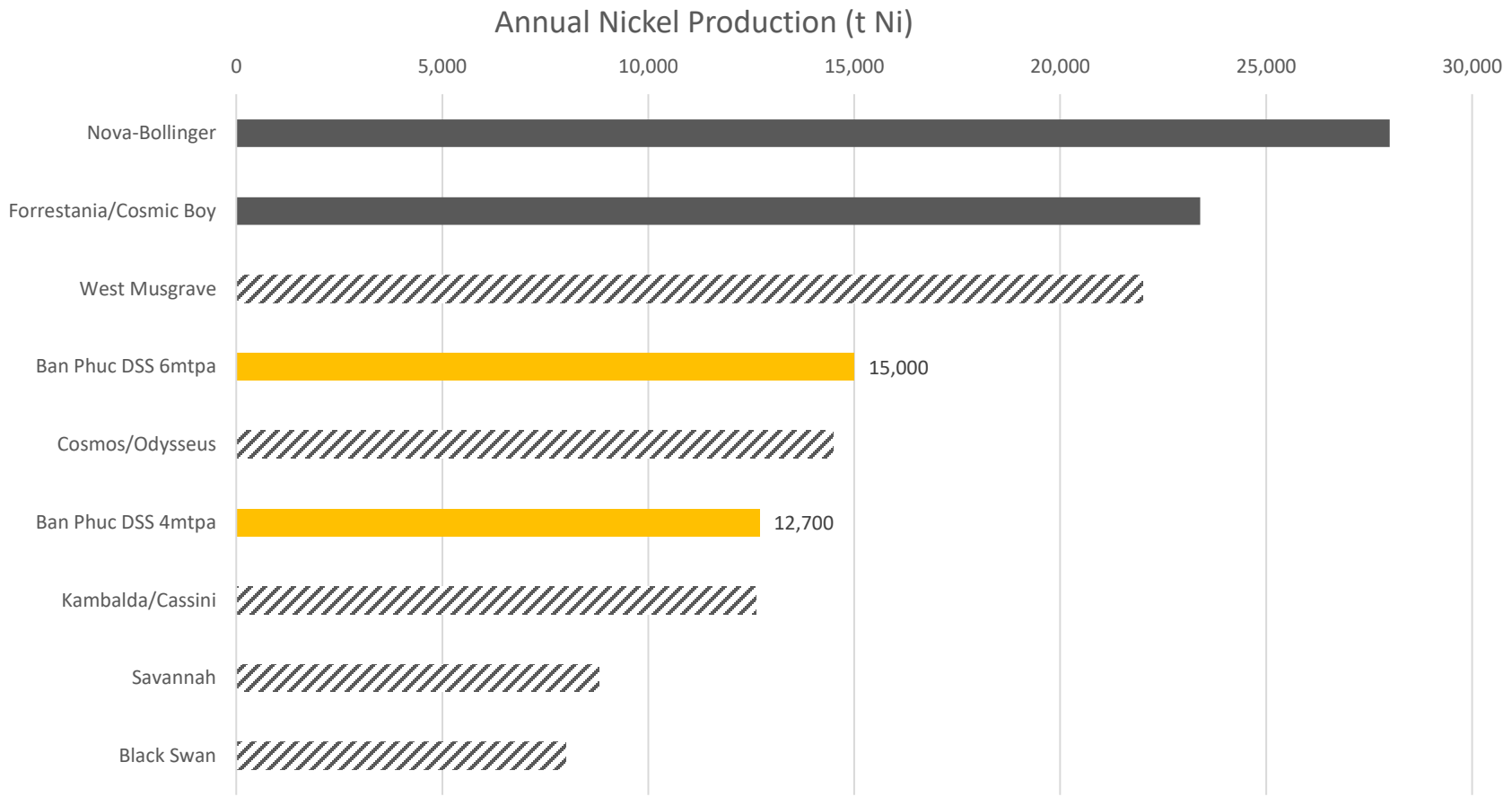


Source: Company announcements, S&P Global, Terra Studio. Mt Keith mine added for comparison purposes

MINERAL RESOURCE – ORE RESERVES NICKEL MINES AND PROJECTS

Source: Terra Studio

ASX LISTED NICKEL SULFIDE PEERS FORECAST ANNUAL PRODUCTION



Source: Company announcements, Terra Studio. Nova: FY21 guidance. Forrestania: FY20 production

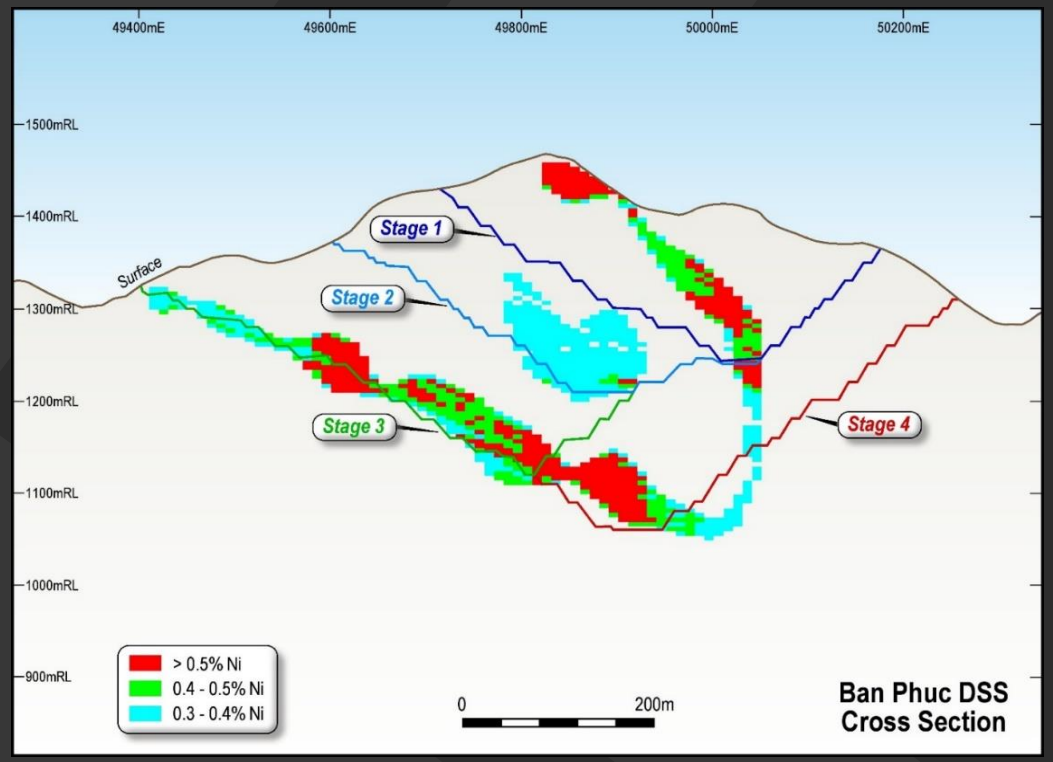
SCOPING STUDY – ASX LISTED PEER COMPARISON

Company Code	Blackstone BSX	Poseidon POS	Centaurus CTM	Panoramic PAN	Mincor MCR
Strategic Partner	✓	✗	✗	✗	✗
Downstream	✓	✗	✗	✗	✗
Resource	✓	✓	✓	✓	✓
Study	✓	✓	✗	✓	✓
EV/Resource	0.18	0.17	0.15	0.32	0.60
Market Cap	$151m	$169m	$209m	$236m	$377m
EV	$123m	$154m	$182m	$205m	$276m

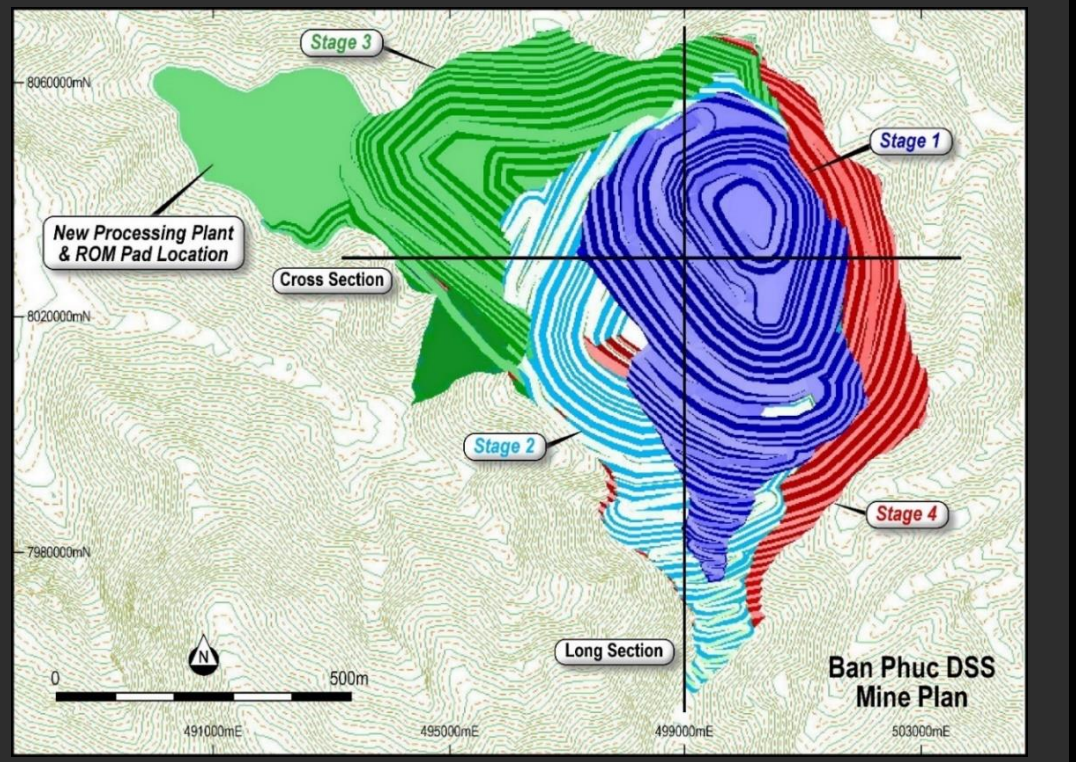
TA KHOA PROJECT LOCATION AND INFRASTRUCTURE

Son La Hydropower Plant - a renewable energy source for the Ta Khoa Project

SCOPING STUDY – OPEN PIT MINE DESIGN

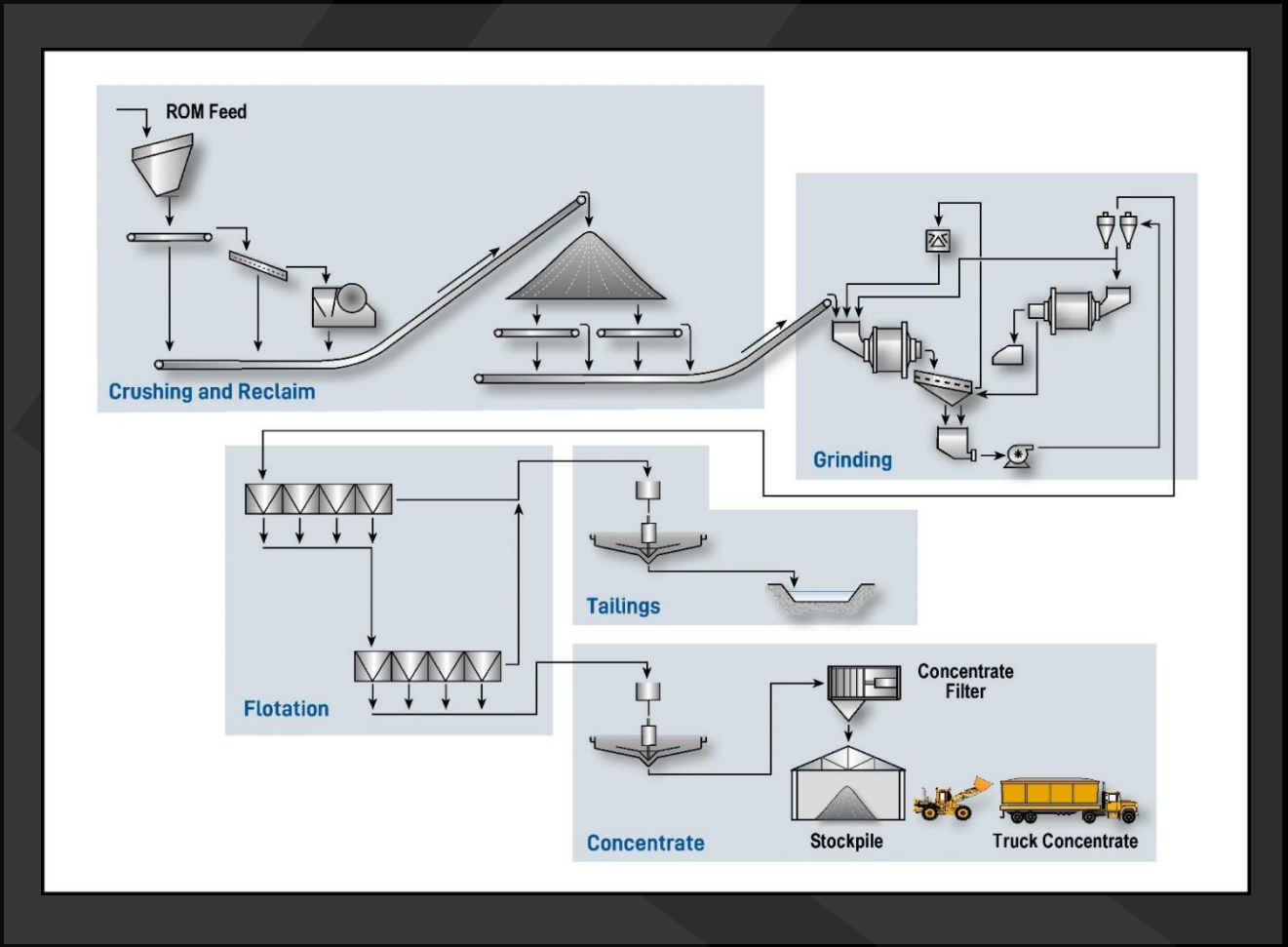


Ban Phuc DSS Cross Section with Open Pit Stages 1 to 4



Ban Phuc DSS Plan View Stages 1 to 4

SCOPING STUDY – UPSTREAM PROCESSING



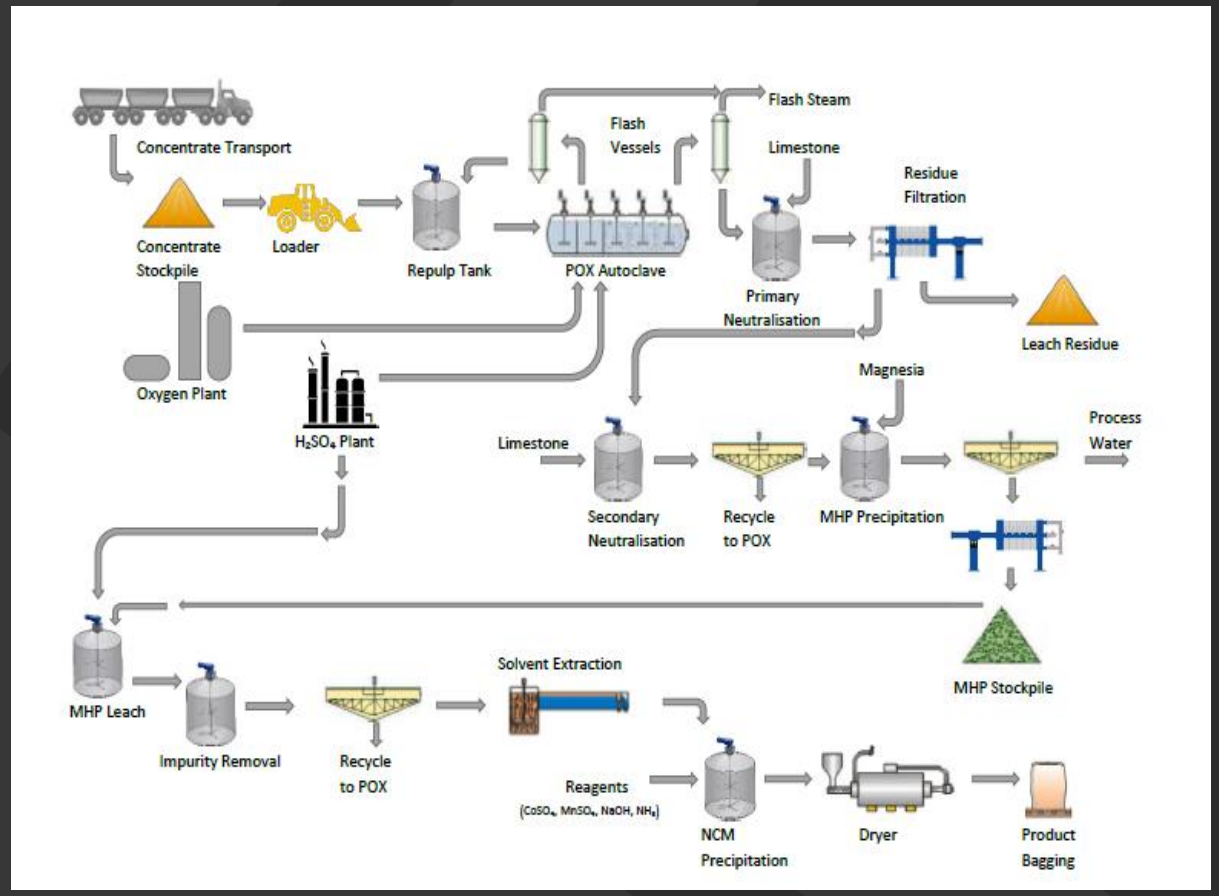
Process Flow Diagram for Upstream Processing

01 Process plant will produce nickel concentrate targeting optimum metal recoveries at the concentrator, suited to processing at the downstream process facility.

02 Flotation circuit consists of a rougher/scavenger circuit followed by a cleaner flotation circuit.

03 Mineral concentrate is transported to a downstream processing facility via road transport to be converted to final product.

SCOPING STUDY – DOWNSTREAM PROCESSING



Process Flow Diagram for Downstream Processing

Develop an integrated downstream processing facility to supply Precursor products to the emerging Lithium-ion battery market

Technology associated with the production of NCM precursor from MHP is well-tested.

BENEFITS:

- Significantly improve payability of the product, from ~70-80% to ~125-135% of LME metal prices;
- Eliminate or substantially reduce export tariffs on the product;
- Maximise product margin by reducing transport and rehandling costs, as well as by taking; advantage of competitive hydro-power and labour rates;
- Provide increased employment in Son La, particularly amongst minority groups;
- Allow the product to be delivered directly to the battery supply chain in an environmentally friendly manner;

UPSIDE OPPORTUNITIES – STAGED CAPEX AND BY PRODUCTS

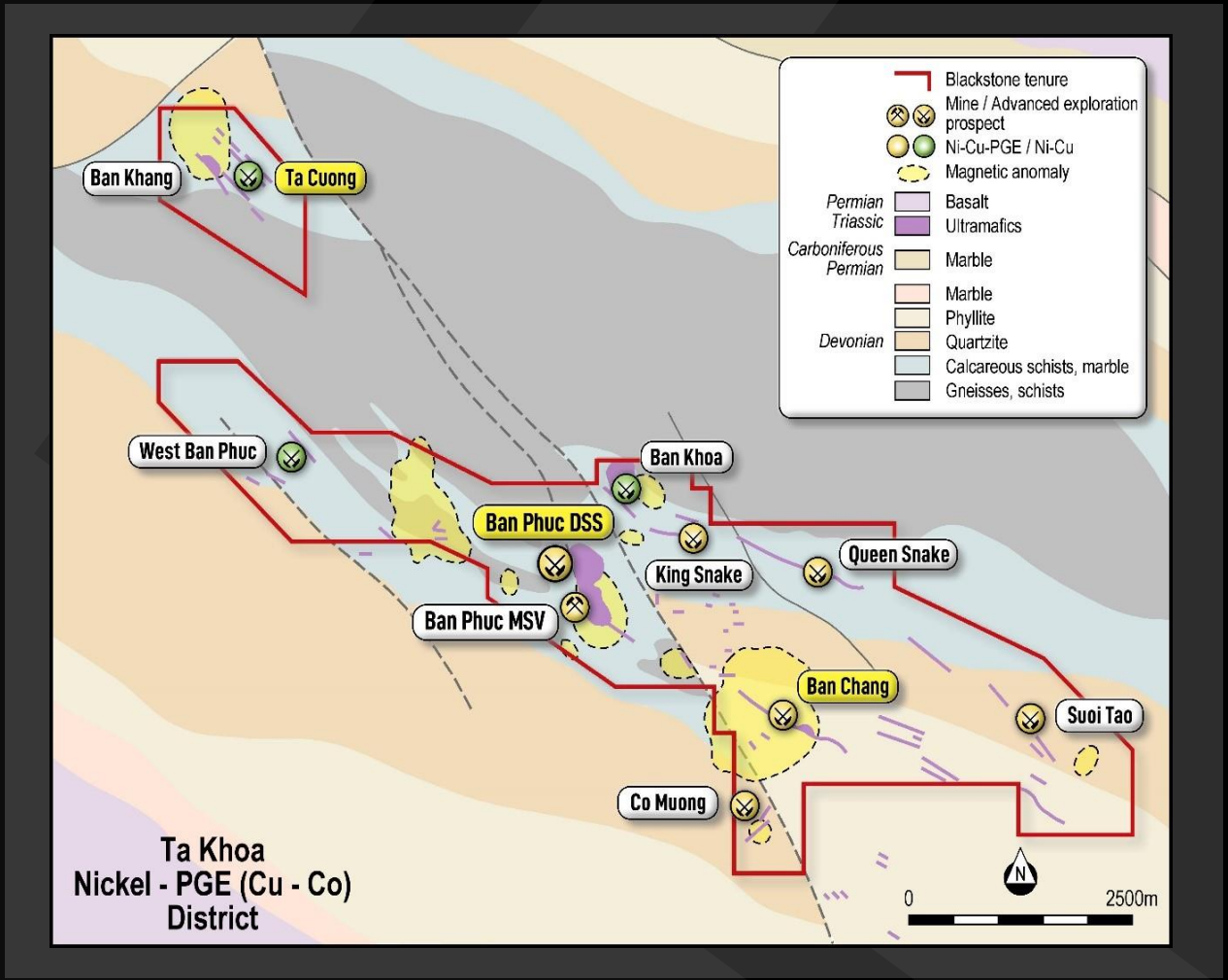
01 **Staged Capex**

- Immediate construction of 4-6Mtpa treatment facility to process ore mined at the large tonnage, Ban Phuc DSS orebody considered
- Project also features an established and well-maintained 450ktpa concentrator and multiple known high grade MSV prospects.
- Potential to defer construction and associated capex of the 4-6Mtpa plant by initially restarting the existing concentrator to treat high grade MSV ore.
- Doing so would improve the overall project NPV, as the initial capex requirement will be significantly reduced and may be funded through future cash flow

02 **By Product Credits**

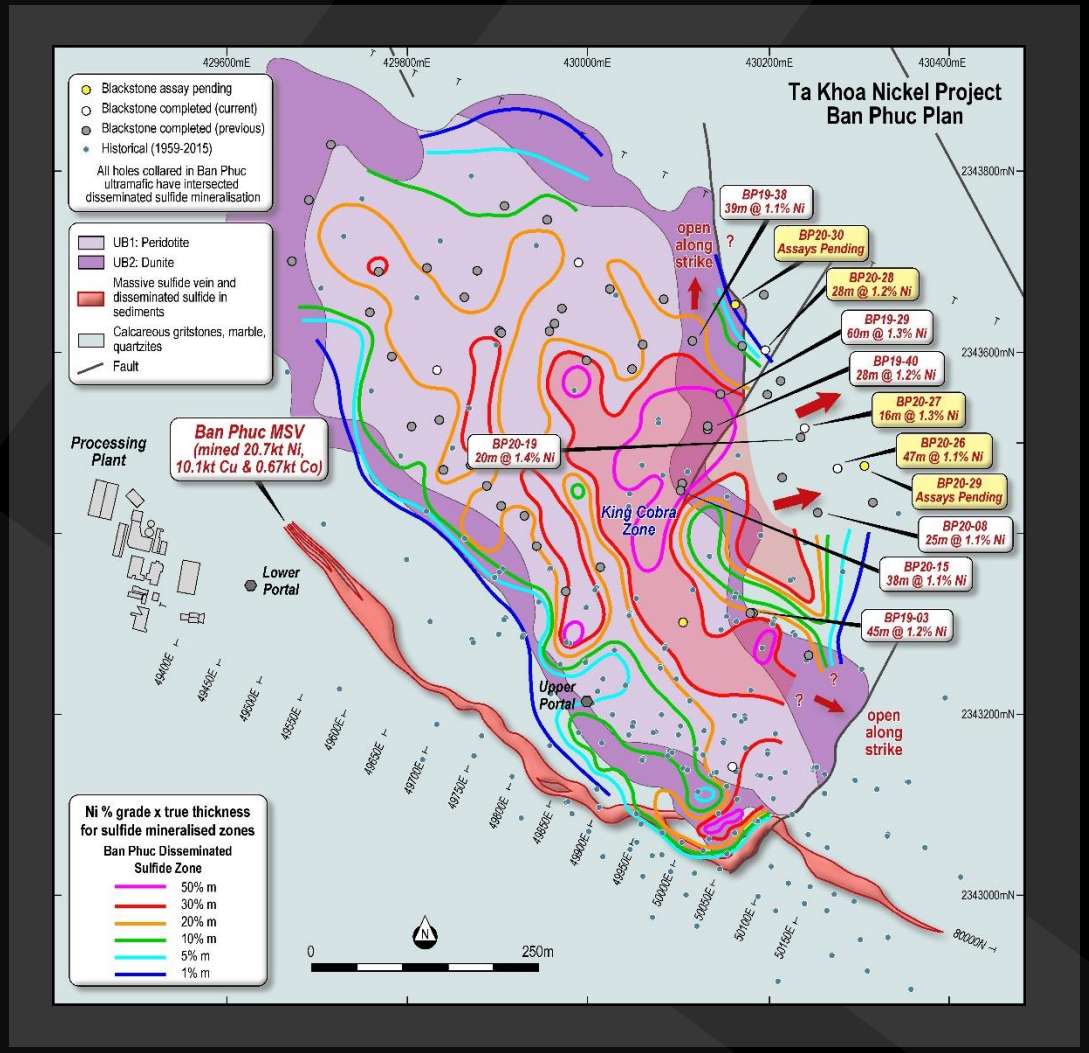
- By-product minerals (including copper, gold, platinum, palladium and rhodium) that exist within the Ban Phuc DSS orebody can be recovered through flotation and processed within the downstream refinery
- Additional processing infrastructure to allow the downstream processing to produce secondary saleable products to generate by-product credits is considered

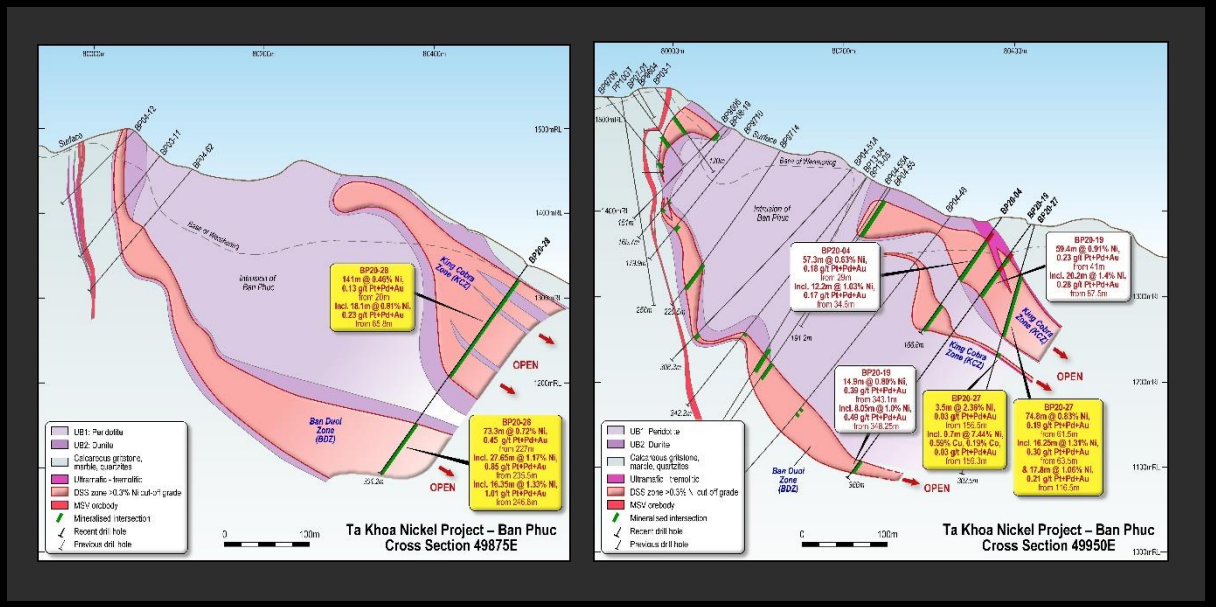
UPSIDE OPPORTUNITIES – TA KHOA NICKEL – PGE (Cu-Co) SULFIDE DISTRICT



- District scale Nickel PGE (Cu Co) sulfide project
- Over 25 advanced stage massive sulfide vein (MSV) targets and a number of large bulk-tonnage disseminated sulfide (DSS) prospects
- Blackstone initial focus on Ban Phuc disseminated, potentially bulk-mineable deposit
- Drilling has commenced at Ban Chang with massive sulfide intersected over an initial 1.2km of strike length within a 1.2km long EM target zone
- Prioritising targets within a 5km "processing radius" of Ban Phuc 450ktpa concentrator
- Systematically testing targets with in-house modern geophysics and company-owned drill rigs
- Geophysics crew has commenced on recently identified Ta Cuong prospect associated with the Ban Khang ultramafic intrusion which is analogous to the flagship Ban Phuc orebody

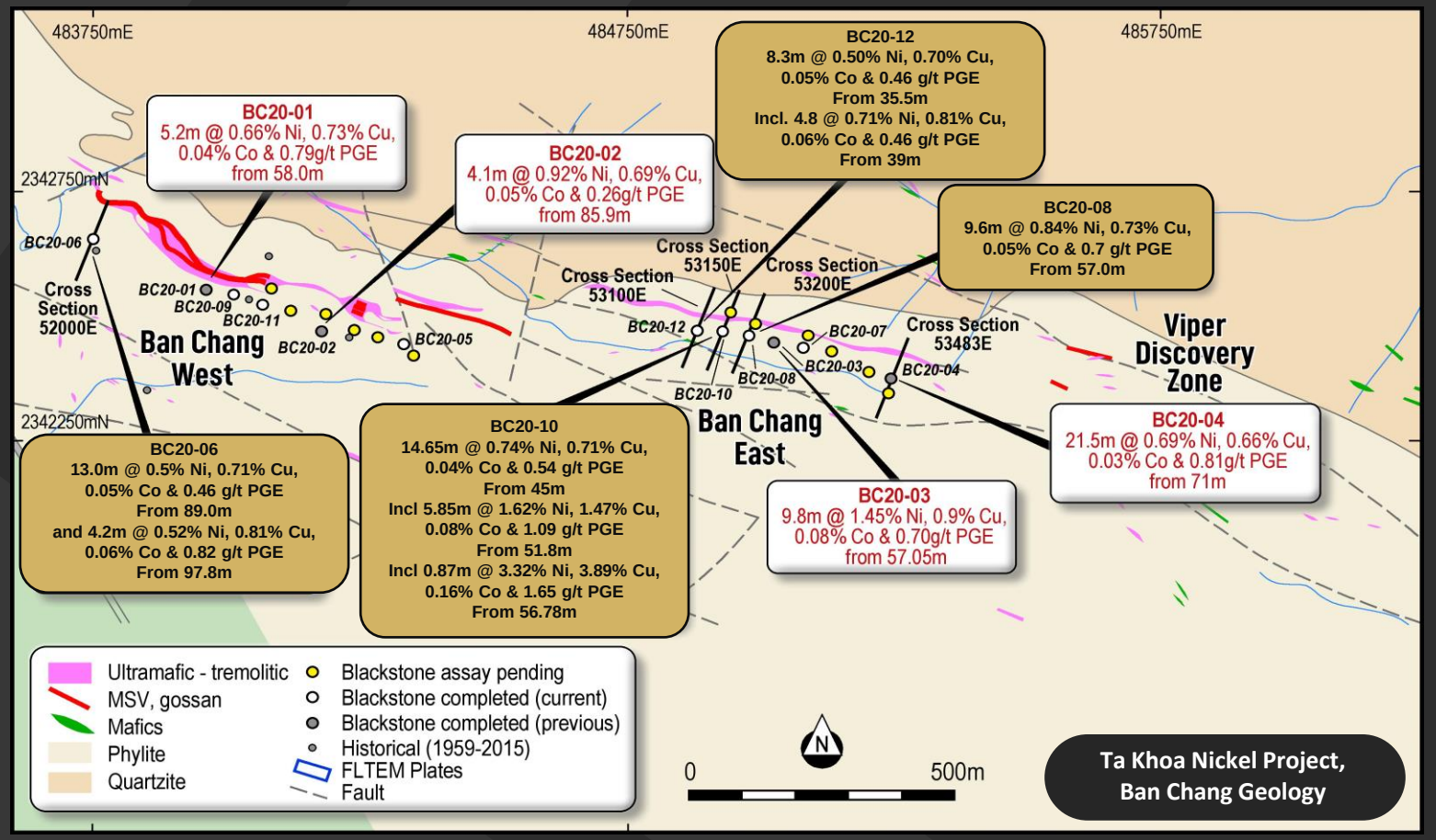
UPSIDE OPPORTUNITIES – BAN PHUC DSS – KING COBRA DISCOVERY





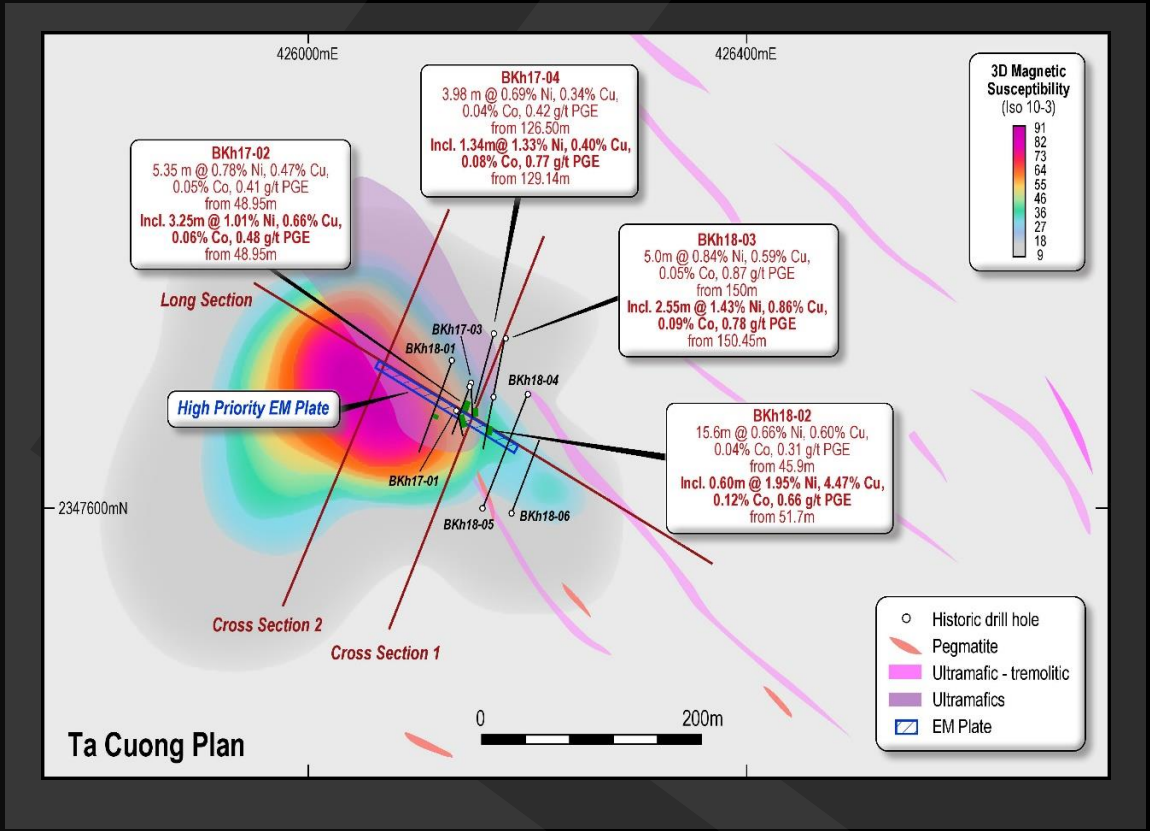
- Blackstone discovered the King Cobra shallow, high grade zone within the Ban Phuc DSS
- The King Cobra discovery provides a potential vector towards the high grade "feeder zone"
- Approximately one third of the Ban Phuc DSS target is open to the north east and at depth
- The King Cobra discovery hole recently intersected **60m @ 1.3% Ni and 142m @ 0.41% Ni**, with a high-grade zone of **13.9m @ 2.25% Ni**

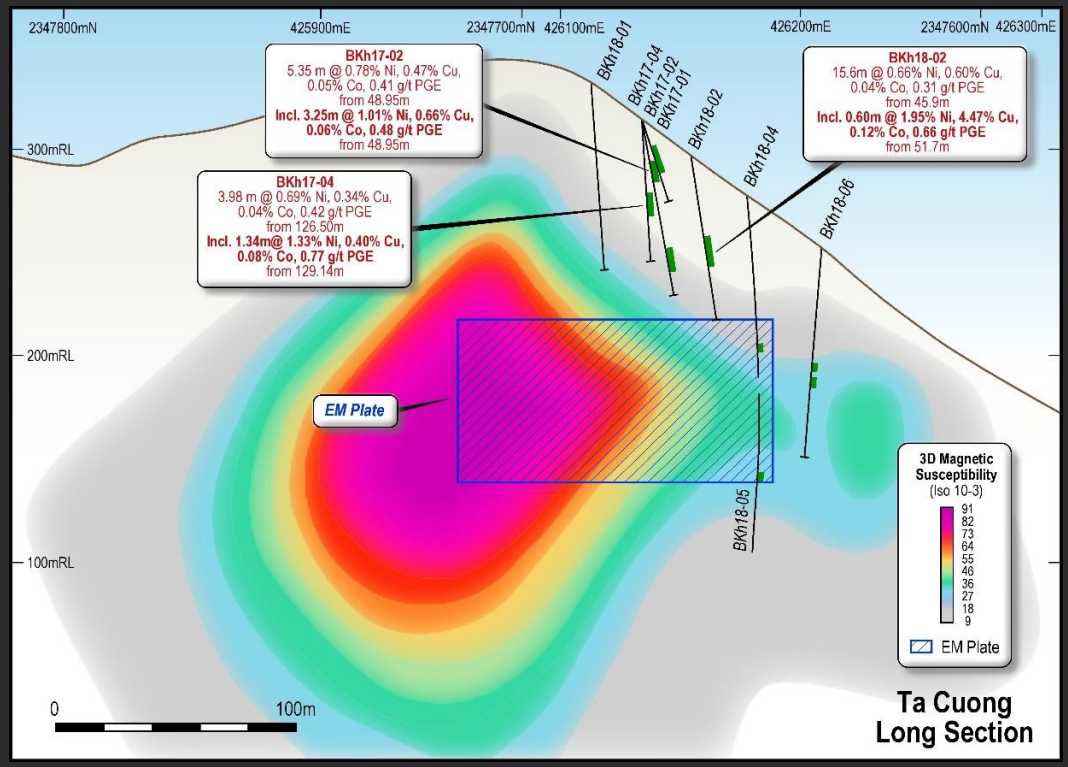
UPSIDE OPPORTUNITIES – BAN CHANG – MASSIVE SULFIDE IN MAIDEN DRILL HOLES



Ta Khoa Nickel Project,
Ban Chang Geology

UPSIDE OPPORTUNITIES – TA CUONG – ONGOING DRILLING AT NEW NICKEL TARGET





- Blackstone has commenced drilling, using electromagnetic (EM) plates to test new massive sulfide vein (MSV) targets for high impact drilling over the coming months
- Ta Cuong is the second high priority MSV prospect within a portfolio of 25 MSV prospects to be systematically tested with modern techniques

NEXT STEPS & TIMELINE ANTICIPATED NEWSFLOW

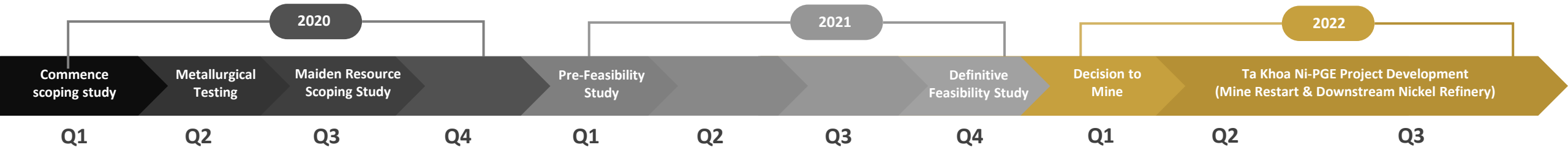
Blackstone's ongoing aggressive exploration program and development of the Ta Khoa Nickel PGE (Cu Co) Sulfide Project next steps include:

01 Blackstone delivered a maiden resource, focused initially on the Nickel PGE (Cu Co) disseminated sulfide (DSS) at Ban Phuc and King Cobra discovery zone

02 Blackstone delivered a Scoping study and has commenced further feasibility studies to be delivered in 2021 including downstream processing facility which will provide details for joint venture partners to formalise the next stage of investment

03 Continue to investigate the potential to restart the existing Ban Phuc concentrator through focused exploration on both massive sulfide veins (MSV) and DSS deposits

04 Mine restart and develop a downstream nickel sulfate refinery in Vietnam to produce a downstream nickel and cobalt product to supply Asia's growing lithium-ion battery industry



The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr Andrew Radonjic, a Non-Executive Director and Technical Consultant of the company, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic 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 Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Mineral Resource Estimation was conducted by BM Geological Services (BMGS) under the supervision of Andrew Bewsher, a director of BMGS and Member of the Australian Institute of Geoscientists with over 21 years of experience in the mining and exploration industry in Australia and Vietnam in a multitude of commodities including nickel, copper and precious metals. Mr Bewsher consents to the inclusion of the Mineral Resource Estimate in this report on that information in the form and context in which it appears.

Competent Person Statement

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