

Zacks Small-Cap Research

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Blackstone Minerals Ltd. (BLSTF-OTCQX)**Zacks Initiates Coverage of Blackstone Minerals**

Based on comparative analysis of junior nickel companies in the developmental phase, a second quartile price-to-book (P/B) ratio of 10.9 indicates a share price target of US\$0.93.

Current Price (09/08/21) \$0.32
Valuation **\$0.93**

OUTLOOK

Blackstone Minerals is advancing two nickel projects: a **downstream refinery business** and an **upstream mining operation**.

A **Scoping Study was completed** on the **Ta Khoa Project**, after which management divided the Project into upstream and downstream components.

A **PFS has been completed** on the **downstream refinery** unit and the project is advancing towards the operation of a pilot plant and the work on a DFS.

Demand for nickel is expected to exceed supply in the upcoming years as the EV mega-trend appears to be favoring NCM battery chemistry.

SUMMARY DATA

52-Week High **\$0.99**
52-Week Low **\$0.10**
One-Year Return (%) **N/A**
Beta **1.54**
Average Daily Volume (shrs.) **9,143**

Shares Outstanding (million) **332.2**
Market Capitalization (\$mil.) **106.3**
Short Interest Ratio (days) **N/A**
Institutional Ownership (%) **20.5**
Insider Ownership (%) **12**

Annual Cash Dividend **\$0.00**
Dividend Yield (%) **0.00**

5-Yr. Historical Growth Rates
Sales (%) **N/M**
Earnings Per Share (%) **N/M**
Dividend (%) **N/M**

P/E using TTM EPS **N/A**
P/E using 2021 Estimate **N/A**
P/E using 2022 Estimate **N/A**

Risk Level **Above Average**
Type of Stock **Small-Value**
Industry **Mining – Misc.**

ZACKS ESTIMATES**Revenue**

(in thousands of \$)

	Q1 (Sep)	H1 (Dec)	Q3 (Mar)	H2 (Jun)	Year (Jun)
2019		97 A		4 A	101 A
2020		438 A		147 A	586 A
2021		111 A		80 E	191 E
2022		100 E		70 E	170 E

Earnings per Share

(EPS is operating earnings before non-recurring items)

	Q1 (Sep)	H1 (Dec)	Q3 (Mar)	H2 (Jun)	Year (Jun)
2019		-\$0.027 A		-\$0.013 A	-\$0.040 A
2020		-\$0.024 A		-\$0.017 A	-\$0.041 A
2021		-\$0.023 A		-\$0.019 E	-\$0.042 E
2022		-\$0.022 E		-\$0.021 E	-\$0.043 E

Quarterly EPS may not equal annual EPS due to rounding.

EXECUTIVE SUMMARY

Blackstone Minerals (OTCQX: BLSTF; ASX: BSX) is advancing both upstream and downstream nickel projects in northern Vietnam. The **upstream Ta Khoa Project** is developing a series of **nickel-sulfide deposits** within a 12-kilometer **district-scale exploration corridor**. The Project has Maiden Resource, a processing facility and a permitted tailings facility, along with access to local, green hydroelectric power. In addition, management is pursuing a **downstream refinery project** in order to produce higher-margin NCM (Nickel-Cobalt-Manganese) products for the lithium-ion battery industry. Management's downstream strategy includes collaboration with Tier1 partners in the development of a refinery.

Nickel is a strategic raw material in the EV battery industry, and there are growing concerns of a disruption in the supply of nickel and other metals, such as lithium and cobalt, that are crucial to the wide-scale adoption of electric vehicles and power grids. Due to the growing stainless steel production and the significant incremental demand from the adoption of EVs, the nickel industry is expected to experience significant supply shortages starting in 2023.

A **Scoping Study** on the Ta Khoa Project **was completed in October 2020**, after which management divided the Project into upstream and downstream components. Blackstone Minerals is advancing both segments: a **PFS for downstream refinery business unit was completed** in July 2021 and now work is beginning on a pilot plant and a DFS. The **Scoping Study** included a **Maiden Resource** on the **Ban Phuc DSS deposit**. The PFS on the upstream business unit should be completed in the second half of 2021. Resource drilling continues at four other prospects (Ban Chang, King Snake, Ta Cuong and Ban Khoa).

Critical Milestones Achieved

May 8, 2019	Entered term sheet for an option to acquire a 90% interest in the Ta Khoa Project
April 2020	Exercised option to acquire 90% interest in the Ta Khoa Project
October 2020	Completed Scoping Study on Ta Khoa Project , which included Maiden Resource on the Ban Phuc DSS deposit
July 26, 2021	Completed PFS on downstream Ta Khoa Refinery Project

Expected Future Milestones

3Q 2021	Maiden resource estimation on Ban Chang prospect
2H 2021	PFS on upstream business unit including Ban Phuc DSS ore-body & other ore-bodies
2H21-1H/22	Initial production from Pilot Plant
2H21-1H/22	DFS on downstream Ta Khoa Refinery Project
2022	DFS on upstream business unit
2022	Final Investment Decision

Blackstone Minerals is moving forward with both upstream and downstream nickel projects, which are **located in proximity to major battery manufacturers** that are supplying Asia's growing demand for lithium-ion batteries. **For example**, in the first quarter of 2020, **VinFast** (a subsidiary of Vingroup JSC, Vietnam's largest conglomerate) launched Vietnam's first EV automobile, which is powered by NCM (nickel-cobalt-manganese) batteries. In 2020, VinFast sold about 30,000 vehicles (gas-powered cars, EVs and e-scooters) in Vietnam. VinFast has plans to expand production to 250,000 automobiles per year, including the sale of vehicles into the United States starting in March 2022. VinFast's production facilities are located in northern Vietnam, a greenfield factory near the port of Hai Phong and an acquired GM factory in Hanoi. Currently, LG Chem is producing NCM lithium-ion batteries for VinFast through a joint venture entered into during 2019. This strong and growing local demand for NCM-based batteries is in Blackstone's backyard. VinFast also signed a

letter of intent with Gotion High-Tech in August 2021. VinFast is considering building a LFP battery factory in Vietnam.

Green Operational Advantage

Management plans to develop its mineable deposits in the Ta Khoa Project with a fully electric-powered fleet as management targets net-zero carbon mining operations. Also, the downstream refinery will utilize renewable, inexpensive (roughly US\$0.07 per kWh) local, renewable hydroelectric power sources. To further its green efforts, Blackstone Minerals joined the Electric Mine Consortium in April 2021.

Equity Milestones

In October 2020, the shares of Blackstone Minerals Limited were admitted to the OTCQB market. Less than four months later, on February 10, 2021, the company's shares were **uplisted to the OTCQX Best Market**. The OTCQX listing should expand awareness of the company among US investors, both retail and institutional. The company's primary listing continues to be the Australian Stock Exchange (ASX) under the symbol BSX.

AUSTRALIAN SECURITIES EXCHANGE (ASX) - SUMMARY DATA

Blackstone Minerals Limited			
ASX: BLX			
Current Price	AUD 0.475	Average Daily Volume (shrs.)	689,601
52-Week High	AUD 0.570	Shares Outstanding (million)	332.20
52-Week Low	AUD 0.315	Market Capitalization (million)	AUD 157.80

UPSTREAM PROJECT (TA KHOA Ni-Cu-PGE Project – 90% interest)

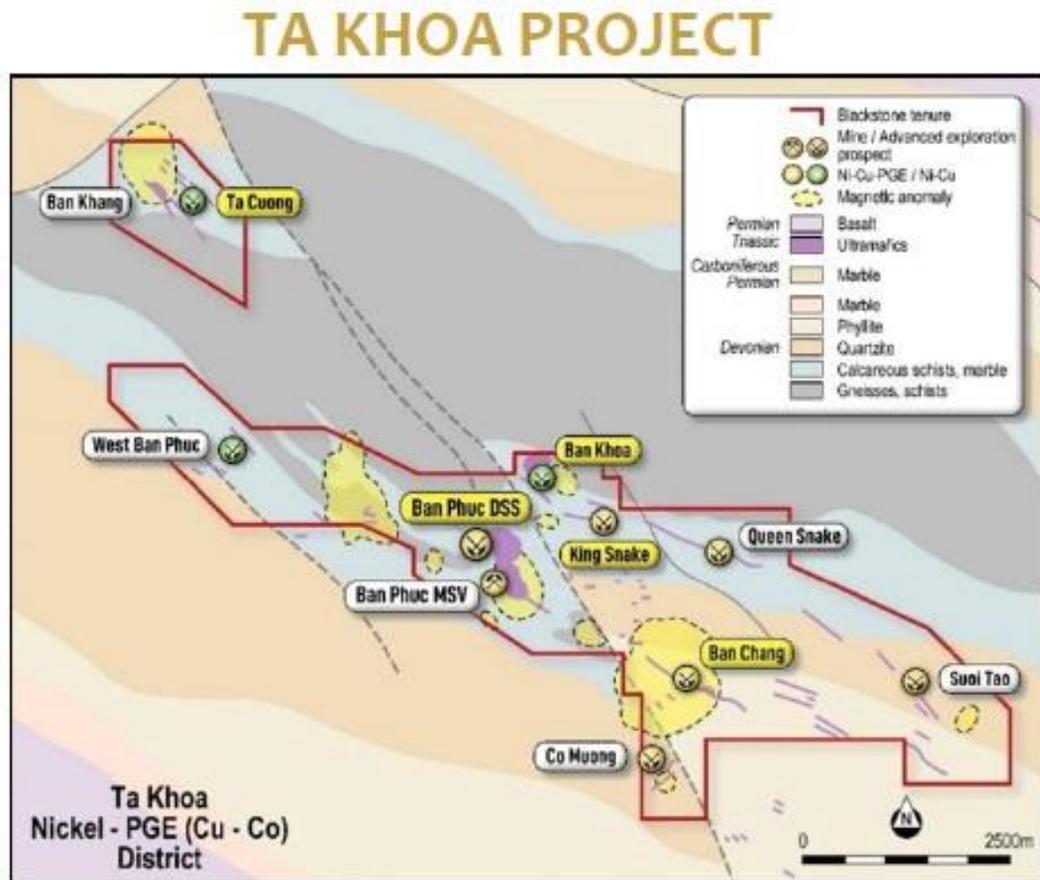
Blackstone's upstream business unit consists of the **Ta Khoa Project**. Located 160 kilometers west of Hanoi in northern Vietnam, this upstream project is composed of several ore bodies and multiple advanced exploration prospects, namely:

- Ban Phuc - DSS ore body; Scoping Study (completed Oct. 2020); PFS in progress
- Ban Chang - Both MSV & DSS styles; maiden resource estimation expected in 3Q 2021
- King Snake - potentially promising MSV prospect with a 900 meter strike length
- Ta Cuong – in Feb. 2021, a discovery hole identified 20.4m grading 1.35% Ni & 0.80% Cu
- Ban Khoa – Bulk tonnage DSS opportunity analogous to Ban Phuc

In the future, the other higher grade Massive Sulfide Vein deposits listed above could potentially be additive to subsequent Prefeasibility Studies. Management plans to explore both Massive Sulfide Vein (MSV) and Disseminated Sulfide (DSS) targets throughout the project.

Ta Khoa Project

The exploration and mining tenements of the **Ta Khoa Project** encompass 34.8 km² that contain multiple nickel, PGE, copper and cobalt prospects (both MSV and DSS), along with a well-maintained **450 ktpa processing plant, which includes a mill, concentrator** and other **mine facilities**. The facility was constructed in 2013 at a cost of US\$136 million.



Blackstone Minerals Presentation July 2021

On May 8, 2019, Blackstone Minerals entered into a binding term sheet with AMR Nickel Limited (a 90% owned subsidiary of Asian Mineral Resources Limited) for an option to acquire a 90% interest in the Ta Khoa Project. The 12-month **option was exercised in mid-April 2020** with Blackstone having made the required exploration expenditures and the issuance of **8.6 million shares** (worth AUD\$1.0 million) to AMR Nickel Limited. An Exploration License issued by the Ministry of Natural Resources and Environment that covers the entire Ta Khoa Concession is currently in force.

Ban Phuc

Ban Phuc is the most advanced undertaking of the Ta Khoa Project. Between 2013 and 2016, a MSV underground Ni-Cu-Co-PGE resource was mined at Ban Phuc generating US\$213 million in revenue. From a MSV vein with an average width of 1.3 meters, 975kt of ore was mined, which had average grades of 2.4% Ni and 1.0% Cu. Also at Ban Phuc, there is the infrastructure associated with an operating mine: a 450 ktpa concentrator, a permitted tailings facility, a modern 250-person mining camp and an assay lab building. However, when nickel prices declined to below US\$4.00 in mid-2016, the mine and associated infrastructure was placed into care and maintenance.

Processing Plant



Blackstone Minerals Presentation May 2019

Hosted in a shear, the **mined Massive Sulfide Vein** at Ban Phuc is **640 meters in length** and descends to at least 450 meters below surface with an average width of 1.3 meters. Over 25 targets have been mapped at Ban Phuc.

Currently, **management is primarily targeting the Disseminated Sulfide (DSS) deposits** at Ban Phuc. Soon after entering into the binding term sheet with AMR Nickel Limited, Blackstone Minerals began a drilling campaign on July 8, 2019 and concurrently undertook an initial IP survey. Using the IP survey's results, the second phase of drilling program targeted high chargeability zones, which tend to correlate with the higher-grade zones within the Ban Phuc DSS deposit.



Blackstone Minerals YouTube Channel <https://www.youtube.com/watch?v=ythxBC2gA84>

In mid-October 2020, a **Scoping Study** was completed on the Ta Khoa Project, which included a **Maiden Resource** on Ban Phuc Disseminated Sulfide (DSS) ore-body. The JORC-compliant **Indicated Resource** estimate is **44.3 Mt** grading at 0.52% Ni (229 kt Ni). The Scoping Study estimated that over 8.5 years project life, annual production of approximately 12.7 ktpa Ni (equivalent to 25 ktpa NCM production) would generate a 45% IRR with a capital payback period of 2.5 years assuming a nickel price of US\$8 per pound. The Scoping Study envisioned an open pit mine design.

Key Operational Outcomes

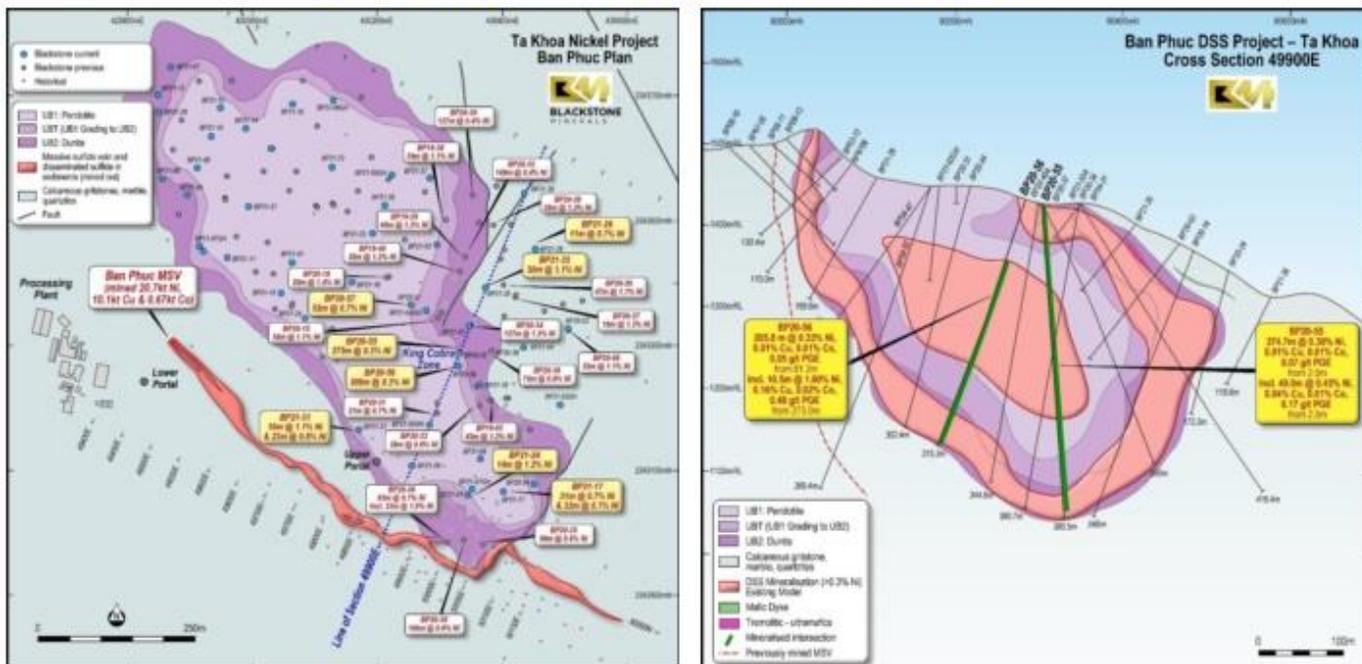
- ▶ Maiden Ban Phuc DSS indicated resource of 44.3Mt @ 0.52% Ni for **229kt Ni** and Inferred Mineral Resource of 14.3Mt @ 0.35% Ni for **50kt Ni**;
- ▶ Annual production of **12.7ktpa Ni over 8.5-year** project life;
- ▶ Gross Revenue of US\$3.27 billion;
- ▶ Net pre-tax cashflow of US\$1.2 billion;
- ▶ **Pre-tax cashflow of US\$176mpa**;
- ▶ **Pre-tax NPV_{8%} of US\$665m and 45% IRR**;
- ▶ **Capital Payback Period of 2.5 years**;

	4Mtpa Base Case
Ore Mined (Mt)	~31.6Mt
Metallurgical Recovery (%)	~65.9%
Strip Ratio (Waste (t): ore (t))	~6.1:1
Mining Cost (US\$/t ore)	US\$12.00 - 14.70
Processing Cost (US\$/t ore)	US\$10.70 - 13.00
Refining Cost (US\$/t ore)	US\$19.50 - 23.80
Project Life	~8.5 years
Nickel Production	~108kt
Annual Nickel Production	~12.7ktpa
NCM Production	~213kt
Annual NCM Production	~25ktpa

Blackstone Minerals Scoping Study Presentation October 2020

In order to bolster the Maiden Resource and **in preparation for a PFS**, management embarked on an infill drilling campaign to better define the DSS deposit. The final infill drill program was completed in late August 2021. With the resource better delineated, **management anticipates a PFS to be completed during the second half of 2021**. The PFS may include the option to mine several higher grade MSV deposits in order to reduce initial upfront capital requirements. Thereafter, the company will pursue the completion of a DFS and an open pit mining permit.

Ban Phuc Plan View & Cross Section



Blackstone Minerals Press Release August 24, 2021

Projected Timeline of Upstream Milestones

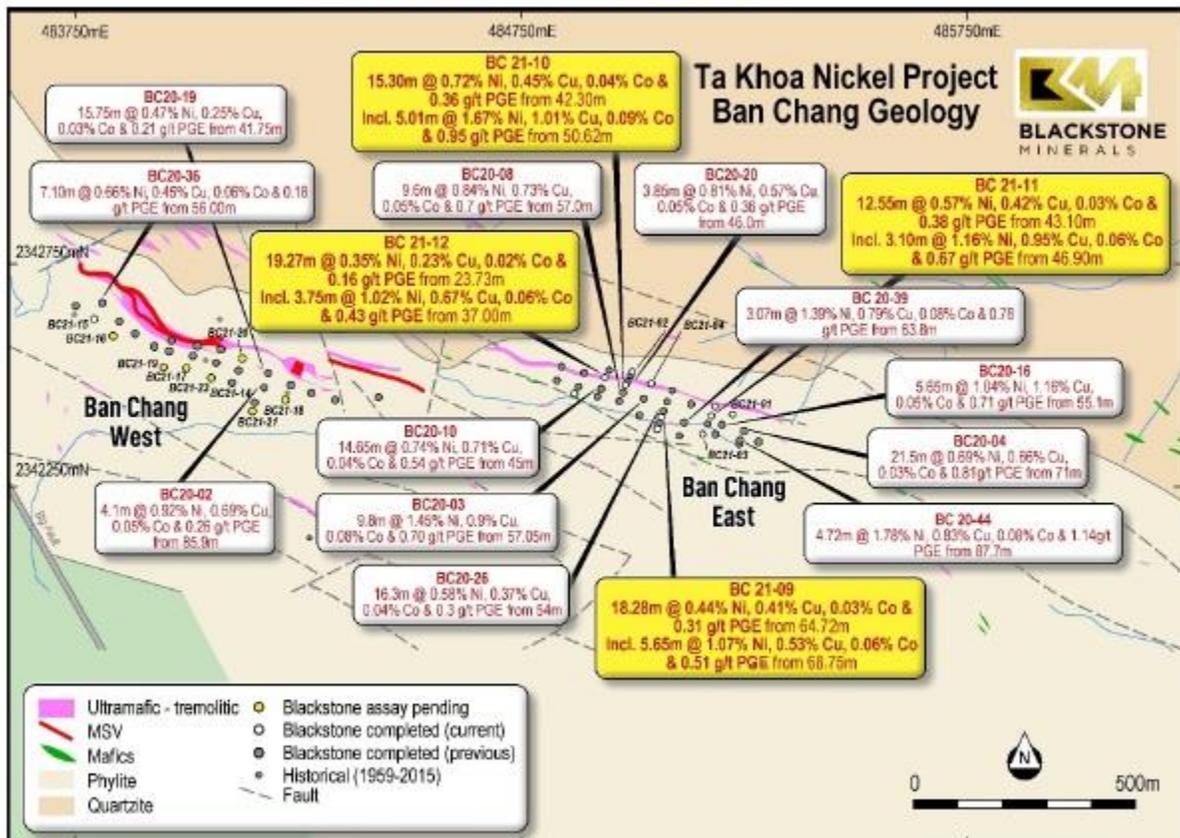


Blackstone Minerals Presentation July 2021

Ban Chang

Located 2.5 kilometers southeast of the Ban Phuc mine and processing facility, the Ban Chang prospect is adjacent to the Chim Van–Co Muong fault system. **Both MSV and DSS mineralization styles are present** with the massive sulfide deposits mainly in veins and lenses while the DSS mineralization is hosted within dykes.

BAN CHANG PROSPECT

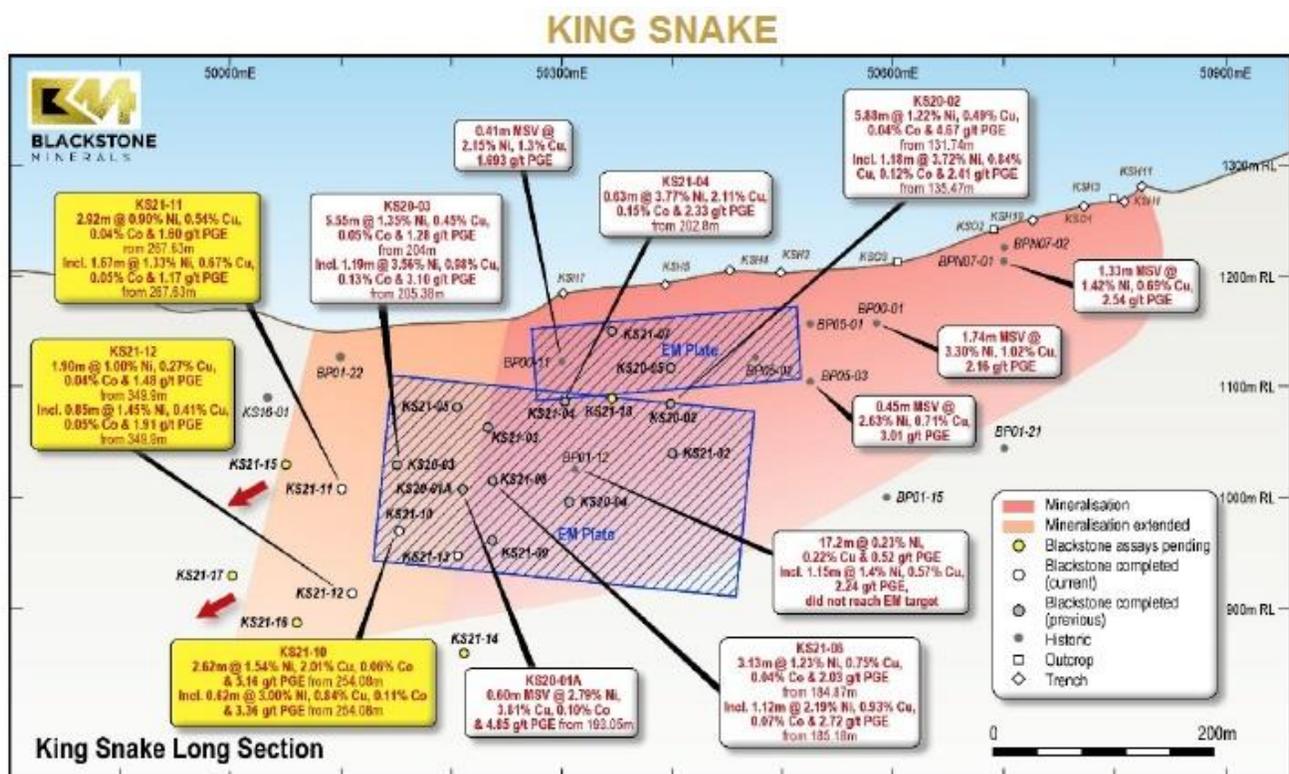


Blackstone Minerals Presentation July 2021

Historically, between 1960 and 1963, the prospect area was sampled with drilling and 19 trenches through Vietnamese Geological Survey. Highlighted sample results included 3.9 meters grading 1.07% Ni and 0.95% Cu in a channel sample and drill-hole BLK 2 intersecting a 1-meter Massive Sulfide Vein grading 2.65% Ni and 1.07% Cu. Blackstone completed an electromagnetic (EM) survey at Ban Chang that identified a 1.2 kilometer MSV target, which the company initially drill tested in June 2020.

Subsequent drilling identified a 420-meter **West Zone** of MSV lenses, a 200-meter **Central Zone** of MSV lenses and an **East Zone**. Ensuing infill drilling should lead to a **maiden resource estimation for Ban Chang**, which **management anticipates will be completed in 3Q 2021**.

King Snake



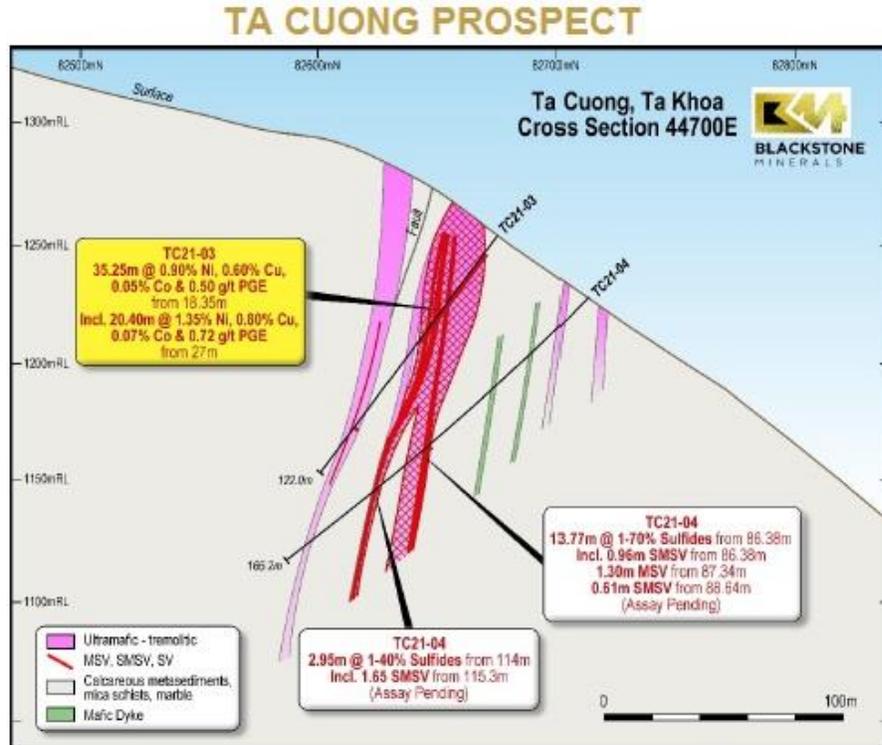
Blackstone Minerals Presentation July 2021

Located 1.5 kilometers northeast of the Ban Phuc mine and processing plant, **King Snake** is a potentially promising **MSV prospect**. Historically, approximately 50 rock chip samples and 23 diamond drill holes (totaling 5,187 meters) indicated a 600-meter body of mineralization with an average width of 0.62 meters grading 1.79% Ni, 0.7% Cu and 1.14 g/t PGE.

Blackstone Minerals completed a ground-based EM survey that guided the company's drilling program. Drilling has intersected MSV and has defined a 900-meter strike length. The longest continuous interval was with drill hole KS20-02 with 5.88 meters grading at 1.22% Ni and 0.49% Cu. The mineralization appears open down dip and down plunge to the west of the area of historic drilling results. Downhole electromagnetic (DHEM) surveys will help guide infill drilling, particularly for potentially identifying MSV targets at depth.

Ta Cuong

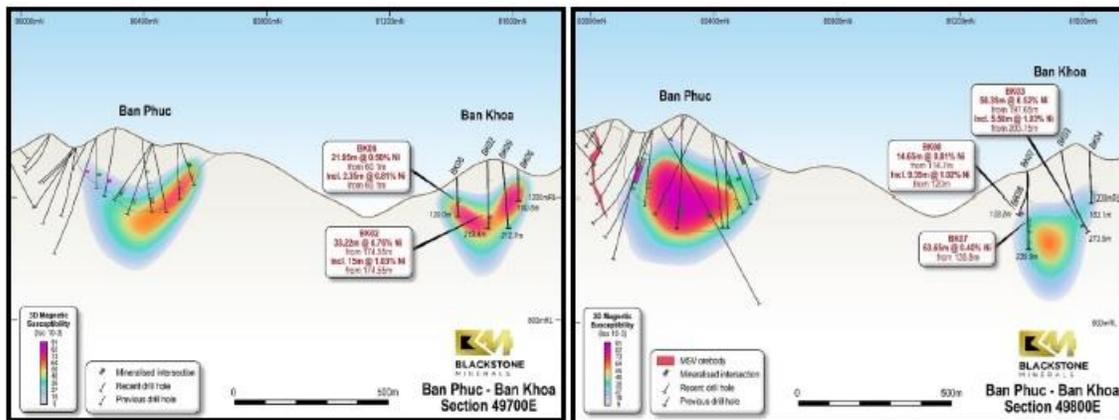
Located approximately 6 kilometers along strike from the Ban Phuc mine and processing facility, the **Ta Cuong** MSV prospect came to the forefront in February 2021 when the Taipan Discovery Zone (TMZ) was discovered by drill hole TC21-03, which identified 20.40 meters of DSS, SMSV and MSV mineralization grading at 1.35% Ni, 0.80% Cu, 0.07% Co and 0.72g/t PGE. The hole tested a previously untested zone which was identified by EM survey.



Blackstone Minerals Presentation July 2021

Ban Khoa

Located approximately 1.5 kilometers north of the Ban Phuc deposit, Ban Khoa has MSV prospects, which are analogous to the mined Ban Phuc MSV ore body, within a broader DSS deposit.



Blackstone Minerals Presentation July 2021

Historically, through Vietnamese Geological Survey, the Ban Phuc deposit was sampled by 13 trenches, a 100-meter adit and 50 drill holes (total of 2,338 meters). Highlighted drilling results

included drill hole BK02 intersecting 15.0 meters grading 1.03% Ni and drill hole BK08 intersecting 14.65 meters grading 0.81% Ni.

Initially, Blackstone conducted a ground-based EM survey at Ban Khoa. Then in November 2020, Blackstone initiated a drilling program at the Ban Khoa prospect in order to test the targets generated from the EM survey. The drill holes were 200 meters apart on strike along a 1.2-kilometer target zone.

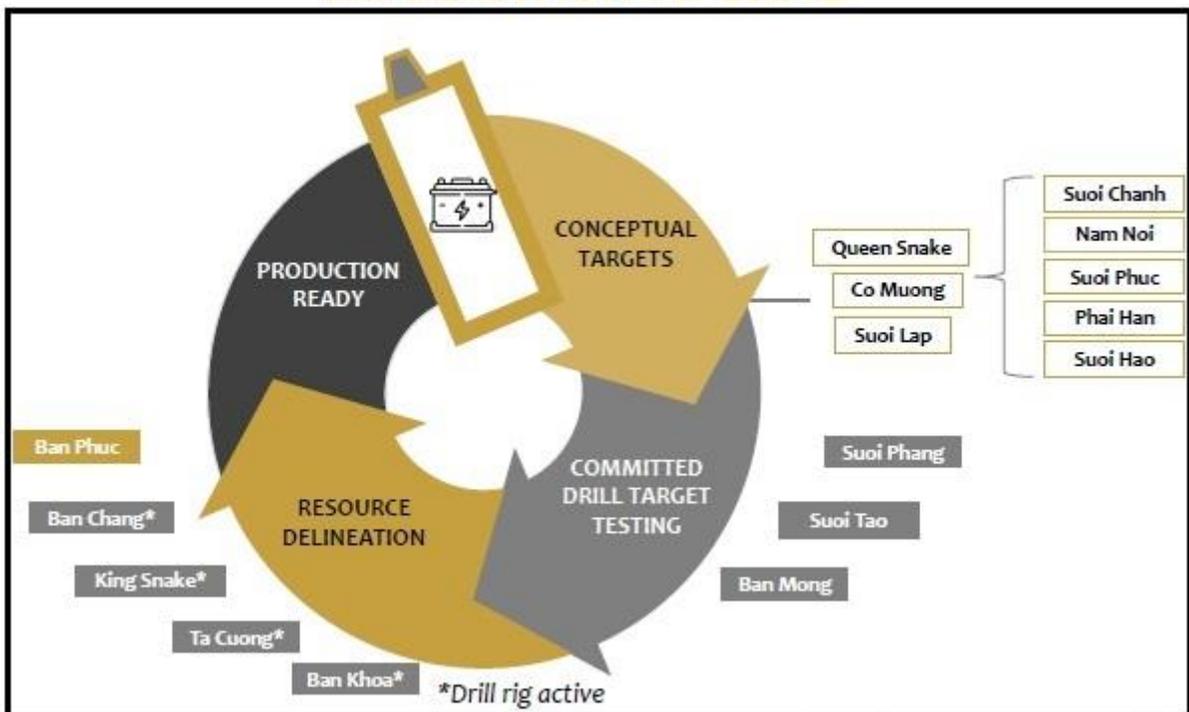
On September 2, 2021, Blackstone Minerals provided assay **results from the maiden infill drilling program** at the **Ban Khoa** DSS deposit, which is approximately 1 kilometer north of the Ban Phuc DSS deposit. With its **147.0-meter intersection of 0.31% Ni**, drill hole BK21-11 also demonstrates the bulk tonnage potential of overall upstream Ta Khoa Project.

Highlighted DSS Intersections at Ban Khoa

BK21-11	147.0m @ 0.31% Ni, 0.04% Cu, 0.01% Co & 0.14g/t PGE¹ from 62.0m
incl.	34.65m @ 0.55% Ni, 0.08% Cu, 0.01% Co & 0.37g/t PGE¹ from 103.7m
incl.	10.6m @ 1.06% Ni, 0.11% Cu, 0.02% Co & 0.88g/t PGE ¹ from 123.3m
BK21-10	67.7m @ 0.33% Ni, 0.04% Cu, 0.01% Co & 0.19g/t PGE¹ from 105.3m
and	32.1m @ 0.48% Ni, 0.08% Cu, 0.01% Co & 0.33g/t PGE¹ from 193.1m
BK21-08	60.2m @ 0.37% Ni, 0.07% Cu, 0.01% Co & 0.09g/t PGE¹ from 208.6m
incl.	10.8m @ 1.03% Ni, 0.13% Cu, 0.02% Co & 0.39g/t PGE ¹ from 210.2m

Blackstone Minerals Press Release September 2, 2021

EXPLORATION PIPELINE



Blackstone Minerals Presentation July 2021

DOWNSTREAM PROJECT – TA KHOA REFINERY

Pre-Feasibility Study

On July 26, 2021, the completion of a **Pre-Feasibility Study** (PFS) on the downstream Refinery Project was announced. In the base case (using estimated future prices of certain commodities), a refinery designed with the capacity to **process 3.9 Mt of nickel concentrate** feed at a rate of **400 ktpa** over a **10-year Life-of-Operations** would generate **revenue of US\$14.0 billion** and produce a post-tax **67% IRR**.

The projected annual refined nickel production is 43.5 kt, which is expected to generate average annual operating cash flow of US\$451 million (post-tax cash flow of US\$365 million). The **payback period** for the required upfront capital of US\$491 million is estimated to be **1.5 years** from the initiation of first production, which is targeted for 2024.

Life-of Operations Physicals

Life-of-Operation Physicals	Unit	Base Case
Refinery Capacity	ktpa	400
Life of Refinery	years	10
Concentrate Feed	kt	3,894
Ni in Concentrate Grade	%	11.5%
Co in Concentrate Grade	%	0.3%
Cu in Concentrate Grade	%	1.1%
Metallurgical Recovery - Ni into NCM Precursor Product	%	96.8%
Metallurgical Recovery - Co into NCM Precursor Product	%	96.7%
Metallurgical Recovery - Cu into Copper Cathode	%	93.1%
NCM Precursor Production Breakdown:		
Nickel recovered in NCM Precursor Product	Kt	435
Cobalt recovered in NCM Precursor Product	Kt	11
Cobalt make-up Quantities	Kt	44
Manganese	Kt	51
Hydroxide	Kt	315
Total NCM Precursor Production	kt	856
Average Annual NCM Precursor Production	ktpa	85.6
Average Annual Refined Nickel Output	ktpa	43.5

Blackstone Minerals Press Release July 26, 2021

Assumptions include **sufficient demand for NCM811 Precursor to support a premium to the price of nickel metal** and the ability to **procure sufficient concentrate feed grading at 11.5% Ni, 1.1% Cu and 0.3% Co**.

Base Case Price Forecasts vs Spot Case

Price Forecast (US\$/t)	Base Case	Spot Case
NCM811 Precursor	16,397	19,559
Nickel Metal	18,230	19,613
Cobalt Metal	66,028	51,907
Cobalt Sulfate (21%)	12,842	11,119
Manganese Sulfate (32%)	1,035	1,168
Copper Cathode	6,985	9,458

Spot Case Assumptions referenced from SMM on 19 July 2021

Blackstone Minerals Press Release July 26, 2021

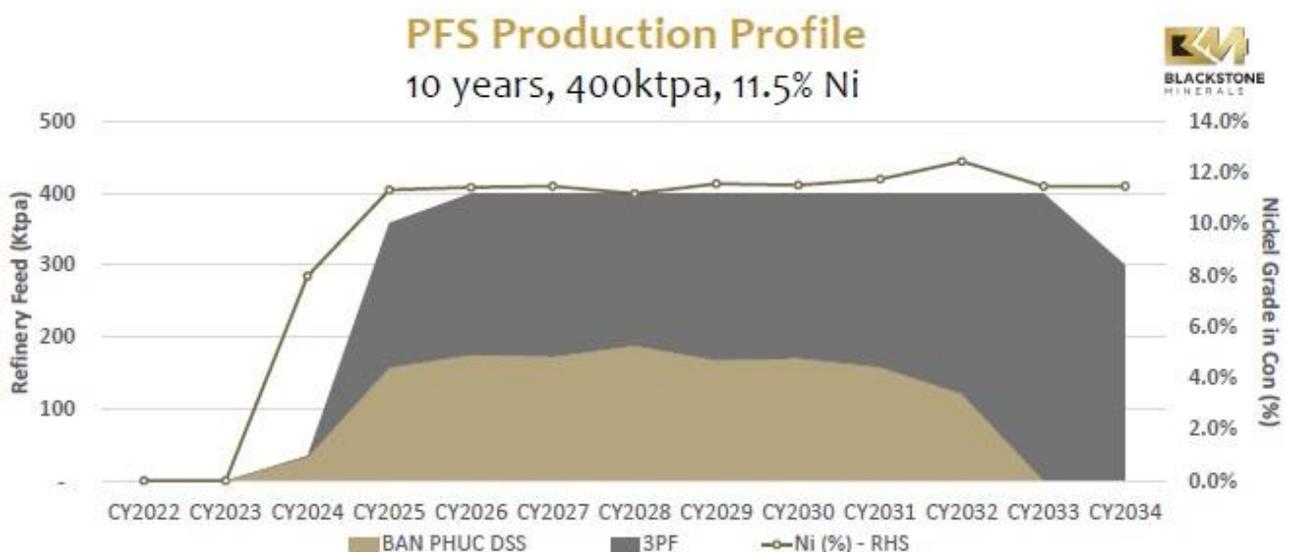
Refinery Feed Profile

Under the base case of the PFS, the expected nickel concentrate feed (11.5% Ni, 1.1% Cu and 0.3% Co) to the refinery is 400 kt annually. **Blackstone will give preference to its own upstream mining operations.** Currently, the expected feed from the Ban Phuc DSS is approximately 200 kt, along with other Ta Khoa MSV's (King Snake, Ban Chang, Ta Cuong, etc.) for a yet undetermined amount. Third party nickel concentrate feed supply will be solicited through off-take arrangements.

The PFS envisions securing **third party concentrate feed** to supplement the nickel concentrate feed from the company's Ban Phuc Mine in order to support the scale of operations planned by the PFS. Currently, Blackstone has an arrangement with **Trafigura Pte Ltd** through a Non-Binding Letter of Interest (LOI) signed in January 2021. Trafigura is a significant global trader of physical commodities, including nickel, copper, cobalt, zinc and lead. The intended arrangement is for Trafigura to become a third party supplier of nickel concentrate to Blackstone's Ta Khoa Refinery.

Refinery Production Profile

Though the PFS targets **first commercial production NCM811 Precursor product in 2024**, it is anticipated that the rate of production will ramp up to **85.6 ktpa NCM811 Precursor product** based on an operational steady nickel concentrate feed of **400 ktpa being achieved in calendar 2026**.



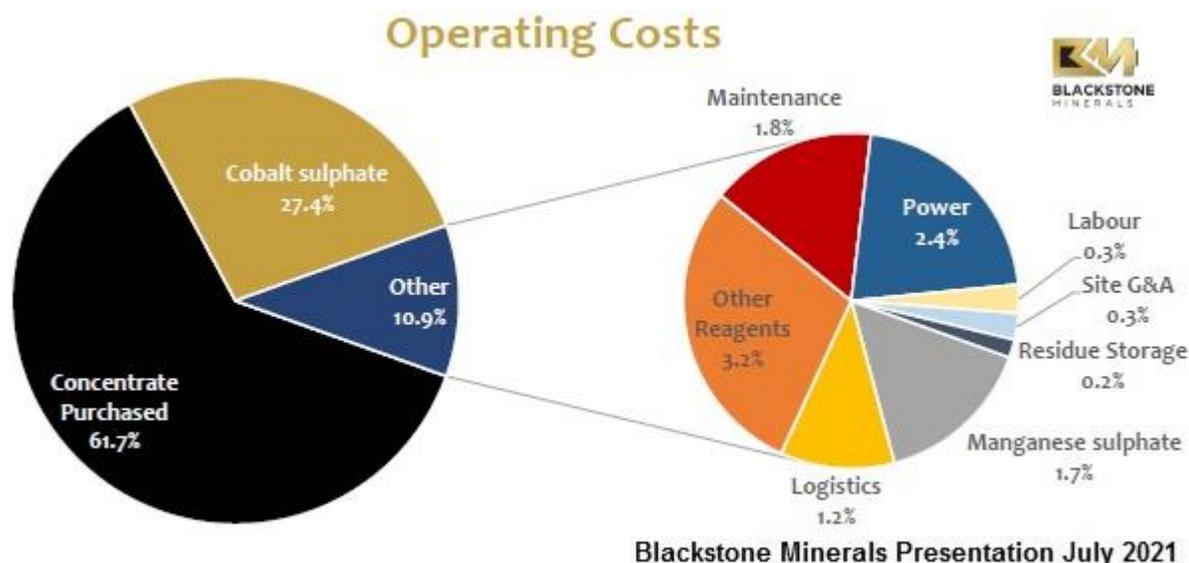
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Funding

Funding the downstream Refinery Project (aka Ta Khoa Refinery or TKR) is expected to come from multiple sources, including Joint Venture (JV) partners, investment loans, issuance of equity securities and off-take prepayments. Most recently, on August 26, 2021, Blackstone appointed The Korea Development Bank and BurnVair Corporate Finance (BurnVair) as debt advisors in order to secure a funding package for the development of the upstream and downstream components of the Ta Khoa Project.

Refinery Operating Costs

A key economic aspect of the Ta Khoa Refinery Project is that the **purchase of nickel concentrate** will be the largest operating cost (61.7% of total operating costs). The second highest component of operating costs is the **purchase of cobalt sulfate** (27.4%). Therefore, the Ta Khoa Refinery is expected to be a **margin-based business**. In other words, profitability will be driven more by the **price spread** between commodity nickel and NCM products rather than the movement of nickel or cobalt prices.



Blackstone Minerals has a strong commitment to ESG (Environmental, Social and Governance) principles.

Refinery POX Metallurgical Technology (A Green Operational Advantage)

The battery industry has become very mindful of the environmental impact of nickel refining operations. OEMs are willing to pay a premium for responsibly sourced and refined nickel. Blackstone's use of a **Pressure Oxidation (POX) leaching method** for the refining of nickel concentrate from sulfide deposits is more environmentally friendly than the High Pressure Acid Leach (HPAL) process for extracting nickel from laterite ore.

The **High Pressure Acid Leach (HPAL) extraction process** requires elevated temperatures (approximately 255° Celsius) and high pressure (around 725 psi), both of which are energy intensive. In addition, sulfuric acid is required to separate the nickel and cobalt from laterite ore. Therefore, it is necessary to utilize reagents to neutralize the acid discharge.

PRESSURE OXIDATION (POX) TECHNOLOGY

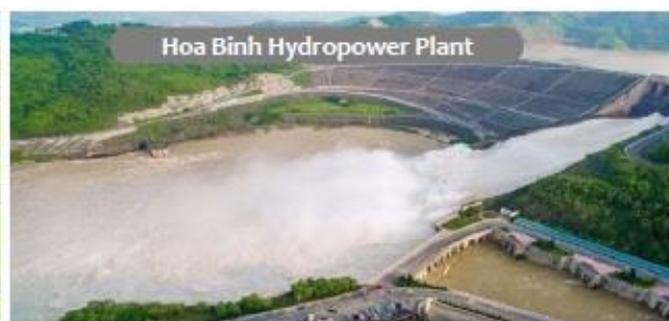
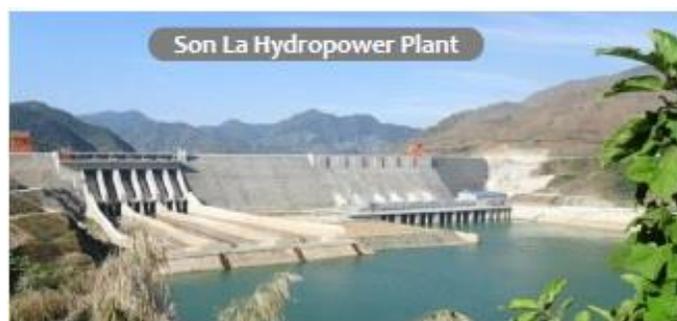
	Ta Khoa – Pressure Oxidation (POX) - Hydrometallurgy	Typical High Pressure Acid Leach (HPAL) - Hydrometallurgy	Pyromet (Smelter)
Typical Feed Ni grade, %	~10	0.8-1.5	>10
Mineral Type	Sulfide concentrate from sulfide ore	Oxide – laterite ore	High grade Ni ore, typically sulfide ore
Extraction process conditions	150-210 degree C, high pressure oxygen	250-270 degree C high pressure steam and high acid	1100-1700 degree C furnace - Energy intensive + Coke
Capital investment	Low – exotic material not required for construction	Very High – exotic material, acid plant, steam boiler, very large equipment need for high tonnage	Low-Medium
Technology	Mature since 1960s – low risk	Since 1990s – high risk	Mature – low risk
Ore Sensitivity	Robust	Sensitive with acid consumption	Sensitive with Arsenic, Magnesium, and sulfur
Waste Residues	Low or net neutral solid residue mass –potential to be repurposed	Approximately 200% solid generated in tailing storage facility	Low, hard residue slag

Blackstone Minerals Presentation July 2021

In contrast, the use of POX technology requires less energy and a smaller amount of caustic chemicals while providing a high level of metal recovery. As a result, the POX process produces quality, high purity MHP product with a lower carbon footprint, more eco-friendly discharge stream and lower overall operating costs. MHP is an intermediate product in Blackstone’s hydrometallurgical flowsheet to produce NCM811 Precursor. Consequently, the ESG metrics of energy usage and emissions discharge are enhanced.

Hydroelectric Power (Another Green Operational Advantage)

Part of the process of finding the optimal location for the Ta Khoa Refinery included access to renewable (and inexpensive) hydroelectric power. Vietnam has 306 hydroelectric plants in operation, two of which (2,400 MW Son La and 1,920 MW Hòa Bình, both on the Black River) are in close proximity to the Ta Khoa Project.

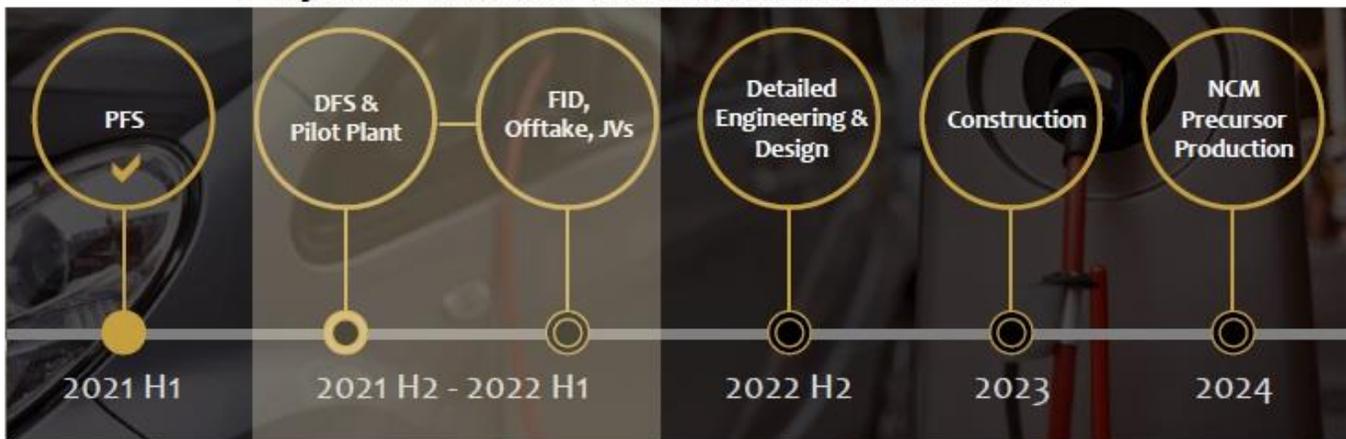


Blackstone Minerals Presentation June 2021

Approval from Board of Directors

On August 3, 2021, the **Board of Directors** of Blackstone Minerals approved the **first phase of pilot plant work** and the **commissioning of a Definitive Feasibility Study (DFS)** for the **Ta Khoa Refinery Project**, citing the compelling economics of the Pre-Feasibility Study. Management anticipates that the construction of a pilot plant and the completion of a DFS on the Ta Khoa Refinery will require approximately 12 months. The first phase of developing the pilot plant and the DFS can be fully funded by the company’s existing cash reserves.

Projected Timeline of Downstream Milestones



Blackstone Minerals Presentation July 2021

Downstream Pilot Plant

A pilot plant is an important step toward optimizing the design of the refining process, both in terms of quantity and quality. The test work at a pre-commercial production plant, particularly the production of Precursor NCM products, is crucial to the economic success of the Ta Khoa Refinery Project and will obviously contribute to the DFS.

The location of the pilot/demonstration plant is planned to be in the vicinity of the company's upstream Ta Khoa Project. The current expected design will allow for the processing of **nickel concentrate** feed at a rate of **20 kilograms per hour** into MHP (Mixed Hydroxide Precipitate) and thereafter into roughly **1.75 kilograms of Precursor NCM** (Nickel/Cobalt/Manganese) products, particularly NCM622 and NCM811, which are raw materials for lithium-ion batteries for EVs.

Early design work for the pilot plant has already been completed, and some equipment should start to be procured during the current quarter. Management expects that the pilot plant should begin producing initial NCM product in early 2022.

Definitive Feasibility Study

Concerning the DFS, an engineering firm needs to be engaged for the lead engineering role for the Ta Khoa Refinery DFS. A scope of work has been submitted to several Tier 1 engineering firms, and the DFS contract is expected to be awarded in the near future.

Management expects the completion of a DFS on the Ta Khoa Refinery and the construction of a pilot plant to occur within 12 months.

NICKEL INDUSTRY – UPCOMING SHORTAGE OF SUPPLY

The nickel industry is expected to benefit from the global transition to electric vehicles (EVs) as well as from economic growth that is expected to drive increased demand for stainless steel, which is currently the largest end-market for nickel. The transition of the energy source for automobiles from fossil fuels to electricity stored in EV batteries is expected to drive an increased demand for Class I nickel, which, within the next several years, will not be able to be met by the current production capacity of existing mining operations nor by current global nickel processing capacity. Therefore, the increasing demand for EV batteries portends robust demand for nickel.

A sampling of the increase in demand being spurred by the mega-trend toward EVs includes:

- To support its EV product lines, **Tesla** (NASDAQ: TSLA) has built and currently operates three EV battery production facilities, two in the U.S (San Francisco and Sparks, NV) and one in China (Shanghai). Upcoming giga-factories under construction are in Berlin, Germany and Austin, TX.
- In January 2021, **General Motors** (NYSE: GM) announced plans to offer only EVs by 2035.
- In February 2021, **Ford** (NYSE: F) announced that its spending on EVs and autonomous vehicles (AVs) is planned to more than double to \$29 billion by 2025.
- In December 2019, **Volkswagen** (Xetra: VOW) stated a corporate goal of producing 1,000,000 EVs annually year by 2023 and 1.5 million a year by 2025. Volkswagen is also targeting that 50% of its North America sales will be fully electric vehicles by 2030. In March 2021, Volkswagen announced plans to construct six battery factories in Europe by 2030 to support its EV goals.
- In March 2021, **Volvo** (STO: VOLV-B) made a commitment to only make and sell all-electric vehicles by 2030.
- In December 2020, the Government of **Japan** launched the Green Growth, which includes the goal to produce only EVs (i.e. no gasoline-powered cars) by the mid-2030s.

The **number of giga-factories** has grown rapidly from 17 in 2019 to 70 in 2020 to **142 in mid-2021**.

Abridged Synopsis of the Dynamics of the Nickel Industry

According to the U.S. Geological Survey (USGS), the vast majority of **economic global nickel resources** (with an average 1.0% Ni or more) are generally dispersed in two types of ore deposits: **laterite** (approximately 60% of known deposits) and **sulfide** (40%) deposits. A variety of techniques are utilized to extract nickel from these ores, including Pressure Oxidation (POX) leaching for sulfide ores and High Pressure Acid Leaching (HPAL), Caron Processing, Pressure Acid Leaching (PAL), ferro-nickel smelting, atmospheric leaching and bioleaching for laterites. Typically, sulfide ores have a higher grade than laterites, and sulfide ores are easier and less expensive to process than laterites.

Nickel production is most often categorized as high-purity **Class I nickel** (electrolytic nickel, powders and briquettes) and **Class II nickel** (nickel pig iron and ferronickel). Nickel is an essential component for the manufacture of cathodes in many types of batteries used for both the Electrical Vehicle and Battery Storage segments of the battery industry; however, the nickel feedstock varies depending technology employed by battery manufacturers. Feedstock options include Class I nickel, Mixed Hydroxide Product (MHP), Mixed Sulphide Precipitate (MHP), Nickel Pig Iron (NPI) and matte intermediates, among others.

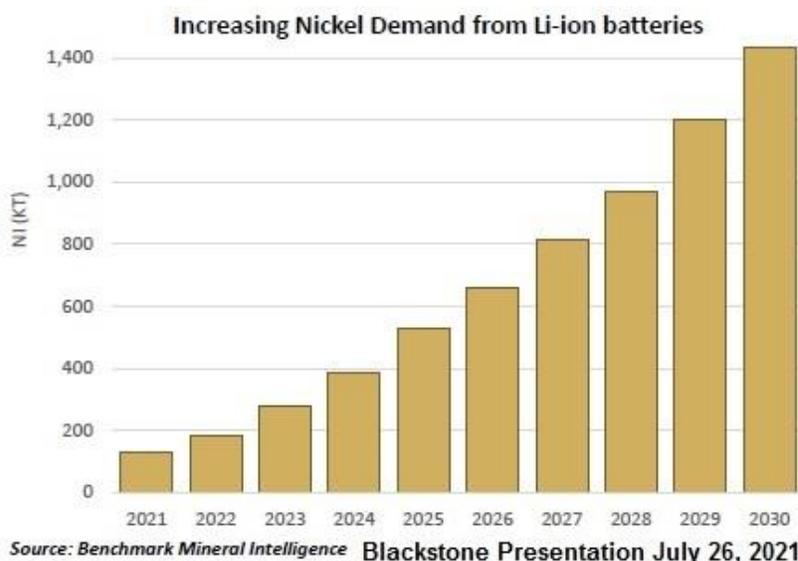
Currently, the **vast majority of nickel demand** is derived from the **production of stainless steel** and **super alloys** (65% and 12% of consumption, respectively) due to nickel's physical and chemical properties of a high melting point, an ability of being easily alloyed, its ductility and a resistance to corrosion/oxidation. As a result, nickel-based stainless steels and alloys are used in the pharmaceutical, petrochemical, chemical, aerospace, marine and food & beverage industries.

Lithium-ion Battery-related Demand for Nickel

Demand for rechargeable lithium-ion batteries, especially those used to power EVs and to store electric energy, particularly from renewable sources (such as solar panels and wind turbines), is expected to accelerate and become the **major driving factor of incremental growth of the nickel market**.

In 2021, Benchmark Minerals Intelligence, a leading market intelligence provider, estimates that lithium-ion batteries constitute a \$50 billion market in 2021 and expects that market will expand to

\$200 billion in 2030. Consequently, Benchmark forecasts that this growing demand will increase lithium-ion battery's share of the nickel market from 2.3% in 2020 to 30% in 2030.ⁱ



According to the International Nickel Study Group (INSG), **global demand for nickel** is expected to increase 12.0% from 2.405 million tonnes in 2019 to 2.673 million tonnes in 2021, driven by robust demand from manufacturers of stainless steel and strong sales of electric-vehicles (EVs).

Global Nickel Industry					
Year	Global Production (MM tonnes)	YOY Change	Global Usage (MM tonnes)	YOY Change	Surplus/ (Deficit) (tonnes)
2010	1.450		1.470		(20,000)
2011	1.610	11.0%	1.580	7.5%	30,000
2012	1.760	9.3%	1.660	5.1%	100,000
2013	1.750	-0.6%	1.660	0.0%	90,000
2014	1.994	13.9%	1.863	12.2%	131,000
2015	1.973	-1.1%	1.881	1.0%	92,000
2016	1.991	0.9%	2.037	8.3%	(46,000)
2017	2.070	4.0%	2.184	7.2%	(114,000)
2018	2.184	5.5%	2.328	6.6%	(144,000)
2019	2.369	8.5%	2.405	3.3%	(36,000)
2020	2.494	5.3%	2.386	-0.8%	108,000
2021 E	2.718	9.0%	2.673	12.0%	45,000

Another indication of the looming shortage of nickel is the actions of producers of EV battery and energy storage batteries to lock in supply. A prominent example is **Tesla**, which in July 2021 **entered into a long-term supply contract with BHP Billiton for Class I nickel**. Tesla is also securing additional nickel supply through agreements with Prony Resources and Vale.

Environmental Sustainability and the Nickel Industry

The environmental impact of nickel mining and refining operations has come to the forefront as countries and the managements of both upstream and downstream companies focus on addressing net-zero emissions targets. Concerns range from the **carbon footprint** of powering mining and nickel smelting operations to the **remediating** the clearance of large areas of land during the mining process and sulfuric acid/the emissions of sulfur dioxide in some processes of refining nickel into

intermediate products. As ecological and sustainability efforts become an increasingly significant factor in the nickel market, eco-friendly nickel for use in batteries will command a premium.

The Use of Nickel Cathodes for Electric Vehicles

Rechargeable lithium-ion batteries have become ubiquitous, powering electric vehicles (EVs) and large-scale energy storage systems. The current growth in these applications is being enabled not only by lithium but also by nickel. The expansion of these devices and systems is dependent on several attributes battery technology, namely life span, recharging time, energy capacity and the capability for rapid discharge (enables quick acceleration and rapid recharge).

Several popular types of lithium-ion batteries utilize a variety of other elements. Each type has attributes that are better suited for certain applications, some of which are listed below in order of energy density:

- Lithium Manganese Oxide (LiMn_2O_4 aka **LMO**) for power tools, medical devices & electric powertrains – energy density (100-150 Wh/kg) and with 300-700 recharging cycles
- Lithium Iron Phosphate (LiFePO_4 aka **LFP**) for high load requirements – energy density (90-200 Wh/kg), 1,000-2,000 recharging cycles but can pulse discharge for high 40 amp load
- Lithium Nickel Manganese Cobalt Oxide ($\text{LiNi}_x\text{Mn}_y\text{Co}_{1-x-y}\text{O}_2$ aka **NMC / NCM**) for E-bikes, medical devices & EVs – energy density (150-220 Wh/kg) and with 1,000-2,000 recharging cycles
 - NMC333 ($\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$): 33.3% Ni, 33.3% Mn, 33.3% Co
 - NMC622 ($\text{LiNi}_{0.6}\text{Co}_{0.2}\text{Mn}_{0.2}\text{O}_2$): 60% Ni, 20% Mn, 20% Co
 - NMC811 ($\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$): 80% Ni, 10% Mn, 10% Co
- Lithium Cobalt Oxide (**LCO**) energy density (150-280 Wh/kg); encumbered by the disadvantages of a higher price & cobalt toxicity due to a higher cobalt content
- Lithium Nickel Cobalt Aluminum Oxide (LiNiCoAlO_2 aka **NCA**) for medical devices, electric powertrain (Tesla) – high energy density (200-280+ Wh/kg) but only 500 recharging cycles

The **cathode** is at **critical part of a lithium-ion battery** and is a **significant part in determining the cost of that battery** (usually between 42%-to-48%). Multiple active materials (e.g. cobalt, nickel and manganese) are utilized in attempts to increase energy density and lower costs (particularly decreasing cobalt content) while maintaining or improving overall battery life span (aka cycle life or cyclability or durability) and safety (overheating aka thermal runaway).

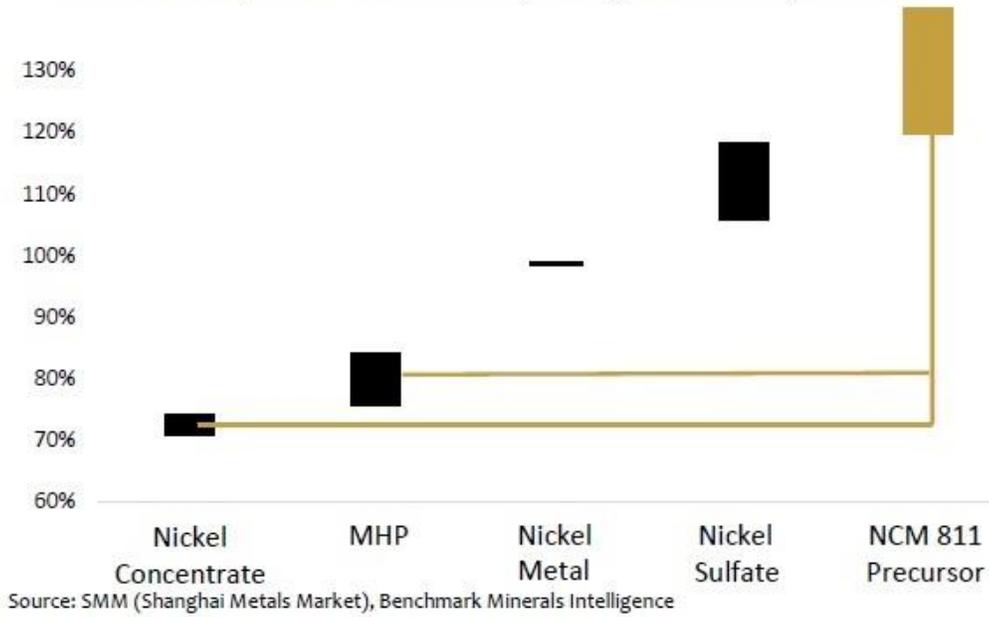
There are multiple scenarios related to which cathode-type will dominate; however, the most logical forecast is that several chemistries will co-exist with the penetration rate of each type of cathode varying by region, automobile company and/or application (from low-end e-scooters to high-end passenger vehicles). The cathode types range from ultra-high-nickel (LNO) and high-nickel chemistries (NCM811) to low-nickel (NCM217) and no-nickel alternatives (LFP). Currently, EVs mainly utilize Nickel-Cobalt-Manganese (NCM) and Nickel-Cobalt-Aluminum (NCA) cathode chemistries due to their high energy densities. Benchmark Minerals forecasts that **NCM chemistry will account for 68% of the cathode market in 2025**.

For example, Tesla utilizes multiple cathode chemistries through its battery suppliers: Panasonic (NCA), LG Chem/LG Energy Solutions (NCM811) and Contemporary Amperex Technology Co Ltd aka CATL (LFP). Furthermore, in China, LFP-cathode batteries account for over 51% of EV battery production.ⁱⁱ

Nickel Products and the Value Chain

After **nickel ore** is mined, it is crushed and processed into **nickel concentrate**, after which it is upgraded/refined into various standard **intermediate nickel products**, such as **MHP** (Mixed Hydroxide Precipitate), **nickel sulfate** (NiSO_4) and **NCM** (NiCoMn) concentrate **precursors** (shown below), along with matte (nickel-iron sulfide), MSP (Mixed Sulfide Precipitate) and various nickel salts, such as nickel hydroxide, mixed nickel-cobalt hydroxide and nickel carbonate.

Illustration of Nickel Product Payability vs Metal Spot Price

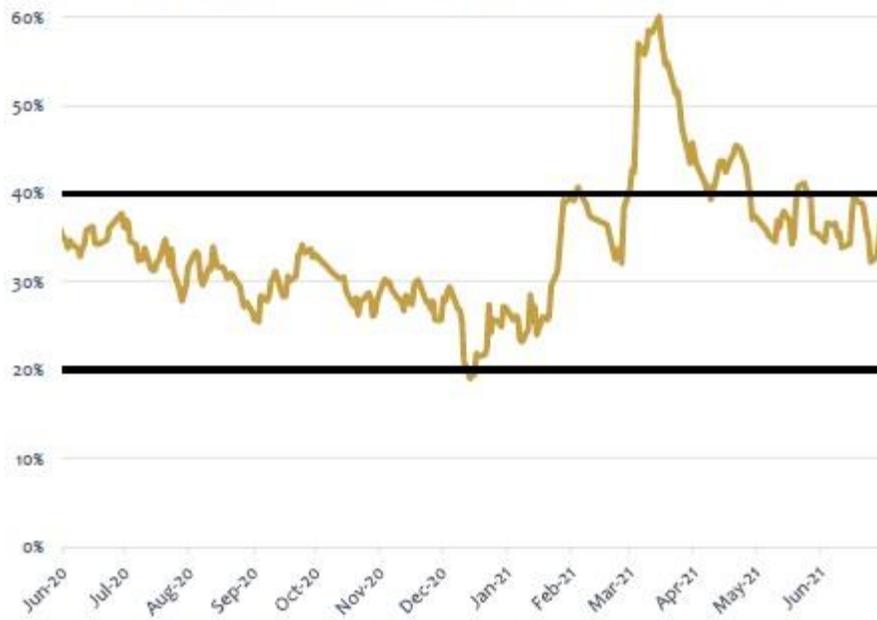


Blackstone Minerals Presentation June 2021

Each **intermediate nickel product is priced differently**. Historically, **MHP** has been priced at roughly 80% of the LME price for nickel metal (a **20% discount**), while **nickel sulfate** has commanded a **5%-to-20% premium**.

In March 2021, Blackstone provided an update of **management’s corporate strategy** that included the ability to produce a range of intermediate nickel products based on the refinery’s expanded flexible design. The planned downstream facility will be able to process nickel concentrate, upgrading it to MHP, and further treat this intermediate product to produce premium, high-value nickel products, such as **NCM Precursor products**, including **NCM811**, which has commanded a significant **20%-to-60% premium to nickel metal price** over the last 14 months.

NCM 811 Premium Over Nickel Metal Prices



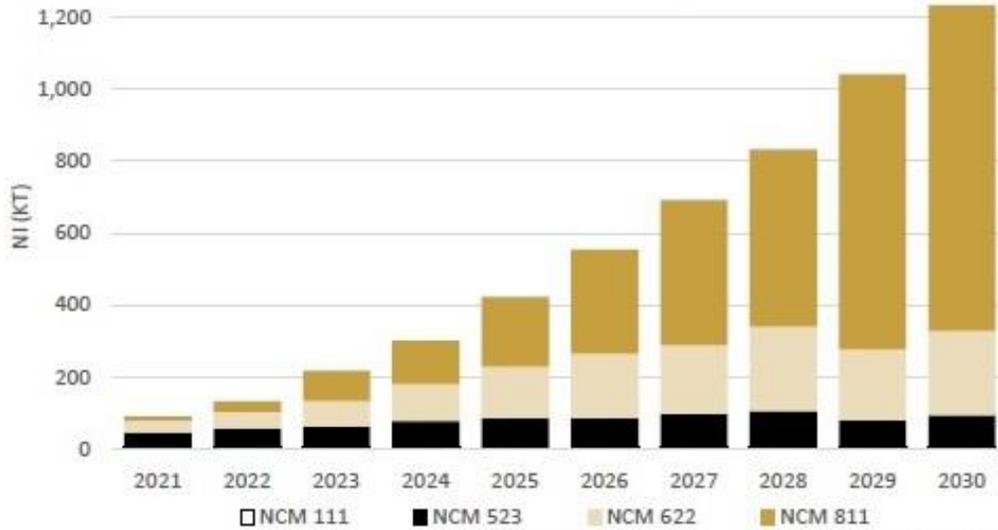
Source: BSX analysis of SMM data

Blackstone Minerals Presentation July 2021

In an effort to increase energy density and also reduce a dependence on high-cost cobalt, battery manufacturers are migrating toward NCM811 cathodes. Consequently, Benchmark Minerals Intelligence is forecasting that **NCM811** will grow faster than other NCM chemistries and **achieve market share dominance**. According to Terrafame, the market share of NCM622 batteries was 30%, with NCM811 rapidly gaining share with 12% as of mid-2021 versus 7% a year earlier.

Forecast Nickel Demand by NCM Chemistry

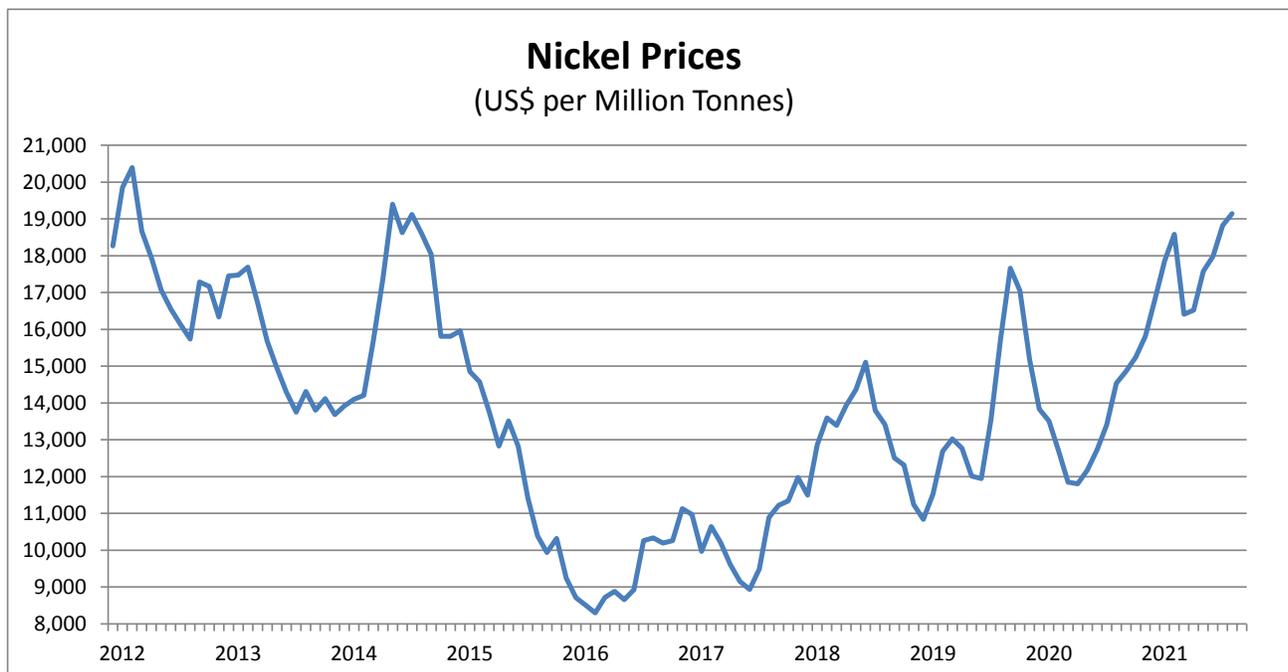
Source: Benchmark Mineral Intelligence



Blackstone Presentation July 26, 2021

Nickel Pricing

Nickel metal prices bottomed around \$8,300 per tonne in early 2016 as LME stocks peaked slightly above 500,000 tonnes. **LME inventories continued to decline to below 200,000 tonnes through September 2019** as some nickel mines were idled, including the Ravensthorpe Mine in Western Australia in 2017, along with reduced mine output from the Philippines. In addition, nickel consumption exceeded nickel mine supply starting in 2016 through 2019.



Nickel prices plummeted from \$17,657 per tonne in September 2019 to \$11,804 in April 2020 as LME inventories expanded from 157,000 to roughly 230,000 tonnes. However, demand for nickel recovered in the second half of 2020 due to rising demand driven to increasing EV sales, which drove the price of nickel to \$18,500 in February 2021.

After a brief correction in March, nickel prices have rallied from \$16,400 to over \$19,100 in August as demand increased for stainless steel and EV nickel-cathode batteries (first half 2021 EV sales increased 168% YOY to 2,650,000). In addition, LME stock has declined from approximately 261,000 tonnes in April to roughly 189,000 tonnes in August. This increased demand that reduced inventories is expected to stimulate higher prices of nickel in order to incentivize the development of incremental nickel projects.

RECENT NEWS

Downstream Ta Khoa Refinery Project

On July 23, 2021, Blackstone reported that a batch of battery-grade NCM811 Precursor had been produced with a NCM purity of greater than 99.7% using a feed blend composed of select split drill core from Ban Phuc DSS and concentrate samples from prospective third-party feed partners in proportions that reflect the proposed refinery feed blend. The metallurgical test work was conducted by Simulus Engineers at their laboratory in Perth.

NCM811 Precursor Batch Precipitation Test



Blackstone Minerals Press Release July 23, 2021

On July 26, 2021, Blackstone Minerals announced that a **Pre-feasibility Study (PFS)** had been **completed** on the downstream Ta Khoa Refinery Project. The PFS had a base case (constructed on certain nickel and NCM811 price assumptions) with a Life of Operations of 10 years, **refinery capacity of 400 ktpa @11.5% Ni**, average annual post-tax cash flow of US\$365 million and an **IRR of 67%**. The **upfront capital** for the refinery project (US\$491 million) was **projected to be paid back in 1.5 years** from the initiation of commercial production.

The PFS also technically confirmed that POX hydrometallurgical refining process could upgrade nickel sulfide concentrate to battery-grade NCM 811 Precursor product. The company's development strategy currently envisions using nickel concentrate feed from Ban Phuc, along with third-party nickel concentrate feed, to supply the Ta Khoa Refinery Project.

On August 3, 2021, Blackstone Minerals announced that the company's **Board of Director's approved** the first phase of work on the **development of a pilot plant** and the **commissioning of a Definitive Feasibility Study (DFS)** on the downstream Ta Khoa Refinery Project.

On August 26, 2021, Blackstone Minerals announced that **The Korea Development Bank and BurnVoir Corporate Finance** will **aid Blackstone in securing funding** for the development of **both the upstream and downstream portions of the Ta Khoa Project.**

Upstream Ta Khoa Mining Project

On August 24, 2021, Blackstone Minerals provided **results from the final infill drilling program** at the **Ban Phuc DSS** deposit. Drill hole BP20-55 helps demonstrate the bulk tonnage potential of the Ban Phuc DSS deposit with its **374.7-meter intersection of 0.30% Ni.**

Some of the Better Broad DSS Intersections from Latest Infill Drill Program at Ban Phuc

BP20-55 incl.	374.7m @ 0.30% Ni, 0.01% Cu, 0.01% Co & 0.07g/t PGE¹ from 2.0m 49.0m @ 0.45% Ni, 0.04% Cu, 0.01% Co & 0.17g/t PGE ¹ from 2.0m
BP20-57 incl.	211.38m @ 0.43% Ni, 0.03% Cu, 0.01% Co & 0.13g/t PGE¹ from 111.62m 52.24m @ 0.74% Ni, 0.11% Cu, 0.01% Co & 0.31g/t PGE ¹ from 241.0m
BP21-17 incl.	156.25m @ 0.50% Ni, 0.07% Cu, 0.01% Co & 0.15g/t PGE¹ from 79.75m 31.05m @ 0.75% Ni, 0.14% Cu, 0.01% Co & 0.26g/t PGE ¹ from 83.75m
BP21-31 incl.	169.0m @ 0.43% Ni, 0.04% Cu, 0.01% Co & 0.15g/t PGE¹ from 62.0m 10.3m @ 1.13% Ni, 0.18% Cu, 0.02% Co & 0.48g/t PGE ¹ from 98.0m
BP21-35 incl.	52.0m @ 0.79% Ni, 0.10% Cu, 0.01% Co & 0.26g/t PGE¹ from 22.0m 30.0m @ 1.10% Ni, 0.14% Cu, 0.02% Co & 0.41g/t PGE ¹ from 40.0m

Blackstone Minerals Press Release August 24, 2021

The results of the infill drill program is expected to contribute to the upgrade the existing JORC resource at Ban Phuc, which in turn will support the economics in the PFS expected to be completed in the second half of 2021.

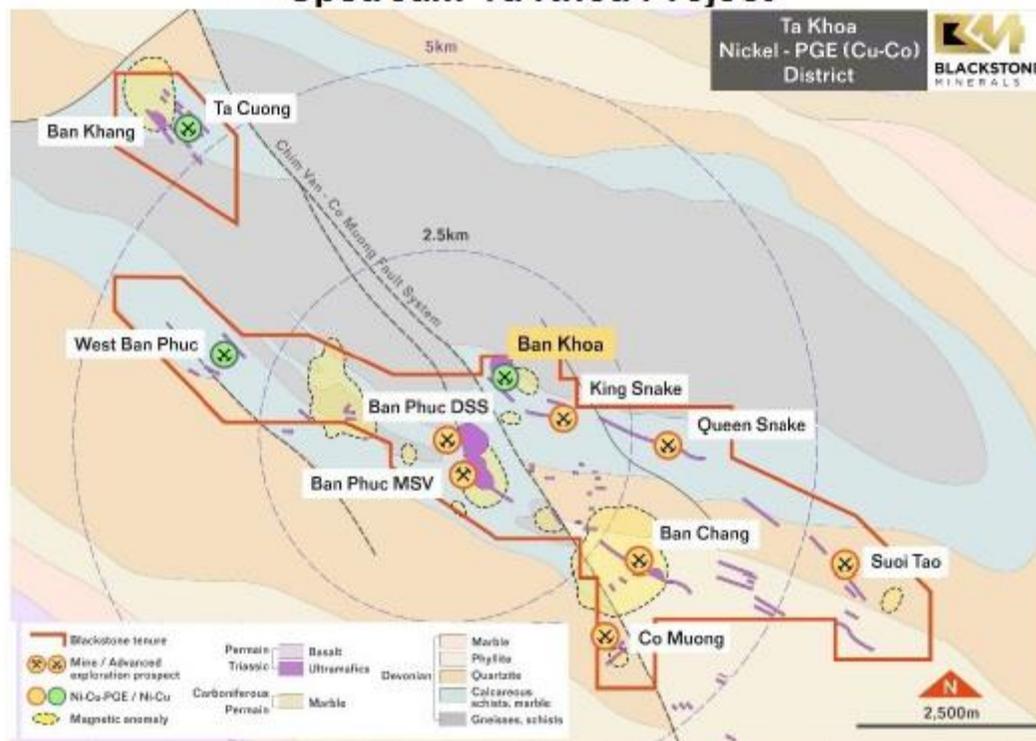
On September 2, 2021, Blackstone Minerals provided assay **results from the maiden infill drilling program**, this time from the **Ban Khoa DSS** deposit, which is approximately 1 kilometer north of the Ban Phuc DSS deposit. With its **147.0-meter intersection of 0.31% Ni**, drill hole BK21-11 also demonstrates the bulk tonnage potential of overall upstream Ta Khoa Project.

Highlighted DSS Intersections at Ban Khoa

BK21-11 incl.	147.0m @ 0.31% Ni, 0.04% Cu, 0.01% Co & 0.14g/t PGE¹ from 62.0m 34.65m @ 0.55% Ni, 0.08% Cu, 0.01% Co & 0.37g/t PGE¹ from 103.7m incl. 10.6m @ 1.06% Ni, 0.11% Cu, 0.02% Co & 0.88g/t PGE ¹ from 123.3m
BK21-10 and	67.7m @ 0.33% Ni, 0.04% Cu, 0.01% Co & 0.19g/t PGE¹ from 105.3m 32.1m @ 0.48% Ni, 0.08% Cu, 0.01% Co & 0.33g/t PGE¹ from 193.1m
BK21-08 incl.	60.2m @ 0.37% Ni, 0.07% Cu, 0.01% Co & 0.09g/t PGE¹ from 208.6m 10.8m @ 1.03% Ni, 0.13% Cu, 0.02% Co & 0.39g/t PGE ¹ from 210.2m

Blackstone Minerals Press Release September 2, 2021

Upstream Ta Khoa Project



Blackstone Minerals Press Release September 2, 2021

VALUATION

As a junior nickel company, Blackstone Minerals cannot be valued on a revenue, earnings or cash flow basis. The goal of management's strategy is to increase shareholders' value through the development of the upstream and downstream components of company's Ta Khoa Project.

More sophisticated methodologies based on market capitalization-to-reserves, average value per tonne, per-pound costs or cash profit margins per pound produced also are not germane. However, once the Definitive Feasibility Studies are completed and the financings for both components are secured, we will be able to utilize a resource valuation methodology that calculates a per share value of attributable resources for the upstream component, along with a Discounted Cash Flow (DCF) model for the downstream component. In the meantime, an alternative valuation technique based on book value is an appropriate alternative, especially in comparison to junior nickel companies that share similar attributes to Blackstone's.

Book value of a **junior nickel development company** represents the equity capital that has been raised to acquire the minerals rights on properties and to conduct exploration and development programs. An amalgamation of this information is encapsulated within the raised capital total, including the quality of the properties (both in terms of mineral potential and political stability), exploration results from drilling programs and the steps of development process that management has initiated /completed (Scoping Study, Pre-Feasibility Study, Metallurgical Test Work, Environmental Impact Statement, Baseline Studies and Definitive Feasibility Study). Therefore, book value captures the complex valuation of the company's base nickel resource value by relatively sophisticated investors (many with expert knowledge of junior nickel companies in the development phase both in terms of upstream and downstream projects). Hence, we find the use of book value is a valid and appropriate metric by which to determine a junior nickel company's valuation.

<i>Industry Comparables</i>	% Chg YTD	Ticker	Exch.	OTC Ticker	Project Country	Phase	Mkt Cap	
							Local Curr. (\$ mil.)	Price/ Book
Blackstone Minerals Ltd	22.0%	BLSTF	OTCQX		Vietnam	DFS	114.6	4.20
Blackstone Minerals Ltd	22.4%	BSX	ASX		Vietnam	DFS	161.6	4.57
NICKEL SULFIDE COMPANIES								
Canada Nickel Company Inc.	46.9%	CNC	TSXV	CNIKF	Canada	PEA	251.2	6.40
Centaurus Metals Limited	25.0%	CTM	ASX	N/A	Brazil	DFS	376.2	14.40
Class 1 Nickel & Technologies	-50.0%	NICO	CSE	NICLF	Canada	PEA	51.4	12.38
Horizonte Minerals Limited	7.7%	HRZ	TSX	HZMMF	Brazil	PFS	218.5	3.50
Mincor Resources NL	17.6%	MCR	ASX	MCRZF	Australia	DFS	570.7	6.38
Panoramic Resources Limited	55.6%	PAN	ASX	PANRF	Australia	DFS	430.7	2.58
Poseidon Nickel Limited	84.6%	POS	ASX	PSDNF	Australia	SS	367.7	5.67
Industry Mean	26.8%						323.8	7.33
S&P 500 Index	20.3%	^SPX:US	NYSE	N/A	N/A	N/A	N/M	4.88

Broadly speaking, the public nickel companies can be grouped into three segments: producers, development companies and exploration companies. Producers are actively mining and generating revenues. Exploration companies are prospecting and/or drilling to establish mineral resources. In between these two segments are the development companies that already have established resources and are advancing through the process of bringing a mine into operation, generally from the point of initiating a Scoping Study to the actual construction of a permitted mine. The comparable companies to Blackstone Minerals fall into this developmental category.

Further, the comparable companies have been narrowed through quantitative factors, particularly those with a market capitalization over \$50 million and trading above \$0.10 per share. This process captures a range of well-funded junior nickel development companies, which are listed in the table above. Currently, the P/B valuation range of these comparable companies is between 2.58 and 14.40. With the expectation that Blackstone's stock will attain a second quartile P/B ratio of 10.87, our **comparable analysis valuation price target is US\$0.93**.

RISKS

- As with almost all junior resource exploration companies, currently Blackstone Minerals does not generate sufficient cash flow to adequately fund its developmental and exploration activities and is in need of additional capital to continue pursuing management's strategy. Nevertheless, the company has effectively funded its operations and initiatives to date.
- Shares outstanding increased significantly in fiscal 2018 (+264%), fiscal 2019 (+27.7%), fiscal 2020 (+105%) and the first half of fiscal 2021 (+27.8%) as capital from equity financings have funded the company's exploration and developmental activities, along with general corporate expenses.
- As with any metals company, the price of the targeted mineral is beyond management's control, in the case of Blackstone Minerals, primarily the price of nickel. Consequently, any significant movements in the price of nickel would materially affect the outlook of the company, more so for the plans of the upstream business.

BALANCE SHEETS

Blackstone Minerals Limited				
(in \$ except share data)	2018	2019	2020	1 H 2020
Period ending	6/30/2018	6/30/2019	6/30/2020	12/31/2020
ASSETS				
Cash and cash equivalents	3,064,947	307,532	6,786,541	22,054,082
Accounts receivable	241,285	174,638	2,226,050	2,167,006
Total Current Assets	3,306,232	482,170	9,012,591	24,221,088
Trade and other receivables	96,183	96,183	114,840	549,748
Property, plant and equipment	29,095	16,472	11,512,910	11,658,763
Exploration and evaluation expenditures	10,127,010	10,204,152	7,931,498	7,446,174
Right-of-Use Assets	-	-	386,179	313,572
TOTAL ASSETS	13,558,520	10,798,977	28,958,018	44,189,345
Trade and other payables	911,703	221,727	6,823,462	5,693,248
Provisions	53,811	72,890	901,713	412,659
Lease Liabilities	-	-	136,722	129,697
Total Current Liabilities	965,514	294,617	7,861,897	6,235,604
Provisions	-	-	465,980	431,963
Lease liabilities	-	-	258,804	197,821
Deferred Tax Liabilities	-	-	2,337,918	2,337,918
Non-Current Liabilities	0	0	3,062,702	2,967,702
TOTAL LIABILITIES	965,514	294,617	10,924,599	9,203,306
SHAREHOLDERS' EQUITY				
Issued equity	21,338,801	23,377,083	38,171,741	60,367,683
Reserves	558,355	613,687	1,353,979	3,038,820
Accumulated losses	(9,304,150)	(13,486,410)	(21,380,716)	(28,062,873)
Non-controlling interest	-	-	(111,585)	(357,591)
Total Stockholders' Equity	12,593,006	10,504,360	18,033,419	34,986,039
TOTAL LIABILITIES & STOCKHOLDERS' EQ.	13,558,520	10,798,977	28,958,018	44,189,345
Ordinary shares outstanding	96,204,766	122,879,766	251,768,816	321,832,190

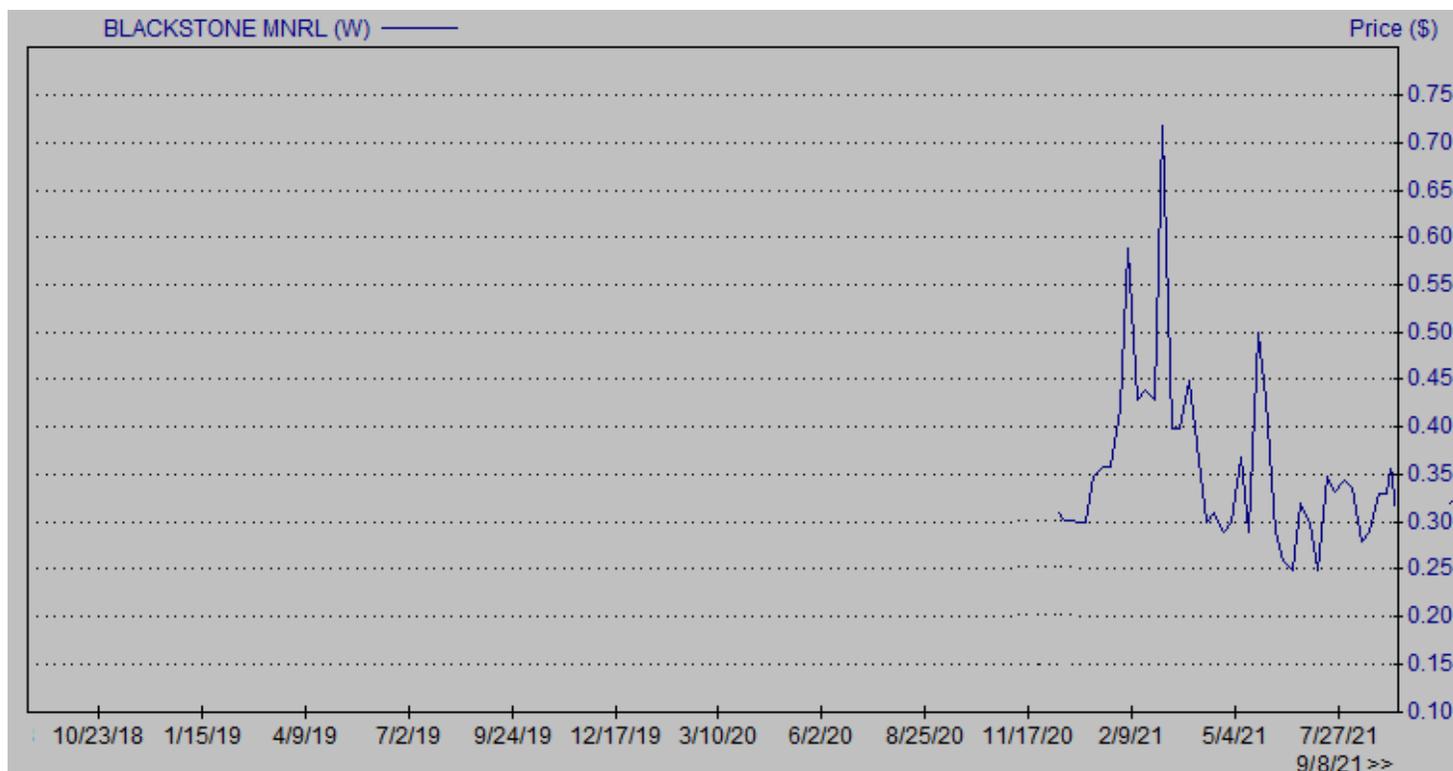
PROJECTED ANNUAL INCOME STATEMENT

Blackstone Minerals Limited					
Income Statement	2017	2018	2019	2020	2021 E
in \$ except share data (000)	6/30/2017	6/30/2018	6/30/2019	6/30/2020	6/30/2021
Revenue from continuing operations	14,504	46,469	12,345	46,333	100,721
Other income	-	-	88,635	539,699	90,000
Total Revenues	14,504	46,469	100,980	586,032	190,721
Administration costs	(38,261)	(580,706)	(594,922)	(1,338,551)	(2,150,775)
Consultancy expenses	(31,658)	(135,240)	(316,063)	(700,464)	(1,653,079)
Employee benefits expense	(129,686)	(560,546)	(573,751)	(677,666)	(1,158,377)
Share based payments expense	(84,140)	(4,504,934)	(335,680)	(1,752,605)	(2,000,000)
Occupancy Expenses	(37,696)	(65,117)	(70,030)	(46,104)	(45,485)
Compliance and regulatory expenses	(26,307)	(75,994)	(81,138)	(103,068)	(188,688)
Insurance expenses	(13,214)	(20,900)	(40,889)	(36,990)	(51,832)
Exploration expenditures	(517,183)	(2,511,782)	(2,245,881)	(2,635,304)	(5,988,121)
Depreciation expense	(471)	(22,331)	(15,042)	(100,908)	(155,184)
Depreciation on right of use assets	-	-	-	(126,468)	(125,703)
Finance and interest costs	(1,048)	(7,910)	(9,844)	(8,990)	(7,979)
Interest expense on lease liabilities	-	-	-	(23,810)	(17,898)
Impairment of Explor. & Eval. Assets	-	-	-	(2,727,010)	0
Gain from bargain purchase	-	-	-	1,722,326	0
Expenses	(879,664)	(8,485,460)	(4,283,240)	(8,555,612)	(13,543,122)
Net Loss	(865,160)	(8,438,991)	(4,182,260)	(7,969,580)	(13,352,401)
Non-controlling interest			0	(75,274)	(541,268)
Net Loss attrib. for BLSTF shareholders	(865,160)	(8,438,991)	(4,182,260)	(7,894,306)	(12,811,133)
Basic & diluted (loss) per BLSTF share	(0.047)	(0.126)	(0.040)	(0.041)	(0.042)
Wgtd. Avg. Ord. Shares Out. - diluted	18,408	66,976	104,557	192,544	306,180

PROJECTED HALF INCOME STATEMENT

Blackstone Minerals Limited						
Income Statement	1H 2020	2H 2020	2020	1H 2021	2H 2021 E	2021 E
in \$ except share data (000)	12/31/2019	6/30/2020	6/30/2020	12/31/2020	6/30/2021	6/30/2021
Revenue from continuing operations	438,570	N/A	46,333	60,721	40,000	100,721
Other income	0	N/A	539,699	50,000	40,000	90,000
Total Revenues	438,570	147,462	586,032	110,721	80,000	190,721
Administration costs	(633,815)	(704,736)	(1,338,551)	(1,018,410)	(1,132,365)	(2,150,775)
Consultancy expenses	(267,436)	(433,028)	(700,464)	(631,143)	(1,021,936)	(1,653,079)
Employee benefits expense	(288,150)	(389,516)	(677,666)	(492,553)	(665,824)	(1,158,377)
Share based payments expense	(1,300,697)	(451,908)	(1,752,605)	(1,171,869)	(828,131)	(2,000,000)
Occupancy Expenses	(33,421)	(12,683)	(46,104)	(32,972)	(12,513)	(45,485)
Compliance and regulatory expenses	(37,924)	(65,144)	(103,068)	(69,428)	(119,260)	(188,688)
Insurance expenses	(15,332)	(21,658)	(36,990)	(21,484)	(30,348)	(51,832)
Exploration expenditures	(1,949,934)	(685,370)	(2,635,304)	(3,488,121)	(2,500,000)	(5,988,121)
Depreciation expense	(29,119)	(71,789)	(100,908)	(75,184)	(80,000)	(155,184)
Depreciation on right of use assets	(60,834)	(65,634)	(126,468)	(60,466)	(65,237)	(125,703)
Finance and interest costs	(5,012)	(3,978)	(8,990)	(3,980)	(3,999)	(7,979)
Interest expense on lease liabilities	(12,755)	(11,055)	(23,810)	(9,588)	(8,310)	(17,898)
Impairment of Explor. & Eval. Assets	0	(2,727,010)	(2,727,010)	0	0	0
Gain from bargain purchase	0	1,722,326	1,722,326	0	0	0
Expenses	(4,634,429)	(3,921,183)	(8,555,612)	(7,075,198)	(6,467,924)	(13,543,122)
Net Loss	(4,195,859)	(3,773,721)	(7,969,580)	(6,964,477)	(6,387,924)	(13,352,401)
Non-controlling interest	0	0	(75,274)	(282,320)	(258,948)	(541,268)
Net Loss attrib. for BLSTF shareholders	(4,195,859)	(3,773,721)	(7,894,306)	(6,682,157)	(6,128,976)	(12,811,133)
Basic & diluted (loss) per BLSTF share	(0.024)	(0.017)	(0.041)	(0.023)	(0.019)	(0.042)
Wgtd. Avg. Ord. Shares Out. - diluted	174,827	221,984	192,544	290,529	321,832	306,180

HISTORICAL STOCK PRICE



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- ⁱ Benchmark Launches Nickel Industry's First Mixed Hydroxide Precipitate (MHP) Price, August 25, 2020, <https://www.benchmarkminerals.com/membership/benchmark-launches-nickel-industrys-first-mixed-hydroxide-precipitate-mhp-price/>
- ⁱⁱ Cathode and precursor materials: Can success in the Chinese LFP battery market be mimicked in the European and North American EV markets?, August 12, 2021, <https://roskill.com/news/cathode-and-precursor-materials-can-success-in-the-chinese-lfp-battery-market-be-mimicked-in-the-european-and-north-american-ev-markets/>