

## Ta Khoa Project Development Update

### Blackstone Continues to Optimise Project Development Strategies Through Ongoing Engagement with Prospective Technology and Off-take Partners



Figure 1. Ta Khoa Refinery 3D Model - Phu Yen District

Blackstone Minerals Limited (“Blackstone” or the “Company”) wishes to provide an update on corporate activities, and on the Ta Khoa Project development. With completion of the Ta Khoa Refinery (“TKR”) piloting program, Blackstone has progressed critical project milestones in collaboration with prospective technology and off-take partners (the “Partners”). The development strategy will focus on the following critical activities:

- 1. Partnerships:** continued engagement with Partners to reach a final JV structure and investment contribution.
- 2. Multi-product strategy:** evaluation of various product and throughput staging options, including an initial nickel sulphate start up scenario, which would de-risk early project cashflows, and improve the project development schedule.
- 3. Community:** collaboration with community stakeholders to ensure greatest community support and to aid the permitting process for land access and thus enable early works activities.

- 4. Permitting:** dossier submitted seeking investment policy for the Ta Khoa Refinery, environmental impact assessment and social and economic baseline surveys commenced.

Further details can be found below.

### **Partnerships**

Five groups visited the Project site in 2022 as part of the partnership due diligence process. These visits were accompanied by meetings with government representatives (provincial and federal), Austrade, Australian Department of Foreign Affairs and Trade, financial institutions and other important stakeholders.

Following the announcement of Joe Biden's Inflation Reduction Act in the United States, the global landscape for battery materials has change dramatically. We are seeing similar new initiatives rolling out in the European Union (EU) and this puts Blackstone in a unique position due to the existing Free Trade Agreement (FTA) between Vietnam and the EU. Following a trip to South Korea in January 2023 to meet with Partners, Blackstone has seen an increased level of engagement with clear interest in the European FTA, as well as the low carbon footprint associated with the Ta Khoa Project nickel products.

The consideration of a multi-product strategy was welcomed by the Partners. Having the flexibility to sell nickel and cobalt sulphate intermediate products while completing precursor cathode active material ("pCAM") qualification processes will provide cashflow security during the critical project ramp-up phase. This strategy has also attracted several new downstream players, with short term nickel sulphate off-take a desirable contract to secure.

Blackstone looks forward to developing these relationships further in 2023 and is working with its advisors to ensure that the right partner is chosen, delivering the best outcomes for Blackstone shareholders.

### **Multi-product Strategy**

In consultation with Partners and Wood, the lead engineering consultant for the Definitive Feasibility Study ("DFS"), Blackstone is exploring various options. While the development strategy will depend upon the final partnership structure, key considerations being assessed include:

- Production of crystal nickel and cobalt sulphate intermediate products, prior to development of the pCAM facility funded from operating cashflow,
- Staged development of the Refinery, with an initial train capacity for 200,000 tonnes of concentrate feed per year, before expanding with a second train to 400,000 tonnes per year, which would be funded from operating cashflow,
- Early development of the Ta Khoa Massive Sulphide Vein ("MSV") projects, (King Snake and Ban Chang), and operation through the existing concentrator.

Each of these options de-risk Blackstone's path to project cashflows and are being evaluated from a technical and economic perspective.

Blackstone is pleased to announce the integration of the Vietnamese engineering firm Narime into the DFS delivery team. Narime will assist Wood in 'nationalising' the Ta Khoa Refinery design as well as supporting Blackstone to complete 'in-country' vendor and

contractor due diligence and source local construction pricing to feed into the DFS estimates. Nationalising the Ta Khoa Refinery design will assist Blackstone in expediting the permitting process as all document submissions need to comply to Vietnamese Standards.

Narime has experience in oil and gas, hydrometallurgical refineries, and manufacturing industries in Vietnam and South-East Asia, across all stages of project development from studies through to execution, providing a natural fit to work with Blackstone and Wood. Examples of recent significant hydrometallurgy projects by Narime include Lam Dong bauxite - aluminium project in 2012 (US\$830m), Nhan Co bauxite - aluminium project in 2015 (US\$840m). Other recent projects include; EV production line equipment for VinFast LLC (in progress), material handling systems for Vung Ang thermal power plant (in progress), Nghi Son II thermal power plant (2022) and Song Hau thermal power plant (2021), Nui Phao tungsten beneficiation plant (2012), design verification for Lao Cai copper refinery (2014).

In addition, Blackstone is currently completing due diligence of several pCAM facility design consultants from Europe and China. The short-listed consultants have extensive engineering and execution experience in both pCAM and CAM facilities, many of which are operational today. The selected pCAM consultant will contribute to the DFS and provide invaluable support into the development of the upcoming pCAM facility design and execution.

### **Community**

Blackstone continues to engage community stakeholders to ensure strong community support for the Ta Khoa Project. After collaboration with the peoples' committee at both provincial and district level in 2022, Blackstone accepted the opportunity to relocate the Ta Khoa Refinery to Bac Phong Commune, Phu Yen District. Bac Phong Commune is located adjacent to the Da River and at a point that has all year-round river access. Bac Phong is the preferred location for the Refinery as it:

- has a reduced community impact with the need for resettlement reduced by approximately 70%,
- enabled use of the Da River for transportation during construction and project operations. Using the Da River for transportation provides an alternate transport route as well as significantly reducing the interaction with local communities for logistics management,
- improved access to the proposed residue storage locations,
- is the governments preferred location.

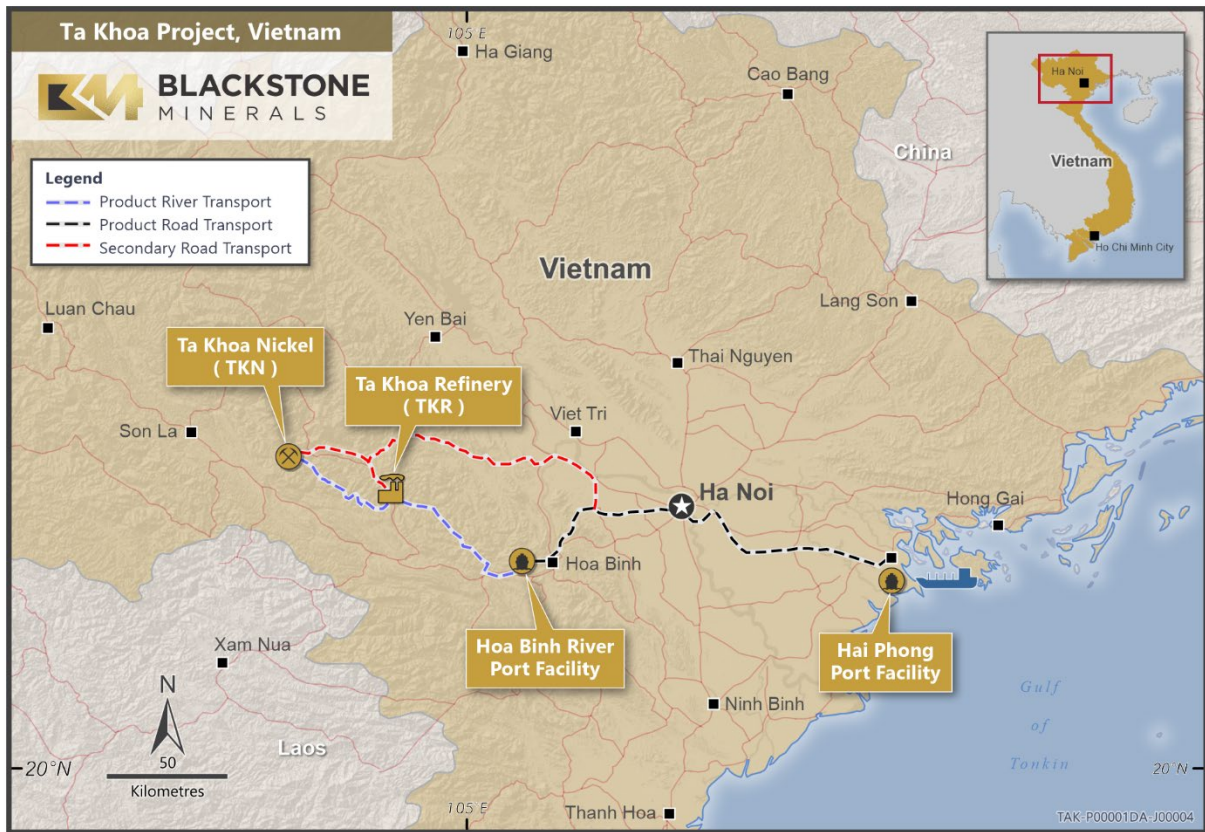


Figure 2. Ta Khoa Project Logistics Routes

## Permitting

Permitting remains on the critical path and a priority for our Vietnam team. In February 2023 we hit a major milestone with the submission of the Ta Khoa Refinery dossier and commenced the environmental and social and economic baseline surveys for the project. Focus will remain to complete the baseline surveys during 2023 as well as progressing the relevant mining and operational licenses for the Ta Khoa Project.

During 2022 Blackstone formed a Permitting Steering Committee with members from Blackstone, key government officials from Son La Peoples Committee and heads from Provincial level agencies such as Department of Natural Resources and Energy, Department of Finance, and Department of Industry and Trade. This has helped to spearhead the Ta Khoa Project permitting process and as a result, great progress has been made since August 2022. Key milestones include:

- Formally submitted a dossier seeking an investment policy from the Son La provincial government for the Ta Khoa Refinery in February 2023. This is an important step in advancing the licensing and permitting of the Ta Khoa Refinery. Blackstone expects formal feedback on the dossier submission in Q2 2023,
- Hosted the Reserves Council at Ban Phuc Nickel Mine (BPNM) in January 2023. The Reserves Council inspected core samples, drill hole locations, the bulk sample drive in the underground workings, the plant site and laboratory. The Reserves Council were satisfied that the data captured within the reserve report was factual and valid,
- Executed an agreement with Centre of Industrial Environment to undertake the environmental impact assessment for the Ta Khoa Project and executed an

agreement with Development Research and Consultancy Centre to undertake a social and economic base line survey of the Ta Khoa Project. Works commenced in February 2023 with first draft reports expected in Q3 2023.

Blackstone is actively engaged with the Vietnamese government to approve the Ta Khoa resource and reserve statements and progress application for mining licences to cover the Ban Phuc Disseminated, Ban Khoa Disseminated, King Snake MSV and Ban Chang MSV deposits. Blackstone's subsidiary, BPNM currently holds Mining Licence Extension 129/GP over the Ban Phuc MSV deposit, the existing concentrator and tailings storage facility (TSF).



**Figure 3. Left to right: Mr Din Van Tien, Director, Department of Planning and Investment and Mr Lon Taranaki, General Director, TKR meeting to submit dossier, Son La**

As we start 2023, Blackstone will continue to focus on critical path items while limiting spend in this current market environment. With the completion of the Refinery pilot program and integration of learnings into the Ta Khoa Refinery flowsheet, focus will convert to completion of the Ta Khoa Refinery DFS. Test work and piloting for the mine and concentrator will continue, with completion expected in Q2 2023.

Blackstone's exploration team is currently focused on geophysical targeting with Down Hole Transient electro-magnetic ("EM") work looking for extensions to the Ban Phuc MSV deposit, and 3D Induced Polarisation surveying of the disseminated nickel sulphide deposits to explore for extensions to the identified resources. BPNM is also assessing additional nickel sulphide exploration opportunities in northern Vietnam.

### **Corporate**

The Company wishes to announce the resignation of its Chief Financial Officer (CFO), Mitch Thomas who resigned to pursue other opportunities. Blackstone wishes Mitch all the best and thanks him for his services since joining the Company. Blackstone's Company Secretary, Jamie Byrde, will assume the CFO responsibilities.

Blackstone's senior leadership team will be participating in the following upcoming industry conferences:

- RedCloud Pre-PDAC 2023 Mining Showcase, Toronto, Canada, 02-03 March
- Metals Investor Forum, Toronto, Canada, 03-04 March
- PDAC 2023, Toronto, Canada, 05-08 March
- Vietnam Business Forum, Hanoi, Vietnam, 19 March
- Battery Minerals Conference, Perth, Australia, 21-22 March
- 121 Mining Investment Hong Kong, 29-30 March
- Resource Connect Asia, Singapore, 04-06 April

Scott Williamson, Blackstone's Managing Director said,

*"Blackstone continues to deliver major project milestones to progress development of the Ta Khoa Project. Completion of the pilot program, dossier submission and commencement of major permitting activities are great examples of our team's commitment to drive the project forward. The Project development strategy has matured, driven through partnership collaboration. Incorporating a multi-product strategy and staging opportunities into the design has brought increased interest from prospective partners, and de-risked the projects pathway to cashflow. This is an exciting time for Blackstone as we continue our ambition to develop the greenest and most resilient nickel business in the world."*

Authorised by the Managing Director on behalf of the Board.

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## About Blackstone

Blackstone Minerals Ltd (ASX: BSX / OTCQX: BLSTF / FRA: B9S) is focused on building an integrated battery metals processing business in Vietnam that produces Nickel:Cobalt:Manganese precursor products for Asia's growing lithium-ion battery industry.

Blackstone will produce the lowest emission precursor as verified by Minviro and the Nickel Institute (refer ASX announcement 15 September 2022).

The existing business has a modern nickel mine built to Australian standards, which successfully operated as a mechanised underground nickel mine from 2013 to 2016. This will be complemented by a larger concentrator, refinery and precursor facility to support integrated production in-country.

To unlock the flowsheet, the Company is focused on a partnership model and is collaborating with groups who are committed to sustainable mining, minimising the carbon footprint and implementing a vertically integrated supply chain.

The Company's development strategy is underpinned by the ability to secure nickel concentrate and Ta Khoa is emerging as a nickel sulphide district with several exploration targets yet to be tested.



Figure 4: Ta Khoa Project Location

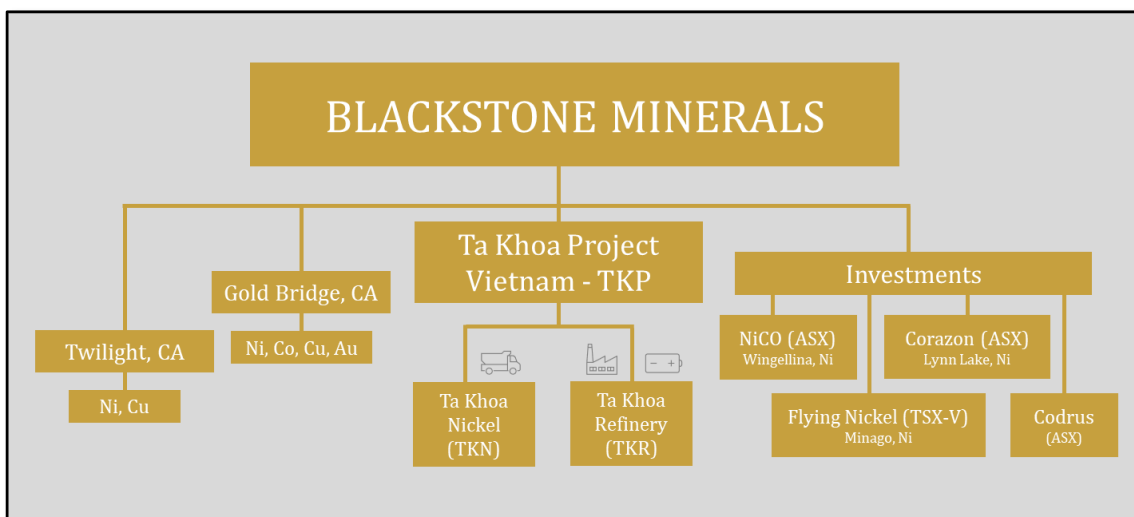


Figure 5: Blackstone Minerals Business Structure Schematic