

BUY

244%

HZM-TSX/ HZM-LON

Metals & Mining

C\$0.11, £0.06

C\$0.35, £0.21↓

C\$0.10 - C\$0.18

HORIZONTE MINERALS PLC.

Closes Equity Component of \$633 MM Project Financing Package

EVENT

Horizonte Minerals announced that it has closed the equity component of the \$633 MM comprehensive funding package for the construction of Araguaia nickel project in Brazil announced on November 23 (Cantor acted as joint bookrunner).

IMPACT

Positive: Horizonte is now fully financed to build its 100%owned Araguaia ferronickel project in Brazil. The financing was larger than we had anticipated including \$197 MM equity issue and a rather expensive convertible debenture for another \$65 MM. We have updated our model for the additional dilution and costs resulting in a reduction of our target price to C\$0.35/shr from C\$0.50/shr. However, Horizonte continues to stand out for value offering exposure to two top tier nickel projects with robust economics located in a proven jurisdiction. We maintain our BUY rating.

FOCUS POINTS

- Fully Financed for Araguaia: The \$633 MM financing package includes \$197 MM in equity, a \$65 MM convertible loan, \$346.2 MM senior debt and a \$25 MM cost overrun facility. This should be more than adequate to complete construction of Araguaia.
- Araguaia Nickel for Stainless Steel: Araguaia is a lowrisk, shovel-ready ferronickel project set to feed the stainless steel market over a 28-year life with an after-tax NPV_{8%} of \$850.9 MM and an IRR of 28.3%.
- Vermelho Nickel for EV Batteries: Vermelho is a nickel laterite project that will produce nickel and cobalt sulphate to supply the growing battery and EV market and has an after-tax NPV_{8%} of \$1.9B and an IRR of 32.1%.
- Established Mining Jurisdiction: Both projects are located in the Carajás Mining District in Brazil, which has a long history of mining and supportive infrastructure.
- Attractive Value: Horizonte trades at 0.3x NAV (riskadjusted) versus development peers at 0.5x NAV and established producers at 0.6-1.2x NAV.

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IM comprehensive funding package	All currency values in \$US unless otherwise noted.
Araguaia nickel project in Brazil ber 23 (Cantor acted as joint	Current price: C\$0.11 One-year target: C\$0.35 Target return:
	52-week Range: C\$0.10 -

Financial Summary Market Cap (C\$MM)	\$418.3
Cash on hand (C\$MM)	\$202.6
Debt (C\$MM)	\$22.1
Basic Shares O/S (MM)	3,802.4
Fully Diluted Shares O/S (MM)	3,927.7
Avg. Weekly Volume (k)	11,327

Global Resources

Recommendation:

Symbol/Exchange:

Sector:

	<u>ktonnes</u>	<u>Ni (%)</u>	<u>Co (%)</u>	<u>NiEq (%)</u>
M&I	265,037	1.15%	0.05%	1.3%
Inferred	16,020	1.15%	0.06%	1.3%
Total M&+I	281,057	1.15%	0.05%	1.3%
Metal Content (Mlbs)		Ni	Cu	NiEq
M&I		6,714	318	7,613
Inferred		405	20	461
Total M&I+I		7,119	338	8,074
EV/lb NiEq M&I (US\$/	1b)			\$0.04
P/NAV				0.3x
0.20 0.18 0.16 0.14 0.12 0.10 0.08 0.06 0.04 0.02 0.00 0.04 0.02 0.00 0.04 0.02 0.00 0.04	when when	Marken Mark		4.0 3.5 2.5 2.0 1.5 0.0 0.0

Company Profile: Horizonte Minerals is a Nickel-focused development company with two top tier projects in Brazil: Araguaia and Vermelho. Araguaia has completed permitting and will be constructed once financing can be obtained, and Vermelho provides further potential production once Araguaia is in operation.

See disclosure and a description of our recommendation structure at the end of this report.

COMPRENENSIVE FINANCING PACKAGE FOR ARAGUAIA

Horizonte Minerals announced that it has completed investment and subscription agreements as part of a comprehensive funding package of \$633 MM for the construction of Araguaia nickel project in Brazil. Horizonte is now fully financed to build its 100%-owned Araguaia ferronickel project in Brazil. The financing was larger than we had anticipated consisting of a \$197 MM equity issue and a rather expensive convertible debenture for another \$65 MM.

Funding Sources	US\$M
Equity fundraise ⁽¹⁾	
Orion	\$50.0
La Mancha (between US\$65 million and US\$75 million)	\$65.0
Glencore	\$7.0
Placing	\$75.0
Total	\$197.0
Senior Debt Facility	
Tranche A	\$146.2
Tranche B	\$200.0
Total	\$346.2
Convertible Loan Note Offering	\$65.0
Open Offer (assuming take up in full)	\$8.0
Others ⁽²⁾	\$42.0
Total Sources of Funds	\$658.2

Use of Funds	US\$M	
Araguaia Capital Expenditure (incl. US\$44 million contingency)	\$477.3	
Working Capital and Other ⁽³⁾	\$135.8	
Cost Overrun Equity and Debt Contingency	\$45.0	
Total Use of Funds	\$658.2	

2 "Others" includes pre-production operating costs. Financing fees, land acquisition and interest during construction. Source: Horizonte Minerals.

Equity: A total of 2,102,209,850 new ordinary shares in the capital of the Company have been placed at a price of 7 pence (C\$0.12) per share for total gross proceeds of ~f147.2 MM (~\$197 MM). The equity issue consisted of (i) strategic investments of \$71 MM from La Mancha and \$50.0 MM from Orion in newly issued Ordinary Shares; (ii) the placing of ~\$68.6 MM of newly issued Ordinary Shares by way of the UK Placing and the Canadian Offering and iii) a cornerstone subscription with Glencore of \$7 MM in newly issued Ordinary Shares. With over 3.8 BB shares outstanding now, the Company will consider carrying out a share consolidation.

Senior Debt Facility: In September, Horizonte Minerals announced that it has received credit approvals from a syndicate of five international financial institutions in addition to the previously announced approval by the two export



credit agencies (ECAs) for a senior secured project finance facility of up to \$346.2 MM to fund the construction and development of its Araguaia ferro-nickel project in Brazil. The Senior Lenders are BNP Paribas Securities Corp, ING Capital LLC, Natixis New York Branch, Société Générale, and Swedish Export Credit Corporation. The ECAs are EKF, Denmark's Export Credit Agency and Finnvera plc, Finland's Export Credit Agency. The Senior Debt Facility will include two tranches:

- 1) Tranche A of \$146.2 MM, to be guaranteed by the ECAs in relation to a number of key equipment and service provider contracts; and
- 2) Tranche B of \$200 MM.

The term of the Senior Debt Facility will be ten and a half years for Tranche A, and eight and a half years for Tranche B. The interest rate of the Senior Debt Facility will be at a rate of LIBOR plus 1.80% for Tranche A, and LIBOR plus 4.25 to 4.75% for Tranche B. Closing of the Senior Debt Facility is subject to customary conditions, including the negotiation and settlement of definitive documentation and the entry into a comprehensive intercreditor agreement, among others. Investors are reminded that the Proposed Senior Debt Facility and the Cost Overrun Facility are at the documentation stage and remain conditional upon definitive documentation being agreed and the completion of due diligence.

Convertible Loan: As part of their Strategic Investments, Orion and La Mancha have conditionally agreed to subscribe for \$50 MM and \$15 MM of Convertible Notes respectively. The Convertible Notes will be issued by the Company at a 5.75% discount (such that the Orion Noteholder and/or La Mancha shall only be required to pay 94.25% of the principal amount) at a fixed interest rate of 11.75% per annum, which shall be capitalised until Project Completion and payable in cash (subject to available cashflows) thereafter. At any time until the Maturity Date, being 3 months after the final maturity date of Tranche A of the Proposed Senior Debt Facility, the Orion Noteholder and/or La Mancha may, at their option, convert the Convertible Notes, partially or wholly, into Ordinary Shares up to the total amount outstanding under the Convertible Notes at a conversion price equal to 125% of the UK Placing Price subject to customary anti-dilution adjustments. At any time after the fifth (5th) anniversary of the subscription of the Convertible Notes, the Company shall have a one-time right to redeem the then outstanding and unconverted Convertible Notes in whole at 105% of the par value plus accrued and unpaid interest in cash if (i) a change of control event occurs; or (ii) the 30-day volume weighted average trading price of Ordinary Shares exceeds 200% of the Conversion Price and the aggregate average daily trading value exceeds \$2.5 MM over the prior 30 trading days.

Cost Overrun Facility: Orion has obtained investment committee approval to provide a Cost Overrun Facility in the amount of \$25 MM to be used, if required, for the construction of Araguaia. The Proposed Cost Overrun Debt Facility is subject amongst other things on definitive documentation and would form part of a total of \$99 MM in dedicated cost overrun funding and contingency funding for the Project (see Use of Funds in Exhibit 1 above).

Vermelho Royalty: In addition to its participation in the proposed Equity Fundraise, Convertible Notes and the provision of the Proposed Cost Overrun



Debt Facility, an affiliate of Orion will also purchase a 2.1% gross revenue royalty on the Vermelho project (the "Vermelho Royalty") for cash consideration to the Company of \$25 MM. The net proceeds from the sale of this royalty will be used to advance a feasibility study and permitting work streams on the Vermelho project. The Company also has the right to buy back 50% of the royalty on the first four anniversaries of closing (provided on such date it has not already been bought back) at agreed multiplies of the initial purchase price of up to 2x or thereafter for a sum which would deliver an IRR of 17% upon a change of control. Orion will also have the right to require the Company to repurchase the Vermelho Royalty if construction of the Vermelho project has not commenced within 10 years of at a price which generates minimum level of IRR of 15% for Orion. The proceeds of the Vermelho Royalty may only be used for the development of Vermelho and cannot be used towards Araguaia. Under the Vermelho Royalty, Orion has been granted a right of first refusal over future royalties/streams on the project, mining area or mining rights for ten years.

VALUATION

We continue to apply a sum-of-parts NAV approach in valuing Horizonte based on the production and cost profiles outlined by the Company in its 2019 and 2018 technical reports. For Araguaia, we apply a 0.8x multiple to our NPV_{8%} estimate of the project discounted to today for a value of \$700.3 MM. For Vermelho, we apply a 0.3x multiple (was 0.2x) to our NPV_{10%} estimate of the project discounted to today for a value of \$253.6 MM. We steeply discount Vermelho due to its earlier stage, high capex, higher technical risk and current status as a secondary project but have increased the multiple given the \$25 MM royalty deal that will be used to accelerate work. We have also adjusted Horizonte's capital structure to reflect the completed financing package including the significant share dilution associated with the equity issue as well as the final arrangement of \$346 MM in debt (initial draw-down in H2/2022). As a result, our target decreases to C\$0.35/shr from C\$0.50/shr previously.

Exhibit 2: NAV Summary

Mining Assets	Ownership	Valuation		NAV		
			(US\$MM)	(£MM)	£/sh	C\$/sh
Araguaia	100%	0.8x NPV8%	700.3	525.7	0.14	0.23
Vermelho	100%	0.3x NPV10%	253.6	190.4	0.05	0.08
Total Mining Assets			953.8	716.1	0.19	0.32
Financial Assets ¹						
Pro-forma Cash and I	nvestments	189.9	142.6	0.04	0.06	
Pro-forma Debt			(90.0)	(67.6)	-0.02	-0.03
Net Financial Assets			99.9	75.0	0.02	0.03
Net Asset Value			1,053.7	791.1	0.21	0.35
Target NAV per Dilute	ed Share (rounded)			0.21	0.35	
Basic shares outstanding	(MM)				3,802.4	
Diluted shares outstandi	ng (MM) ¹			3,802.4		
Fully diluted shares outs	tanding (MM)			3,927.7		
1						

¹Includes 12-mo ITM options & warrants, debt drawdown and capex spend through 2022.

Source: Cantor Fitzgerald

Horizonte exhibits significant leverage to the price of nickel and, to a lesser extent, cobalt. We calculate that for every 1.00/lb move in the nickel price, our target fluctuates by ~C0.10 per share. A 1.00/lb move in the price of cobalt



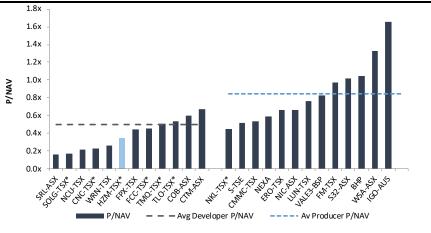
results in virtually no change to our valuation given that the bulk of the valuation resides in Araguaia which has no cobalt production and that Vermelho has both a small amount of cobalt production and a relatively small contribution to our NAVPS estimate. At spot prices of \sim \$9.00 nickel and \sim \$30.00 cobalt, our target would be \sim C\$0.41 per share, quite a premium to the current stock price.

C\$/shr		Ni Price (\$US/lb)										
		\$6.50	\$7.00	\$7.50	\$8.00	\$8.50	\$9.00	\$9.50	\$10.00	\$10.50	\$11.00	\$11.50
	\$12.00	\$0.15	\$0.20	\$0.24	\$0.29	\$0.34	\$0.38	\$0.43	\$0.47	\$0.52	\$0.57	\$0.61
	\$14.00	\$0.16	\$0.20	\$0.25	\$0.29	\$0.34	\$0.38	\$0.43	\$0.48	\$0.52	\$0.57	\$0.61
ত্রি	\$16.00	\$0.16	\$0.20	\$0.25	\$0.30	\$0.34	\$0.39	\$0.43	\$0.48	\$0.52	\$0.57	\$0.62
(qı/\$SN)	\$18.00	\$0.16	\$0.21	\$0.25	\$0.30	\$0.34	\$0.39	\$0.44	\$0.48	\$0.53	\$0.57	\$0.62
	\$20.00	\$0.16	\$0.21	\$0.25	\$0.30	\$0.35	\$0.39	\$0.44	\$0.48	\$0.53	\$0.58	\$0.62
lice	\$22.00	\$0.17	\$0.21	\$0.26	\$0.30	\$0.35	\$0.39	\$0.44	\$0.49	\$0.53	\$0.58	\$0.62
E E	\$24.00	\$0.17	\$0.21	\$0.26	\$0.31	\$0.35	\$0.40	\$0.44	\$0.49	\$0.53	\$0.58	\$0.63
Cobalt Price	\$26.00	\$0.17	\$0.22	\$0.26	\$0.31	\$0.35	\$0.40	\$0.45	\$0.49	\$0.54	\$0.58	\$0.63
ŭ	\$28.00	\$0.17	\$0.22	\$0.26	\$0.31	\$0.36	\$0.40	\$0.45	\$0.49	\$0.54	\$0.59	\$0.63
	\$30.00	\$0.18	\$0.22	\$0.27	\$0.31	\$0.36	\$0.41	\$0.45	\$0.50	\$0.54	\$0.59	\$0.63
	\$32.00	\$0.18	\$0.22	\$0.27	\$0.32	\$0.36	\$0.41	\$0.45	\$0.50	\$0.55	\$0.59	\$0.64
	HZM PFS/FS					Cantor	Spot					

Exhibit 3: Target Price Sensitivities to Nickel and Cobalt Prices

On a P/NAV basis, Horizonte trades at 0.3x NAV (risk-adjusted), below its peer group of nickel and copper developers at 0.6x while established producers (larger and generally diversified) are trading in the 0.8-1.6x NAV.





Source: Cantor Fitzgerald, Company Reports



COMPANY SUMMARY

Horizonte Minerals is a London-based, Brazil focused nickel development company that is advancing its 100% owned Araguaia and Vermelho nickel projects toward production. Both projects are located in the Carajás Mining District of Pará State, northeast Brazil. Araguaia is a traditional laterite project producing ferronickel and is construction-ready with financing discussions ongoing. The Vermelho project is also a laterite project that has advanced the pre-feasibility stage and Horizonte is planning on producing nickel- and cobalt-sulphate to be sold directly into the battery and Electric Vehicle (EV) markets. Horizonte stands out for their advanced, high-quality and advanced Brazilian assets, which boast robust project economics at prices below spot metal prices and long mine lives in an established mining jurisdiction. Our initiation of coverage piece on Horizonte can be found here. In our January 25 Macro Report: *A Green Economy and Electric Vehicles Start with Metals* (link here) we highlighted nickel and cobalt as critical metals needed to make the transition to a green economy.

Exhibit 5. Araguaia and Vermelho Nickel Project Locations Map



Araguaia Ferronickel Project: The Araguaia Project is a large deposit with M&I resources of 119Mt of ore at 1.3% Ni and 0.06% Co for 3.3 Blbs Ni and 158 Mlbs Co. Included in resources are Reserves of 27.3Mt at 1.7% Ni for 1.0Blbs Ni in situ that drive the modeled 28-year ferronickel operation outlined in the 2018 FS. The operation will be composed of two open pit mining areas and a central rotary kiln electric furnace (RKEF) processing facility able to process 900 ktpa of ore producing ~15kt of nickel in the form of ferronickel. At an 8% discount rate and \$6.35/lb Ni price applied in the FS, the project has an after-tax NPV of \$401.0 MM and an IRR of 20.1%. Applying our long-term nickel price of \$8.50/lb, we estimate the Araguaia project has an after-tax NPV_{8%} of \$850.9 MM and an IRR of 28.3%. As such the project is both robust at lower nickel prices and exhibits significant leverage to the nickel price. The project is construction ready with all



major permits, including the water permit and the construction permit. Engineering work has already begun, and the company aims to get the project shovel-ready as financing discussions are well advanced.

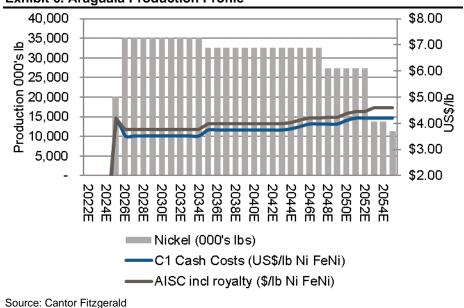


Exhibit 6. Araguaia Production Profile

Battery Nickel: Horizonte's initial project, Araguaia, will produce ferronickel which is predominantly used in the production of stainless steel. The production of batteries for electric vehicles requires nickel in the form of nickel sulphate. So, while there is no direct link per se, prices for nickel sulphate and ferronickel are both based on the LME price for nickel. And while the nickel sulphate market is set to grow dramatically, stainless steel remains a strong market with good growth and the dominant consumer of nickel, currently at over 70%. The strong and growing nickel demand across all markets support strong nickel prices and all types of nickel producers stand to benefit. Further, ferronickel can be converted to nickel sulphate with additional processing which remains an option for the future (either by Horizonte or a 3rd party off-taker).

 CO_2 Emissions: A key focus for investors looking at the nickel space is CO_2 emissions. While mining of laterite ore benefits from low to no stripping, the drying, crushing and smelting of the ore is energy intensive. However, Araguaia is located such that there is ample zero-emission hydroelectric power to run the crushers and the electric arc furnace. As such, it comes in the low end of carbon emissions among peers. In addition, proven operational efficiencies such as heat transfer capture combined with efficient fuel substitutes in the dryer and reductant processes puts Araguaia on the pathway to becoming one of the lowest carbon footprint projects per tonne of nickel within its FeNi peer group.



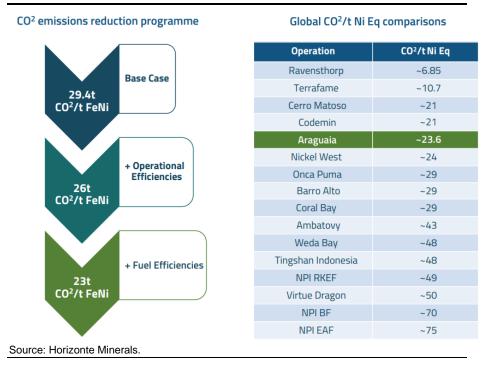


Exhibit 7. CO2 Emissions

Vermelho Nickel-Cobalt Project for Batteries and EVs: The Vermelho Project is Horizonte's second project consisting of another large Ni-laterite deposit 100% owned by Horizonte. The deposit has M&I resources of 146 MMt at 1.1% Ni and 0.05% Co for 3.4 Blbs of nickel and 161 Mlbs of cobalt in-situ. The project was initially developed by Vale who spent over \$200 MM on the project. A recently completed PFS by Horizonte envisions a 38-year open pit operation with a high-pressure acid leach (HPAL) facility able to process 2 Mtpa of ore producing 24 kt of nickel in nickel sulphate and 1,300 t of cobalt in cobalt sulphate annually. The upfront costs are estimated to be \$652 MM, with cash costs in the lowest quartile at \$3.64/lb for the LOM. The PFS using a \$7.43/lb (\$16,400/t) nickel price generated an after-tax NPV_{8%} of \$1.7B for the project. Applying our long-term nickel price of \$8.50/lb and \$24/lb cobalt, we estimate the Vermelho project has an after-tax NPV_{8%} of \$1.9B and an IRR of 32.1%.



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BUY (Speculative): The stock is attractively priced relative to the company's fundamentals, however investment in the security carries a higher degree of risk.

HOLD: The stock is fairly valued, lacks a near term catalyst, or its execution risk is such that we expect it to trade within a narrow range of the current price in the next 6 to 12 months. The longer term fundamental value of the company may be materially higher, but certain milestones/catalysts have yet to be fully realized.

SELL: The stock is overpriced relative to the company's fundamentals, and we expect it to decline from the current price over the next 6 to 12 months.

TENDER: We believe the offer price by the acquirer is fair and thus recommend investors tender their shares to the offer.

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