

Australian Equity Research 19 July 2021

Rating	Price Target
SPECULATIVE BUY	A\$1.20
CTM-ASX	Price <b>A\$0.83</b>

#### Market Data

52-Week Range (A\$) :	0.44 - 0.95
Avg Daily Vol (000s) :	137
Market Cap (A\$M) :	297.4
Shares Out. (M) :	358.3
Dividend /Shr (A\$) :	0.00
Dividend Yield (%) :	0.0
Net Debt (Cash) (AUcM) :	21.7
Enterprise Value (A\$M) :	270
Cash (AUcM) :	1.2
NAV /Shr :	1.20
NAV /Shr (5%) (A\$) :	2.28
P/NAV (x) :	0.70

FYE Dec	2020A	2021E	2022E	2023E
EBITDA (A\$M)	(8.3)	(12.4)	(8.4)	(4.5)
EV/EBITDA (x)	(32.7)	(23.1)	(38.5)	(49.4)
Net Income (A\$M)	(5.3)	(7.8)	(5.7)	(6.5)



Priced as of close of business 19 July 2021

Centaurus Metals Limited (ASX:CTM) is a nickel sulphide focussed developer aiming to bring the 100%-owned Jaguar Project into production in 2024. The project is located in the world-class Carajás Mineral Province in Brazil. Scoping Studies for both an upstream mining operation to produce nickel sulphide in concentrate, and a downstream value-add scenario to produce +20ktpa of nickel in sulphate have been completed.

Initiation of Coverage

# Centaurus Metals Li

Base Metals - Developer/Explorer

 Paul Howard | Analyst | Canaccord Genuity (Australia) Ltd. | phoward@cgf.com | +61.8.9263.1155

 Timothy Hoff | Analyst | Canaccord Genuity (Australia) Ltd. | THoff@cgf.com | +61.2.9263.2745

# Jaguar is purring, meow is the time to buy

Centaurus Metals Limited (CTM-ASX) is a nickel sulphide developer aiming to bring the 100%-owned Jaguar Project into production in 2024. The project is located in the Carajás Mineral Province in Brazil, a world-class mining destination hosting the world's the largest iron ore mine (S11D) and a number of large IOCG mines owned by Vale. The Jaguar Nickel Sulphide deposits are related to the regional IOCG mineralisation and are hosted within dacites adjacent to a layered mafic-ultramafic complex. However, they are hydrothermal in nature and are atypical of nickel sulphide mineralised occurrences in the sense that they are not hosted within komatiites or intrusions.

**Pursuing the production of nickel sulphate:** In late May 2021, CTM released a Value-Add Scoping Study for Jaguar, which contemplates developing a large, 13+ year mine and plant to produce ~20ktpa of a premium nickel sulphate product (metal as opposed to concentrate, which could deliver 56% more margin compared to a mine-only scenario), as well as a mixed sulphide by-product containing cobalt and zinc. The study builds on a mine-only Base Case Scoping Study released in March 2021. Pressure Oxidation (POx) will be employed to convert concentrate into nickel metal for an estimated pre-production capex of US\$288m. CTM estimates C1 costs and AISC to be US\$3.29/Ib Ni and US\$3.94/Ib Ni respectively. Given the study is preliminary and scoping in nature, costs and assumptions are to a +/-40% level of accuracy.

**'Green Nickel' for an ESG conscious world:** While the downstream Value-Add scenario is US\$110m more expensive than the Base Case that would produce a concentrate, CTM expects to benefit from the premium paid above the nickel price for a sulphate product; a key component of electric vehicle (EV) batteries. CTM anticipates prices equivalent to a 107% payability rate for sulphate. CTM estimates cash operating margins for the sulphate scenario at US\$4.27/lb verses US\$2.74/lb for the sulphide case, with operating cash flows averaging US\$189mpa versus US\$123mpa in the Base Case.

Given Brazil's national power grid runs on at least 80% renewables (mainly hydroelectrical power), and with this clean power costing a lowly US\$0.10/kWh, we believe the Jaguar Nickel Sulphide Project has the potential to appeal to environmentally aware investors, battery manufactures and in-turn, final end-users of products containing CTM's nickel metal that could be viewed as ethically sourced.

**Ongoing exploration, resource drilling and study work:** CTM is aiming to make a formal decision to mine in 2023 following delivery of a DFS in late 2022. First production could be expected in the back half of 2024 following at least a 12-month build. In the meantime, CTM remains well funded with an expected (CG estimates) ~A\$16.5m cash at the end of the JunQ'21. Earlier this month, the company released its best ever drill result from the Jaguar Nickel Sulphide Project: **56.1m @ 2.05% Ni** from 206m (incl. 17.6m @ 4.96% Ni and 6.7m @ 2.09% Ni) from below the existing pit shell at Jaguar South. A number of other strong results were also released in the same announcement, which point to at least 60m of strike extensions at the Jaguar Central deposit alone. Five rigs are currently on site and two more are set to arrive to undertake a 65,000m program. One rig is dedicated to regional greenfields work.

**Valuation and recommendation:** We initiate coverage of Centaurus Metals with a SPECULATIVE BUY and \$1.20 price target. Our NPV<sub>12%</sub> valuation is on a fully-diluted basis and risked 85% to account for the early stage (albeit very detailed) nature of the published Scoping Studies. Our modelling centres around CTM's Value-Add mine and downstream scenario. In our view, CTM is well funded and having operated in Brazil for over a decade, is well placed to take the Jaguar Nickel Sulphide Project forward towards development. Its 13-year mine life is class-leading among the ASX nickel producer/ developer peers and its ~20ktpa of contained nickel production ranks it second behind IGO's Nova Mine in terms of scale among the hardrock, non-NPI players on the ASX.

Canaccord Genuity is the global capital markets group of Canaccord Genuity Group Inc. (CF : TSX)

The recommendations and opinions expressed in this research report accurately reflect the research analyst's personal, independent and objective views about any and all the companies and securities that are the subject of this report discussed herein.

### For important information, please see the Important Disclosures beginning on page 26 of this document.



#### Figure 1: CTM financial summary FINANCIAL SUMMARY Centaurus Metals Ltd ASX:CTM Analyst : Paul How ard Date: Year End: 19/07/2021 December Market Information Share Price Market Capitalisation A\$ A\$m 0.83 297.4 A\$ A\$ 12 Month Hi 0.95 12 Month Lo 0.44 Issued Capital 358.3 m Options Fully Diluted m 0.0 358.3 m Valuation A\$m Risk Adj. A\$/share Jaguar Exploration & Other assets NPV @ 12% 486.5 50.0 85% 1.06 0.11 Corporate (21.7) (0.05) Cash (est. at end of Q) 0.04 16.8 ITM Options 1.6 0.00 (0.42) 0.45 Future Debt (191.9) 206.9 548.3 Future Equity TOTAL NAV 1.19 Price/NAV 0.70x Target Price 1.20 Assumptions 2020a 2021e 2022e 2023e 2024e Nickel Price (US\$/lb) Cobalt Price (US\$/lb) 6.29 28.24 7.74 21.01 8.00 22.68 8.00 22.68 8.00 22.68 AUD:USD 0.69 0.77 0.76 0.76 0.75 Sensitivity \$2.00 \$1.50 \$1.00



Jaguar					
Nickel (kt)	0.00	0.00	0.00	0.00	5.9
Cash cost (A\$/lb Ni payable)	0.00	0.00	0.00	0.00	4.79
AISC (A\$/lb Ni payable)	0.00	0.00	0.00	0.00	6.50

Resources	Mt	Ni (%)	Ni (kt)
Jagaur Project			
Indicated	20.1	1.12	225.8
Inferred	38.8	0.87	336.8
Total	58.9	0.96	562.6
Mining Inventory	Mt	Ni (%)	Ni (kt)
Jagaur Project			
Open Pit	36.55	0.76	276.3
Underground	8.5	1.01	85.4
Total	45.0	0.81	361.7
Iron Ore Assets			
Reserves	Mt	Fe (%)	Fe (Mt)
Jambreiro			
Proved	35.4	25.8%	9.1
Probable	13.1	27.2%	3.6
Total	48.5	26.2%	12.7
Resources	Mt	Fe (%)	Fe (Mt)
Jambreiro, Canavial, Passabém			
Total	193.7	29.0%	56.2

Source: Company Reports, Canaccord Genuity estimates

Centauru	s Metals	Limited
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Rating:

Target Price

SPEC BUY

A\$1.20

	Та	arget Price:			A\$1.20
0					
Company Description Centaurus Metals Limited (ASX:CTM)	is a nickel sulr	hide focusse	d developer a	imina to brina	the 100%-
owned Jaguar Project into production				0 0	
Province in Brazil. Scoping Studies for	both an upstre	eam mining o	peration to pro	duce nickel s	ulphide in
concentrate, and a downstream value	-add scenario	to produce +2	Oktpa of nicke	l in sulphate h	ave been
completed.					
Profit & Loss (A\$m) Revenue	2020a 0.0	2021e 0.0	2022e 0.0	2023e 0.0	2024e 146.8
Other Income	0.0	0.0	0.0	0.0	0.0
Operating Costs	0.0	0.0	0.0	0.0	-33.1
Exploration expensed/written off	-6.9	-10.0	-5.3	-0.4	-0.6
Corporate/Other expenses	-1.6	-2.4	-3.1	-4.1	-5.0
EBITDA	-8.3	-12.4	-8.4	-4.5	108.1
Dep'n	0.0	0.0	0.0	0.0	-21.3
Net Interest Other	0.3 0.0	0.6 0.0	-0.3 0.0	-5.3 0.0	-4.0 0.0
Tax	2.7	4.0	2.9	3.3	-12.6
NPAT (reported)	-5.3	-7.8	-5.7	-6.5	70.1
Abnormals	0.0	0.0	0.0	0.0	0.0
NPAT	-5.3	-7.8	-5.7	-6.5	70.1
EBITDA Margin	nm	nm	nm	nm	74%
E <b>V/EBITDA</b> EPS	<b>-32.7x</b> -\$0.01	-23.1x	nm -\$0.016	<b>nm</b> -\$0.018	2.7x
EPS EPS Growth	-\$0.01 nm	-\$0.022 47%	-\$0.016 -30%	-\$0.018 8%	\$0.196 -1045%
PER	-56.0x	-38.1x	-30% -52.1x	-46.0x	-1045% 4.2x
Dividend Per Share	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Dividend Yield	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Flow (A\$m)	2020a	2021e	2022e	2023e	2024e
Cash Receipts	0.1	0.0	0.0	0.0	146.8
Cash paid to suppliers & employee: Fax Paid	-1.6 0.0	-2.4 0.0	-3.1 0.0	-4.1 0.0	-38.1 -12.6
Exploration and growth	-6.9	-9.9	-5.2	-0.4	-12.0
H- Working cap change	0.0	0.0	0.0	0.0	0.0
Operating Cash Flow	-8.3	-12.3	-8.3	-4.5	95.5
Exploration evaluation	0.0	0.0	-0.8	-1.7	-2.5
Capex	0.0	0.0	-41.1	-82.8	-317.9
Other	-1.2	-1.3	0.0	0.0	0.0
nvesting Cash Flow	-1.2 0.0	-1.3 0.0	<b>-41.9</b> 80.0	<b>-84.4</b> 111.9	-320.4 0.0
Debt Drawdown (repayment) Share capital	24.8	0.0	80.0 15.0	111.9	0.0
Dividends	0.0	0.0	0.0	0.0	0.0
Net interest	0.2	0.4	-0.3	-5.3	-4.0
Financing Cash Flow	25.0	1.1	94.7	298.5	-4.0
Opening Cash	0.0	24.1	11.0	55.6	265.1
ncrease / (Decrease) in cash	15.5	-12.5	44.5	209.5	-228.9
TX Impact	-1.1	-0.6	0.0	0.0	0.0
Closing Cash	14.4	11.0	55.6	265.1	36.2
Op. Cashflow/Share	-\$0.02	-\$0.03	-\$0.02	-\$0.01	\$0.27
P/CF	00.02 nm	ф0.00 nm	0.02 nm	-65.7x	φ0.27 3.1x
FCF	nm	nm	nm	nm	nm
EV/FCF	nm	nm	nm	nm	nm
FCF Yield	-3%	-5%	-17%	-30%	-76%
Balance Sheet (A\$m) Cash + S/Term Deposits	2020a 24.1	2021e 11.0	2022e 55.6	2023e 265.1	2024e 20.3
Other current assets	0.2	0.0	24.7	49.7	190.7
Current Assets	24.3	11.0	80.2	314.8	211.0
		0.8	41.9	124.7	442.5
Property, Plant & Equip.	0.8				400.4
	0.8 0.0	0.0	41.1	123.9	420.4
Exploration & Develop. Other Non-current Assets	0.0 0.0	0.0 0.0	0.0	0.0	0.0
Exploration & Develop. Other Non-current Assets Payables	0.0 0.0 1.9	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 14.7
xploration & Develop. Dther Non-current Assets Payables Short Term Debt	0.0 0.0 1.9 2.4	0.0 0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 14.7 100.0
Exploration & Develop. Other Non-current Assets Payables Short Term Debt Long Term Debt	0.0 0.0 1.9 2.4 2.7	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 80.0	0.0 0.0 0.0 191.9	0.0 14.7 100.0 -100.0
Exploration & Develop. Other Non-current Assets Payables Short Term Debt ong Term Debt Other Liabilities	0.0 0.0 1.9 2.4 2.7 0.7	0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 80.0 62.9	0.0 0.0 0.0 191.9 166.5	0.0 14.7 100.0 -100.0 785.8
Exploration & Develop. Other Non-current Assets Payables Short Term Debt Joher Liabilities Vert Assets	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b>	0.0 0.0 0.0 0.0 0.0 0.8 <b>19.0</b>	0.0 0.0 80.0 62.9 <b>28.2</b>	0.0 0.0 191.9 166.5 <b>213.6</b>	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b>
Exploration & Develop. Other Non-current Assets Payables Short Term Debt .ong Term Debt Diher Liabilities <b>Wet Assets</b> Shareholders Funds	0.0 0.0 1.9 2.4 2.7 0.7	0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 80.0 62.9	0.0 0.0 0.0 191.9 166.5	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b> 363.4
Exploration & Develop. Other Non-current Assets Ayables Short Term Debt Other Liabilities <b>Vet Assets</b> Shareholders Funds Reserves	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9	0.0 0.0 0.0 0.0 0.8 <b>19.0</b> 156.6	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b> 363.4 -8.3
Exploration & Develop. Other Non-current Assets ayables Short Term Debt Dher Liabilities Net Assets Shareholders Funds Reserves Retained Earnings	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3	0.0 0.0 0.0 0.0 0.8 <b>19.0</b> 156.6 -8.3	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6 -8.3	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b> 363.4 -8.3 -71.4
Exploration & Develop. Other Non-current Assets 'ayables Short Term Debt Other Liabilities <b>Vet Assets</b> Shareholders Funds Reserves Retained Earnings <b>Fotal Equity</b>	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3 -121.5 <b>26.1</b>	0.0 0.0 0.0 0.0 156.6 -8.3 -129.3 <b>19.0</b>	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6 -8.3 -135.0 <b>28.2</b>	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3 -141.5 <b>213.6</b>	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b> 363.4 -8.3 -71.4 <b>283.7</b>
Exploration & Develop. Other Non-current Assets Payables Short Term Debt .ong Term Debt Dher Liabilities Net Assets Shareholders Funds Reserves Retained Earnings Total Equity Debt/Equity	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3 -121.5 <b>26.1</b> 10%	0.0 0.0 0.0 0.8 <b>19.0</b> 156.6 -8.3 -129.3 <b>19.0</b> 0%	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6 -8.3 -135.0 <b>28.2</b> 28.2	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3 -141.5 <b>213.6</b> 90%	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b> 363.4 -8.3 -71.4 <b>283.7</b> -35%
Exploration & Develop. Other Non-current Assets Payables Short Term Debt .ong Term Debt Duber Liabilities Ver Assets Shareholders Funds Reserves Retained Earnings Fotal Equity Debt/Equity Net Debt/EBITDA	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3 -121.5 <b>26.1</b> 10% 1.1x	0.0 0.0 0.0 0.0 19.0 156.6 -8.3 -129.3 19.0 0% 0.9x	0.0 0.0 80.0 62.9 28.2 171.6 -8.3 -135.0 28.2 28.3 28.3 -3.0x	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3 -141.5 <b>213.6</b> 90% 16.2x	0.0 14.7 100.0 785.8 <b>283.7</b> 363.4 -8.3 -71.4 <b>283.7</b> -35% -0.4x
Exploration & Develop. Dither Non-current Assets Payables Short Term Debt Dither Liabilities <b>Vet Assets</b> Shareholders Funds Reserves Retained Earnings <b>Fotal Equity</b> Debt/Equity Net Debt/EBITDA Vet Interest Cover	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3 -121.5 <b>26.1</b> 10% 1.1x nm	0.0 0.0 0.0 0.0 156.6 -8.3 -129.3 19.0 0% 0.9x nm	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6 -8.3 -135.0 <b>28.2</b> 283% -3.0x -29.1x	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3 -141.5 <b>213.6</b> 90% 16.2x -0.9x	0.0 14.7 100.0 785.8 <b>283.7</b> 363.4 -8.3 -71.4 <b>283.7</b> -35% -0.4x 21.6x
Exploration & Develop. Other Non-current Assets Payables Short Term Debt .ong Term Debt Dher Liabilities Net Assets Shareholders Funds Reserves Retained Earnings Total Equity Debt/Equity Net Debt/EBITDA Net Interest Cover ROE	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3 -121.5 <b>26.1</b> 10% 1.1x nm -20%	0.0 0.0 0.0 0.8 <b>19.0</b> 156.6 -8.3 -129.3 <b>19.0</b> 0% 0.9x nm -41%	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6 -8.3 -135.0 <b>28.2</b> 283% -3.0x -29.1x -20%	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3 -141.5 <b>213.6</b> <b>90%</b> 16.2x -0.9x -3%	0.0 14.7 100.0 -100.0 785.8 <b>283.7</b> 363.4 -8.3 -71.4 <b>283.7</b> -35% -0.4x 21.6x 25%
Property, Plant & Equip. Exploration & Develop. Other Non-current Assets Payables Short Term Debt Long Term Debt Other Liabilities <b>Net Assets</b> Shareholders Funds Reserves Retained Earnings <b>Total Equity</b> Debt/Equity Net Debt/EBITDA Net Interest Cover ROE ROIC Book Value/share	0.0 0.0 1.9 2.4 2.7 0.7 <b>26.1</b> 155.9 -8.3 -121.5 <b>26.1</b> 10% 1.1x nm	0.0 0.0 0.0 0.0 156.6 -8.3 -129.3 19.0 0% 0.9x nm	0.0 0.0 80.0 62.9 <b>28.2</b> 171.6 -8.3 -135.0 <b>28.2</b> 283% -3.0x -29.1x	0.0 0.0 191.9 166.5 <b>213.6</b> 363.4 -8.3 -141.5 <b>213.6</b> 90% 16.2x -0.9x	-0.4x 21.6x



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# Overview

Centaurus Metals (CTM) is a Brazilian nickel explorer-developer focussed on the 100%-owned Jaguar Nickel Sulphide Project (JNP) in the Carajás Mineral Province. Although head office is in Perth, CTM has a number of key senior management personnel permanently based in-country and has operated in Brazil for over 12 years. In September 2019, CTM through its subsidiary Alianca Mineracao Ltda (Alianca) executed a Sale & Purchase Agreement (SPA) with Vale Metais Basicos SA (Vale) that transferred 100% of the JNP to Alianca in an asset swap arrangement on the Salobo West Project. A current Net Operating Royalty of 2.55% applies.

Drilling at Jaguar commenced in November 2019; and by May 2021 CTM had delivered Resource updates, a Base Case Scoping Study as well as a Value-Add Scoping Study. The Jaguar Nickel Sulphide Project has a base plan to produce 20ktpa nickel concentrate per annum through a 2.4Mt plant for 10 years. 90% of the feed is from open pit. CTM expects LOM C1 costs to be US\$2.41/lb and US\$2.97/lb for AISC; processing costs are a standout at a lowly US\$11.33/t ore owing to cheap hydro-power in country. CTM estimates pre-production capex is estimated at US\$178m.

A subsequent Value-Add Scoping Study, which forms the basis of our valuation, builds downstream into the Base Case Scoping Study and assesses a 2.7Mtpa open pit and underground producing +20ktpa in recovered nickel sulphate and +9.6ktpa of a mixed sulphide precipitate over a 13-year LOM. CTM forecasts capex to expand to US\$288m (versus US\$178m for the upstream only case that produces a concentrate) and LOM C1 cost is US\$3.29/lb Ni (versus US\$2.41/lb in the Base Case Scoping Study). The downstream produces nickel sulphate (metal) and as such produces a higher margin product. CTM is aiming for a late 2024 date for first production.



### Figure 2: Project location map

Source: Company reports



# Valuation summary

# Valuation

We have based our valuation for CTM on a DCF analysis (NPV<sub>12%</sub>) for the Jaguar Nickel Sulphide Project, incorporating CTM's recently released Value-Add Scoping Study with a combined open pit and underground mining inventory of 45Mt @ 0.81% Ni for 362kt of contained nickel. CTM expects ore sorting of low-grade material to reduce mill feed to 33.7Mt @ 1.01% Ni for 341kt cont. Ni.

We model pre-production capital of US\$303m with construction commencement in 2023 followed by an ~15-month build. We model the project to produce on average ~20ktpa of nickel sulphate at an average C1 cost of <US\$3.61/lb payable nickel (net of Co credits) over an initial +13-year LOM to recover ~267kt of nickel and 5.9kt Co. We await release of further work before modelling the zinc production as outlined in the Base Case Scoping Study (Value-Add Scoping Study outlines plans to produce ~80kt Zn over LOM in a mixed sulphide product. Zinc had previously never appeared in resource estimates and no production profile has been provided in the Base Case Scoping Study).

We ascribe a nominal A50m for exploration upside around Jaguar and value for the significant iron ore assets (194Mt @ 29% Fe).

Valuation		A\$m	Risk Adj.	A\$/share
Jaguar	NPV @ 12%	486.5	85%	1.06
Exploration & Other assets		50.0		0.11
Corporate		(21.7)		(0.05)
Cash (est. at end of Q)		16.8		0.04
ITM Options		1.6		0.00
Future Debt		(191.9)		(0.42)
Future Equity		206.9		0.45
TOTAL NAV		548.3		1.19
Price/NAV				0.70x
Target Price				1.20

#### Figure 3: CTM sum-of-the-parts valuation

Source: Canaccord Genuity estimates

In deriving our valuation, we utilise the CG price deck forecasts for nickel, cobalt and FX. We assume a 5% premium on the nickel price for nickel sulphate. This premium has averaged 10% over the past 10 years.

#### Figure 4: Commodity price and FX assumptions

	2021e	2022e	2023e	2024e	2025e	LT
Nickel (US\$/lb)	7.74	8.00	8.00	8.00	8.00	8.00
Cobalt (US\$/lb)	21.01	22.68	22.68	22.68	22.68	22.68
US/AUS Exchange	0.77	0.76	0.76	0.75	0.75	0.75

Source: Canaccord Genuity estimates

#### Figure 5: Assumed project timeline

	2021e		2022e		2023e		2024e	
	H1	H2	H1	H2	H1	H2	H1	H2
Drilling								
Resource update							[	
Permitting								
PFS/DFS								
Financing								
Construction								
Production								

Source: Canaccord Genuity estimates



# Figure 6: CG key assumptions vs CTM assumptions

cg/Canaccord Genuity	Units	CTM Scoping Study March 2021	CTM Value-Add Scoping Study May 2021	% Difference	CGe July 2021	% Difference	CGe Spot
Assumed mine inventory	Mt	32.8	45.0	37%	45.0	0%	45.0
Avg LOM Nickel grade	%	0.84%	0.80%	-5%	0.81%	1%	0.81%
Avg LOM Cobalt grade	%	0.03%	0.03%	0%	0.03%	-5%	0.03%
Avg LOM Zinc grade	%	0.4%	0.4%	0%	0.0%		0.0%
Mine Life	yrs	10	13	30%	13.5	4%	13.5
Milled	Mt	24.0	33.7	40%	33.7	0%	33.7
Avg LOM Nickel grade	%	1.08%	1.01%	-6%	0.99%	-2%	0.99%
Avg LOM Cobalt grade	%	No pro	ovided		0.03%		0.03%
Avg LOM Zinc grade	%	NO pro	ovided				
Average annual ore processed	Mtpa	2.4	2.6	8%	2.5	-4%	2.5
Recoveries							
Nickel	%	78%	81.5%	4%	80%	-2%	80%
Cobalt	%	71%	71%	0%	70%	-1%	70%
Zinc	%	No pro	ovided				
LOM Recoverable metals in Concentrate/Sulphate/Sulp	ohide						
Nickel	kt	203.3	262.1	28.9%	267.4	2.0%	267.4
Cobalt	kt	2.8	7.3	160.7%	5.9	-19.3%	5.9
Zinc	kt		80.5		-		-
Avg Annual Recoverable metals in Concentrate/Sulpha	te/Sulphide						
Nickel	ktpa	20.3	20.2	-0.8%	19.8	-1.7%	19.8
Cobalt	ktpa	0.3	0.6	100.5%	0.4	-22.3%	0.4
Zinc	ktpa		6.2		-		-
Average LOM commodity price							
Nickel	US\$/t	16,540	16,540	0.0%	17,637	6.6%	18,785
Nickel Sulphate	US\$/t	N/A	17,632		18,519	5.0%	19,724
Cobalt	US\$/t		$\Delta V$		50,001		50,450
Zinc	US\$/t	No pro	ovided		2,315		2,315
	US\$M	2,422	4,530		5,040		5,399
Total Revenue		3,229	6,040	87.0%		11.3%	7,191
Total Operating Costs	US\$M A\$M	<b>1,377</b> 1,834.3	2,468.8 3,288.3	79.3%	2,659.4 3,542.2	7.7%	<b>2,705</b> 3,602.9
Mining - o/p	US\$/t	18.09	19.62		20.0	2%	20.0
Mining - underground	US\$/t	50.54	47.53		48.0	1%	48.0
Processing	US\$/t	11.33	28.02	147.3%	28.2	1%	28.2
G&A + Logistics	US\$/t	5.68	4.59	-19.2%	5.0	9%	5.0
G&A + LOGISTICS	US\$/t	5,313	7,253	36.5%	7,964	10%	8,012
C1	US\$/Ib	2.41	3.29	36.5%	3.61	10%	3.63
	US\$M	110.0	165.0	50.576	207.1	1070	221.8
Royalties	A\$M	146.5	219.8	50.0%	275.9	26%	295.5
	US\$M	316.0			522.9		529.6
Total Project capital	A\$M	237.2	376.1	58.5%	392.6	4%	329.0
Pre-production capital	US\$M	178.0	288.0	61.8%	303	5%	307
Pre-production capital	US\$M US\$M			54.3%			
Sustaining capital	IVIÇCU	138.0	213.0	54.570	220	3%	223
LOM Pre-tax Free Cash Flow per annum (incl capital)	US\$M	75.9	124.5	64%	139.2	12%	161.0
	A\$M	101.1	165.8		185.4		214.4

Source: Company reports, Canaccord Genuity estimates

Figure 7-14 demonstrate our forecast production, C1 cost and AISC profile, key physicals, earnings and cash flow forecasts for the Jaguar Nickel Sulphide Project. We have modelled a conservative ramp-up over FY24E.



Figure 7: CG model production and cost profile



Source: Canaccord Genuity estimates

#### Figure 9: CG modelled material movement and grade



Source: Canaccord Genuity estimates

# Figure 11: EBITDA sensitivity (CG deck and spot)



Source: Canaccord Genuity estimates

Figure 8: CG modelled C1, AISC vs nickel price



Source: Canaccord Genuity estimates





Source: Canaccord Genuity estimates



#### Figure 12: FCF sensitivity, annual and cumulative (CG deck and spot)

Source: Canaccord Genuity estimates



Figure 13: Annual revenue split by commodity



# Figure 14: LOM revenue split by commodity



Source: Company reports, Canaccord Genuity estimates

Source: Company reports, Canaccord Genuity estimates

### Sensitivity to key input assumptions

We have completed a comprehensive sensitivity analysis to examine a number of scenarios and test the resiliency of the project.

#### Commodity prices and FX

Our nickel price assumptions are based on internal supply and demand models. FX assumptions are based on the forward curve and are consistent with our valuations across the coverage universe. We conducted sensitivity analysis across several scenarios out to +/-15% on our nickel price assumption and a range of nominal values for FX. Outcomes are shown in Figure 15 and 16.

#### Figure 15: NAV sensitivity - nickel prices and FX

	Nickel Price (U\$\$/Ib)									
NAV	1.20	-15%	-10%	-5%	0%	5%	10 %	15%		
	0.69	0.70	0.90	1.05	1.25	1.45	1.60	1.80		
	0.71	0.70	0.90	1.05	1.25	1.40	1.60	1.75		
	0.73	0.70	0.85	1.05	1.20	1.40	1.55	1.75		
\$U\$ Exchange Rate	0.75	0.65	0.85	1.00	1.20	1.35	1.50	1.70		
-	0.77	0.65	0.80	1.00	1.15	1.30	1.50	1.65		
	0.79	0.65	0.80	0.95	1.15	1.30	1.45	1.60		
	0.81	0.65	0.80	0.95	1.10	1.25	1.45	1.60		

Source: Canaccord Genuity estimates

# Figure 16: FCF sensitivity - nickel prices and FX

	Nickel Price (U\$\$/Ib)									
Annual Avg. FCF (A\$m)	232.2	-15%	-10%	-5%	0%	5%	10 %	15%		
	0.69	194	213	233	253	272	292	311		
	0.71	188	207	226	245	264	283	302		
	0.73	183	201	220	238	257	275	294		
\$US Exchange Rate	0.75	178	196	214	232	250	268	286		
_	0.77	173	190	208	225	243	261	278		
	0.79	168	185	202	220	237	254	271		
	0.81	164	181	197	214	231	247	264		

Source: Canaccord Genuity estimates



# Peer comparisons

# Figure 17: Enterprise value for nickel peers



Source: FactSet, Company reports, Canaccord Genuity estimates

# Figure 19: EV/Resource tonnes rankings



Source: FactSet, Company reports, Canaccord Genuity estimates



# Figure 21: Capex and capital intensity

Source: Company reports, Canaccord Genuity estimates

# Figure 18: Resources vs nickel grades vs EV



#### Source: Company reports, Canaccord Genuity estimates

#### Figure 20: Estimated annual production vs costs/lb



Source: Company reports, Canaccord Genuity estimates

### Figure 22: Mine life and average annual production



Source: Company reports, Canaccord Genuity estimates



# Company background

The current incarnation of Centaurus Metals came into existence in 2009 following a change in strategic direction and merger with Glengarry Resources, which was previously focussed on copper, gold and uranium assets in Queensland, NT and WA. Current CTM Managing Director, Darren Gordon, served on the Board of Glengarry from 2006 to 2007 before taking the role of Managing Director of Glengarry in April 2009, at the same time as current Chairman Didier Murcia joined Glengarry.

In November 2009, Glengarry announced a proposed merger, by way of an offmarket takeover of ASX-listed iron ore company Centaurus Resources. The company's new direction was to concentration on development of iron ore assets in Brazil.

Iron ore continued to serve as the company's primary focus in the ensuing 10 years. In July 2019, a PFS was released for the Jambreiro Iron Ore Project which assessed a 1Mpta start-up operation with an 18-year mine life.

In September 2019, CTM through its subsidiary Alianca executed a Sale & Purchase Agreement with Vale that transferred 100% of the Jaguar Nickel Project to Alianca in an asset swap arrangement on the Salobo West Project. Drilling at Jaguar commenced in October 2019 and by May 2021 CTM had delivered resource updates, a Base Case Scoping Study as well as a Value-Add Scoping Study.

# Asset overview – Jaguar Nickel Sulphide Project

# Location, access and infrastructure

The Jaguar Nickel Sulphide Project is located in the São Félix do Xingú municipality, in the western portion of the Carajás Mineral Province within the state of Pará, central northern Brazil. The project is accessed by major road from the city hub of Parauapebas, 270km to the northeast. The nearest regional centre to Jaguar is Tucamã, with a population of ~35,000 and a 138kV power substation. Although there is an airport in Parauapebas, a regional airport is also located 9km east of Tucamã.

# Figure 23: Project location maps



Source: Company reports

# Acquisition and project history

In August 2019, CTM secured an option to acquire 100% of the Jaguar Nickel Sulphide Project from Vale in return for giving Vale its Salobo West Project (a swap). At the time, with a non-JORC resource of 40.4Mt @ 0.78% Ni for 315kt of contained nickel, we believe Jaguar was deemed not to be of sufficient scale for Vale to progress. For CTM, Salobo West represented a highly prospective exploration project but having spent two years advancing the project to a drill-ready stage, the opportunity to swap it for a more advanced project with existing resources offered greater appeal. Consideration for the transaction comprised an upfront cash payment of US\$250k, the transfer of the Salobo West tenements to Vale, two deferred consideration payments totalling US\$6.75m (US\$1.75m on BFS, construction or after three years, and US\$5m on first production) and a production royalty of 0.75%. Execution of the deal occurred in September 2019. The acquisition was formally closed in April 2020 following receipt of required approval from the Brazilian National Bank for Economic and Social Development (BNDES).

CTM set to work remodelling geophysics to confirm further targets and also commenced establishing a higher-grade component to the deposits. Two diamond drill rigs were mobilised to site in October 2019 and CTM commenced an initial 10,000m program at Jaguar. Numerous high-grade drill results were returned, additional drill rigs added and further diamond meters budgeted, culminating in CTM's maiden JORC resource over Jaguar in June 2020: 48Mt @ 1.08% Ni for 517.5kt of contained nickel, comprising a higher-grade component of 321kt Ni @ 1.56% Ni. More than 80% of the bulk resource was situated within 200m of surface.

Following the maiden JORC resource, CTM rolled straight into the ongoing 75,000m, multi-rig (five) resource in-fill and expansion program to deliver an updated resource of 58.6Mt @ 0.95% Ni for 557.8kt Ni in February 2021. The Indicated component of the resource grew 50% to 223kt of contained Ni. This resource was tweaked slightly for the March 2021 Base Case Scoping Study and May 2021 Value-Add Scoping Study. The current resource is 58.9Mt @ 0.96% Ni for 562.6kt contained Ni.

		Tonnes		Grade		Metal Tonnes			
Classification	Ore Type	Mt	Ni %	Co ppm	Zn %	Ni	Co	Zn	
Indicated	Transition Sulphide	0.7	0.96	250	0.52	6,900	200	3,640	
	Fresh Sulphide	19.4	1.13	326	0.48	218,900	6,300	93,120	
	Total Indicated	20.1	1.12	323	0.48	225,800	6,500	96,760	
Inferred	Transition Sulphide	0.9	0.79	239	0.24	6,800	200	2,160	
	Fresh Sulphide	37.9	0.87	230	0.32	330,000	8,700	121,280	
	Total Inferred	38.8	0.87	230	0.32	336,800	8,900	123,440	
Total		58.9	0.96	262	0.37	562,600	15,400	220,200	

#### Figure 24: Jaguar Resource

Source: Company reports

Figure 25: Jaguar Resource locations



Source: Company reports



# Scoping Studies: Base Case and Value-Add

CTM published the Base Case Scoping Study for the Jaguar Nickel Sulphide Project in late March 2021. The current Base Case plan assesses annual production of 20ktpa nickel in <u>concentrate</u> through a 2.4Mtpa plant for 10 years. 90% of the feed is from open pit. CTM expects LOM C1 to be US\$2.41/lb Ni and US\$2.97/lb for AISC; processing costs are a standout at a lowly US\$11.33/t ore owing to cheap hydro-power in country. Pre-production capex estimated at US\$178m.

In May 2021, CTM released the Value-Add Scoping Study, which builds downstream into the Base Case Scoping Study. The Value-Add Scoping Study expands on the scoping work for the mine-only scenario and assesses a 2.7Mtpa open pit and underground producing +20ktpa in recovered nickel sulphate and +9.6ktpa of a mixed sulphide precipitate over a 13-year LOM. CTM forecasts capex to expand to US\$288m and LOM C1 cost is US\$3.29/lb Ni. The production of a nickel sulphate is more capital intensive than that of sulphide given the required hydrometallurgical processing (POx) but it CTM expects that sulphate will attract a premium to sulphide pricing. CTM models 107% payabilities versus typical nickel sulphide payabilities of ~70%.

#### Figure 26: Key results from the Base Case and Value-Add Scoping Studies

Key Results	Units	Base Case	Value-Add	Operating Costs (100% payable basis)			
Production Target - Physicals				C1 Cash Costs	US\$/lb	2.41	3.29
Mining	Mt	32.8	45.0	Royalties	US\$/lb	0.25	0.28
Grade	%	0.84	0.80	Total Operating Costs	US\$/lb	2.66	3.57
Contained Nickel	t	275,600	361,700	Sustaining and Deferred Capital	US\$/lb	0.31	0.36
Milling	Mt	24.0	33.7	All-in Sustaining Costs (AISC)	US\$/lb	2.97	3.94
Grade	%	1.08	1.01	Development Capital	US\$/lb	0.40	0.49
Contained Nickel	t	260,300	341,300	All-in Costs	US\$/lb	3.37	4.43
Production				Cash Operating Margin	US\$/lb	2.74	4.27
Nickel Concentrate/Sulphate	t	1,284,700	1,175,500	Financial Metrics			
Grade	% Ni	15.8	22.3	Total Revenue	US\$M	2,422	4,532
Contained Nickel	t	203,300	262,100		US\$M	914	1,942
Production By-products in MSP				Project Cashflow - pre-Tax	0.000		
Cobalt	t	2,800	7,300	NPV - pre-Tax	US\$M	543	1,030
Zinc	t	N/A	80,500	EBITDA	US\$M	1,230	2,443
Nickel		N/A	3,100	IRR - pre-Tax	%	62%	60%
Project Life	Vrs	10.0	12.9	Tax Paid	US\$M	137	376
Capital Costs	9.5	10.0	12.7	Project Cashflow - post Tax	US\$M	778	1,566
	100014	170	200	NPV <sub>a</sub> - post Tax	US\$M	452	831
Development Capital	US\$M	178	288	IRR - post Tax	%	54%	52%
Sustaining and Deferred Capital	US\$M	138	213	Capital Payback Period - post Tax	Years	1.9	1.8

Source: Company reports

### A closer look at the Value-Add Scoping Study

CTM is now progressing down the pathway outlined in the Value-Add Scoping Study, and our modelling centres around these initial assumptions. It should be noted that the level of accuracy in the study is +/-40%, so there is risk to the upside as well as downside. Our modelling has remained consultative for now, given the early stage nature of the work undertaken.

CTM is targeting open pit and underground ore sources to deliver a production target of 45Mt @ 0.8% Ni for 361.7kt cont. Ni. A strip ratio of 6.5:1 over LOM is anticipated. A total of 33.7Mt @ 1.01% for 341.3kt of cont. Ni will be fed through the mill at a rate of 2.7 Mtpa. Ore sorting of low-grade material reduces the overall mined material through the mill by  $\sim 6\%$  in terms of contained nickel.

CTM intends to construct a nickel sulphate plant which includes a conventional nickel sulphide flotation plant and hydrometallurgical circuit capable of processing up to 2.7Mtpa of ore. The proposed flowsheet includes oxidation, neutralisation, solid/liquid separation, solution impurity removal, production of an intermediate high value mixed metal sulphide (cobalt, zinc and nickel) and nickel sulphate crystallisation.

1.00%

0.80%

0.60%

0 40%

0.20%

3

Site infrastructure is to include: building a tailings storage facility (TSF) that is integrated within the mined waste (IWL); upgrading the 40km access road from Tucumá to the site; construction of a 39km, 138kV power line from the Tucumá substation to site to supply up to 50MW peak power demand; construction of a village to accommodate 400 workers for the project implementation stage; and inclusion of all non-processing infrastructure, i.e. office and administration buildings, gate house, warehousing, heavy vehicle workshop, ponds and general facilities.

Figure 27: Underground stopes beneath the open pits

# Jaguar South

anaccord

enuitv

Capital Market

Source: Company reports

# Figure 29: Tailings storage facility and site layout

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Figure 28: Mine production schedule

5.0

4.(

3.0

2.0

1.0

Jaguar North



Source: Company reports

Source: Company reports

Jaguar Central



#### Figure 31: Jaguar flowsheet



Source: Company reports

# **Royalties**

Under the acquisition terms with Vale for Jaguar, a Net Operating Revenue Royalty of 0.75% is payable to Vale. CTM also assumes the original obligation of Vale to BNDES for a 1.8% Net Operating Revenue Royalty. The Vale and BNDES royalty rates were based on the sale of a nickel concentrate with a reduced rate to be applicable for any value-added product produced so as to ensure the royalty burden was no more than applicable under the production of a nickel concentrate.

A government royalty of 2% on the value of concentrate sales revenue applies to Jaguar ore. CTM assumes 80% of this rate will be applied to account for the premium sulphate production expected at Jaguar.

### **Off-take**

As part of the acquisition terms for Jaguar, Vale and CTM agreed to enter into a future Off-take Agreement whereby Vale can purchase 100% of the production from the project. Under the proposed key off-take terms, Vale can acquire all production from any future operation at Jaguar on standard arm's length prevailing market prices and they may consider a pre-purchase of product to support CTM's funding of the project.

# Geology and mineralisation

The Jaguar Nickel Sulphide Project is located in the Carajás Mineral Province, which contains one of the world's largest known concentrations of large tonnage IOCG deposits. The province also hosts the world's largest source of high-grade iron ore, as well as a significant source of gold, manganese, and lateritic nickel. Jaguar is located at the intersection of the WSW-trending Canaã Fault and the ENE-trending McCandless Fault, immediately south of the NeoArchean Puma Layered Mafic-Ultramafic Complex, which is host to the Puma Lateritic Nickel deposit.

The Jaguar deposits differ from most nickel sulphide deposits because they are of hydrothermal origin, with the nickel sulphide mineralisation being of high tenor with



low Cr and Mg contents, and not directly associated with mafic-ultramafic rocks. We understand that the Jaguar mineralisation represents a hybrid hydrothermal style between magmatic Ni-Cu-PGE sulphide and IOCG mineralisation.

The Jaguar mineralised bodies are hosted within sheared Sub-Volcanic Dacitic Porphyries of the Serra Argueada Greenstone belt, adjacent to the boundary with a tonalite intrusive into the Xingu basement gneiss, while the Onca Preta and Onca Rosa deposits are tabular mineralised bodies hosted within the tonalite. The hydrothermal alteration and mineralisation form sub-vertical to vertical bodies structurally controlled by the regional ductile-brittle mylonitic shear zone. The hydrothermal alteration appears to be synchronous with, or postdate, deformation. Three main types of alteration assemblages are recognised in the Jaguar deposit: biotite-chlorite, amphibole-biotite and magnetite-apatite-quartz. These hydrothermal mineral assemblages are variably developed around the mineralised bodies being influenced by the composition of the host rocks. The Jaguar deposits are hosted within a subvertical mylonite zone trending EW which is interpreted to represent one strand of the regional Canaã Fault. Bedding has been transposed by the main foliation which dips 88°/177°, with subsidiary foliations dipping 90°/143° and 56°/282°. Both the Onça Preta and Onça Rosa deposits are hosted within tonalite along the contacts where it has been intruded by the older dolerite suggesting the mineralisation was emplaced during a stage of dilation. The mean orientation of the Onça Preta mineralisation is 78°/008° and 72°/013° at Onça Rosa.

Two types of nickel sulphide mineralisation occur in the Jaguar deposit. Sulphide assemblages are similar in both ore types, differing only in modal sulphide composition and structure. The mean sulphide assemblage (in order of abundance) is pyrite, pentlandite, millerite, violarite, pyrrhotite and sphalerite with trace vaesite, nickeliferous pyrite and chalcopyrite. The most abundant type constitutes low-grade nickel mineralisation and is associated with the biotite-chlorite alteration as well as amphibole, magnetite, quartz, apatite and talc, and occurs as veins and stringer sulphides. Sulphides usually occur within veins concordant with the foliation but may also infill discordant fractures or occur as disseminated grains in alteration zones.

At Jaguar, the target high-grade nickel mineralisation is associated with the magnetite-apatite-quartz alteration. It occurs as veins and breccia bodies consisting of irregular fragments of extensively altered host rocks within a sulphide-magnetite-apatite rich matrix. Mineralised breccias form semi-massive sulphide bodies up to 30m thick parallel to, or crosscutting, biotite-chlorite rich zones. The breccias are predominantly clast-supported, but matrix supported sulphide breccias are also recognised.

Mineralisation at the Onça Preta and Onça Rosa deposits is predominantly of the second type, forming tabular semi-continuous to continuous bodies both along strike and down dip.

Regolith at the deposit is in-situ and comprises a thin soil layer overlying a decomposed saprolite transitional zone. The thickness to the base of the transitional zone generally varies from 5m to 25m (max. 34m). Within the Jaguar Project tenement there are also several untested targets characterised by magnetic and/or electromagnetic anomalies located along favourable structures.





#### Figure 32: Plan of the Jaguar Project deposits, exploration targets and structure

Source: Company reports

# Figure 33: Jaguar South cross sections



Source: Company reports





Figure 34: Jaguar Central cross sections

Source: Company reports

#### **Exploration**

RC drilling is currently underway on greenfields nickel exploration targets that have been identified by airborne electromagnetic surveys (GeoTEM), detailed ground magnetics and soil geochemistry. The first two of these prospects are:

- The Leão Prospect: RC rig drilling will target the 2.5km strike target that hosts multiple GeoTEM, FLEM and ground magnetic anomalies coincident with Ni-Cu-Cr -V-Au soil anomalism. Only three holes have ever been drilled at Leão, with one hole returning 3.0m at 1.06% Ni and 0.21% Cu.
- The Tigre Prospect: A strong discrete (+800m) GeoTEM anomaly coincident with multiple ground magnetic anomalies and supported by a +1.0km continuous Ni-Cr -As-Au geochemical signature. There are no historical drill holes in the Tigre Prospect.

CTM has highlighted the potential for a structurally controlled PGE-Ni occurrence at the Filhote prospect. The prospect is adjacent to the Onca Layered Mafic-Ultramafic Complex that hosts stratiform PGE mineralisation. Initial drilling has returned peak values of **1.3g/t Pd, 0.34g/t Pt & 0.48% Ni** within drilling that includes 32m @ 0.39g/t Pd, 0.05g/t Pt & 0.04% Ni from 41m.

A number of other regional targets to be tested over the coming months include:

- Twister Prospect: Interpreted to be the southern contact of the Puma Layered Mafic-Ultramafic Complex within the basement granite. The prospect has ~1.0km of prospective strike with EM and ground magnetic anomalies, and Ni-Cr-As-V-Co and PGE soil geochemical support.
- Roquefera Prospect: Located immediately north of the Jaguar NE Deposit and associated with a NNE dyke identified by weak magnetics. There is a moderate Ni-As soils anomaly that could indicate remobilisation of nickel along the dyke contacts.
- Puma Contact Prospect: Soil geochemistry analysis has identified a 750m long Ni/Cu anomaly along the southern contact of the Puma mafic-ultramafic intrusive



with the basement granite, immediately north of the company's Onça Deposits. A FLEM survey identified a 950m long conductor that is coincident with the southern contact between the Puma ultra-mafic intrusive and the basement granite and the Ni/Cu anomaly.

- Jaguar Central Sul Prospect: In-fill soil sampling has identified a new Ni/Cr soil anomaly immediately south of the Jaguar Central Deposit that is coincident with a weak to moderate magnetic signature.
- Onça Preta SE Prospect: Located along the hydrothermal alteration zone associated with the northern splay of the Canaã fault, the same mineralising structure that hosts the high-grade Onça Preta and Onça Rosa Deposits. The anomalous nickel-in-soils is associated with a weak magnetic signature and further supported by a IP chargeability anomaly.
- Jaguar North-east Deposit Extension: This is the extension of the Jaguar Northeast Deposits to the ESE along the Canaã fault. Although the ground magnetics are not strong in this area, the soil geochemical program indicates that mineralisation is continuous beyond the current limit of drilling.
- Dente de Sabre Prospect: Located to the north-west of the Filhote Prospect and associated with moderate ground magnetic anomalies and a discrete late-time GeoTEM anomaly. Recent soils sampling has identified Ni/Cr anomalies coincident with the late-time conductor.
- Fliperama Prospect: Located along the Canaã fault and hosts a cluster of NNEtrending magnetic anomalies with anomalous As-Cr-Cu-Ni soil geochemical support. A FLEM survey has been completed and two weak conductive trends were identified coincident with the magnetic trends.



### Figure 35: Plan of the Jaguar Project soil geochemistry over GeoTEM

Source: Company reports



# Corporate and finance

# **Balance sheet and liquidity**

CTM is debt-free and we expect it to have finished the JunQ'21 with \$16.5m in cash.

While we see no imminent need for CTM to secure more capital, with a number of drill rigs turning and DFS work commencing, on our modelling, we believe it may seek to increase cash in 2022E.

Our model is on a fully funded basis, meaning future equity dilution for project construction is factored in. We assume future requirement of A\$400m to fund the build at Jaguar and to cover working capital requirements. We currently model a 50:50 debt to equity ratio but do not rule out project partnerships and prepayments to assist with funding.

#### Figure 36: CTM capital structure

			Price	Expiry
Issued Shares	m	358.3	\$0.82	
Options 1 (CTMAS)	m	4.29	0.00	
Options 2 (CTMAW)	m	2.36	0.00	
Options 3 (CTMAU)	m	1.40	0.38	31/05/2022
Options 4 (CTMAV)	m	1.40	0.39	31/05/2023
Options 5 (CTMAX)	m	1.40	0.41	31/05/2024
Options 6 (CTMAA)	m	0.47	0.00	
Options 7 (CTMAB)	m	0.67	0.00	
Total Options	т	11.99	0.14	

Source: Company Reports, Canaccord Genuity estimates

# Substantial shareholders

CTM has two substantial shareholders:

- Sprott Inc 9.66%
- McCusker Holdings 6.14%

### **Directors and management**

See Appendix 1 for full Director bios

- Didier Murcia Non-Executive Chairman
- Darren Gordon Managing Director & Chief Executive Officer
- Bruno Scarpelli Non-Executive Director
- Mark Hancock Non-Executive Director
- Chris Banasik Non-Executive Director
- Roger Fitzhardinge Operations Manager
- John Westdorp Chief Financial Officer



# Nickel market

# Class 1 nickel hungry EV's the long-term bull case for nickel

Despite the undeniably strong growth from the emerging electric vehicle (EV) sector, nickel prices in the short-term will continue to be driven by stainless-steel demand which makes up ~70% of total refined nickel demand. Looking further out however, EVs are the driving factor in the medium-to-long term bull case for nickel, especially class 1 nickel. Class 1 nickel is required to produce nickel sulphate, a precursor to nickel cathodes used in batteries. With CTM's plans for Jaguar, the company has the optionality to produce a concentrate or a sulphate product.

Historically, stainless-steel producers have used both high-purity class 1 nickel (+99.8% Ni) and lower-purity class 2 nickel (<99.8% Ni). Over the last decade however, class 2 nickel supply increased substantially as a result of increased demand from Chinese stainless-steel producers looking to reduce costs by using cheaper class 2 nickel as opposed to class 1. This in turn led to a significant expansion in nickel-pig-iron (NPI) production (a class 2 nickel) which ultimately saw the nickel price decline from a high of ~US\$29,000/t in early CY11 to its current price of ~US\$18,700/t. The move to class 2 nickel and the subsequent decline in the nickel price led to higher-cost class 1 nickel producers closing mines and deferring capital expenditure, resulting in little to no growth in class 1 production over recent years.

With the emergence of EVs and the significant growth forecasts in EV sales (Figure 37) as well as the industry-wide shift towards high nickel content batteries (NCM, NCA etc), class 1 nickel has seen renewed investor focus. Batteries with nickel cathodes require high-quality low-impurity class 1 nickel, generally in the form of nickel sulphate. NPI production cannot be directly used for EV production without the use of HPAL plants to produce nickel sulphide/hydroxide from NPI feed, these plants are capital intensive and we estimate only become economical at >US\$18,000/t.

Class 1 nickel is traditionally sourced from sulphide orebodies. There has been a significant decline in the discovery of new sulphide deposits due in part to a lack of investment in a low nickel price environment but also as a consequence of many years of exploitation of sulphide ores, leading to their depletion. This has left the nickel market with a very limited number of nickel sulphide projects in the global development pipeline. Similar to HPAL plants, we estimate these projects become economical above US\$18,000/t, hence we expect nickel prices to gradually increase beyond these levels.

The benefit for CTM, in our view, is that it plans to produce nickel sulphate metal to achieve higher margins above those seen from producing nickel sulphide. However, it has the fallback optionality of being able to resort to the production of a nickel sulphide concentrate should further testwork and studies identify that the production of nickel sulphate is not feasible for the company.



#### Figure 37: EV sales forecasts - 2021E-30E



Source: EV-volumes, Rho Motion, Canaccord Genuity estimates

#### Figure 38: EV penetration by market



Source: EV-volumes, Rho Motion, Canaccord Genuity estimates



# Figure 39: CG nickel supply-demand forecasts

Source: Canaccord Genuity estimates

# Figure 40: CG nickel market balance

		2019a	a 2020e	2021e	2022e	2023e	2024e 20	25e (LT)
Refined Primary Ni Demand I	by Applicati	on						
Stainless Steel	kt Ni	1,702	1,563	1,642	1,863	2,052	2,158	2,265
Alloy, Foundry, Plating, Others	kt Ni	579	550	564	578	592	607	622
Batteries / Electric Vehicles	kt Ni	57	71	92	116	151	220	290
Total Refined Demand	kt Ni	2,338	2,184	2,297	2,557	2,796	2,986	3,177
Refined Supply								
Class I	kt Ni	921	918	925	930	958	978	979
Class II	kt Ni	1,389	1,536	1,697	1,704	1,710	1,760	1,860
% Class I	%	40%	37%	35%	35%	36%	36%	34%
Total Refined Supply	kt Ni	2,310	2,454	2,623	2,634	2,667	2,738	2,839
Updated Market Balance	kt Ni	- 27	270	206	76 -	128	- 248 -	338
Previous Market Balance	kt Ni	- 39	- 26 -	49 -	184 -	283	- 412 -	397
Change (+ surplus, -deficit)	% market	0.5%	<b>5 13.6%</b>	11.1%	10.2%	5.6%	5.5%	1.9%

Source: Canaccord Genuity estimates





# Figure 41: Nickel supply chain – (green denotes class 1 supply; blue denotes class 2 supply); overall market of 2.3mtpa

Source: Company reports, Canaccord Genuity estimates

# Asset overview – non-core

# Jambreiro Iron Ore Project

CTM's 100%-owned Jambreiro Project is located in south-east Brazil near Belo Horizonte. CTM completed a PFS in July 2019, highlighting a 1Mtpa project with A\$59.8m development cost, life-of-mine revenues of A\$1.05bn and EBITDA of A\$533m over its initial 18-year life. The PFS was based on the JORC 2012 Proven and Probable Ore Reserves estimate of 43.3Mt @ 29.1% Fe. The Ore Reserve delivers 17.9Mt of high-grade (65% Fe), low impurity (4.3% SiO2, 0.8% Al2O3 & 0.01% P) sinter product.



The Jambreiro Project's economics were updated in May 2020 when CTM updated capex and FX considerations for the GBP, AUD and USD against the BRL. As with the initial PFS, the results of the updated PFS considered forecast production of 17.9Mt of high-grade low-impurity product at a rate of 1Mtpa over a period of 18 years using the same resource and reserve previously outlined. All other inputs and parameters used in the Revision were the same as those that outlined in the July 2019 PFS Results. Potential project economics have continued to improve with the increase in global iron ore prices in recent months and weakness in the Brazilian Real exchange rate to the US dollar.

According to CTM, the Jambreiro Iron Ore Project retains significant value; but the completion of a suitable domestic market off-take for Jambreiro product (65% Fe) remains a key step to unlocking this value and to advance financing/partnering discussions for the project. The company is continuing to assess off-take/partnering options for the Project and discussions remain open in this regard.

#### Figure 42: Jambreiro Iron Ore Project location



Source: Company reports

### **Itapitanga Nickel-Cobalt Project**

In November 2018, CTM entered into a farm-out joint venture with battery metal specialist, Simulus Group. Under the farm-out, Simulus could earn 80% of the Itapitanga Nickel-Cobalt Project by free-carrying CTM to a Decision to Mine. During CY20, Simulus Group did not undertake any exploration or development activities, and the Farm-out Agreement was terminated in August 2020, returning control of the project to CTM. A review of value realisation opportunities for this project are being undertaken given the company's focus on the Jaguar Nickel Sulphide Project.



# Appendix 1: Board of Directors

# **Didier Murcia - Non-Executive Chairman**

Mr Murcia is a lawyer with over 30 years of legal and corporate experience in the resources industry. He is currently Honorary Australian Consul for the United Republic of Tanzania. Mr Murcia is the Chair and founding director of Perth-based legal group Murcia Pestell Hillard, and is Chair of Strandline Resources and non-executive director of Alicanto Minerals.

# Darren Gordon - Managing Director & Chief Executive Officer

Mr Gordon is a Chartered Accountant with 25 years' experience in the mining industry as a senior finance and resources executive. Mr Gordon has had extensive involvement in financing resource projects from both a debt and equity perspective, including his previous position as Chief Financial Officer for Gindalbie Metals. Mr Gordon has over 12 years' experience operating in Brazil and as a result has a deep understanding of the regulatory framework and general operating environment required to develop a mining project in country.

# Bruno Scarpelli – Non-Executive Director

Mr Scarpelli is based in the company's Brazil office. He joined Centaurus in 2011 bringing a wealth of stakeholder relations and regulatory approval experience to the company, particularly in the field of environmental matters, health and safety and human resources. Prior to joining Centaurus, Mr Scarpelli was the Environmental Coordinator of the S11D Iron Ore Project, part of the world class Carajás Iron Ore Operations in the State of Para, Brazil. Mr Scarpelli has also previously held a number of roles in Minas Gerais, including with the leading environmental consulting group, Brandt Meio Ambiente, and the global mining consultancy, Golder Associates.

### Mark Hancock - Non-Executive Director

Mr Hancock is a Chartered Accountant with more than 30 years of professional experience, including senior financial roles across a number of leading Australian and international companies including Atlas Iron, where he held the roles of CFO and CCO, Lend Lease Corporation, Woodside Petroleum and Premier Oil. Mr Hancock is presently a Company Director and consultant to the resource industry with a focus on commercial advisory and commodity marketing.

### **Chris Banasik - Non-Executive Director**

With more than 31 years' experience across multiple disciplines and commodities, Mr Banasik is a well-known mining and exploration executive. He was a founding Director of the successful WA gold producer Silver Lake Resources, where he held the key role of Director of Exploration and Geology from 2007 to 2014. Prior to that, he held a range of senior geological and executive roles for companies including Consolidated Minerals, Reliance Nickel, Western Mining Corporation and a private mining company.



# Appendix 2: Investment risks

# **Financing risks**

As an exploration and development company with no material income, CTM is highly reliant on equity and debt markets to fund development of its assets and progress its regional exploration pipeline. Further, we can make no assurances that accessing these markets will be done without further dilution to shareholders.

# **Exploration and development risks**

Exploration is subject to a number of risks and can require a high rate of capital expenditure. Risks can also be associated with conversion of resources and lack of accuracy in the interpretation of geochemical, geophysical, drilling and other data. No assurances can be given that exploration will delineate further mineral resources nor that the company will be able to convert the current Mineral Resource into Ore Reserves. The Scoping Studies completed to date are at a low (+/-40%) level of accuracy and present both upside and downside risk to our valuation.

# **Operating risks**

If/when in production, the company will be subject to risks such as plant/equipment breakdowns, metallurgical (meeting design recoveries within a complex flowsheet), materials handling and other technical issues. An increase in operating costs could reduce the profitability and free cash generation from the operating assets considerably and negatively impact valuation. Further, the actual characteristics of an ore deposit may differ significantly from initial interpretations which can also materially impact forecast production from original expectations.

# **Commodity price and currency fluctuations**

As with any development company, CTM is directly exposed to commodity price and currency fluctuations. Commodity price fluctuations are driven by many macroeconomic forces including inflationary pressures, interest rates and supply and demand factors. These factors could reduce the profitability, costing and prospective outlook for the business.

# **Geopolitical risks**

CTM's key asset is located in Brazil, which is considered an emerging market. As such, CTM, through the Jaguar Nickel Sulphide Project, carries a higher degree of economic, political, social, legal and legislative risk. Brazil has a well-established and stable mining industry.



# Appendix: Important Disclosures

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# **Investment Recommendation**

Date and time of first dissemination: July 19, 2021, 16:29 ET Date and time of production: July 19, 2021, 16:29 ET

Target Price / Valuation Methodology:

# Centaurus Metals Limited - CTM

Our price target (NPV12%) is on a fully diluted basis and risked 85% to account for early-stage status and jurisdictional location of the project. Our project valuation is based on our interpreted development/production scenario at Jaguar as outlined in the Value-Add Scoping Study. Given the early stage of development of the project along with the financing and permitting stages to progress through, we have applied an 85% risk weighting to our project valuation to capture project and financing risks. Our net asset valuation per share is based on a fully financed scenario inclusive of equity dilution and fully drawn project debt.

### **Risks to achieving Target Price / Valuation:**

Centaurus Metals Limited - CTM

### **Financing risks**

As an exploration and development company with no material income, CTM is highly reliant on equity and debt markets to fund development of its assets and progress its regional exploration pipeline. Further, we can make no assurances that accessing these markets will be done without further dilution to shareholders.

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# Global Stock Ratings (as of 07/19/21)

Rating	Coverag	IB Clients		
	#	%	%	
Buy	642	66.12%	42.99%	
Hold	156	16.07%	22.44%	
Sell	12	1.24%	33.33%	
Speculative Buy	152	15.65%	67.11%	
	971*	100.0%		

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