

Carbine Resources Ltd

UPDATE

Production on the horizon

Overview

Carbine Resources and their Mount Morgan gold/copper tailings retreatment project has the potential to become one of the lowest cost gold producers in Australia when production commences next year.

Carbine released a positive Pre-Feasibility Study (PFS) last year, with the key highlights including **All-in-sustaining Costs (AISC) of US\$234/oz and initial capital costs of \$63.3m**. A Definitive Feasibility Study (DFS) is due by the middle of 2016.

The PFS assumed more than **50,000oz of gold would be produced during the first year of production**, and an average of more than **58,000oz Au eq. per annum for the first three years of production (LOM production – 46,500koz Au eq.)**.

The project has a current mine life of eight year and will produce three separate saleable products, **gold (31,200ozpa), copper sulphate (3,200tpa) and pyrite concentrate (211,000tpa)**. A drill program recently commenced aimed at extending the mine life.

The historical Mount Morgan operation, was one of Australia most profitable mines, however closed due to a falling gold price and high operating costs due to metallurgical issues. Since the closure, metallurgical technology has advanced and Carbine believes they have unlocked the significant value that still exists at Mount Morgan, through a **commonly used technology called Ion Exchange** – which is used on numerous mining operations throughout the world today, including Rio Tinto and Barrick Gold operations.

Catalysts

- Drilling - delineation reserves and expand resource - commenced
- Definitive Feasibility Study – mid 2016
- Project Finance – 2H16;
- Decision to mine/commence construction - 2H16; and
- First production – mid - 2017.

Investment View

Carbine has come a long way in the past 12 months as they completed an impressive PFS, agreed offtake terms for their copper sulphate and pyrite production as well as a new major shareholder joined the register (GR Engineering - completed the PFS).

However there is no slowdown in the year ahead as a DFS will be released by the middle of the year and an announcements regarding project financing and a decision to mine will follow (TSI estimate - 2H16) before production commences next year.

We value Carbine at \$0.40 per share, however believe this valuation could increase up to \$0.58 per share provided there is relief on the state royalty and the mine life is extended to 10 years (TSI assumption - 7yrs).

Mining - Development

March 2016

Share Price	A\$0.18
Value per share	A\$0.40
Implied Return	122%

Company Information

ASX Code	CRB
Ord Shares	152.5M
Options	28.0M
Market Cap	A\$27.5M
Cash (Jan 16)	A\$3.0M
Total Debt (Dec 15)	A\$0.0M

Board & Management

Patrick Walta	ED
Evan Cranston	NED
Tom Bahen	NED
Steve Dobson	NED

Substantial Shareholders

Board & related parties	22.0%
GR Engineering	8.2%

Share Price

52 week High	A\$0.18
52 week Low	A\$0.04
3m avg dail vol	324k
3m avg daily value	A\$40k

Video Analysis



Carbine Resources

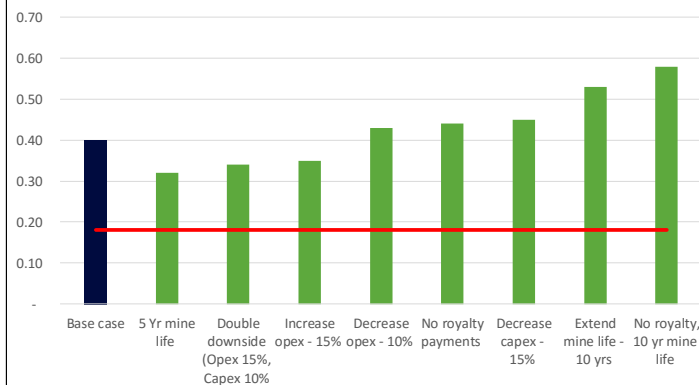
Company Ticker	CRB.ASX	Cash - TSI Estimate (A\$)	3.0
Shares on issue - current (m)	152.5	Debt (A\$)	0.0
Share Price (A\$)	0.180	EV (A\$m)	24.5
Market Cap (A\$m)	27.5	Valuation/share (A\$)	0.40
Industry	Mining - Gold	Intrinsic Value - TSI (A\$m)	127.5
Stage of Development	PFS	Implied Return (%)	122%
Project Location	QLD, Australia	P/NAV (x)	0.45

Year end: 31 December

Valuation	Disc' rate	Ownership	Val (A\$m)	Val / sh (A\$)*	Price Assumptions	2016	2017	2018	2019
Mt Morgan - Base case	10%	100%	\$101.2	\$0.32	Gold (A\$ / oz)	\$1,655	\$1,655	\$1,655	\$1,655
Unpaid cap. & new equity			\$23.3	\$0.07	Copper - (A\$/ t)	\$6,521	\$6,521	\$6,521	\$6,521
Current Cash			\$3.0	\$0.01	Pyrite - (A\$/ t)	\$85	\$85	\$85	\$85
Total NAV			\$127.5	\$0.40	FX (A\$:USD\$)	\$0.71	\$0.71	\$0.71	\$0.71

* Fully diluted for options & project development 316.5 M shares

**Inclusive of tax & corporate costs



Production Profile	2016	2017	2018	2019
Tonnes Processed (Mt pa)	0.00	0.50	1.00	1.00
Grade processed - Au (g/t)	0.00	2.30	1.93	1.50
Gold Produced (oz)	0	28,100	47,037	36,652
Copper Sulphate (t)	0	1,579	3,157	3,157
Pyrite Produced (t)	0	105,500	211,000	211,000

Cash costs (A\$) / Au oz	2016	2017	2018	2019
C1 Cash costs	\$0	\$520	\$621	\$797
Other Costs	\$0	\$328	\$331	\$378
By Product Credit	\$0	(-\$420)	(-\$502)	(-\$644)
Total Operating Cost /oz	\$0	\$428	\$450	\$532

Resource	Tonnes	Gold (g/t)	Contained Gold (oz)	As at (date):
Indicated	2,487,000	1.6	127,135	31 - Dec - 14
Inferred	5,861,000	1.1	201,626	31 - Dec - 14
Total	8,348,000	1.2	328,760	

Ratios	2016	2017	2018	2019
EPS (A\$)	(-\$0.01)	\$0.13	\$0.11	\$0.08
FCFPS (A\$)	(-\$0.14)	(-\$0.04)	\$0.14	\$0.11
P/E ratio (x)	-14.5	1.3	1.6	2.3
P/FCF (x)	-1.3	-4.7	1.3	1.7
Shares on issue (m)	152.5	316.5	316.5	316.5

Resource	Tonnes	Copper %	Copper Content (kt)	As at (date):
Indicated	2,487,000	0.16%	3,979	31 - Dec - 14
Inferred	5,861,000	0.14%	8,205	31 - Dec - 14
Total	8,348,000	0.15%	12,185	

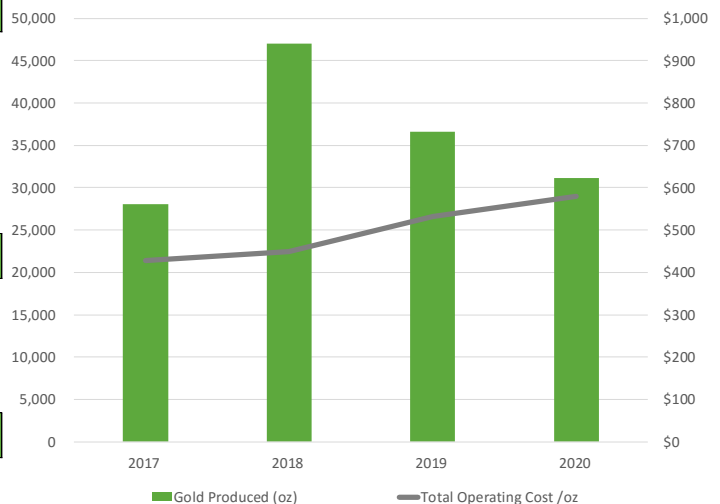
Earnings (A\$ m)	2016	2017	2018	2019
Revenue & other Inc.	\$0.1	\$58.8	\$102.5	\$86.2
Operating Costs	\$0.0	\$17.3	\$33.8	\$33.0
Other Expenses	\$2.0	\$3.0	\$4.0	\$4.0
Exp & Eval	\$0.0	\$0.0	\$0.0	\$0.0
EBITDA	(-\$1.9)	\$38.5	\$64.6	\$49.2
Depreciation	\$0.0	\$5.5	\$11.7	\$12.6
Interest Expense	\$0.0	\$1.5	\$2.9	\$2.1
Tax	\$0.0	\$2.7	\$14.7	\$9.8
Profit (loss) after tax	(-\$1.9)	\$28.7	\$35.3	\$24.7

Balance Sheet (A\$ m)	2016	2017	2018	2019
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Assets	2016	2017	2018	2019
Cash	\$3.4	\$35.7	\$72.0	\$92.0
PPE & Exp. & Dev.	\$19.0	\$59.7	\$52.1	\$43.5
Total Assets	\$22.5	\$95.6	\$124.2	\$135.6

Liabilities	2016	2017	2018	2019
Senior Debt Facility	\$19.0	\$40.0	\$33.3	\$20.0

Cash flow Generation	2016	2017	2018	2019
Cash flow generated	(-\$1.9)	\$32.3	\$36.3	\$20.0
Equity Placement	\$0.0	\$23.3	\$0.0	\$0.0
Capital Expenditure	\$19.0	\$46.3	\$4.0	\$4.0



Source: Company Data, TSI Assumptions

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