

6 Sep 2017

## EMERALD RESOURCES NL (EMR)

### Targeting +100kozpa from Cambodian Okvau Asset

Emerald Resources NL (EMR) is looking to transition to a gold producer through the development of its 100%-owned Okvau gold (+1.1Moz) deposit in Cambodia.

The Company recently (May 2017) completed a definitive feasibility study (DFS) on the project, highlighting attractive financial returns based on a 2.0Mtpa operation producing +100kozpa over an initial mine life of 7 years with only modest pre-production capital costs of ~US\$100M anticipated. EMR is now in the final stages of project permitting with the environmental and mining approvals expected soon, with project funding to follow thereafter for construction to commence potentially before year end (CY17).

Assuming these key milestones can be achieved, first production is forecast for early CY19. EMR boasts an impressive management team with a proven track record of successful gold project developments (while at Equigold and Regis Resources), developing projects rapidly and cost effectively.

Okvau is hosted in an intrusion related gold system (IRGS), which is largely unexplored and has the potential to be a significant new gold province. IRGS have wide-ranging characteristics, but on a basic level are gold deposits produced by local-scale fluids derived from a cooling pluton in regions lacking copper. These mineralised systems rarely form in isolation and can host a significant volume of gold, which bodes well for more discoveries to come.

With development studies completed, significant exploration upside (Cambodia remains under-explored and highly prospective) and permitting approvals imminent, we initiate coverage with a Speculative Buy recommendation and price target of 8.6cps. Our EMR NAV of 8.0cps and spot NAV of 9.7cps is largely based on information supplied in the DFS, but we assume slightly adjusted costs (opex and capex).

### Okvau DFS delivers maiden reserve, and improved costs

The Okvau DFS delivered a maiden ore reserve of 14.3Mt @ ~2g/t Au for 907koz in a single open pit with a low strip ratio (waste to ore) of 5.8:1 life of mine (LOM). The DFS assumed a 2.0Mtpa scale operation for average LOM production of ~106kozpa gold over an initial mine life of 7.2 years.

Operating cash costs (C1) of US\$651/oz for AISC of US\$731/oz highlight robust project economics at current gold prices. Capital costs were estimated to be US\$98M, inclusive of pre-production mining costs. The capital costs were substantially better than RNS' PFS capex number of ~US\$120M from a smaller 1.5Mtpa plant, but the processing design remained largely unchanged for a single-stage crushing circuit, SAG mill, sulphide flotation, regrind mill followed by conventional cyanide leaching. Total gold recoveries of 84% are anticipated, as the gold mineralisation has a strong association with sulphides (pyrrhotite and arsenopyrite veining), common among IRGS deposits. With available cheap grid power nearby, processing costs are not expected to be onerous, and should be similar to conventional processing.

### Cambodia – highly prospective but still under explored

EMR controls ~1,500km<sup>2</sup> of prospective, under-explored terrain in Cambodia. The Company has multiple IRGS targets to test within a 60km radius of Okvau. We consider the exploration upside to be strong, as mentioned these type of mineralised systems rarely form in isolation.

Share Price	\$0.046
Valuation	\$0.080
Price Target (12 month)	\$0.086

#### Brief Business Description:

Exploration and development of gold deposits.

#### Hartleys Brief Investment Conclusion

Under-explored and highly prospective IRGS terrain in Cambodia. Robust DFS delivered on the Okvau gold deposit (100% EMR). Highly experience gold development team.

#### Chairman, MD & ED

Simon Lee (Non-Executive Chairman)

Morgan Hart (Managing Director)

Justin Tremain (Executive Director)

#### Top Shareholders (est)

Directors & Management	30%
Ingalls & Snyder	8%
Confederate Capital Pty Ltd	5%

#### Company Address

1110 Hay Street West Perth, WA 6005

Issued Capital 2108.0m

- ords + ITM options 2150.5m

Market Cap A\$97.0m

- ords + ITM options A\$98.9m

Cash (30 June 17a) A\$8.5m

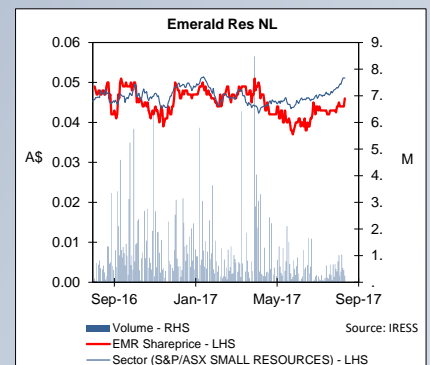
Debt A\$0.0m

EV A\$88.5m

EV/Resource Au oz A\$78/oz

EV/Reserve Au oz A\$98/oz

	Au
Resources (Moz) - 100%	1.14
Reserves (Moz) - 100%	0.91



Mike Millikan

Resources Analyst

Ph: +61 8 9268 2805

E: mike\_millikan@hartleys.com.au

Hartleys has a beneficial interest in 4.65 million unlisted options in Emerald Resources NL.

## SUMMARY MODEL

Emerald Res NL EMR		Share Price \$0.046				
<b>Key Market Information</b>						
Share Price		\$0.046				
Market Capitalisation - ordinary		A\$97.0m				
Net Cash (debt)		\$8.5m				
Market Capitalisation - fully diluted		A\$100.0m				
EV		A\$91.5m				
Issued Capital (current)		2108.0m				
Options		66.1m				
Issued Capital (fully diluted ITM options)		2150.5m				
Issued Capital (fully diluted inc. all options and new capital)		3028.7m				
Valuation		\$0.080				
12month price target		\$0.086				
<b>P&amp;L</b>						
	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19	30 Jun 20
Net Revenue	A\$m	0.0	0.0	0.0	70.6	180.5
Total Costs	A\$m	-0.7	-3.7	-3.2	-38.0	-98.2
EBITDA	A\$m	-0.7	-3.7	-3.2	32.6	82.3
- margin					46%	46%
Depreciation/Amort	A\$m	0.0	0.0	0.0	-0.1	-0.1
EBIT	A\$m	-0.7	-3.7	-3.2	32.6	82.2
Net Interest	A\$m	0.5	0.1	0.1	0.1	0.1
Norm. Pre-Tax Profit	A\$m	-0.3	-3.6	-3.0	32.7	82.4
Reported Tax Expense	A\$m	0.0	0.3	0.0	0.0	-14.9
Normalised NPAT	A\$m	-0.2	-2.5	-2.1	22.9	57.7
Abnormal Items	A\$m	1.2	-0.8	-2.9	7.8	7.8
Reported Profit	A\$m	1.1	-3.2	-5.0	30.7	65.5
Minority	A\$m	0.0	0.0	0.0	0.0	0.0
Profit Attrib	A\$m	1.1	-3.2	-5.0	30.7	65.5
<b>Balance Sheet</b>						
	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19	30 Jun 20
Cash	A\$m	11.7	8.5	67.9	33.1	90.4
Other Current Assets	A\$m	6.4	6.3	6.3	12.2	21.3
Total Current Assets	A\$m	18.1	14.7	74.2	45.3	111.8
Property, Plant & Equip.	A\$m	0.0	0.0	72.0	134.4	138.4
Exploration	A\$m	0.5	3.3	3.3	3.3	3.3
Investments/other	A\$m	0.6	0.6	0.6	0.6	0.6
Tot Non-Curr. Assets	A\$m	1.1	3.9	75.9	138.3	142.2
Total Assets	A\$m	19.2	18.6	150.0	183.6	254.0
Short Term Borrowings	A\$m	-	-	-	-	-
Other	A\$m	0.4	0.3	0.3	3.1	8.1
Total Curr. Liabilities	A\$m	0.4	0.3	0.3	3.1	8.1
Long Term Borrowings	A\$m	-	-	76.5	76.5	76.5
Other	A\$m	-	-	-	-	-
Total Non-Curr. Liabil.	A\$m	-	-	76.5	76.5	76.5
Total Liabilities	A\$m	0.4	0.3	76.8	79.6	84.6
Net Assets	A\$m	18.8	18.3	73.3	104.0	169.4
Net Debt	A\$m	-11.7	-8.5	8.6	43.4	-13.9
<b>Cashflow</b>						
	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19	30 Jun 20
Operating Cashflow	A\$m	-0.5	-0.9	-3.2	29.6	78.1
Income Tax Paid	A\$m	0.0	0.3	0.0	0.0	-14.9
Interest & Other	A\$m	0.5	0.1	0.1	0.1	0.1
Operating Activities	A\$m	0.0	-0.5	-3.1	29.7	63.3
Property, Plant & Equip.	A\$m	-3.3	0.0	-72.0	-62.5	-4.0
Exploration and Devel.	A\$m	-0.5	-2.8	-2.0	-2.0	-2.0
Other	A\$m	-2.2	0.0	0.0	0.0	0.0
Investment Activities	A\$m	-5.9	-2.8	-74.0	-64.5	-6.0
Borrowings	A\$m	0.0	0.0	76.5	0.0	0.0
Equity or "tbc capital"	A\$m	-0.3	0.0	60.0	0.0	0.0
Dividends Paid	A\$m	0.0	0.0	0.0	0.0	0.0
Financing Activities	A\$m	-0.3	0.0	136.5	0.0	0.0
Net Cashflow	A\$m	-6.2	-3.3	59.4	-34.8	57.3
<b>Shares</b>						
	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19	30 Jun 20
Ordinary Shares - End	m	1306.6	1306.6	2184.8	2184.8	2184.8
Ordinary Shares - Weighted	m	1306.6	1306.6	1745.7	2184.8	2184.8
Diluted Shares - Weighted	m	1306.6	1306.6	1745.7	2184.9	2184.9
<b>Ratio Analysis</b>						
	Unit	30 Jun 16	30 Jun 17	30 Jun 18	30 Jun 19	30 Jun 20
Cashflow Per Share	A\$ cps	0.0	0.0	-0.2	1.4	2.9
Cashflow Multiple	x	-2668.1	-132.3	-26.2	3.4	1.6
Earnings Per Share	A\$ cps	0.1	-0.2	-0.3	1.4	3.0
Price to Earnings Ratio	x	57.2	-18.5	-16.0	3.3	1.5
Dividends Per Share	AUD	-	-	-	-	-
Dividend Yield	%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Debt / Net Debt + Equity	%	-167%	-86%	11%	29%	-9%
Interest Cover	X	1.6	28.1	24.1	na	na
Return on Equity	%	na	na	na	22%	34%
<b>Directors</b>						
Simon Lee (Non-Executive Chairman)						
Morgan Hart (Managing Director)						
Justin Tremain (Executive Director)						
Ross Stanley (Non-Executive Director)						
Ross Williams (Non-Executive Director)						
Mick Evans (COO)						
Mark Clements (Company Secretary)						
<b>Company Information</b>						
1110 Hay Street						
West Perth, WA 6005						
+61 8 9286 6300						
+61 8 9286 6333						
www.emeraldresources.com.au						
<b>Top Shareholders (est)</b>						
m shares %						
Directors & Management 638 30%						
Ingalls & Snyder 169 8%						
Confederate Capital Pty Ltd 105 5%						
<b>Reserves &amp; Resources</b>						
Resource - Okvau 100%						
Measured - - - - -						
Indicated 15.1 2.08 1.01 0.70g/t Au						
Inferred 2.6 1.61 0.13 0.70g/t Au						
Total 17.7 2.01 1.14 0.70g/t Au						
Reserve - Okvau 100% 14.3 2.00 0.91 0.63g/t Au						
<b>Production Summary</b>						
Unit Jun 16 Jun 17 Jun 18 Jun 19 Jun 20						
Mill Throughput Mt - - - 0.8 2.0						
Strip Ratio x - - - 5.8 5.8						
Mined grade g/t - - - 2.0 2.0						
Combined Recovery & Payability % - - - 84% 84.0%						
Gold 100% (Koz) - - - 40.5 108.0						
Gold Attr. (Koz) - - - 40.5 108.0						
Mine Life yr 7.5 7.5 7.5 7.3 6.3						
Mining Inventory Mt 14.3 14.3 14.3 13.8 11.8						
Conversion of M&I % 95% 95% 95% 91% 78%						
<b>Costs</b>						
Unit Jun 16 Jun 17 Jun 18 Jun 19 Jun 20						
Cost per milled tonne \$/t - - - 45.9 45.6						
EBITDA / tonne milled ore \$/t - - - 43.5 41.2						
C1: Operating Cash Cost = (a) \$/oz - - - 850 844						
(a) + Royalty = (b) \$/oz - - - 903 895						
C2: (a) + depreciation & amortisation = (c) \$/oz - - - 852 845						
(a) + actual cash for development = (d) \$/oz - - - 888 900						
C3: (c) + Royalty \$/oz - - - 905 895						
(d) + Royalty \$/oz - - - 940 950						
Total Cash Cost \$/oz - - - 938 909						
AISC \$/oz - - - 1128 1000						
AISC \$US/oz - - - 860 763						
<b>Price Assumptions</b>						
Unit Jun 16 Jun 17 Jun 18 Jun 19 Jun 20						
AUDUSD AS/US\$ 0.74 0.75 0.79 0.76 0.76						
Gold US\$ US\$/oz 1182 1239 1280 1325 1275						
Gold A\$ A\$/oz 1608 1643 1620 1738 1671						
<b>Hedging</b>						
Jun 16 Jun 17 Jun 18 Jun 19 Jun 20						
Hedges maturing? No No No No No						
<b>Sensitivity Analysis</b>						
Valuation						
Base Case 0.080						
Spot Prices 0.097 (22.2%)						
Spot USD/AUD 0.80, Gold \$1338/oz.						
AUDUSD +/-10% 0.07 / 0.09 (-15.4% / 18.8%)						
Gold +/-10% 0.11 / 0.05 (36.8% / -36.7%)						
<b>Unpaid Capital</b>						
Options No (M) A\$ (M) Ave Pr % Ord						
15-Oct-17 15.19 0.98 0.065 0.7%						
21-Jan-20 20.00 0.50 0.025 0.9%						
30-Sep-20 22.55 0.73 0.032 1.1%						
6-Jan-22 2.50 0.13 0.052 0.1%						
9-Mar-22 3.37 0.19 0.057 0.2%						
6-Jul-22 2.50 0.12 0.049 0.1%						
Total 66.12 2.65 0.040 3.1%						
<b>Share Price Valuation (NAV)</b>						
Risked Est. A\$m Est. A\$/share						
100% Okvau (pre-tax NAV at disc. rate of 12%) 243.5 0.080						
Exploration 40.0 0.013						
Forwards 0.0 0.000						
Corporate Overheads -17.5 -0.006						
Net Cash (Debt) 8.5 0.003						
Tax (NPV future liability) -33.0 -0.011						
Options & Other Equity 0.0 0.000						
Total 241.5 0.080						
Analyst: Mike Millikan						
+61 8 9268 2805						
"tbc capital" could be equity or debt. Our valuation is risk-adjusted for how this may be obtained.						
Sources: IRESS, Company Information, Hartleys Research						
Gold explorer/developer with no current producing assets.						
Leveraged to exploration success/improved market sentiment.						
Last Updated: 06/09/2017						

# OVERVIEW

*Emerald is focused on gold exploration and development within Cambodia*

*The ground is 100%-owned and contains the 1.1Moz Okvau gold deposit*

*The project area is considered highly prospective for more IRG deposits*

*Cambodia is considered to be highly prospective and under explored*

*First mover advantage and most advanced of the Cambodian focused explorers*

Emerald Resources NL (EMR.asx), formerly Emerald Oil and Gas NL, is a gold explorer and developer, focused on bringing the 100%-owned Okvau gold project in Cambodia into production.

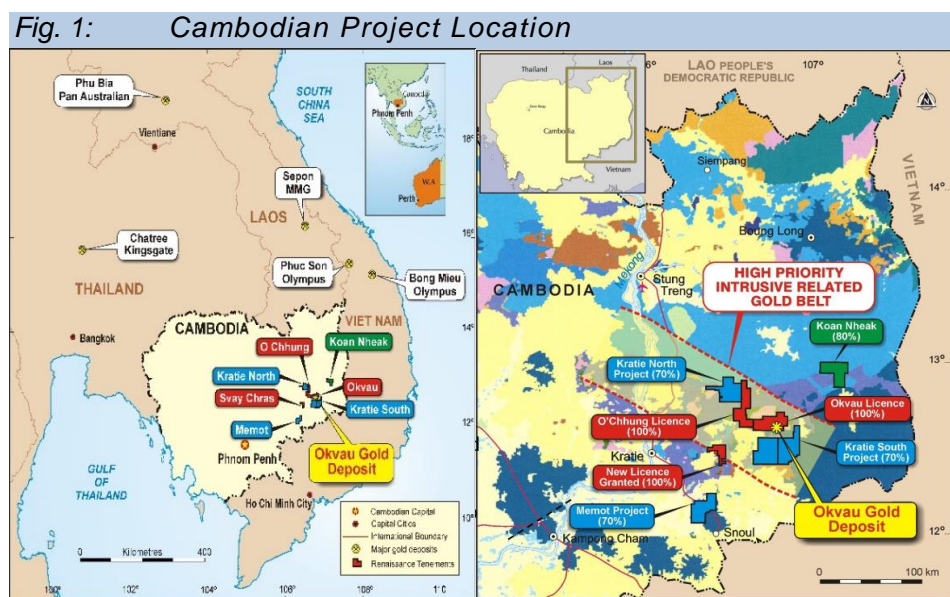
Emerald acquired Renaissance Minerals Ltd (RNS.asx, now delisted) in July 2016, via an off-market takeover. The merger followed a period of joint venture (JV) in the Okvau project, whereby EMR was earning a controlling (51%) interest at the project level, through sole funding exploration and development studies.

The Company released the Okvau DFS in May 2017, highlighting substantially improved project metrics in comparison to the previous development studies (Scoping and PFS), with increased operational scale of 2.0Mtpa (from 1.5Mtpa), increased forecast annual production of ~106kozpa (from ~92kozpa), lower operating costs of US\$731/oz AISC (from US\$755/oz ASIC) and significantly reduced pre-production capital costs of US\$98M (from US\$120M).

The DFS also provided a maiden reserve (907koz @ 2.0g/t AU) for an initial mine life of over 7 years from a single, low strip ratio open pit. At the current gold price capital payback is expected to be less the 2 years. The Company is now in the final stages of project permitting, with the environmental and mining approvals expected soon, with project funding to follow thereafter, for construction to commence potentially before year end (CY17). The Cambodian government is currently constructing a new road to be within 15km of the proposed Okvau mine site, improving road access and a planned power line from Kratie to Okvau is expected to be in place to provide cheap power (<US\$12c Kwh) in the not too distant future. The project has abundant fresh water.

Cambodia has a large untapped mineral endowment, with Emerald being one of a handful of active gold explorers within the country, but with first mover advantage in regards to licence agreements and exploration data already collected. Okvau is hosted in an intrusion related gold system (IRGS), which is largely unexplored and has the potential to be a significant new gold province. These mineralised systems rarely form in isolation and can host a significant volume of gold, which bodes well for more discoveries to come. The country has a favourable fiscal regime for foreign investment with a mining law largely modelled on Western Australia mining code.

EMR has current estimated cash of A\$8.5M, which provides funding to progress pre-development activities and towards planned exploration.



Source: Emerald Resources NL

## CAMBODIAN GOLD PROJECT

Fig. 2: Cambodian Gold Project Snap Shot

### Cambodia Gold

Contains the +1.1Moz Okvau gold deposit

Over 1,500km<sup>2</sup> of prospective terrain to explore

- Interest: 100% interest in Okvau, O'Chhung and New Licence, 80% interest in Koan Nheak JV and 70% interest in Kratie North, Kratie South, Memot JVs.
- Location: Mondulkiri Province, Eastern Cambodia
- Tenement coverage: ~1,500km<sup>2</sup>
- Project stage: Development studies, exploration
- Mineral Resources: 17.7Mt @ 2.0g/t Au for 1.14Moz gold (0.7g/t Au LC)
- Ore Reserves: 14.3Mt @ 2.0g/t Au for 0.9Moz gold (0.63g/t Au LC)
- Commodity Target: Gold
- Key Mineralised Zones: Intrusion Related Gold Systems (IRGS) - Okvau deposit

Source: Emerald Resources NL

### Background

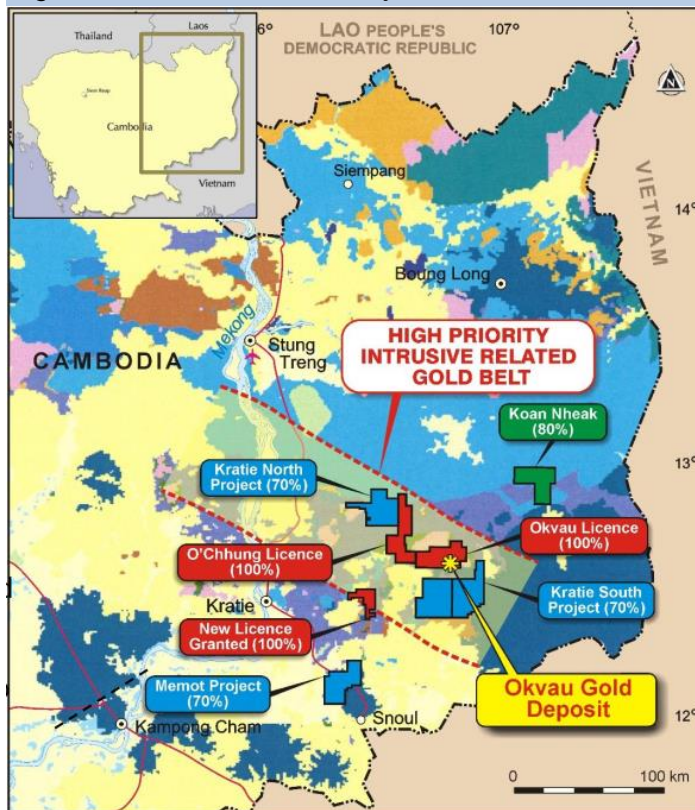
The Cambodian gold assets were originally acquired by RNS from OZ Minerals Limited (OZL.asx) in early 2012, through cash and RNS scrip. EMR acquired RNS in July 2016, via an off-market takeover. The merger followed a period of JV in the Okvau project, whereby EMR was earning a controlling (51%) interest at the project level, through sole funding exploration and development studies. OZL is currently entitled to a gross royalty of 1.5% on future production from Okvau, capped at A\$22.5M. EMR currently has 100% interest the Okvau, O'Chhung licences and a New Licence; and respective 80% and 70% interest (through JVs) in some surrounding tenure.

Local topography is generally flat and reasonably open

Power (nearby 400MW hydro project under development)

No water issues are expected (high rainfall, nearby rivers for potential water extraction)

Fig. 3: Cambodian Project Location



Source: Emerald Resources NL

### Location & Local Geology

*The project area is located in the eastern parts of Cambodia, some 300kms north-east of the capital Phnom Penh*

The project area is located in the eastern parts of Cambodia, in the Mondulkiri Province, some 300kms north-east of the capital Phnom Penh and east of Kratie.

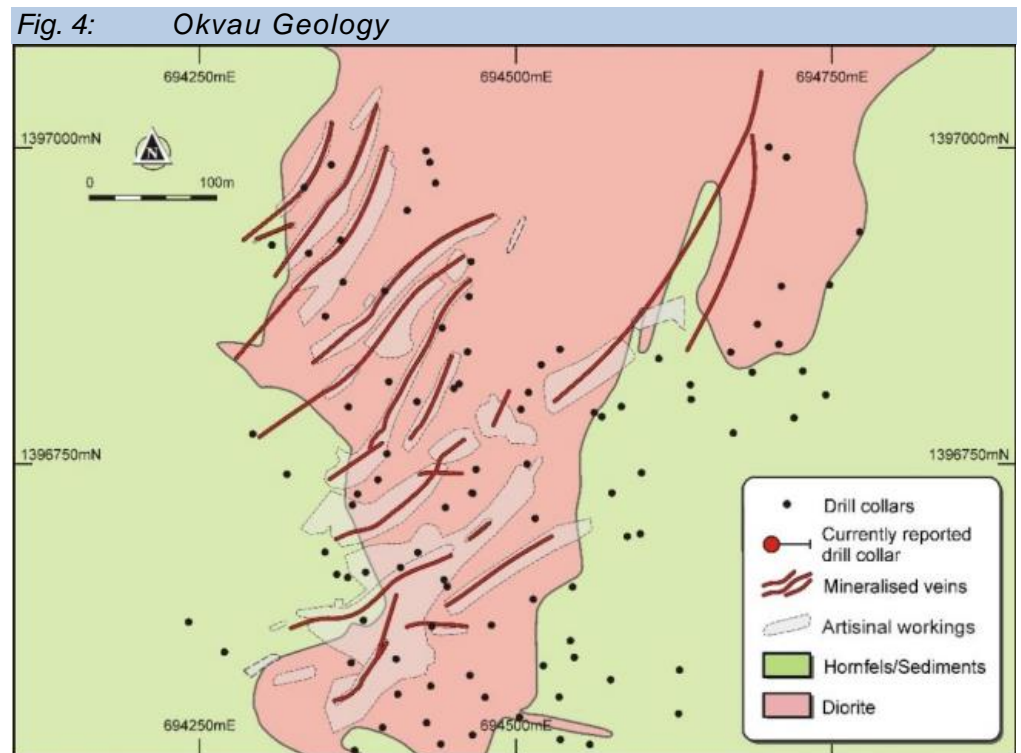
The ground holdings are considered highly prospective for intrusion-related gold (IRG) systems as confirmed by the Okvau gold deposit, which has a current resource of +1.1Moz. It is considered highly unlikely that this deposit occurs in isolation, as IRG systems are generally large and cluster, providing for strong exploration potential.

The Okvau deposit is largely hosted in a diorite intrusion (Cretaceous aged) emplaced within a younger (Triassic) metasedimentary package. Gold mineralisation is contained in a north-east trending fracture set in a narrow off-shoot from a larger diorite intrusion however extends beyond the diorite contact into the metasediments.

Okvau is a high-quality gold resource; it is shallow, good-grade (2.0g/t Au at a 0.7g/t Au lower cut) and 85% of the resource is Indicated. Mineralisation also remains open to the north-east, south-east and at depth, as such further resource growth is anticipated.

*The plutonic rocks throughout the area have a direct association with gold mineralisation and similarities to the IRG deposits of the major Tintina Belt of Alaska and Canada, notably intrusive age (both Cretaceous aged), geochemical signatures (pathfinder elements of gold, arsenic, bismuth and tellurium) and deposit style*

The gold mineralisation has a strong association with pyrrhotite and arsenopyrite veining and metallurgical testwork indicates that sulphide flotation followed by fine grinding of the concentrate prior to conventional cyanide leaching is required to achieve optimal gold recoveries. The current conceptual flow sheet for processing is a coarse primary grind and sulphide flotation to generate a high-grade concentrate which is then reground (~15µm) prior to cyanide leaching. Indicative gold recoveries of ~84% from this process flow is anticipated, and importantly no oxidation is required. With available cheap grid power nearby, processing costs are not expected to be onerous, in fact costs should be around conventional costs.

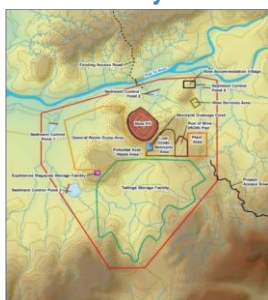


Source: Emerald Resources NL

*Okvau DFS highlighted an attractive open pit operation producing at over 100kozpa over a +7 year mine life, with only modest pre-production capital costs*

*Single-stage crushing circuit, SAG mill, sulphide flotation, regrind mill followed by conventional cyanide leaching*

#### Site Layout



Source: EMR

*The Okvau DFS improved on the original RNS PFS, providing increase project scale and production, while decreasing operating and capital costs*

## Okvau DFS highlights good project economics

In May 2017, EMR completed a definitive feasibility study (DFS) on the Okvau Gold Project, highlighting attractive financial returns based on an operation producing over 100kozpa, sub US\$800/oz AISC and with only modest pre-production capital costs.

The Okvau DFS delivered a maiden ore reserve of 14.3Mt @ ~2g/t Au for 907koz in a single open pit with a low strip ratio (waste to ore) of 5.8:1 life of mine (LOM). The DFS assumed a 2.0Mtpa scale operation for average LOM production of ~106kozpa gold. Operating cash costs (C1) of US\$651/oz for AISC of US\$731/oz highlight robust project economics at current gold prices. Capital costs were estimated to be US\$98M, inclusive of pre-production mining costs. The capital costs were substantially better than RNS' PFS capex number of ~US\$120M from a smaller 1.5Mtpa plant, with the processing design largely unchanged but included minor adjustments to the frontend (crush and mill) and improvements to the flotation circuit. Latest process design for a single-stage crushing circuit, SAG mill, sulphide flotation, regrind mill followed by conventional cyanide leaching. Total gold recoveries of 84% are anticipated, as the gold mineralisation has a strong association with sulphides (pyrrhotite and arsenopyrite veining), common among IRGS deposits.

EMR is now in the final stages of project permitting with the environmental and mining approvals expected soon, with project funding to follow thereafter for construction to commence potentially before year end (CY17). The Company has already received indicative debt financing proposals from some international financiers, but it is likely any proposal is subject to successful permitting.

Fig. 5: Okvau Development Studies – PFS vs DFS Outcomes

	Okvau PFS	Okvau DFS
	RNS	EMR
Current Resource	15.8Mt @ 2.2g/t Au for 1.13Moz	17.7Mt @ 2.0g/t Au for 1.14Moz
Mineral Inventory/Reserve	11.6Mt @ 2.2g/t Au for 829Koz	14.3Mt @ 2.0g/t Au for 907Koz
Mining cut-off grade	0.6g/t Au	0.625g/t Au
Strip Ratio (W:O) -LOM	7.7:1	5.8:1
<b>Throughput</b>	<b>1.5Mtpa</b>	<b>2.0Mtpa</b>
Capex (pre-prod) - US\$m	120	98
LOM - yrs	8	7.2
Recoveries - LOM	85%	84%
Gold Oz (contained)	829,000	907,000
Gold Oz (recovered)	705,000	762,000
<b>Gold Production (ave) - oz</b>	<b>91,500</b>	<b>106,000</b>
Mining - US\$/t	20.8	17.8
Mining - US\$/oz	342	333
Processing - US\$/t	17.4	14.1
Processing - US\$/oz	285	265
G&A - US\$/t	3.5	2.6
G&A - US\$/oz	87	48
Transport & Refining - US\$/t	na	0.2
Transport & Refining - US\$/oz	na	5
C1 Cash Costs - US/t	41.8	34.7
<b>C1 Cash Costs - US/oz - LOM</b>	<b>684</b>	<b>651</b>
Royalties - US\$/t	3.1	2.7
Royalties - US\$/oz	51.0	50.0
Sustaining capex -US\$/t	1.3	0.6
Sustaining capex -US\$/oz	20.5	12.0
Rehab & Closure - US\$/t	na	1.0
Rehab & Closure - US\$/oz	na	19.0
AISC - US\$/t	46.1	39.0
<b>AISC - US\$/oz - LOM (incl. sus capex)</b>	<b>755</b>	<b>732</b>

Source: Emerald Resources NL; Renaissance Minerals Ltd

### Okvau open at depth, with prospective surrounds

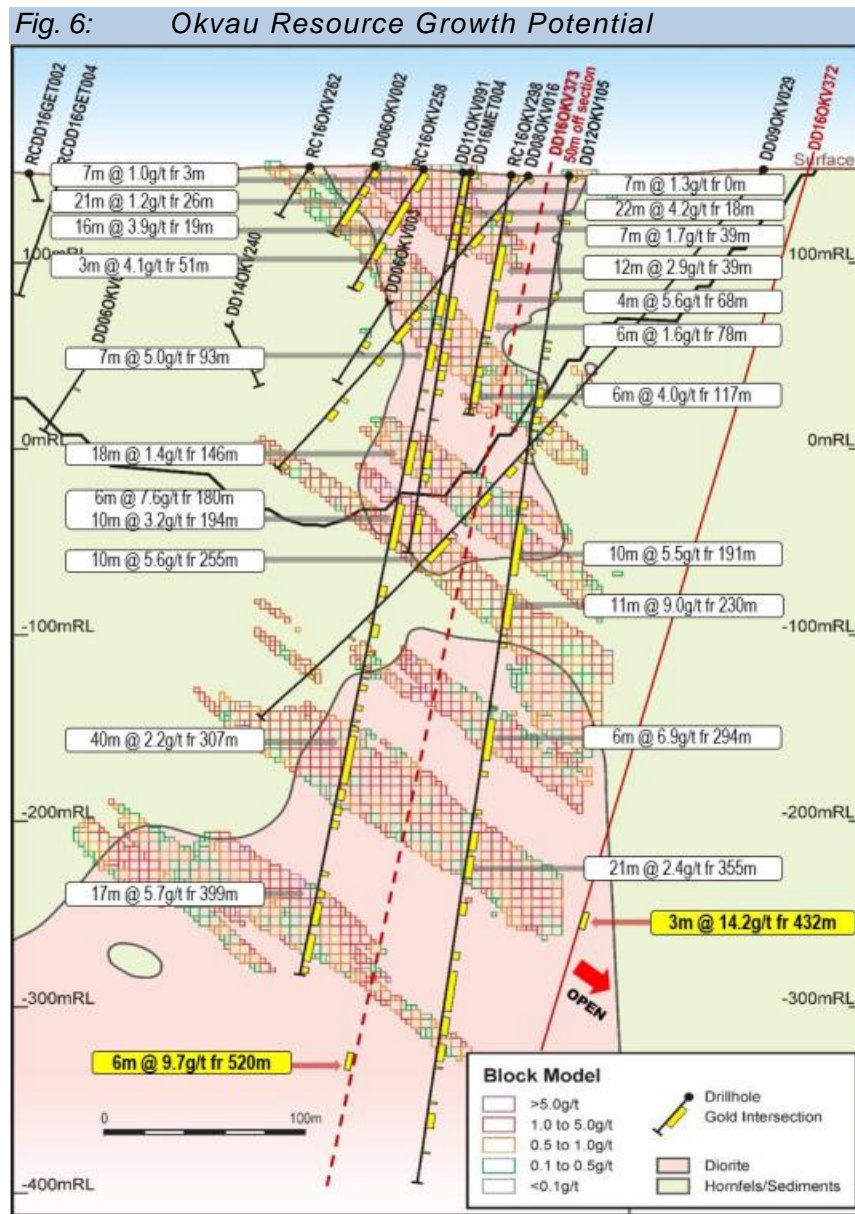
It is highly unlikely that the +1.1Moz Okvau gold deposit occurs in isolation as IRGS are generally very large, and cluster within mineralised belts.

*Okvau remains open to the north and north-east along strike, and remains open at depth*

The Okvau deposit remains open to the north and north-east along strike, and remains open at depth with high grade shoots providing potential underground opportunities in the future. Significant good-grade mineralisation has already been defined beneath the current (final) open pit design, with some of the better drill highlights including:

- 11m @ 9.0g/t Au from 230m;
- 23m @ 15.3g/t Au from 352m;
- 17m @ 5.7g/t Au from 399m (including 11m @ 8.4g/t Au)
- 3m @ 14.3g/t from 432m; and
- 6m @ 9.7g/t from 520m

*Current open pit mine plan with potential underground opportunities in the future*



Source: Emerald Resources NL

*Highly unlikely that Okvau occurs in isolation as IRGS are generally very large, and cluster which bodes well for more discoveries to come*

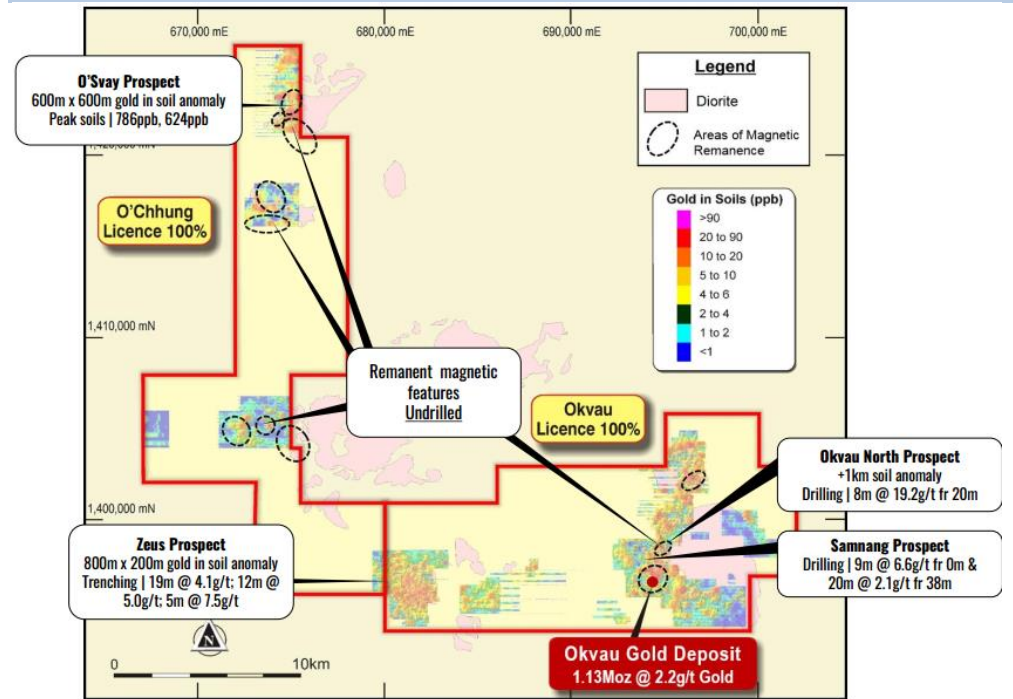
*More recent exploration has focused on a 5-8km anomalous geochemical trend north of the deposit, with key prospects defined*

## Okvau open at depth, with prospective surrounds

Previous exploration has already identified multiple drill-ready targets that remain to be tested, many within close proximity to the proposed Okvau project development.

More recent exploration has focused on a 5-8km anomalous geochemical trend north of the deposit, with a number of key prospects defined.

**Fig. 7: Okvau Surrounds – Exploration Upside**



Source: Emerald Resources NL

### Okvau North Prospect

- Located less than 2km north of Okvau, with observable gold in soil associated with diorite-sediment contact boundary and IP anomalies;
- Isolated drilling resulted in:
  - 8m @ 19.2g/t Au from 20m

### Samnang

*Further work required*

- Located ~500m north of Okvau in another area with significant artisanal mining activity.
- First pass drilling results include:
  - 9m @ 6.6g/t Au from 0m
  - 20m @ 2.1g/t Au from 38m
  - 3m @ 4.0g/t Au from 21m
  - High grade rock chips and replicates samples from the north east.

These targets are robust gold in soil anomalies with critical pathfinder multi-elements (bismuth, arsenic, tellerium) and all show potential for an 'Okvau style' repetition. EMR is focused on targets within close proximity (trucking distance) to Okvau offering potential satellite deposits for a development scenario.



### New JVs add to regional potential

EMR recently reached agreement to earn-in to five exploration licences surrounding the Okvau and O’Chhung licences. The farm-ins grow the Company ground holdings from ~400km<sup>2</sup> to ~1,500km<sup>2</sup>.

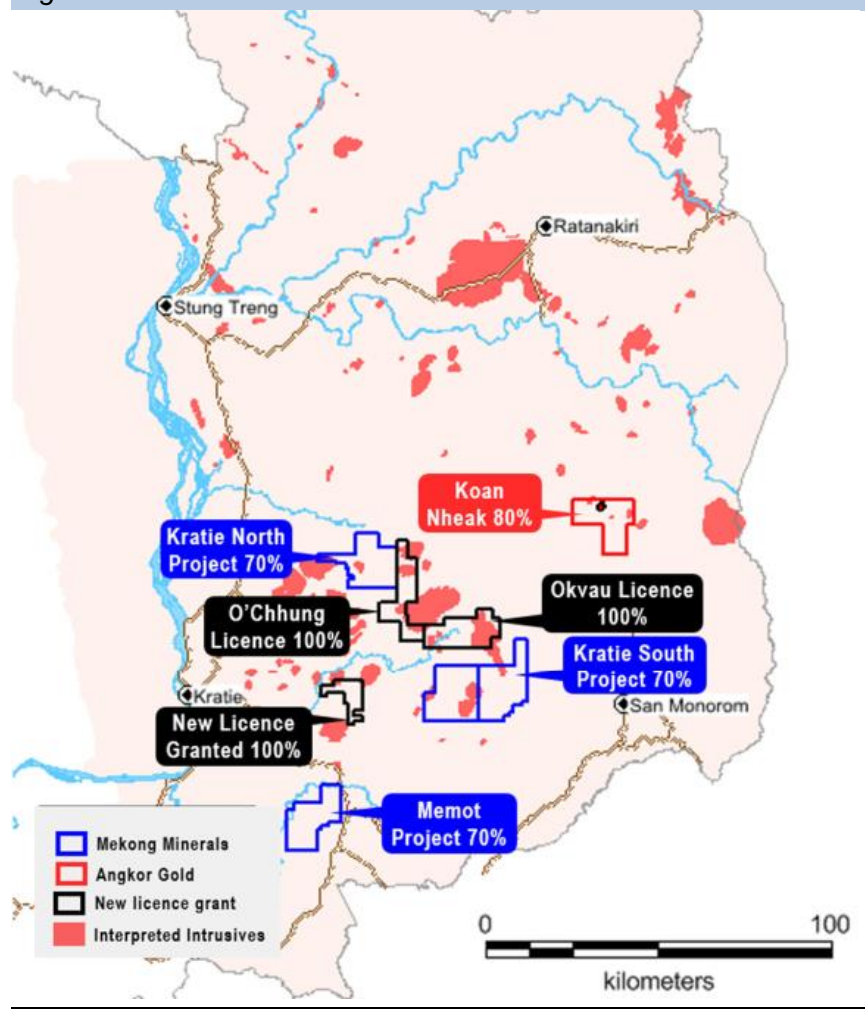
EMR can earn up to 70% in four exploration licences held by Australian private company (Mekong Minerals) and up to 80% interest in an exploration licence (Koan Nheak) held by TSX-listed Angkor Gold Corp.

*New JVs increases EMR ground holdings to over 1,500km<sup>2</sup>*

Historical results on the Mekong held ground includes drill results of 4m @ 11.9g/t Au from 4m; 16m @ 2.9g/t Au from 4m; 4m @ 10.2g/t Au from 56m; 3m @ 8.9g/t Au from 73m; 3m @ 12.9g/t Au from 38m; and 3m @ 8.5g/t Au from 58m. Only limited follow-up provides new discovery potential.

All ground is considered highly prospective for new IRG systems.

**Fig. 8: Cambodian Assets – New JVs**



Source: Emerald Resources NL

# COMPARATIVES

## PEER COMPARATIVES

Selected ASX listed peer companies – Gold Developers.

**Fig. 9: ASX Peer Comparison – Developers**

Name	Code	Mkt cap A\$M	Net cash \$AM	Project	Scale Mtpa	Capex \$AM	EV/Reserve oz \$/oz	EV/Resource oz \$/oz	Comments
Gold Road	GOR	616	310.7	Yamarna	3.8	266	324	169	50:50 JV
Dacian	DCN	467	137.0	Mt Morgans	2.5	220	460	166	Construction to begin. Funded
Gascoyne	GCY	173	42.0	Dalgaranga	2.5	86	371	187	Awaiting debt
Capricorn	CMM	42	5.5	Karlawinda	3.0	120	219	174	DFS SepQ
Emerald	EMR	97	8.5	Okvau	2.0	124	234	187	Financing underway, first gold target 2019
West African	WAF	208	26.0	Sanbrado	2.0	131	342	235	FS update H1 2018

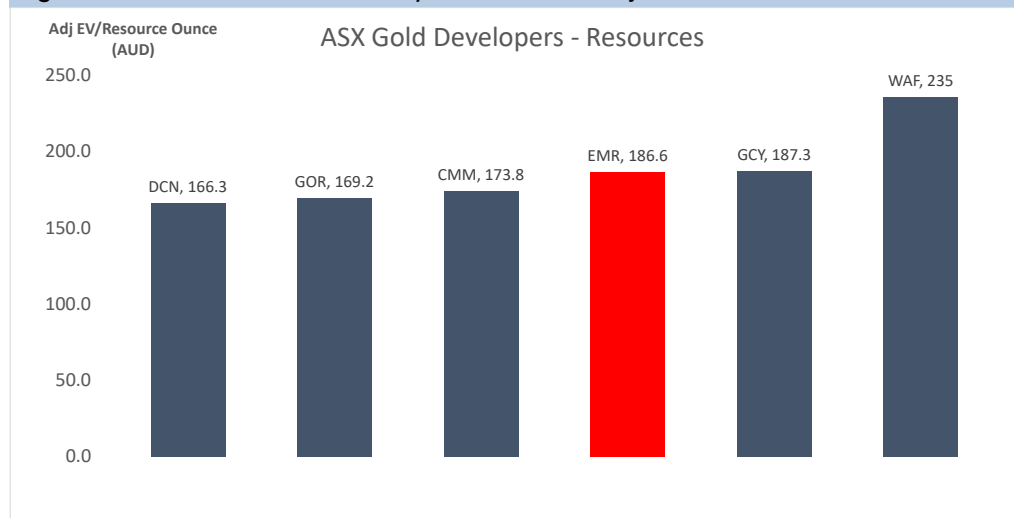
Source: IRESS prices @ close 5 September 2017; Cash at end June '17 or estimated; Note EV adjusted by capex

*We would expect as permitting approvals are received and exploration upside continues to be demonstrated, the Company will be re-rated*

*EMR is currently trading on a Adj EV/Resource Oz of ~\$187/oz, which is at the developer peer average, whereas EMR is well below the average on a Adj EV/Reserve Oz of A\$234/oz*

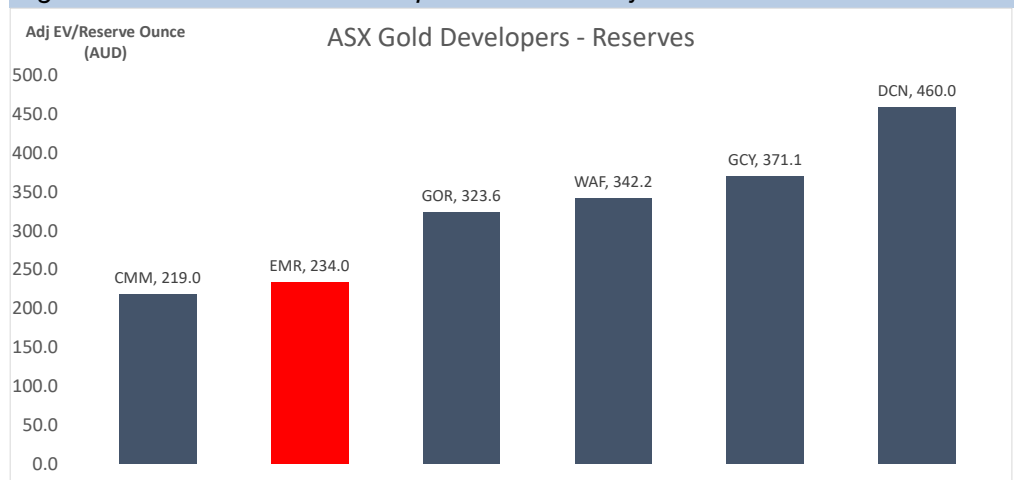
*We remain of the opinion EMR is good value.*

**Fig. 10: ASX Gold Developer Peers – Adj EV/Resource oz**



Source: IRESS, Company Reports; EV adjusted for project capex

**Fig. 11: ASX Gold Developer Peers – Adj EV/Reserve oz**



Source: IRESS, Company Reports; EV adjusted for project capex

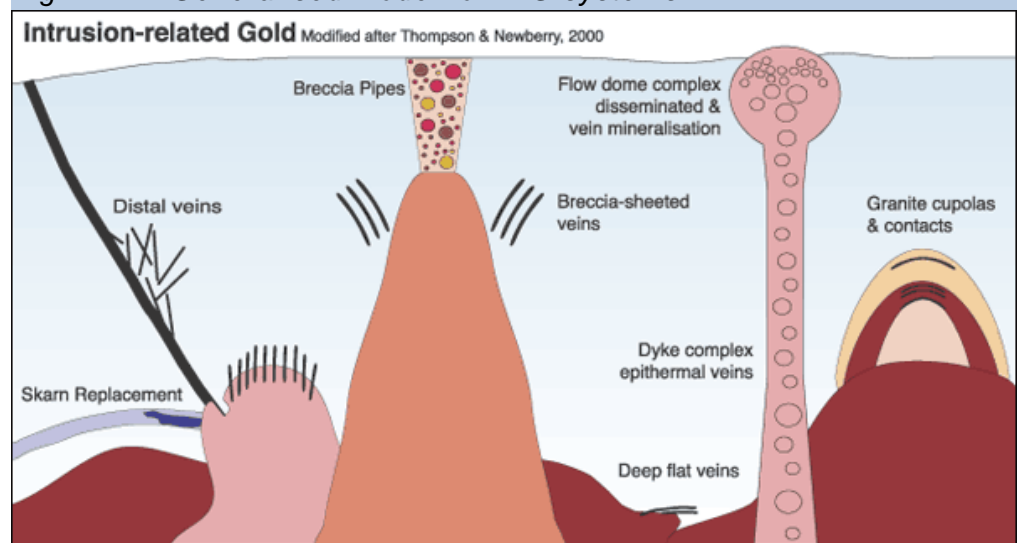
## INTRUSION RELATED GOLD SYSTEMS (IRGS)

Intrusion related gold systems (IRGS) are a class of deposits in which gold mineralisation is associated with plutonic intrusions in regions lacking copper. As well as being economically important for gold, these types of deposits are also known for significant concentrations of tungsten (W) and tin (Sn).

*Gold mineralisation is associated with plutonic intrusions in regions lacking copper*

Intrusion related gold deposits have generally wide ranging characteristics, but on a simplistic level are produced by local-scale fluids derived from a cooling pluton. The broad mineralised styles are best summarised by the below figure. They range from those proximal to granites (e.g. greisen, disseminated gold, skarns) to more distal and more contentious styles, such as breccias, and vein systems where the relationship with granites is unclear. In an IRGS model, gold mineralisation can occur in multiple parallel veins and stock-works that have a high likelihood of continuing at depth.

**Fig. 12: Generalised model for IRG systems**



*Gold mineralisation is characterised by a wide range of gold grades, with bulk mineable volumes at 0.8- 1.5g/t Au, and grades well above 2g/t Au, up to ~19g/t Au*

Source: Chapman, 2005, AusGeo News September 2005 Issue No. 79

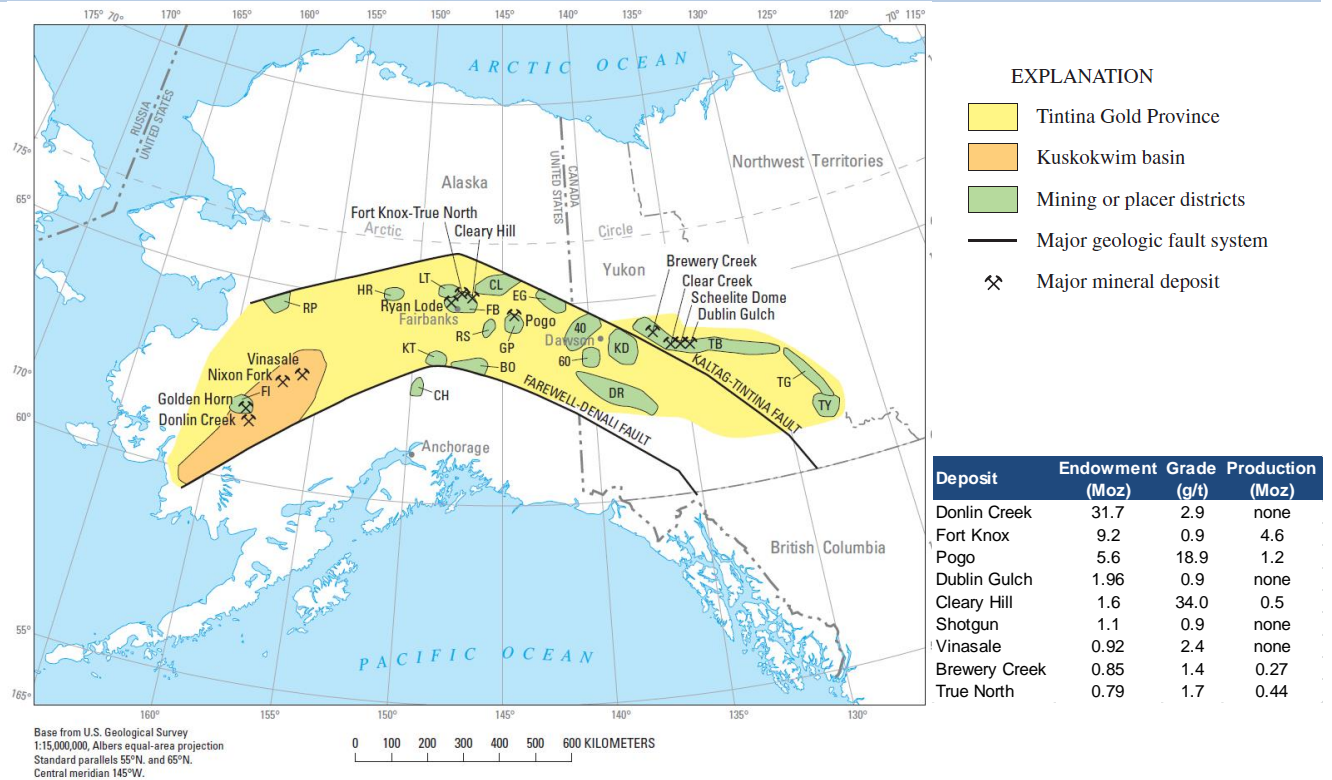
The model development for IRGS has been largely based on North American deposits, especially on work completed within the Tintina Gold Province (TGP) of Alaska and Canada (where IRGS' were first identified and termed). According to the US Geological Survey (USGS), more than 50Moz of lode gold resources have been defined in the last 15 years through this new class of gold deposits. The TGP covers more the 150,000km<sup>2</sup>, as displayed in Fig. 15.

*According to the USGS, more than 50Moz of lode gold resources have been defined in the last 15 years through this new class of gold deposits*

IRGS can host a significant volume of gold with some of the deposits within the Tintina belt containing up to 32Moz of gold (Donlin Creek) and grades varying from sub 1g/t, up to 18.9g/t Au in the 5.6Moz Pogo deposit. The major deposits in the Tintina Gold Province formed around 105 to 90Ma in east-central Alaska and Yukon, and around 70Ma in south-western Alaska.

Of important note, the new intrusion related gold province identified in Cambodia is of similar age to Tintina, with granitoid intrusions of Cretaceous age (~100Ma), with the gold mineralised occurrences having a direct association with these age intrusions.

**Fig. 13: Main gold districts of the Tintina Gold Province of Alaska and Canada (Yukon)**



Source: USGS; from “Recent U.S. Geological Survey Studies in the Tintina Gold Province, Alaska, United States, and Yukon, Canada—Results of a 5-Year Project”

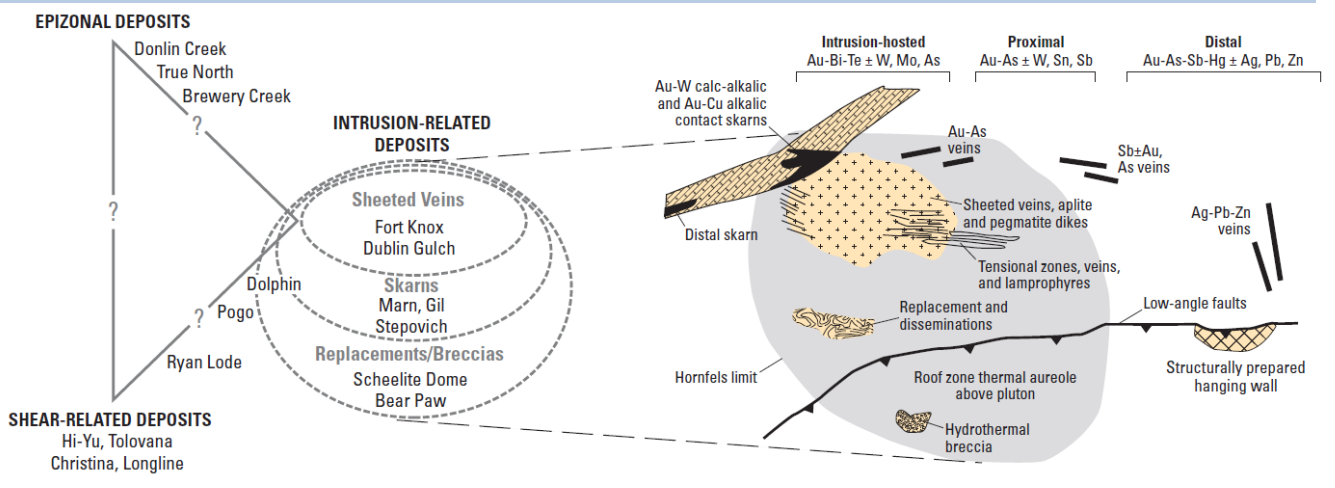
*The intrusion related gold belt in Cambodia, remains largely unexplored*

Important characteristics of IRGS are their size and frequency, as the deposits generally cluster around the main plutonic intrusion. It is considered highly unlikely that Okvau (in Cambodia) occurs in isolation, and we see significant upside for the deposit to extend and for more discoveries to be made.

*We see significant potential for new discoveries*

The gold mineralisation at Okvau is associated with pyrrhotite and arsenopyrite veining within a shear zone that cuts diorite and metamorphosed sediments. Moderate to high-grade gold mineralisation is located within both the main shears and secondary linking faults and splays. As an analogue, the sheeted vein system at Fort Knox (~9Moz), is not too dissimilar but Okvau is more than double the grade.

**Fig. 14: Intrusion related gold deposit styles within the TGP**



Source: USGS; from “Recent U.S. Geological Survey Studies in the Tintina Gold Province, Alaska, United States, and Yukon, Canada—Results of a 5-Year Project”

## RESERVES & RESOURCES

Maiden reserves (probable) were delivered as part of the Okvau DFS (May 2017), and consist of 14.3Mt @ ~2g/t Au for 907,000 oz (lower cut off grade of 0.625g/t Au).

*Current reserve for 907koz contained gold from a base resource base of 1.1Moz*

**Fig. 15: Okvau Gold Reserve – April 2017**

JORC Reserves	Mt	Grade	Moz	LC (g/t Au)
Probable	14.26	1.98	0.907	0.625
<b>Total</b>	<b>14.26</b>	<b>1.98</b>	<b>0.907</b>	<b>0.625</b>

Source: Emerald Resources NL

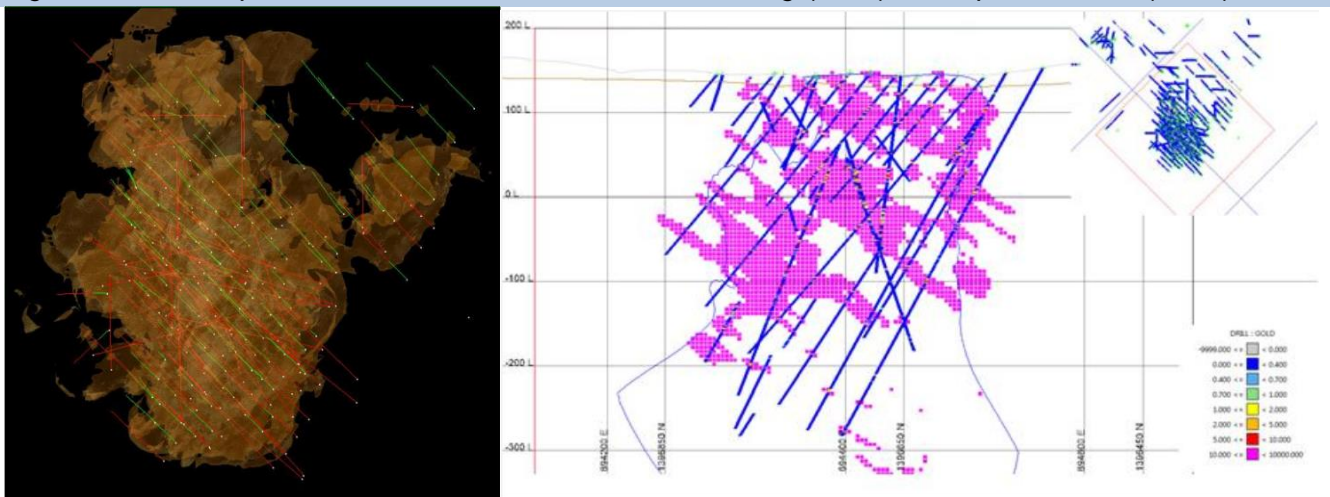
The Okvau gold deposit has an independent JORC resource estimate of 17.68Mt @ 2.01g/t Au for 1.1Moz gold (at lower cut of 0.7g/t Au). The resource is considered robust, with 85% in the Indicated resource category.

**Fig. 16: Okvau Gold Resource – April 2017**

JORC Resources	Mt	Grade	Moz	LC (g/t Au)
Indicated	15.11	2.08	1.008	0.7
Inferred	2.57	1.61	0.133	0.7
<b>Total</b>	<b>17.68</b>	<b>2.01</b>	<b>1.141</b>	<b>0.7</b>

Source: Emerald Resources NL

**Fig. 17: Okvau Deposit – Mineralised Outline and Drilling (LHS) ; Oblique Section (RHS)**



Source: Emerald Resources NL

## COMMODITY EXPOSURE

*Gold is seen the largest commodity exposure*

Emerald is currently focused on precious metal exploration and is progressing the Okvau deposit in Cambodia in development.

The Company currently has no operating mines, but on current timing could be in production in early to mid-2019.

## GEOGRAPHIC EXPOSURE

*Cambodia remains largely unexplored*

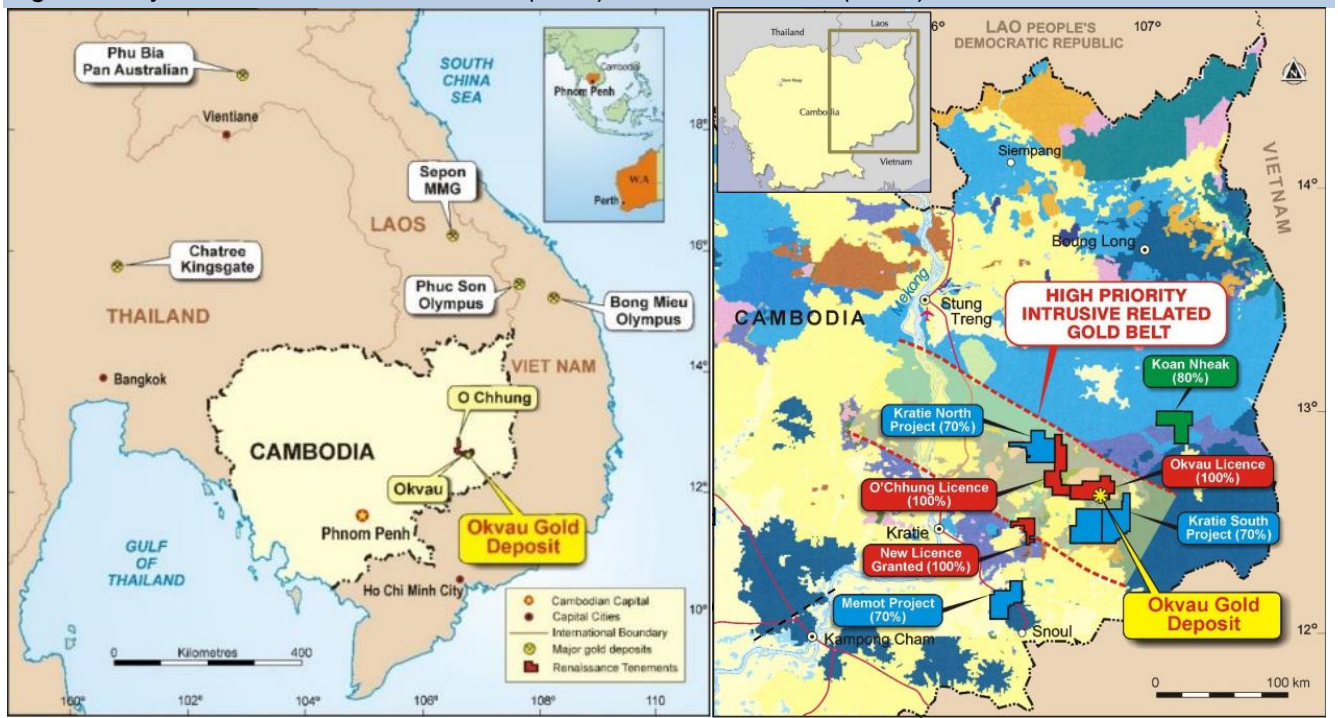
*Modern exploration in search of mineral deposits only commenced in 2006/07 following the implementation of laws governing exploration, mining and foreign investment*

Cambodia is a south-eastern Asian country, bordering Thailand, Laos and Vietnam. The country operates under a constitutional monarchy providing for a multi-party democracy. Government elections are every 5 years, with the next elections scheduled for July 2018. The population of Cambodia is currently ~16 million.

The country has a tropical climate with a monsoon season from May to November and dry season from December through to April, generally with little seasonal variation in temperature. Cambodia is considered one of the more business friendly countries in the region, with an open trading regime and joined the World Trade Organisation in 2004. Over the past 14 years the Country has enjoyed political stability and one of the strongest performing economies in Asia. Cambodia has a modern and transparent mining code and the government is supportive of foreign investment particularly in mining and exploration.

There are no major operating mines in country, only small-scale (artisanal) activity. The country does have an attractive fiscal regime for mining, with a corporate tax rate of 30%, 2.5-3.0% gross revenue royalty and no restrictions on foreign ownership (direct foreign ownership of 100%).

Fig. 18: Project Location – Cambodia (LHS): Licence Areas (RHS)



Source: Emerald Resources NL

# MANAGEMENT, DIRECTORS AND MAJOR SHAREHOLDERS

Economic Exposure of Board and key management				Total	
		Total Options	Total Shares	Economic	
		#	#	Exposure	Rank
	Position				
<b>Directors</b>					
Simon Lee	Non-Executive Chairman	0	114,000,000	114,000,000	3
Morgan Hart	Managing Director	0	260,000,000	260,000,000	1
Justin Tremain	Executive Director	12,012,500	4,340,000	16,352,500	5
Ross Stanley	Non-Executive Director	0	222,163,613	222,163,613	2
Ross Williams	Non-Executive Director	0	25,000,000	25,000,000	4
<b>Management</b>					
Mick Evans	Chief Operating Officer	na	na	na	
Mark Clements	Company Secretary	na	na	na	
<b>Total</b>		<b>12,012,500</b>	<b>625,503,613</b>	<b>637,516,113</b>	<b>30%</b>

Source: Emerald Resources NL

## Mr. Simon Lee AO (Non-Executive Chairman)

*Strong technical and corporate experience on the Board*

Mr Lee has had extensive management experience with a diverse range of business enterprises in a career that has based him in Asia, England, Canada and Australia. Mr Lee has held a number of positions, which included Board Member of the Australian Trade Commission (AUSTRADE), Chairman of the Western Australian Museum Foundation Trust and President of the Western Australian Chinese Chamber of Commerce Inc. In 1993 he received the Advance Australia Award for his contribution to commerce and industry and in 1994 he was bestowed an Officer of the Order of Australia. Mr Lee has a successful track record in the resources industry which has included building gold mining companies, Great Victoria Gold NL, Samantha Gold NL and Equigold NL.

## Mr. Morgan Hart (Managing Director)

Mr Hart is a Geologist and experienced Mining Executive. He is formerly an Executive Director COO of Regis Resources Ltd, responsible for the development of three gold mines in four years (Moolart Well, Garden Well and Rosemont). Prior to that, Mr Hart was Executive Director COO of Equigold NL, responsible for the development and construction of the Bonikro Gold Project in Ivory Coast West Africa along with the management of the operation of the Mount Rawdon and Kirkalocka gold mines in Australia.

## Mr. Justin Tremain (Executive Director)

Mr Tremain graduated from the University of Western Australia with a Bachelor of Commerce degree. Mr Tremain has over 10 years' investment banking experience in the natural resources sector. He has held positions with Investec, NM Rothschild & Sons and Macquarie Bank and has extensive experience in the funding of natural resource projects in the junior to mid-tier resource sector. Mr Tremain has undertaken numerous advisory assignments for resource companies, including acquisition and disposal assignments and project advisory roles. He is formerly the Managing Director of Renaissance Minerals Limited and is currently a Non-Executive Director of Berkut Minerals Limited.

**Mr. Ross Stanley (Non-Executive Director)**

Ross is a well-respected mining executive with extensive experience both in Australian and African mining enterprises. Ross was formerly the majority shareholder and Managing Director of ASX listed Stanley Mining Services prior to its merger with Layne Christensen in 1997. Stanley Mining was the dominant drill services provider in Ghana in the 1990's. Ross also served as a non-executive director of Equigold NL.

**Mr. Ross Williams (Non-Executive Director)**

Ross Williams is a founding shareholder of MACA Limited (ASX: MLD) and was Financial Director until his resignation in July 2014. Mr Williams also has 16 years banking experience having held executive positions with a major Australian Bank. Mr Williams is a past fellow of the Australian Institute of Banking and Finance and holds a Post Graduate Diploma in Financial Services Management.

**Michael Evans (Chief Operating Officer)**

Mr. Michael Evans is Chief Operating Officer of the company. He has over 20 years experience in various mining and processing industries throughout Australia and Africa. Prior to joining the Company he spent 7 years with Regis Resources Ltd (ASX:RRL) firstly as Projects Manager and in April 2014 he was appointed as Chief Development Officer and was responsible for the construction of the processing plant at the Moolart Well, Garden Well and Rosemont gold mines. Before that, Mr Evans spent 10 years with Equigold NL where he was instrumental in the construction of the Bonikro processing plant in Cote D'Ivoire.

**Mr. Mark Clements (Company Secretary)**

Mr Clements has 18 years experience in corporate accounting and public company administration. He is Company Secretary for a number of diversified ASX listed companies. He is currently Executive Chairman of MOD Resources Limited. Mr Clements previously worked for an international accounting firm. He is a Fellow of the Institute of Chartered Accountants in Australia and a Member of the Australian Institute of Company Directors.



## MAJOR SHAREHOLDERS

Substantial shareholders include Directors & Management with ~30%, Ingalls & Snyder with ~8%, and Confederate Capital with ~5%.

**Fig. 19: Top 20 Shareholders as at 27 Sep 2016\***

Shareholder	Number of Shares	% Issued Capital
Hart Morgan Cain	260,000,000	12.33%
Stanley Ross Francis	222,163,613	10.54%
Merril Lynch Aust Nom Pty Ltd	172,404,688	8.18%
Shi Pty Ltd	114,000,000	5.41%
Zero Nom Pty Ltd	101,559,361	4.82%
Confederate Capital Pty Ltd	87,498,347	4.15%
Lennan BJDM & IJM	30,000,000	1.42%
Seah Kee Khoo	25,000,000	1.19%
PS Cons Pty Ltd	23,250,000	1.10%
Radford Stacey	22,733,334	1.08%
Geared Investment Pty Ltd	21,746,553	1.03%
Laguna Bay Capital Pty Ltd	21,700,001	1.03%
Metford David George	20,662,412	0.98%
Jamax Holdings Pty Ltd	20,150,000	0.96%
BNP Paribas Noms Pty Ltd	18,034,262	0.86%
Jamax Holdings Pty Ltd	15,758,333	0.75%
Hawkestone Resources Pty Ltd	15,515,026	0.74%
JA Advisory Services Pty Ltd	15,500,000	0.74%
Williams Ross Campbell	15,000,000	0.71%
Weng Y	13,646,355	0.65%
<b>Total Top 20 Shareholders</b>	<b>1,236,322,285</b>	<b>58.65%</b>

*Board & Management hold ~30% interest*

Source: Emerald Resources NL; \* Also updated by change of substantial releases

## OPTIONS AND UNPAID CAPITAL

There are currently ~66.1M options with an average strike price of 4cps for ~A\$2.65M in unpaid capital.

*EMR currently has ~66.1M options with an average strike price of 4cps for ~A\$2.65M in unpaid capital*

**Fig. 20: Options on issue or to-be-issued**

Ex Date	Ex Price	Option (M)	Unpaid Capital (A\$M)
Oct-17	\$0.065	15.2	\$0.98
Jan-20	\$0.025	20.0	\$0.50
Sep-20	\$0.032	22.6	\$0.73
Jan-22	\$0.052	2.5	\$0.13
Mar-22	\$0.057	3.4	\$0.19
Jul-22	\$0.049	2.5	\$0.12
<b>Total</b>	<b>\$0.040</b>	<b>66.1</b>	<b>\$2.65</b>

Source: Emerald Resources NL

# VALUATION AND PRICE TARGET

## VALUATION METHODOLOGY

Our sum of parts valuation for EMR is largely based on information supplied in the Okvau DFS (released 1<sup>st</sup> May 2017). Our model is based on a conceptual 2.0Mtpa project producing for an indicative 7.5 years (slightly higher than the DFS) and processing at a head grade of ~2.0g/t (in-line with the DFS) and overall recovery of 84% and capex of ~US\$110M (slightly higher than forecast by EMR). Our key inputs are best summarised below in Figure 21.

*Hartleys model assumptions for the EMR are largely based on inputs from the Okvau DFS*

*Model based on a 2.0Mtpa gold operation producing for an initial 7.5 years*

*We assume slightly higher opex and capex, just to build some additional conservatism in our NAV*

*Our modelling currently assumes first production late-Q1 CY19, which requires the completion of permitting and project funding*

**Fig. 21: EMR's Okvau DFS vs Hartleys Model Assumptions**

	Okvau DFS	Hartleys Assumptions
Current Resource	17.7Mt @ 2.0g/t Au for 1.14Moz	17.7Mt @ 2.0g/t Au for 1.14Moz
Mineral Inventory/Reserve	14.3Mt @ 2.0g/t Au for 907Koz	14.3Mt @ 2.0g/t Au for 907Koz
Mining cut-off grade	0.625g/t Au	0.625g/t Au
Strip Ratio (W:O) -LOM	5.8:1	5.8:1
<b>Throughput</b>	<b>2.0Mtpa</b>	<b>2.0Mtpa</b>
Capex (pre-prod) - US\$m	98	110
LOM - yrs	7.2	7.5
Recoveries - LOM	84%	84%
Gold Oz (contained)	907,000	907,000
Gold Oz (recovered)	762,000	802,000
<b>Gold Production (ave) - oz</b>	<b>106,000</b>	<b>107,000</b>
Mining - US\$/t	17.8	18.2
Mining - US\$/oz	333	340
Processing - US\$/t	14.1	14.5
Processing - US\$/oz	265	271
G&A - US\$/t	2.6	3.0
G&A - US\$/oz	48	56
Transport & Refining - US\$/t	0.2	0.3
Transport & Refining - US\$/oz	5	6
C1 Cash Costs - US/t	34.7	36.0
<b>C1 Cash Costs - US\$/oz - LOM</b>	<b>651</b>	<b>673</b>
Royalties - US\$/t	2.7	2.7
Royalties - US\$/oz	50.0	50.0
Sustaining capex -US\$/t	0.6	0.8
Sustaining capex -US\$/oz	12.0	15.0
Rehab & Closure - US\$/t	1.0	1.0
Rehab & Closure - US\$/oz	19.0	18.7
AISC - US\$/t	39.0	40.5
<b>AISC - US\$/oz - LOM (incl. sus capex)</b>	<b>732</b>	<b>757</b>

Source: Emerald Resources NL; Hartleys Estimates

Subject to the completion of permitting and project funding, first production is currently forecast for early 2019. EMR has completed the environmental and social impact assessment for environmental permitting approvals and mining approvals in late Q3/early Q4 CY17. Our modelling currently assumes first production late Q1 CY19.

Exploration success (resource expansions) is expected to further enhance the project economics. We model a nominal A\$40M for exploration value given the exploration potential that EMR has to find further IRG mineralisation within close proximity to the Okvau deposit.

We assume 100% project interest for EMR and use a discount rate of 12%. Once first production is achieved our discount rate will be lowered.

**Fig. 22: Hartleys EMR Valuation**

Share Price Valuation (NAV)	Risked Est. A\$m	Est. A\$/share
100% Okvau (pre-tax NAV at disc. rate of 12%)	243.5	0.080
Exploration	40.0	0.013
Forwards	0.0	0.000
Corporate Overheads	-17.5	-0.006
Net Cash (Debt)	8.5	0.003
Tax (NPV future liability)	-33.0	-0.011
Options & Other Equity	0.0	0.000
<b>Total</b>	<b>241.5</b>	<b>0.080</b>

Our EMR NAV is  
8.0cps

Source: Hartleys Estimates

## PRICE TARGET

Our price target for EMR includes weighting for the base case at consensus and spot pricing and a weighting for the current net cash backing.

**Fig. 23: Price Target Methodology - EMR**

EMR Price Target Methodology	Weighting	Spot	12 mth out
NPV base case	70%	\$0.080	\$0.091
NPV spot commodity and FX prices	20%	\$0.097	\$0.111
Net cash backing	10%	\$0.004	\$0.004
<b>Risk weighted composite</b>		<b>\$0.076</b>	
<b>12 Months Price Target</b>		<b>\$0.086</b>	
Shareprice - Last		\$0.046	
<b>12 mth total return (% to 12mth target )</b>		<b>87%</b>	

Our EMR 12-month  
price target is 8.6cps

Source: Hartleys Estimates

## GOLD PRICE ASSUMPTION USED IN MODEL

Our gold price and exchange rate assumptions are provided in Figure 24.

We assume a long run gold price of US\$1,200/oz and AUDUSD rate of 0.78. Our commodity prices and exchange rates are subject to change and are continually updated.

**Fig. 24: Gold Price Assumptions**

Price Assumptions	Unit	Jun 16	Jun 17	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22	Jun 23
AUDUSD	A\$/US\$	0.74	0.75	0.79	0.76	0.76	0.77	0.78	0.78
Gold US\$	US\$/oz	1182	1239	1280	1325	1275	1250	1250	1200
Gold A\$	A\$/oz	1608	1643	1620	1738	1671	1619	1608	1538

Source: Hartleys, IRESS

## RECOMMENDATION & RISKS

### INVESTMENT THESIS & RECOMMENDATION

We initiate coverage of EMR with a Speculative Buy recommendation, and price target of 8.6cps.

*We initiate coverage of EMR with Speculative Buy recommendation and price target of 8.6cps*

EMR is looking to transition to gold producer through the development of its 100%-owned Okvau gold (+1.1Moz) deposit in Cambodia. The Okvau DFS highlighted attractive financial returns based on a 2.0Mtpa operation producing +100kozpa over an initial mine life of 7 years with only modest pre-production capital costs of ~US\$100M anticipated.

EMR is now in the final stages of project permitting with the environmental and mining approvals expected soon, with project funding to follow thereafter for construction to commence potentially before year end (CY17). Assuming these key milestones can be achieved, first production is forecast for early CY19.

EMR boasts an impressive management team with a proven track record of successful gold project developments (while at Equigold and Regis Resources), developing projects rapidly and cost effectively.

Okvau is hosted in an intrusion related gold system (IRGS), which is largely unexplored and has the potential to be a significant new gold province. IRGS have wide-ranging characteristics, but on a basic level are gold deposits produced by local-scale fluids derived from a cooling pluton in regions lacking copper. These mineralised systems rarely form in isolation and can host a significant volume of gold, which bodes well for more discoveries to come.

### SIMPLE S.W.O.T. TABLE

*Fig. 25: Hartleys SWOT Table for EMR*

<i>Good reserve position at good-grade</i>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>- <i>Okvau 0.9Moz reserve at good-grade</i></li> <li>- <i>First mover advantage in Cambodia</i></li> <li>- <i>Highly prospective ground position</i></li> <li>- <i>Good infrastructure (hydro power and roads)</i></li> <li>- <i>Leveraged to positive news</i></li> <li>- <i>Completed development studies</i></li> </ul>
<i>Exploration Upside</i>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>- <i>Dependant on capital markets</i></li> <li>- <i>Project funding required</i></li> <li>- <i>Cambodia is a frontier (relatively unknown) market for mining investment</i></li> </ul>
<i>Threat of commodity price weakness</i>	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>- <i>Exploration Upside</i></li> <li>- <i>Prospective, unexplored, emerging gold district</i></li> <li>- <i>M&amp;A activity</i></li> </ul> <p><b>Threats</b></p> <ul style="list-style-type: none"> <li>- <i>Exploration Downside</i></li> <li>- <i>Exposure to commodity price decreases or closed capital markets</i></li> <li>- <i>Potential takeover</i></li> </ul>

Source: Hartleys Research

## RISKS

Key risks for EMR include completing permitting (environmental and mining approvals), project funding for the Okvau development, and commissioning for first production (assuming permitting and funding is completed). Weather, land access, and retaining key people are some additional risks.

*Fig. 26: Key Risks*

Assumption	Risk of not realising assumption	Downside risk to share price if assumption is incorrect	Comment
Permitting approvals are received	Low-Med	Extreme	EMR are in the final stages of project permitting, with the Environmental and Social Impact Assessment completed. Both environmental and mining approvals are expected soon (late Q3/early Q4 CY17). We expect permits will be granted and that a Mineral Investment Agreement can be successfully negotiated. Not obtaining permit approvals would have a severe impact on share price.
100% project ownership	Low-Med	Med-High	We assume 100% project ownership for the Okvau project in Cambodia. The current fiscal regime allows for direct foreign ownership of up to 100%, with no government equity participation. This is unlikely to change in the near-term as the country continues to look to attract foreign investment and grows its minerals industry.
Stable government	Low-Med	Extreme	Over the past 14 years Cambodia has enjoyed political stability and remains one of the strongest performing economies in Asia. Cambodia has a modern and transparent mining code and the government is supportive of foreign investment. We assume the April 2018 elections will follow due democratic process.
Okvau project development is successfully funded	Low-Med	High	To achieve the Company's near term production milestone it will require funding for the Okvau project development. We expect this funding will be realised with minimal risk to the downside. Our modelling currently assumes a 55:45 debt to equity funding. The Okvau DFS highlighted a robust project development with favourable production profile, low cost and only modest pre-production capex. EMR has a strong technical and development experience, having completed numerous gold developments in Australia and in West Africa.
Commodity prices	Med	High	The project remains highly sensitive to commodity price movements and sentiment. The Company's exploration/development focus is gold (commodity exposure).

*Conclusion*

*At this stage we consider the assumptions have a low to medium risk of not being achieved. EMR is currently trading at a discount to our valuation and price target, likely reflective of the permitting and funding requirement.*

Source: Hartleys Research

# HARTLEYS CORPORATE DIRECTORY

## Research

Trent Barnett	Head of Research	+61 8 9268 3052
Mike Millikan	Resources Analyst	+61 8 9268 2805
John Macdonald	Resources Analyst	+61 8 9268 3020
Paul Howard	Resources Analyst	+61 8 9268 3045
Aiden Bradley	Research Analyst	+61 8 9268 2876
Michael Scantlebury	Junior Analyst	+61 8 9268 2837
Janine Bell	Research Assistant	+61 8 9268 2831

## Corporate Finance

Dale Bryan	Director & Head of Corp Fin.	+61 8 9268 2829
Richard Simpson	Director	+61 8 9268 2824
Ben Crossing	Director	+61 8 9268 3047
Ben Wale	Associate Director	+61 8 9268 3055
Stephen Kite	Associate Director	+61 8 9268 3050
Scott Weir	Associate Director	+61 8 9268 2821
Scott Stephens	Associate Director	+61 8 9268 2819
Rhys Simpson	Manager	+61 8 9268 2851

## Registered Office

### Level 6, 141 St Georges TcePostal Address:

PerthWA 6000 GPO Box 2777  
Australia Perth WA 6001  
PH:+61 8 9268 2888 FX: +61 8 9268 2800  
www.hartleys.com.au info@hartleys.com.au

*Note: personal email addresses of company employees are structured in the following manner:firstname.lastname@hartleys.com.au*

## Hartleys Recommendation Categories

Buy	Share price appreciation anticipated.
Accumulate	Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy".
Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce / Take profits	It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period.
Sell	Significant price depreciation anticipated.
No Rating	No recommendation.
Speculative Buy	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.

## Institutional Sales

Carrick Ryan	+61 8 9268 2864
Justin Stewart	+61 8 9268 3062
Simon van den Berg	+61 8 9268 2867
Chris Chong	+61 8 9268 2817
Digby Gilmour	+61 8 9268 2814
Tia Hall	+61 8 9268 3053

## Wealth Management

Nicola Bond	+61 8 9268 2840
Bradley Booth	+61 8 9268 2873
Adrian Brant	+61 8 9268 3065
Nathan Bray	+61 8 9268 2874
Sven Burrell	+61 8 9268 2847
Simon Casey	+61 8 9268 2875
Tony Chien	+61 8 9268 2850
Tim Cottee	+61 8 9268 3064
David Cross	+61 8 9268 2860
Nicholas Draper	+61 8 9268 2883
John Featherby	+61 8 9268 2811
Ben Fleay	+61 8 9268 2844
James Gatti	+61 8 9268 3025
John Goodlad	+61 8 9268 2890
Andrew Gribble	+61 8 9268 2842
David Hainsworth	+61 8 9268 3040
Murray Jacob	+61 8 9268 2892
Gavin Lehmann	+61 8 9268 2895
Shane Lehmann	+61 8 9268 2897
Steven Loxley	+61 8 9268 2857
Andrew Macnaughtan	+61 8 9268 2898
Scott Metcalf	+61 8 9268 2807
David Michael	+61 8 9268 2835
Jamie Moullin	+61 8 9268 2856
Chris Munro	+61 8 9268 2858
Michael Munro	+61 8 9268 2820
Ian Parker	+61 8 9268 2810
Matthew Parker	+61 8 9268 2826
Charlie Ransom	+61 8 9268 2868
Mark Sandford	+61 8 9268 3066
David Smyth	+61 8 9268 2839
Greg Soudure	+61 8 9268 2834
Sonya Soudure	+61 8 9268 2865
Dirk Vanderstruyf	+61 8 9268 2855
Samuel Williams	+61 8 9268 3041
Jayne Walsh	+61 8 9268 2828

## Disclaimer/Disclosure

The author of this publication, Hartleys Limited ABN 33 104 195 057 ("Hartleys"), its Directors and their Associates from time to time may hold shares in the security/securities mentioned in this Research document and therefore may benefit from any increase in the price of those securities. Hartleys and its Advisers may earn brokerage, fees, commissions, other benefits or advantages as a result of a transaction arising from any advice mentioned in publications to clients.

Hartleys has a beneficial interest in 4.65 million unlisted options in Emerald Resources NL.

Any financial product advice contained in this document is unsolicited general information only. Do not act on this advice without first consulting your investment adviser to determine whether the advice is appropriate for your investment objectives, financial situation and particular needs. Hartleys believes that any information or advice (including any financial product advice) contained in this document is accurate when issued. Hartleys however, does not warrant its accuracy or reliability. Hartleys, its officers, agents and employees exclude all liability whatsoever, in negligence or otherwise, for any loss or damage relating to this document to the full extent permitted by law.