



## Buy

Current Price **\$1.67**  
Valuation **\$1.60**

Friday, 14 April 2023

## De Grey Mining Ltd (DEG)

### Best foot forward

John Macdonald

### Quick Read

In anticipation of a well-received DFS and De Grey capturing more than its fair share of capital flows into gold equities, we retain a buy recommendation.

### Main points

**DFS:** De Grey expects to complete the Mallina Definitive Feasibility Study in mid 2023.

We expect the market to price in an improved DFS as it arrives and maybe build in a further premium while gold is rising or steady. Based on pricing, expected margins and reserve growth in the gold sector are well below historic averages. As a large, non-depleting, unhedged and clearly commercial gold resource in the ground, we expect Hemi and De Grey to continue to attract patient capital seeking leveraged, long term exposure to gold.

Planning a fully costed, large scale development against a backdrop of rapidly rising base cost and revenue inputs has its challenges. Our database suggests gold industry cost inputs rose about 20% over the course of CY22. We expect an increase in earth movement and ore processing rates above the September 2022 Mallina PFS and increase cost estimates by about 10%, similar to the adjustment made from scoping study to PFS. On our forecasts the rise in the gold price covers cost inflation. Margins above total costs (post capex) are held at 32%; sufficient to reduce the risk of failure due to a mismatch in cost and revenue expectations. We allow for 10% inflation in capex estimates as well.

**No takeover:** No apparent movement on the M&A front. No data rooms open for potential suitors. De Grey is preparing for Mallina's independent development. An experienced project manager has been appointed. Banks are lining up to participate.

**Going alone:** Within mining and extractive industries, all successful first asset development precedents tend to be smaller CIL or concentrate flotation projects, compared to the large-scale POx operation proposed at Mallina. The services industry continues to mature so that independent capabilities are much improved, however independent development continues to bear uncertain funding costs that big balance sheet companies can avoid by absorbing market fluctuation and technical risks. Hence any first asset developer's objectives pre-funding must include managing, suppressing or convincingly playing down the technical, execution and funding risks. We think the banks will be willing participants and that, ahead of final funding, De Grey will have best foot forward giving investors opportunity to drive the share price higher.

### Recommendation

Our De Grey valuation is up from \$1.40/share to \$1.60/share after gold price changes (A\$2410/oz previous, A\$2643/oz new) partially offset by higher cost assumptions. Our spot price valuation (A\$3010/oz) is \$2.05 per share. On valuation grounds we can still justify a buy recommendation. We expect De Grey to be bid up as the gold price consolidates above US\$2000/oz and gold asset premiums come into play.

Code: **DEG**  
Sector: **Materials**

\* All figures in AUD unless stated otherwise

Shares on Issue (M): **1,561**  
Market Cap (\$M): **2,599**  
Net cash (\$M Dec 2022): **160**  
Enterprise value (\$M): **2,534**

52 wk High/Low (ps): **\$1.67** **\$0.74**  
12m av. daily vol. (Mshs): **5.27**

#### Key Metrics

	FY25e	FY26e	FY27e
P/E (x)	0.0	0.0	5.5
EV/EBITDA (x)	-90.5	-90.5	3.5

#### Financials:

	FY25e	FY26e	FY27e
Revenue (\$M)	0	0	1,347
EBIT (\$M)	-28	-28	597
NPAT (A\$M)	-24	-27	472
Net assets (\$M)	634	46,199	46,564
Op CF (\$M)	-24	-626	-54

#### Per share data:

	FY25e	FY26e	FY27e
EPS (c)	-1.5	-1.7	30.2
Dividend (cps)	0.0	0.0	0.0
Yield (%)	-	-	-
CF/Share (cps)	-1.5	-1.7	39.9
Prod (koz Au)	0	0	510

Share Price Graph and trading volumes (msh)



Please refer to important disclosures at the end of the report (from page 6)



De Grey Mining

Equities Research

Analyst: John Macdonald

<b>Recommendation</b>	<b>Buy</b>	<b>Sector</b>	<b>Metals &amp; Mining</b>
<b>Current Price</b>	<b>\$1.67</b>	<b>Issued Capital (Mshs)</b>	<b>1,561</b>
<b>Valuation</b>	<b>\$1.60</b>	<b>Market Cap (M)</b>	<b>\$2,599</b>
			<b>Friday, 14 April 2023</b>

Profit & loss (\$M) 30 June	2023E	2024E	2025E	2026E
Sales Revenue	0	0	0	0
+ Other income/forwards	0	0	0	0
- Operating costs	0	0	0	0
- Royalties	0	0	0	0
- Corporate & administration	-28	-28	-28	-28
<b>Total Costs</b>	<b>-28</b>	<b>-28</b>	<b>-28</b>	<b>-28</b>
<b>EBITDA</b>	<b>-28</b>	<b>-28</b>	<b>-28</b>	<b>-28</b>
- margin	0%	0%	0%	0%
- D&A	0	0	0	0
<b>EBIT</b>	<b>-28</b>	<b>-28</b>	<b>-28</b>	<b>-28</b>
+ Finance Income/Expense	0	0	-2	-6
<b>PBT</b>	<b>-28</b>	<b>-28</b>	<b>-30</b>	<b>-34</b>
- Tax expense	6	6	6	7
- Impairments and other				
<b>NPAT</b>	<b>-22</b>	<b>-22</b>	<b>-24</b>	<b>-27</b>

Cash flow (\$M)	2023E	2024E	2025E	2026E
+ Revenue	0	0	0	0
- Cash costs	-28	-28	-28	-28
- Forwards	0	0	0	0
-Tax payments	0	6	6	7
+ Interest & other	0	0	-2	-6
<b>Operating activities</b>	<b>-28</b>	<b>-22</b>	<b>-24</b>	<b>-27</b>
- Property, plant, mine devel.	-42	-40	-550	-626
- Exploration	-32	-20	-20	-20
<b>Investment activities</b>	<b>-74</b>	<b>-60</b>	<b>-570</b>	<b>-646</b>
+ Borrowings	0	0	400	400
- Dividends	0	0	0	0
+ Equity	150	480	0	0
<b>Financing activities</b>	<b>150</b>	<b>480</b>	<b>400</b>	<b>400</b>
<b>Cash change</b>	<b>48</b>	<b>398</b>	<b>-194</b>	<b>-273</b>

Balance sheet	2023E	2024E	2025E	2026E
<b>Cash &amp; bullion</b>	<b>112</b>	<b>509</b>	<b>316</b>	<b>43</b>
Other Current Assets	0	0	0	0
<b>Total current assets</b>	<b>112</b>	<b>509</b>	<b>316</b>	<b>43</b>
Property, plant & equip.	209	249	799	1425
Investments/other	0	0	0	0
<b>Total non-curr. assets</b>	<b>209</b>	<b>249</b>	<b>799</b>	<b>1425</b>
<b>Total assets</b>	<b>321</b>	<b>759</b>	<b>1115</b>	<b>1468</b>
Trade payables	13	11	6	41
Short term borrowings	0	0	0	120
Other	13	11	75	76
<b>Total curr. liabilities</b>	<b>26</b>	<b>22</b>	<b>81</b>	<b>117</b>
Long term borrowings	0	0	400	680
Other	0	0	0	0
<b>Total non-curr. liabil.</b>	<b>0</b>	<b>0</b>	<b>400</b>	<b>680</b>
<b>Total liabilities</b>	<b>26</b>	<b>22</b>	<b>481</b>	<b>797</b>
<b>Net assets</b>	<b>296</b>	<b>737</b>	<b>634</b>	<b>671</b>

Shares	2023E	2024E	2025E	2026E
New shs issued/exerciseable	152	301*	3	0
Average issue price	0.99	1.59*	0.00	0.00
Ordinary shares - end	1561	1862	1865	1865
Diluted shares - end	1565	1865	1865	1865

\*Argonaut assumption

Price assumptions	2023E	2024E	2025E	2026E
AUDUSD	0.677	0.700	0.700	0.700
Gold	1812	1850	1850	1850
Gold	2676	2643	2643	2643

Financial ratios		2026E	2027E	2028E	2029E
GCFPS	AC	-1.7	39.9	40.0	34.2
CFR	X	0.0	4.2	4.2	4.9
EPS	AC	-1.7	30.2	32.2	26.5
PER	X	0.0	5.5	5.2	6.3
DPS	AC	0.0	0.0	0.0	0.0
Yield	%	0.0%	0.0%	0.0%	0.0%
Interest cover	x	-5.1	79.1	100.0	101.5
ROCE	%	-2%	44%	49%	44%
ROE	%	-5%	54%	40%	26%
Gearing	%	101%	51%	28%	16%

Operations summary	2026E	2027E	2028E	2029E
<b>Mallina project</b>				
Ore processed (Mt)	0.0	10.0	10.0	10.0
Head grade (g/t)	0.00	1.76	1.76	1.67
Met. recovery	0.00	0.94	0.94	0.94
Gold prodn (kcozs)	0	510	530	503
Cost per milled tonne (A\$/t)	0	55	56	60
Cash costs pre royalty (A\$/oz)	0	1140	1159	1298
All in sustaining costs (A\$/oz)	0	1273	1296	1434
Growth capital (\$M)	618	38	40	7

Valuation summary	A\$M	A\$/sh
Mallina project 6% real after tax DR	2168	1.39
Exploration, all sites	325	0.21
Corporate overheads	-147	-0.09
Cash	112	0.07
Debt	0	0.00
Tax benefit	70	0.04
Hedging	0	0.00
Option/equity dilution	-37	-0.02
<b>NAV</b>	<b>2,491</b>	<b>1.60</b>

Directors, management	
Simon Lill	Non-Executive Chairman
Glenn Jardine	Managing Director
Andy Beckwith	Executive Director
Peter Hood	Non-Executive Director
Paul Harvey	Non-Executive Director
Emma Scotney	Non-Executive Director

Top shareholders	M shs	%
Gold Road Resources	310	19.9
Jupiter Investment Management	90	5.8
Van Eck Associates	79	5.1

Resources June '22	Mt	g/t Au	Kozs	Mkt cap/oz
<b>Mallina gold project</b>	<b>251.0</b>	<b>1.32</b>	<b>10,635</b>	<b>244</b>
Measured & indicated	158.0	1.34	6,808	
Inferred	93.0	1.28	3,828	
<b>Includes probable reserves</b>	<b>103.0</b>	<b>1.55</b>	<b>5,133</b>	<b>506</b>

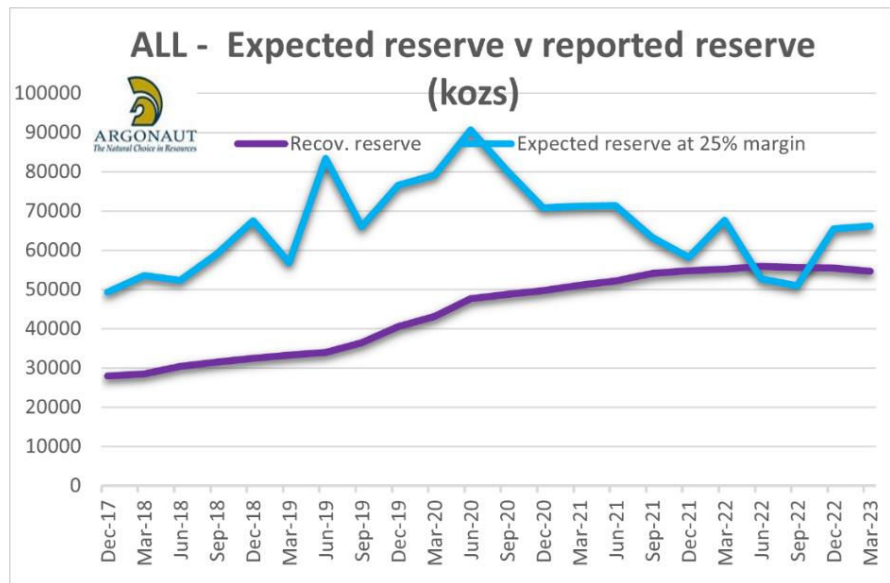
Argonaut model Jun '23	Mt	g/t Au	Kozs	
<b>TOTAL INVENTORY</b>	<b>139.0</b>	<b>1.55</b>	<b>6,931</b>	<b>375</b>
Hemi open pit	114.0	1.54	5,645	
Satellite open pit	25.0	1.60	1,286	

## GOLD PREMIUMS

Gold industry premiums collapsed to historic lows in the September and December quarters of 2022. Share prices have since recovered but remain at a low level relative to the ratings and expectations built into the market in the period 2017-2020.

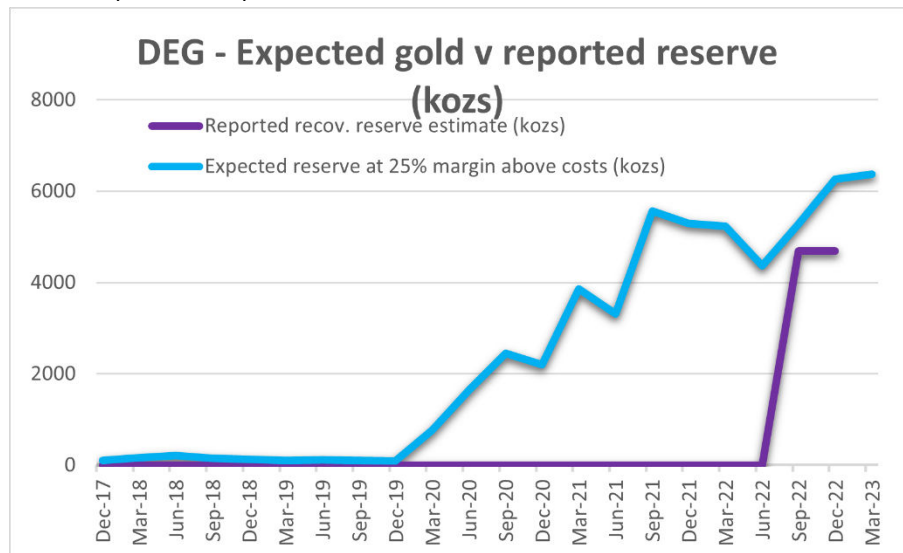
In figure 1, developed, recoverable gold reserves for a group of ASX listed companies is plotted with 25% of the Enterprise Value of those companies, converted to ounces of gold at the prevailing gold price. The use of 25% as a blanket margin approximates the average margin achieved by the best performing companies within the group over 2017-2023. The separation between the lines can be used as a measure of how much additional gold, at any point in time, the market expects the sector to produce.

Fig. 1: Developed, recoverable gold reserves and EV implied reserves at a 25% margin, December 2017-March 2023. Constituents CMM, DCN, EVN, GCY, GOR, NST, PRU, RMS, RED, RRL, RSG, SLR, SBM, WGX, WAF.



Source: Argonaut research

Fig. 2: De Grey recoverable gold reserves and EV implied reserves at a 25% margin, A\$1.1B capital development cost, 2017-March 2023



Source: Argonaut research

## COST ENVIRONMENT AND HEMI

Fig. 3: Quarterly Gruyere site costs DQ 2021 to DQ 2022, annualised, with Hemi forecasts. There are intrinsic differences between the operations and their respective cost structures. Increasing cost trends are also evident in other large scale gold mining operations in Western Australia.

	Gruyere DQ21 annualised	Gruyere MQ22 annualised	Gruyere JQ22 annualised	Gruyere SQ22 annualised	Gruyere DQ22 annualised	Hemi Sept 2022 PFS Avg annual
Ore mined Mtpa	12.7	10.5	10.7	8.6	9.9	10.0
Strip ratio w:o	2.38	2.86	2.53	3.32	2.35	6.1
Material movement Mt	43	41	38	37	33	71
Mining cost \$M	197	177	194	217	223	261
Mining cost \$/t material*	4.60	4.34	5.14	5.87	6.76	3.68
Mining cost \$/t ore	15.54	16.75	18.15	25.36	22.64	26.10
Ore processed	8.9	8.6	9.6	8.7	8.5	10.0
Processing cost \$M	173	187	185	204	220	239
Processing cost \$/t ore	19.38	21.81	19.22	23.44	25.77	23.94
Admin cost \$M	28	44	47	29	41	14
<b>Total site cost \$M</b>	<b>398</b>	<b>407</b>	<b>427</b>	<b>451</b>	<b>484</b>	<b>514</b>

\*Includes mining (opex), sustaining leases, mining (capex) and other sustaining capital

Source: Argonaut research, Gold Road Resources reports to ASX

## VALUATION

Argonaut's De Grey valuation is based on a discounted cash flow valuation of the Mallina project, and an informal estimate of exploration assets value and nominal assessment of De Grey's other assets and liabilities, as at June 2023. Assumptions about Mallina's future development and cash flows are based on De Grey's September 2022 pre-feasibility study, adjusted for cost input changes with differences in timing and price settings. A real, after tax discount rate of 6% is used. Future tax benefits are added back as an estimate of present value. Argonaut's base case commodity and currency forecasts, set out in the summary table, are used to estimate the base case NAV.

Fig. 4: Valuation summary, projected June 2023

Valuation summary	A\$M	A\$/sh
Mallina project 6% real after tax DR	2168	1.39
Exploration, all sites	325	0.21
Corporate overheads	-147	-0.09
Cash	112	0.07
Debt	0	0.00
Tax benefit	70	0.04
Hedging	0	0.00
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<b>NAV</b>	<b>2,491</b>	<b>1.60</b>

Source: Argonaut research

## Key risks to valuation

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### **Mineable inventory**

Argonaut's estimates of mineable inventories at Mallina are based on De Grey's pre-feasibility study figures, including inferred resources as per De Grey's mine plans.

### **Metallurgy**

De Grey's early tests indicate high rates of recovery using conventional pressure oxidation processes. Other large scale operations with successful operating records use the technologies available to and being considered by De Grey.

### **Gold price**

Our estimates of De Grey cash flows are sensitive to the gold price. Each 10% change in the Australian dollar gold price changes our valuation by 20%.

### **Costs**

Cost assumptions are based on pre feasibility study estimates, adjusted to allow for subsequent changes in industry costs.

### **Equity dilution**

De Grey may seek to finance its activities by issuing new shares. The number of shares and the price at which new shares are issued affect our valuation of the existing shares. We have assumed 300M new shares issued in FY24 at \$1.50 per share.

### **Exploration success**

De Grey may invest its cash and any future free cash flows in exploration and/or other mineral asset acquisitions. Valuation assumes that future exploration and investments achieve acceptable returns. Subjective value is attributed to exploration assets at Mallina.

### **Interest rates/discount rates**

Argonaut takes cash flow risk into account when choosing discount rates for different projects. Our valuation is sensitive to the discount rate used. A 2% change in the (after tax) discount rate makes a 16-20% difference to our De Grey valuation.

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