

Australian & New Zealand Gold Operations June Quarter 2025

Overview

The average All-in Sustaining Cost (AISC) for Australia and New Zealand was A\$2,335/oz, which is up 2.5% (A\$57/oz) on the previous quarter average AISC of A\$2,278/oz. Evolution Mining's Ernest Henry and Northparkes operations were the lowest cost producers reporting an AISC of **-A\$2,673/oz**, and **-A\$2,665/oz** respectively followed by Ramelius Resources' Mt Magnet operations with an AISC of A\$1,310/oz. The average gold spot price for the quarter was A\$5,127/oz (US\$3,286/oz). It should be noted that Ernest Henry and Northparkes benefit from significant base metal by-products. Aurum Analytics' estimate of these operations AISC on a co-product basis (Co-AISC) is as follows; Northparkes Co-AISC of A\$1,940/oz and Ernest Henry Co-AISC of A\$2,668/oz. The lowest cost "gold only" operations were Ramelius Resource's Mt Magnet operations with an AISC of A\$1,310/oz, Capricorn Metals' Karlawinda mine (A\$1,381/oz), followed by Evolution's Cowal operations (A\$1,587/oz).

Newmont's Boddington operation took out top spot as Australia's largest gold producer with 147,000 oz for the quarter, followed by Northern Star's KCGM operation (117,367 oz) and Newmont's Cadia operations (104,000 oz). Of the mines where gold is a by-product, BHP's Olympic Dam produced the most gold 46,789 oz followed by their Prominent Hill mine with 28,593 oz, then their Carrapateena mine with 24,462 oz.

Grade wise for the companies that report AISC, the average reported mill head/feed grade was 2.24 g/t (Open Pit (OP) - 1.12 g/t, Underground (UG) – 2.94 g/t, Open Pit & Underground (OP/UG) - 1.96 g/t) which was down on the previous quarter, 2.37 g/t (-5.4%). Gold Fields' Granny Smith mine took out the honour as the operation with the highest average feed grade with 6.10 g/t, followed by Gold Fields' Agnew mine 5.39 g/t. The lowest grade mine was Evolution's Mt Rawdon mine processing an average head grade of 0.31g/t. The high-grade operations that do not report an AISC were Agnico Eagle's Fosterville mine with 8.52 g/t and Tribune Resources' and Rand Mining's share of the Kundana EKJV mine with 3.85 g/t.

Top 10 Gold Producing Operations

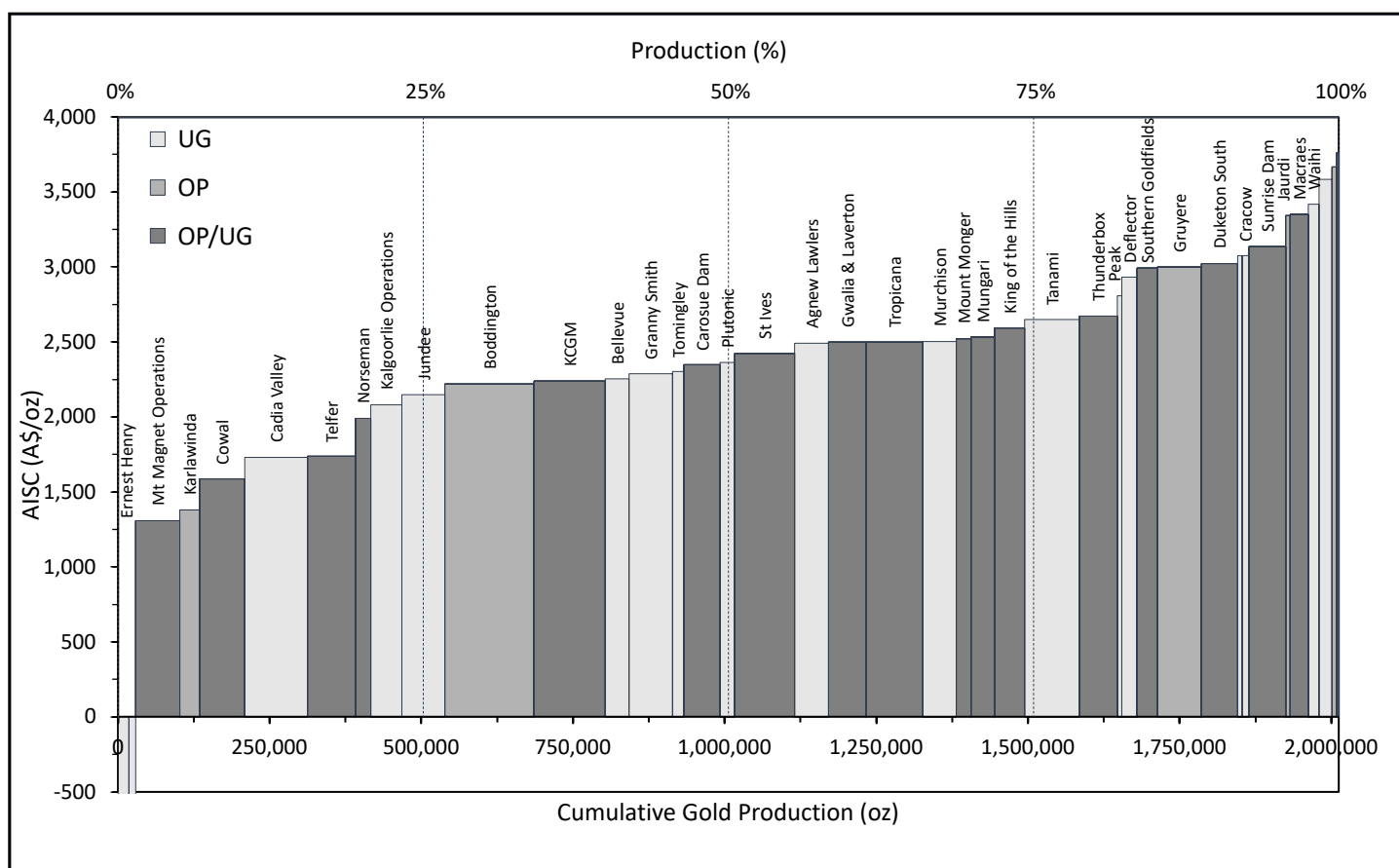
Rank	Operation	Company	Mine Type	Au Produced (oz)
1	Boddington	Newmont Corporation	OP	147,000
2	KCGM	Northern Star Resources Limited	OP/UG	117,367
3	Cadia Valley	Newmont Corporation	UG	104,000
4	St Ives	Gold Fields Limited	OP/UG	99,231
5	Tropicana	JV AngloGold Ashanti Limited/Regis Resources Limited	OP/UG	93,780
6	Tanami	Newmont Corporation	UG	90,000
7	Telfer	Greatland Resources Limited	OP/UG	78,283
8	Cowal	Evolution Mining Limited	OP/UG	74,690
9	Gruyere	JV Gold Fields Limited/Gold Road Resources Limited	OP	72,980
10	Mt Magnet Operations	Ramelius Resources Limited	OP/UG	72,575

Gold Operations That Report AISC

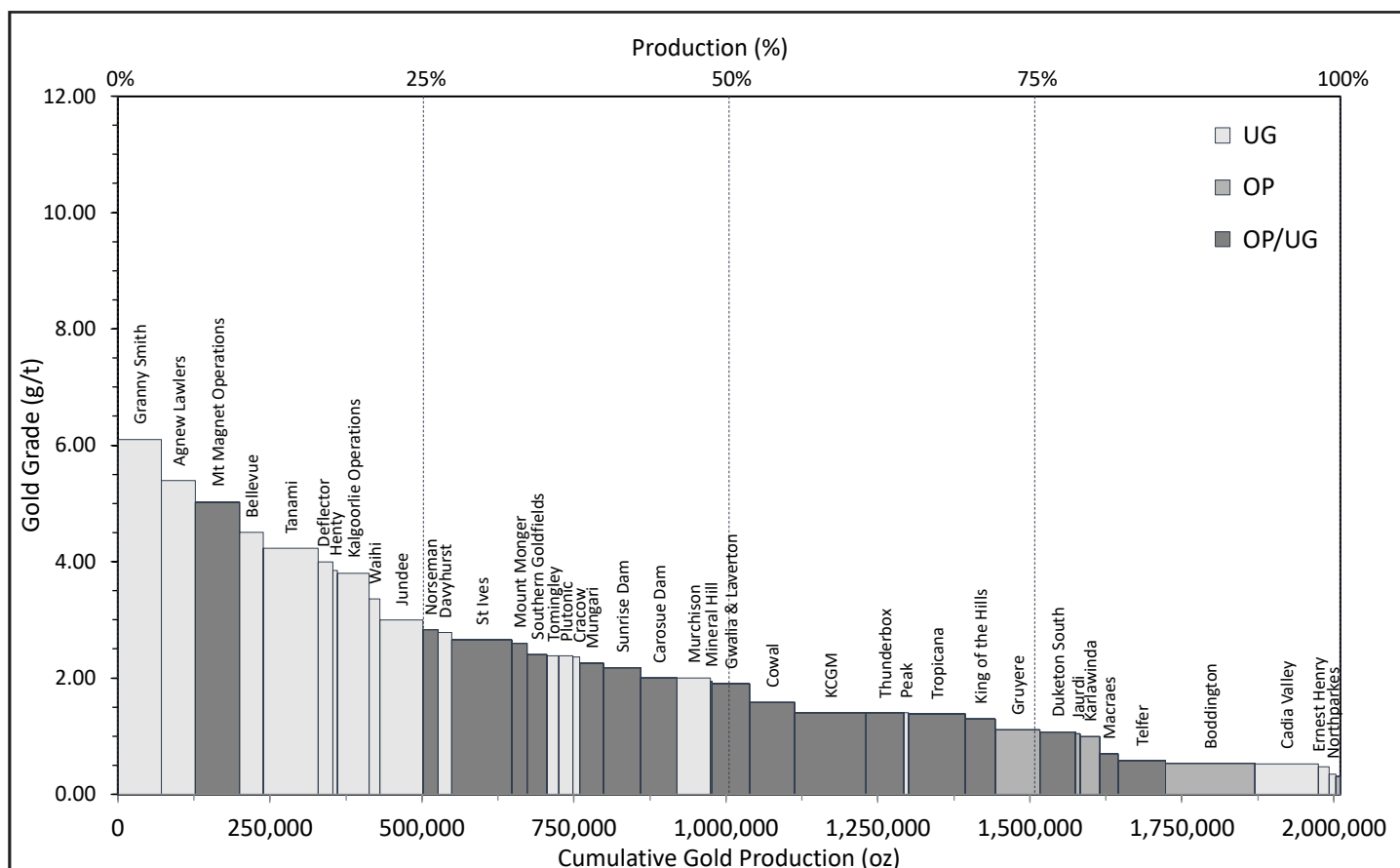
AISC Rank	Operation	Company	Mine Type	AISC (A\$/oz)	Grade (g/t)	Grade Rank	Au Produced (oz)
1	Ernest Henry	Evolution Mining Limited	UG	-2,673	0.47	39	17,852
2	Northparkes	Evolution Mining Limited	UG	-2,665	0.35	40	11,564
3	Mt Magnet Operations	Ramelius Resources Limited	OP/UG	1,310	5.02	3	72,575
4	Karlawinda	Capricorn Metals Limited	OP	1,381	0.99	34	32,216
5	Cowal	Evolution Mining Limited	OP/UG	1,587	1.58	25	74,690
6	Cadia Valley	Newmont Corporation	UG	1,731	0.52	38	104,000
7	Telfer	Greatland Resources Limited	OP/UG	1,736	0.58	36	78,283
8	Norseman	Pantoro Limited	OP/UG	1,991	2.83	11	25,417
9	Kalgoorlie Operations	Northern Star Resources Limited	UG	2,079	3.80	8	51,788
10	Jundee	Northern Star Resources Limited	UG	2,150	3.00	10	70,849
11	Boddington	Newmont Corporation	OP	2,219	0.53	37	147,000
12	KCGM	Northern Star Resources Limited	OP/UG	2,237	1.40	26=	117,367
13	Bellevue	Bellevue Gold Limited	UG	2,253	4.50	4	38,941
14	Granny Smith	Gold Fields Limited	UG	2,287	6.10	1	71,435
15	Tomingley	Alkane Resources Limited	UG	2,302	2.38	16=	19,193
16	Carosue Dam	Northern Star Resources Limited	OP/UG	2,347	2.00	21=	59,470
17	Plutonic	Catalyst Metals Limited	UG	2,362	2.38	16=	23,730
18	St Ives	Gold Fields Limited	OP/UG	2,424	2.66	13	99,231
19	Agnew Lawlers	Gold Fields Limited	UG	2,493	5.39	2	56,072
20=	Gwalia & Laverton	Genesis Minerals Limited	OP/UG	2,499	1.90	24	61,469
20=	Tropicana	JV AngloGold/Regis Resources	OP/UG	2,499	1.38	29	93,780
22	Murchison	Westgold Resources Limited	UG	2,503	2.00	21=	54,811
23	Mount Monger	Vault Mineral Limited	OP/UG	2,522	2.60	14	24,529
24	Mungari	Evolution Mining Limited	OP/UG	2,534	2.25	19	39,214
25	King of the Hills	Vault Mineral Limited	OP/UG	2,591	1.30	30	49,198
26	Tanami	Newmont Corporation	UG	2,650	4.23	5	90,000
27	Thunderbox	Northern Star Resources Limited	OP/UG	2,673	1.40	26=	62,095
28	Peak	Aurelia Metals Limited	UG	2,809	1.40	26=	7,405
29	Edna May	Ramelius Resources Limited	NM	2,892	NA	NR	879
30	Deflector	Vault Mineral Limited	UG	2,931	4.00	6	24,732
31	Southern Goldfields	Westgold Resources Limited	OP/UG	2,992	2.40	15	33,211
32	Gruyere	JV Gold Fields/Gold Road	OP	3,000	1.11	31	72,980
33	Duketon South	Regis Resources Limited	OP/UG	3,023	1.07	32	59,242
35	Henty	Catalyst Metals & Kaiser Reef Limited	UG	3,075	3.85	7	7,656
34	Cracow	Aeris Resources Limited	UG	3,075	2.36	18	11,000
36	Sunrise Dam	AngloGold Ashanti Limited	OP/UG	3,136	2.18	20	61,000
37	Jaurdi	Beacon Minerals Limited	OP	3,344	1.04	33	7,365
38	Macraes	OceanaGold Corporation	OP/UG	3,349	0.70	35	30,000
39	Waihi	OceanaGold Corporation	UG	3,418	3.36	9	17,300
40	Davyhurst	Ora Banda Mining Limited	UG	3,583	2.78	12	21,949
41	Mt Rawdon	Evolution Mining Limited	NM	3,666	0.31	41	7,523
42	Mineral Hill	Kingston Resources Limited	OP	3,759	1.94	23	2,830

Notes: Operations shown on a 100% basis, except North Parkes only Evolution's 80% interest is shown.

Gold Production Cost Curve Ranked By Reported AISC



Gold Production Grade Curve Ranked By Average Mill Feed/Head Grade



Gold Mines That Did Not Report All-in Sustaining Costs

Rank	Operation	Company	Mine Type	Grade (g/t)	Au Produced (oz)
1	Fosterville	Agnico Eagle Mines Limited ¹	UG	8.52	49,574
2	Kal East	Black Cat Syndicate Limited	OP	1.56	12,156
3	Kundana EKJV	Tribune Resources Limited & Rand Mining Limited	UG	3.85	8,916
4	Coolgardie	Focus Minerals Limited	OP/UG	1.09	8,471
5	Costerfield	Mandalay Resources Limited	UG	NA	8,145
6	Boorara	Horizon Minerals Limited	OP	0.90	6,636
7	Paulsens	Black Cat Syndicate Limited	UG	2.29	4,600
8	Second Fortune	Brightstar Resources Limited	UG	3.12	3,566
9	Phillips Find	Horizon Minerals Limited	OP	1.97	1,132
10	A1	Kaiser Reef Limited	UG	2.42	756
NR	Ravenswood	EMR Capital ²	OP	NA	NA
NR	Paddington	Zijin Mining Group Company Limited ²	OP/UG	NA	NA
NR	Marvel Loch	Barto Gold Pty Ltd ²	OP/UG	NA	NA
NR	Pajingo	Minjar Gold Pty Ltd ²	UG	NA	NA

1. Agnico Eagle Mines Limited does not report quarterly AISC values for individual mines.
 2. These companies do not provide detailed quarterly production statistics.

Mines Where Gold Is A By-Product

Rank	Operation	Company	Mine Type	Au Produced (oz)
1	Olympic Dam	BHP Group Limited	UG	46,789
2	Prominent Hill	BHP Group Limited	UG	28,593
3	Carrapateena	BHP Group Limited	UG	24,462
4	Ernest Henry	Evolution Mining Limited	UG	17,852
5	Northparkes ¹	Evolution Mining Limited	UG	11,564
6	Rosebery	MMG Limited	UG	7,661
7	Golden Grove	29Metals Limited	UG	5,118
8	Tritton	Aeris Resources Limited	OP/UG	2,000
9	Eloise	AIC Mines Limited	UG	1,515
10	Kanmantoo	Hillgrove Resources Limited	UG	555

1. Northparkes is a joint venture between Evolution Mining Limited (80%) and Sumitomo Australia Pty Ltd (20%). Gold produced represents Evolutions 80% interest.

Quarter on Quarter Change in AISC and Grade

Statistic	AISC (A\$/oz)	Change (%)	Grade (g/t)	Change (%)
Average (Simple) ¹	2,335	2.5%	2.24	-5.4%
Average (Weighted) ²	2,300	0.7%	1.24	-2.1%
Minimum	-2,673	20.4%	0.31	-22.5%
First Quartile ³	2,150	1.1%	1.11	5.7%
Median ³	2,362	-0.8%	1.90	5.6%
Third Quartile ³	2,650	-2.0%	2.83	-5.7%
Maximum	3,759	2.0%	6.10	-36.5%

Notes: This table of statistics is only based on mines that report an AISC.

1. Simple averages done by number of mining operations.
 2. AISC weighted by gold ounces produced, Au grade weighted by ore tonnes milled.
 3. First Quartile, Median and Third Quartile values are based on production in the AISC Cost Curve and Grade Curve.

Top 5 Gold Operations - Major Gold Miners

Gold Production (Attributable)			All-in Sustaining Costs		
Rank	Operation	oz	Rank	Operation	A\$/oz
1	Boddington	147,000	1	Cadia Valley	1,731
2	KCGM	117,367	2	Kalgoorlie Ops	2,079
3	Cadia Valley	104,000	3	Jundee	2,150
4	St Ives	99,231	4	Boddington	2,219
5	Tanami	90,000	5	KCGM	2,237

Top 5 Gold Operations - Mid-Tier Gold Miners

Gold Production (Attributable)			All-in Sustaining Costs		
Rank	Operation	oz	Rank	Operation	A\$/oz
1	Telfer	78,283	1	Ernest Henry	-2,673
2	Cowal	74,690	2	Northparkes	-2,665
3	Mt Magnet Operations	72,575	3	Mt Magnet Operations	1,310
4	Gwalia & Laverton	61,469	4	Cowal	1,587
5	Duketon South	59,242	5	Telfer	1,736

Top 5 Gold Operations - Junior Gold Miners

Gold Production (Attributable)			All-in Sustaining Costs		
Rank	Operation	oz	Rank	Operation	A\$/oz
1	Bellevue	38,941	1	Karlawinda	1,381
2	Gruyere (50% Gold Road Resources Limited)	36,490	2	Norseman	1,991
3	Karlawinda	32,216	3	Bellevue	2,253
4	Norseman	25,417	4	Tomingley	2,302
5	Plutonic	23,730	5	Plutonic	2,362

Top 5 Pure Gold Operations (No Base Metal By or Co-Products)

Gold Production (Total)			All-in Sustaining Costs		
Rank	Operation	oz	Rank	Operation	A\$/oz
1	KCGM	117,367	1	Mt Magnet Operations	1,310
2	St Ives	99,231	2	Karlawinda	1,381
3	Tropicana ¹	93,780	3	Cowal	1,587
4	Tanami	90,000	4	Norseman	1,991
5	Cowal	74,690	5	Kalgoorlie Operations	2,079

1. Tropicana is a joint venture between AngloGold Ashanti Limited (70%) and Regis Resources Limited (30%).

General Notes

Data was sourced from company quarterly reports. Aurum Analytics created the cost and grade curves. Mine Type reflects the source of the ore mined for the quarter, OP - Open Pit, UG - Underground, OP/UG - Open Pit and Underground and NM - No Mining.

For operations in joint venture such as Gruyere and Tropicana AISC values were apportioned by equity ownership percentages.

Where AISC values were reported in US\$ and no A\$ equivalent provided, the quarterly average US\$/A\$ exchange rate (0.6408) from the Reserve Bank of Australia was used.

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About Aurum Analytics

Aurum Analytics is an independent business providing information and analysis on the Australian and New Zealand gold industry. The information and analysis given is a by-product of Sam Ulrich's PhD research at The University of Western Australia's Centre for Exploration Targeting titled "Insights into the Economic Cost Structure of Gold Mining: From All-in Sustaining Costs to Quantifying Externalities."

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