



Australian & New Zealand Gold Operations

September Quarter 2025

Overview

The average All-in Sustaining Cost (AISC) for Australia and New Zealand was A\$2,494/oz, which is up 6.8% (A\$159/oz) on the previous quarter average AISC of A\$2,335/oz. Evolution Mining's Northparkes and Ernest Henry operations were the lowest cost producers reporting an AISC of -A\$2,993/oz, and -A\$1,926/oz respectively followed by Capricorn Metals' Karlawinda operations with an AISC of A\$1,625/oz. The average gold spot price for the quarter was A\$5,285/oz (US\$3,458/oz). It should be noted that Northparkes and Ernest Henry 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\$3,079/oz and Ernest Henry Co-AISC of A\$2,420/oz. The lowest cost "gold only" operations were Capricorn Metals' Karlawinda operation with an AISC of A\$1,625/oz, Ramelius Resources' Mt Magnet operations (A\$1,815/oz), followed by Evolution's Mungari operations (A\$1,982/oz)

Newmont's Boddington operation took out top spot as Australia's largest gold producer with 146,000 oz for the quarter, followed by Northern Star's KCGM operation (107,118 oz) and AngloGold Ashanti & Regis Resources' Tropicana operations (106,440 oz). Of the mines where gold is a by-product, BHP's Olympic Dam produced the most gold 50,716 oz followed by their Prominent Hill mine with 24,105 oz, then their Carrapateena mine with 23,788 oz.

Grade wise for the companies that report AISC, the average reported mill head/feed grade was $2.30 \, \text{g/t}$ (Open Pit (OP) - $0.86 \, \text{g/t}$, Underground (UG) - $3.29 \, \text{g/t}$, Open Pit & Underground (OP/UG) - $1.72 \, \text{g/t}$) which was up on the previous quarter, $2.24 \, \text{g/t}$ (2.6%). Alkane Resources' Costerfield mine took out the honour as the operation with the highest average feed grade with $8.48 \, \text{g/t}$, followed by Gold Fields' Agnew mine $6.34 \, \text{g/t}$. The lowest grade mine was Evolution's Northparkes mine processing an average head grade of $0.27 \, \text{g/t}$. The high-grade operations that do not report an AISC were Agnico Eagle's Fosterville mine with $5.76 \, \text{g/t}$ and Brightstar Resources' Laverton mine with $3.03 \, \text{g/t}$.

Top 10 Gold Producing Operations

Rank	Operation	Company	Mine Type	Au Produced (oz)
1	Boddington	Newmont Corporation	OP	146,000
2	KCGM	Northern Star Resources Limited	OP/UG	107,118
3	Tropicana	JV AngloGold/Regis Resources	OP/UG	106,440
4	Tanami	Newmont Corporation	UG	100,000
5	Cadia Valley	Newmont Corporation	UG	97,000
6	St Ives	Gold Fields Limited	OP/UG	89,100
7	Telfer	Greatland Resources Limited	OP/UG	80,890
8	Gruyere	Gold Fields Limited	OP	78,000
9	Gwalia & Laverton	Genesis Minerals Limited	OP/UG	72,878
10	Cowal	Evolution Mining Limited	OP/UG	71,219

All-in Sustaining Costs & Grade



Gold Operations That Report AISC

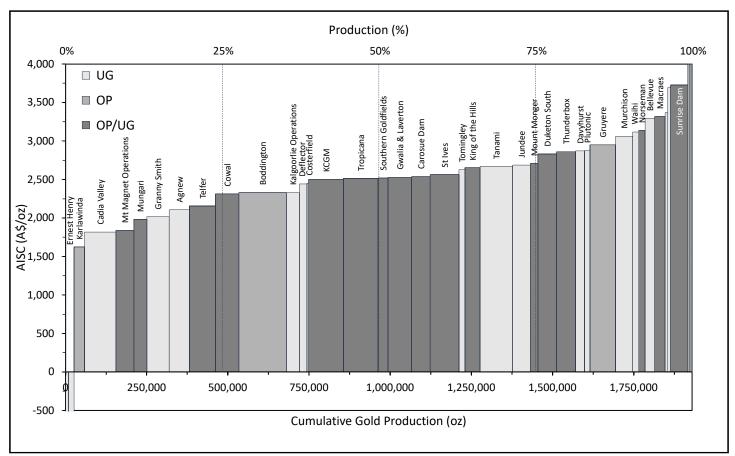
AISC Rank	Operation	Company	Mine Type	AISC (A\$/oz)	Grade (g/t)	Grade Rank	Au Produced (oz)
1	Northparkes	Evolution Mining Limited	UG	-2,993	0.27	40	9,123
2	Ernest Henry	Evolution Mining Limited	UG	-1,926	0.44	38	16,852
3	Karlawinda	Capricorn Metals Limited	OP	1,625	0.91	33	32,318
4	Cadia Valley	Newmont Corporation	UG	1,815	0.52	37	97,000
5	Mt Magnet Operations	Ramelius Resources Limited	OP/UG	1,836	3.30	8	55,013
6	Mungari	Evolution Mining Limited	OP/UG	1,982	1.70	24	39,768
7	Granny Smith	Gold Fields Limited	UG	2,015	6.22	3	69,500
8	Agnew Lawlers	Gold Fields Limited	UG	2,105	6.34	2	62,100
9	Telfer	Greatland Resources Limited	OP/UG	2,155	0.58	35	80,890
10	Cowal	Evolution Mining Limited	OP/UG	2,314	1.33	27	71,219
11=	Kalgoorlie Operations	Northern Star Resources Limited	UG	2,329	3.20	9=	40,796
11=	Boddington	Newmont Corporation	OP	2,329	0.57	36	146,000
13	Deflector	Vault Mineral Limited	UG	2,443	3.70	6	22,767
14	Costerfield	Alkane Resources Limited	UG	2,451	8.48	1	5,643
15	KCGM	Northern Star Resources Limited	OP/UG	2,503	1.40	26	107,118
16	Tropicana	JV AngloGold/Regis Resources	OP/UG	2,512	1.57	25	106,440
17	Southern Goldfields	Westgold Resources Limited	OP/UG	2,516	2.30	14=	30,797
18	Gwalia & Laverton	Genesis Minerals Limited	OP/UG	2,529	2.20	17	72,878
19	Carosue Dam	Northern Star Resources Limited	OP/UG	2,537	1.90	22	56,505
20	St Ives	Gold Fields Limited	OP/UG	2,564	2.58	13	89,100
21	Tomingley	Alkane Resources Limited	UG	2,628	2.15	18	18,335
22	КОТН	Vault Mineral Limited	OP/UG	2,652	1.10	29	46,511
23	Tanami	Newmont Corporation	UG	2,671	5.36	4	100,000
24	Jundee	Northern Star Resources Limited	UG	2,687	2.60	12	54,735
25	Mount Monger	Vault Mineral Limited	OP/UG	2,705	2.30	14=	22,809
26=	Duketon South	Regis Resources Limited	OP/UG	2,832	0.99	31	58,429
26=	Thunderbox	Northern Star Resources Limited	OP/UG	2,862	1.20	28	58,311
28	Davyhurst	Ora Banda Mining Limited	UG	2,872	3.10	11	27,031
29	Plutonic	Catalyst Metals Limited	UG	2,877	2.13	19	17,572
30	Gruyere	Gold Fields Limited	OP	2,951	0.93	32	78,000
31	Murchison	Westgold Resources Limited	UG	3,061	2.00	20	53,140
32	Waihi	OceanaGold Corporation	UG	3,116	3.44	7	18,800
33	Norseman	Pantoro Limited	OP/UG	3,139	2.21	16	19,551
34	Bellevue	Bellevue Gold Limited	UG	3,293	3.20	9=	29,120
35	Macraes	OceanaGold Corporation	OP/UG	3,318	0.73	34	32,800
36	Henty	Kaiser Reef Limited	UG	3,369	4.12	5	8,115
37	Cracow	Aeris Resources Limited	UG	3,692	1.95	21	8,900
38	Sunrise Dam	AngloGold Ashanti Limited	OP/UG	3,727	1.82	23	52,000
39	Jaurdi	Beacon Minerals Limited	OP	4,092	1.01	30	6,884
40	Mt Rawdon	Evolution Mining Limited	NM	5,562	0.30	39	6,358

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

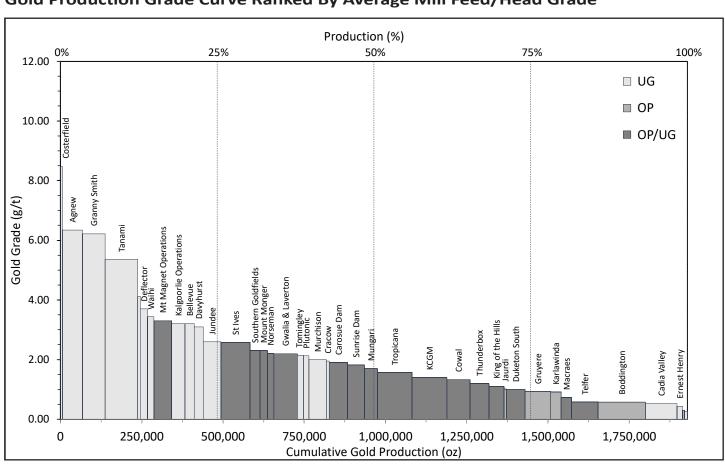
Gold Production Curves



Gold Production Cost Curve Ranked By Reported AISC



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



Additional Gold Production



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	5.76	34,966
2	Coolgardie	Focus Minerals Limited	OP/UG	1.68	18,940
3	Peak	Aurelia Metals Limited	UG	1.80	10,396
4	Kal East	Black Cat Syndicate Limited	OP	1.59	10,043
5	Paulsens	Black Cat Syndicate Limited	UG	2.63	7,744
6	Boorara	Horizon Minerals Limited	OP	1.06	7,349
7	Kundana EKJV	Tribune Resources Limited & Rand Mining Limited	UG	2.89	6,819
8	Laverton Hub	Brightstar Resources Limited	UG	3.03	5,216
9	Mineral Hill	Kingston Resources Limited	OP	2.05	2,909
10	Phillips Find	Horizon Minerals Limited	OP	1.67	2,147
11	A1	Kaiser Reef Limited	UG	2.75	424
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.

Mines Where Gold Is A By-Product

Rank	Operation	Company	Mine Type	Au Produced (oz)
1	Olympic Dam	BHP Group Limited	UG	50,716
2	Prominent Hill	BHP Group Limited	UG	24,105
3	Carrapateena	BHP Group Limited	UG	23,788
4	Ernest Henry	Evolution Mining Limited	UG	16,852
5	Northparkes ¹	Evolution Mining Limited	UG	9,123
6	Rosebery	MMG Limited	UG	7,799
7	Tritton	Aeris Resources Limited	OP/UG	2,000
8	Golden Grove	29Metals Limited	UG	1,992
9	Eloise	AIC Mines Limited	UG	1,618
10	Kanmantoo	Hillgrove Resources Limited	UG	711

^{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	2,494	6.8%	2.30	2.6%
Average (Weighted) ²	2,475	7.6%	1.20	-3.1%
Minimum	-2,993	-12.0%	0.27	-12.9%
First Quartlie ³	2,314	7.6%	0.93	-16.2%
Median ³	2,516	6.5%	1.70	-10.5%
Third Quartile ³	2,705	2.1%	2.60	-8.1%
Maximum	5,562	48.0%	8.48	39.0%

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.

^{2.} These companies do not provide detailed quarterly production statistics.

Top 5 - Production & AISC



Top 5 Gold Operations - Major Gold Miners

Gold Production (Attributable)				All-in Sustaining Costs			
Rank	Operation	oz	Rank	Operation	A\$/oz		
1	Boddington	146,000	1	Cadia Valley	1,815		
2	KCGM	107,118	2	Granny Smith	2,015		
3	Tanami	100,000	3	Agnew Lawlers	2,105		
4	Cadia Valley	97,000	4	Boddington	2,329		
5	St Ives	89,100	5	Kalgoorlie Operations	2,329		

Top 5 Gold Operations - Mid-Tier Gold Miners

Gold Production (Attributable)				All-in Sustaining Costs			
Rank	Operation	oz	Rank	Operation	A\$/oz		
1	Telfer	80,890	1	North Parkes	-2,993		
2	Gwalia & Laverton	72,878	2	Ernest Henry	-1,926		
3	Cowal	71,219	3	Mt Magnet Operations	1,836		
4	Duketon South	58,429	4	Mungari	1,982		
5	Mt Magnet Operations	55,013	5	Telfer	2,155		

Top 5 Gold Operations - Junior Gold Miners

Gold Production (Attributable)				All-in Sustaining Costs	
Rank	Operation	oz	Rank	Operation	A\$/oz
1	Karlawinda	32,318	1	Karlawinda	1,625
2	Bellevue	29,120	2	Costerfield	2,451
3	Davyhurst	27,031	3	Tomingley	2,628
4	Norseman	19,551	4	Davyhurst	2,872
5	Coolgardie	18,940	5	Plutonic	2,877

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	107,118	1	Karlawinda	1,625
2	Tropicana ¹	106,440	2	Mt Magnet Operations	1,836
3	Tanami	100,000	3	Mungari	1,982
4	St Ives	89,100	4	Granny Smith	2,015
5	Gruyere	78,000	5	Agnew Lawlers	2,105

^{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 (0.6544) 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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