

# West African Gold Mines

## Quarterly Summary to 30 June 2019



For the quarter ending 30 June 2019 reported gold production totalled 2.03 Moz, with Ghana, Burkina Faso and Mali accounting for 77.1% of the production. Newmont Goldcorp's Ahafo mine in Ghana was the largest gold producer with 159,000 oz, followed by Barrick's Loulo mine (147,000 oz) in Mali and Goldfields' Tarkwa mine (134,200 oz) in Ghana.

The average gold price (London PM Fix) for the quarter was US\$1,309/oz. The average reported All-in Sustaining Costs (AISC) was US\$976/oz and to be considered in the lowest cost quartile an AISC of less than or equal to US\$770/oz was required. The mine with the lowest reported AISC was SEMAFO's Boungou mine in Burkina Faso with an AISC of US\$476/oz, this was followed by Endeavour Mining's Ity mine (US\$585/oz) in Cote d'Ivoire and B2Gold's Fekola mine (US\$625/oz) in Mali.

### Top 10 Gold Mines by Gold production

Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)	
1	↑1	Ahafo	Ghana	Newmont Goldcorp Corp 90%	159,000
2	↓1	Loulo	Mali	Barrick Gold Corp 80%;	147,000
3	-	Tarkwa	Ghana	Gold Fields Ltd 90%	134,200
4	↑3	Akyem	Ghana	Newmont Goldcorp Corp 100%	118,000
5	↓1	Fekola	Mali	B2Gold Corp 80%;	113,897
6	-	Essakane	Burkina Faso	IAMGOLD Corp 90%;	97,000
7	↓2	Tasiast	Mauritania	Kinross Gold Corp 100%	92,901
8	↑3	Iduapriem	Ghana	AngloGold Ashanti Ltd 100%	71,000
9	↑1	Bissa-Bouly	Burkina Faso	Nord Gold SE 90%	68,200
10	↓2	Syama	Mali	Resolute Mining Ltd 80%	65,757

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### Top 10 Gold Mines by All-In Sustaining Costs

Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	AISC (US\$/oz)	
1	-	Boungou	Burkina Faso	SEMAFO Inc. 90%	476
2	↑22	Ity	Cote d'Ivoire	Endeavour Mining Corp 85%	585
3	-	Fekola	Mali	B2Gold Corp 80%	625
4	-	Damang	Ghana	Gold Fields Ltd 90%	673
5	-	Akyem	Ghana	Newmont Goldcorp Corp 100%	734
6	↓4	Syama	Mali	Resolute Mining Ltd 80%	770
7	↑3	Agbaou	Cote d'Ivoire	Endeavour Mining Corp 85%	788
8	↓2	Sissingue	Cote d'Ivoire	Perseus Mining Ltd 86%	791
9	↑5	Tongon	Cote d'Ivoire	Barrick Gold Corp 89.7%	802
10	↑5	Loulo	Mali	Barrick Gold Corp 80%	811

### Gold operations That Report All-In Sustaining Costs

AISC Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)	AISC (US\$/oz)
1	Boungou	Burkina Faso	SEMAFO Inc. 90%	62,800	476
2	Ity	Cote d'Ivoire	Endeavour Mining Corp 85%	57,503	585
3	Fekola	Mali	B2Gold Corp 80%	113,897	625
4	Damang	Ghana	Gold Fields Ltd 90%	54,600	673
5	Akyem	Ghana	Newmont Goldcorp Corp 100%	118,000	734
6	Syama	Mali	Resolute Mining Ltd 80%	65,757	770
7	Agbaou	Cote d'Ivoire	Endeavour Mining Corp 85%	34,558	788
8	Sissingue	Cote d'Ivoire	Perseus Mining Ltd 86%	21,570	791
9	Tongon	Cote d'Ivoire	Barrick Gold Corp 89.7%	61,000	802
10	Loulo	Mali	Barrick Gold Corp 80%	147,000	811
11=	Iduapriem	Ghana	AngloGold Ashanti Ltd 100%	71,000	836
11=	Hounde	Burkina Faso	Endeavour Mining Corp 90%	58,232	836
11=	Yaramoko	Burkina Faso	Roxgold Inc. 90%	34,354	836
14	Ahafo	Ghana	Newmont Goldcorp Corp 90%	159,000	850
15	Sabodala	Senegal	Teranga Gold Corp 90%	63,436	870
16	Wassa	Ghana	Golden Star Resources Ltd 90%	37,356	941
17	Sadiola Hill	Mali	AngloGold Ashanti Ltd 41% IAMGOLD Corp 41%	31,700	948



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AISC Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)	AISC (US\$/oz)
18	Tarkwa	Ghana	Gold Fields Ltd 90%	134,200	958
19	Yanfolila	Mali	Hummingbird Resources Plc 80%	27,466	998
20	Nampala	Mali	Robex Resources Inc. 90%	12,089	1,035
21	Karma	Burkina Faso	Endeavour Mining Corp 90%	21,006	1,047
22	Essakane	Burkina Faso	IAMGOLD Corp 90%	97,000	1,077
23	Edikan	Ghana	Perseus Mining Ltd 90%	42,555	1,090
24	Siguiri	Guinea	AngloGold Ashanti Ltd 85%	65,000	1,126
25	Mana	Burkina Faso	SEMAFO Inc. 90%	37,000	1,152
26	Asanko	Ghana	Asanko Gold Inc. 45% Gold Fields Ltd 45%	62,067	1,180
27	Youga	Burkina Faso	Avesoro Resources Inc. 90%	15,516	1,234
28	Morila	Mali	AngloGold Ashanti Ltd 40% Barrick Gold Corp 40%	17,500	1,483
29	Bea Mountain	Liberia	Avesoro Resources Inc. 90%	18,822	1,577
30	Prestea	Ghana	Golden Star Resources Ltd 90%	11,066	2,143

Notes: Sadiola Hill's AISC is the weighted average of AngloGold Ashanti Ltd's and IAMGOLD Corp's AISC; Morila's AISC is the weighted average of AngloGold Ashanti Ltd's and Barrick Gold Corp's AISC. Resolute Mining acquired the Mako gold mine in Senegal in July 2019 no details were reported for the quarter ending 30 June 2019.

### Gold Operations That Do Not Report AISC

Rank	Operation	Country	Principal Owners (Excluding Govt Interests)	Au Produced (oz)
1	Tasiast	Mauritania	Kinross Gold Corp 100%	101,358
2	Bissa-Bouly	Burkina Faso	Nord Gold SE 90%	69,200
3	Chirano	Ghana	Kinross Gold Corp 90%	52,322
4	Lefa	Guinea	Nord Gold SE 100%	45,100
5	Taparko	Burkina Faso	Nord Gold SE 90%	13,100
6	Tabakoto	Mali	BCM Investments Ltd 80%	NA
7	Bonikro	Cote d'Ivoire	LGL Mines CI SA 89.9%	NA
8	Nzema	Ghana	BCM International Ltd 90%	NA

Notes: CM International Ltd is a private company, which recently purchased the Nzema mine and do not report quarterly production results. LGL Mines CI SA a private company purchased the Bonikro mine from Newcrest Mining Ltd. BCM Investments Ltd is a private company, which recently purchased the Tabakoto mine from Endeavour Mining Corp. Data Sources: Data was sourced from company quarterly reports; cost curve created by Aurum Analytics.