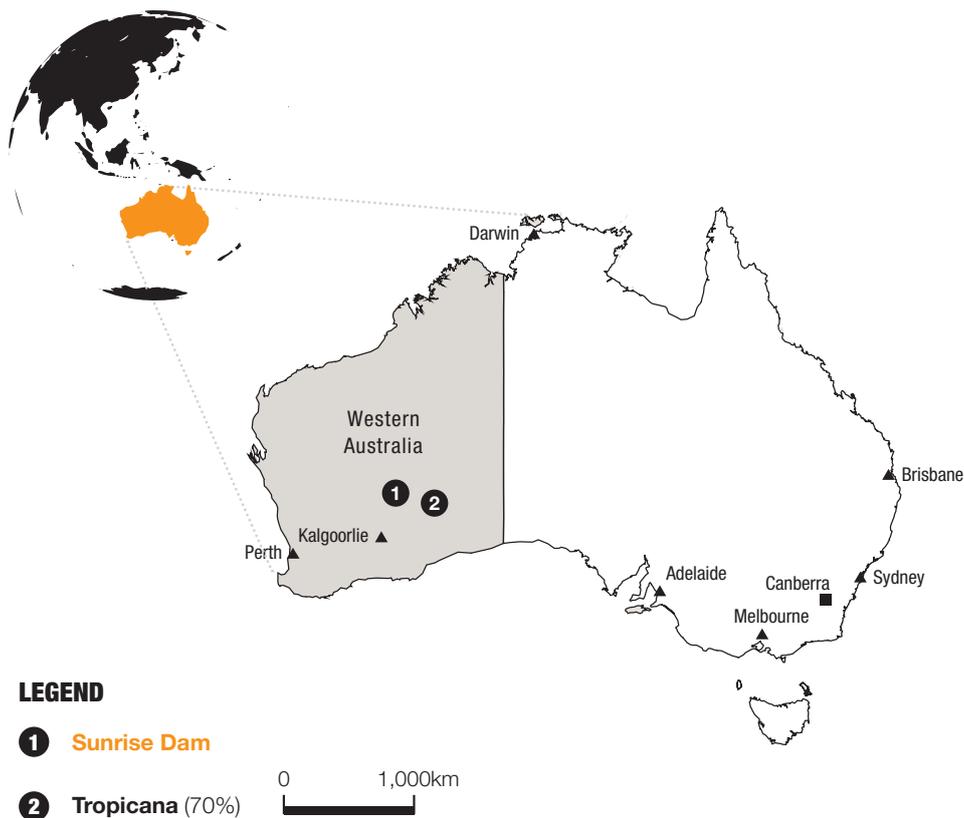


# SUNRISE DAM

AUSTRALIA



**S**unrise Dam, wholly-owned by AngloGold Ashanti, is located 220km north-east of Kalgoorlie and 55km south of Laverton.

Underground mining, carried out by a contract mining company, is now the primary source of ore, following the cessation of mining in the open pit in 2014.

## FEATURES OF THE YEAR

### PRODUCTION IMPACTED

by lower efficiencies and grades

### IMPROVED MINING FLEXIBILITY

in the fourth quarter as larger stopes came on line

### SUBSTANTIAL EXPLORATION

programme currently underway

**4.67Moz\***

inclusive Mineral Resource as at 31 December 2019

\* Includes that below infrastructure

# PERFORMANCE 2019

## Operating performance

### Production

Production was 254,000oz for the year. Sunrise Dam experienced operational challenges in the middle of the year with limited stope flexibility and paste fill delays, which resulted in lower underground volumes and grades. However, mining flexibility improved in the fourth quarter of 2019 as larger stopes came online, resulting in a record production from underground for the fourth quarter.

A substantial exploration programme is underway to increase Mineral Resource confidence, grow the underground Ore Reserve and support development of additional mining areas in the long term. Critical for success at Sunrise Dam is increasing flexibility to ensure consistently high underground tonnages are available to displace lower-grade surface stockpiles. Strategic drill platforms have been established to facilitate systematic exploration of the down plunge extents of the Vogue mineralised system, while also testing areas to the north and south that could generate additional work areas. The objective of the drilling is to provide data to facilitate Ore Reserve conversion and increase confidence and reliability in the two- to five-year planning horizon.

### Costs

Total cash costs of \$1,014/oz were negatively impacted by lower efficiencies, lower grade and inflation.

Operational excellence focused on cost saving and efficiencies continued.

### Capital expenditure

Capital expenditure of \$1,014/oz as compared to \$920/oz the previous year reduced by \$36m due to lower Ore Reserve development and stay-in-business capital expenditure. Several key infrastructure projects, such as the expansion of the tailings storage facility and the upgrade to the ventilation system were completed in 2018 resulting in a \$25m year-on-year reduction in stay-in-business capital expenditure when compared to 2019.

### Growth and improvement

The underground exploration programme initiated in the second half of 2019 is designed to be conducted over the next two years as the mine develops the supporting drill platform infrastructure. The aim of the programme is to grow the Ore Reserve which is critical to increasing face length availability, thereby improving overall flexibility of the mine. By the end of the year, six

underground diamond drill rigs were in operation testing targets including the southern strike extensions of the Midway Shear Steeps (MSS) and Elle and areas to the south of the current Vogue Indicated Mineral Resource. Surface diamond drilling will target southern extensions of Vogue.

Drilling results returned in 2019 identified extensions of Vogue mineralisation over an approximate 180m strike length; southern extensions to the Midway Shear Steeps ore domains, approximately 190m south of the current Indicated Mineral Resource; and potential repetition of the Midway Shear Steeps ore domains, approximately 100m east of the current Indicated Mineral Resource. Drilling also intersected mineralisation 500m to the south down plunge of the Mineral Resource, suggesting the continuation of the Vogue orebody.

## Sustainability performance

### Safety

The all injury frequency rate (AIFR) and lost-time injury frequency rate (LTIFR) both increased marginally from 2018 – from an AIFR of 11.52 per million hours worked in 2018 to 13.00 in 2019 – although the severity of injuries was minor.

### Community development

AngloGold Ashanti is actively involved in communities across the Western Australian goldfields, from Laverton to Kalgoorlie-Boulder and beyond, including remote Aboriginal communities such as Tjuntjuntjara. Our community projects support education, youth, community development and health programmes and local training. We also offer employment and business participation opportunities.

During 2019, AngloGold Ashanti Australia awarded a contract for ore rehandling and crusher feed at Sunrise Dam to Aboriginal contractor Carey Mining Pty Ltd, continuing a business partnership that began more than 20 years ago. Carey Mining employs 57 people on the Sunrise Dam contract.

### Environment

There were no reportable incidents in 2019 and all regulatory reporting obligations were met during 2019.

### Governance

AngloGold Ashanti drafted a whistle-blowing policy for the region, which is also aligned with group policy, to address specific requirements of the Australian Whistle-blowing Act.

# OUR PERFORMANCE CONTINUED

## Key statistics

Sunrise Dam	Units	2019	2018	2017
<b>Operating performance</b>				
Cut-off grade <sup>(1)</sup>	oz/t	0.046	0.079	0.079
	g/t	1.56	2.71	2.71
Average recovered grade	g/t	2.42	2.73	2.02
Tonnes treated/milled	Mt	4.1	4.0	4.0
Gold production	000oz	254	289	238
Total cash costs	\$/oz	1,014	920	919
All-in sustaining costs	\$/oz	1,246	1,223	1,203
Capital expenditure	\$m	43	79	62
Productivity	oz/TEC	37.15	41.83	40.58
<b>Safety performance</b>				
No. of fatalities		0	0	0
All injury frequency rate (AIFR)	per million hours worked	13.00	11.52	12.10
<b>People</b>				
Total average no. of employees		570	576	489
– Permanent		115	108	96
– Contractors		455	468	393
<b>Environmental performance</b>				
Water use	ML	1,898	1,808	1,115
Water use efficiency	kL/t	0.46	0.45	0.28
Energy consumption	PJ	2.67	2.49	2.18
Energy intensity	GJ/t	0.65	0.62	0.54
Greenhouse gas (GHG) emissions	000t	146	140	122
GHG emissions intensity	t CO <sub>2</sub> e/t	30	35	30
Cyanide use	t	1,626	1,500	1,202
No. of reportable environmental incidents		0	0	0
Total rehabilitation liabilities	\$m	45	41	42
<b>Social performance</b>				
Community investment <sup>(2)</sup>	\$000	701	742	684
Payments to government <sup>(3)</sup>	\$m	95	82	74

<sup>(1)</sup> Based on the Ore Reserve.

<sup>(2)</sup> Total community investment for both Sunrise Dam and Tropicana.

<sup>(3)</sup> Total paid to the Australian government for both Sunrise Dam and Tropicana.

For further information on AngloGold Ashanti and its work and performance, as a group and in the Australia region, see the <IR> and <SR> which are available online at [www.aga-reports.com](http://www.aga-reports.com).