MATERIAL ISSUES / ENVIRONMENT continued

GRI / SASB / Policies and standards

WATER

PRIORITISED SDGs

Tanzania – Geita

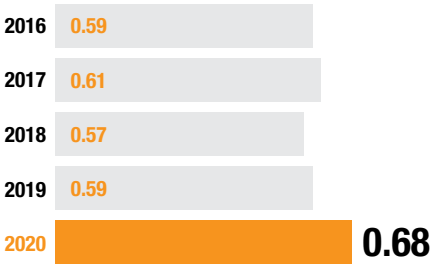
In 2019, to align our water reporting with the ICMM Consistent Water Reporting guide, we undertook an analysis of our operating sites' water context using the WWF (World Wildlife Fund) Water Risk filter. This has been updated during 2020, and we have elevated the profile of water scarcity in our overall reporting on water.

In Tanzania, proof of concept trials for in-situ groundwater remediation were undertaken downstream of Geita mine's TSF. These proved to be successful and we are planning for full implementation of this in-situ sulphate remediation methodology.

During 2020, the AngloGold Ashanti operations in Brazil completed updates to their water accounting systems. In addition, water balance scenarios were run to simulate the effects of decommissioning existing TSFs, in response to new legal requirements, and transitioning to TSF filtering and dry stacking technology. This work is essential in informing the future water use needs at each mine site.

In 2020, our overall water use intensity shows an increase. This metric reflects water withdrawn from the environment to offset production-related consumption losses. To a small degree, this change is ascribed to COVID-19-related throughput disruptions, but it also signals an ongoing change in AngloGold Ashanti's asset mix, with South African operations only included up to September 2020 and the effects of production ramp-up at Obuasi mine.

Water use intensity
(kilolitres per tonne treated)



In-situ water remediation at Geita

AngloGold Ashanti is rolling out a novel in-situ water remediation project at the Geita mine in Tanzania, working with a local Tanzanian/German joint venture partner that will use a process where naturally occurring bacteria directly remediates sulphate in groundwater.

The technology – known as In-situ TSF Bioremediation – is ground-breaking.

The AngloGold Ashanti team worked to adapt it to the mining context, making them the first to introduce it on a mine site.

The fact that the remediation takes place at the site of contamination is key, as it means the process has a very low environmental impact. It can be used instead of more intrusive water remediation solutions such as constructing a water processing plant, digging trenches and pumping the water back to a TSF.

With a successful concept study completed last year, the project is to be rolled out in three phases at Geita. This in-situ remediation approach has scope to be applied at other sites where it could be used not only at TSFs, but around pits as part of decommissioning.

The process uses naturally occurring bacteria in the ground water to remove contaminants such as sulphate and nitrate and because the bacteria is in-situ, the process, once established, will become self-sustaining after a few years.

For the process to work, a carbon source – in this instance, vegetable oil – is introduced to the impacted area, providing food for the micro bacteria. A combination of sulphur, sulphate and nitrate reducing bacteria carry out the remediation.

After acclimatising, the bacteria convert the nitrates to nitrogen gas and precipitate the sulphates to physical sulphides. Vegetable oil is added over the course of a few months, while the team determines how much, and how often, this needs to take place in order to sustain the contamination-busting bacteria. This process will, over time, build a barrier that prevents the spread of sulphate enriched water beyond the reaction zone.

MATERIAL ISSUES / ENVIRONMENT continued

Water

Percentage of sites by catchment stress category
(%)

High stress	17%
Moderate stress	75%
Low or very low stress	8%

Group site water sources and local climate type
(%)

Arid and semi-arid	57%
Arid and semi-arid (low quality groundwater)	25%
Arid and semi-arid (utility water)	19%
Arid and semi-arid (surface water)	13%
Tropical (surface, ground and utility water)	30%
Dry sub tropical (surface water)	13%

Source: WWF Water Risk Filter

Ghana – Obuasi

Our interactions with water

21,252ML
extracted from surface water

18,250ML
extracted from groundwater

7,903ML
imported from water utility suppliers

23,341ML
harvested from rain on process facilities

190,762ML
reused water

261,541ML
needed to sustain core operational site tasks of:

- Surface and underground mining
- Underground mine cooling
- Ore milling and processing
- Tailings transport and deposition
- Dust suppression
- Dewatering
- Water Sanitation and Hygiene (WASH) services

73%
reused water

64,730ML
consumed through evaporation, entrainment and other task losses

6,016ML
treated and discharged to surface water

Other Managed Water: water diverted to the environment, not used in production tasks **13,895ML**