

PROGRESS GALLERY / June 2020 **Building futures. Strengthening communities.** 



On June 13<sup>th</sup>, members of Platreef's shaft-sinking team celebrated the completion of sinking Shaft 1 to a final depth of 996 metres below surface. Underground mine development work now is focused on equipping Shaft 1 as Platreef's initial production shaft.

# Building what will be 3 of the world's best mines and exploring for the next copper giant in Southern Africa's legendary mineral fields

## **WESTERN FORELAND**

**Copper exploration** 

Democratic Republic of Congo's Central African Copperbelt

# **PLATREEF**

Mine development at platinum-group elements, gold, nickel and copper discovery

South Africa's Bushveld Complex

#### KAMOA-KAKULA

Copper mine development and exploration

Democratic Republic of Congo's Central African Copperbelt

### **KIPUSHI**

Zinc, copper, silver and germanium at historic, high-grade mine

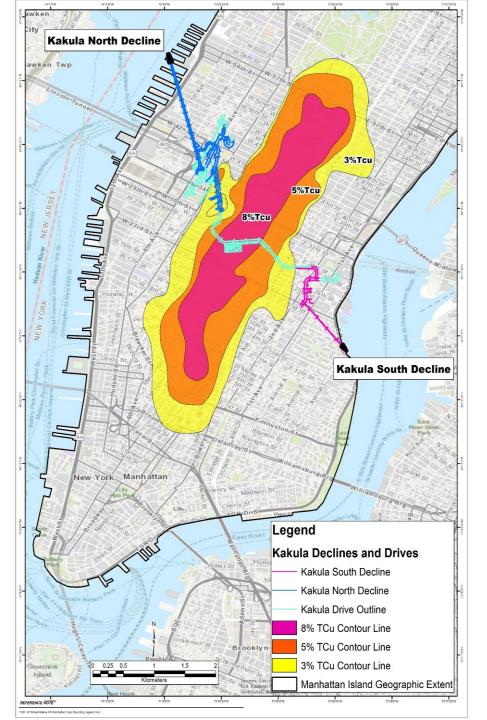
Democratic Republic of Congo's Central African Copperbelt



Aerial view of the Kakula Mine showing the tonnes and grade of the main pre-production stockpiles. The Kakula northern declines and ore conveyor system are circled in red and the processing plant is in the upper right corner.



Aerial view of the Kakula southern decline and ore stockpile containing approximately 38,000 tonnes of medium-grade ore.



The eastern portion of Kakula
Mine — representing less than
half of the overall 13.3kilometre-long Kakula Deposit
— overlain on southern
Manhattan Island to give a
sense of the enormous scale
of the underground operations.

Development to date is shown in blue (from the north decline) and pink (from the south decline). The northern and southern access drives are expected to be joined by the end of October 2020. Initial room-and-pillar mining will occur in the 8% total copper (Tcu) zone (shown in pink).



Aerial view of the Kansoko decline and ore stockpile containing approximately 35,000 tonnes of medium-grade ore. The Kansoko decline is on the Kamoa Deposit, approximately 10 kilometres north of the Kakula Mine.



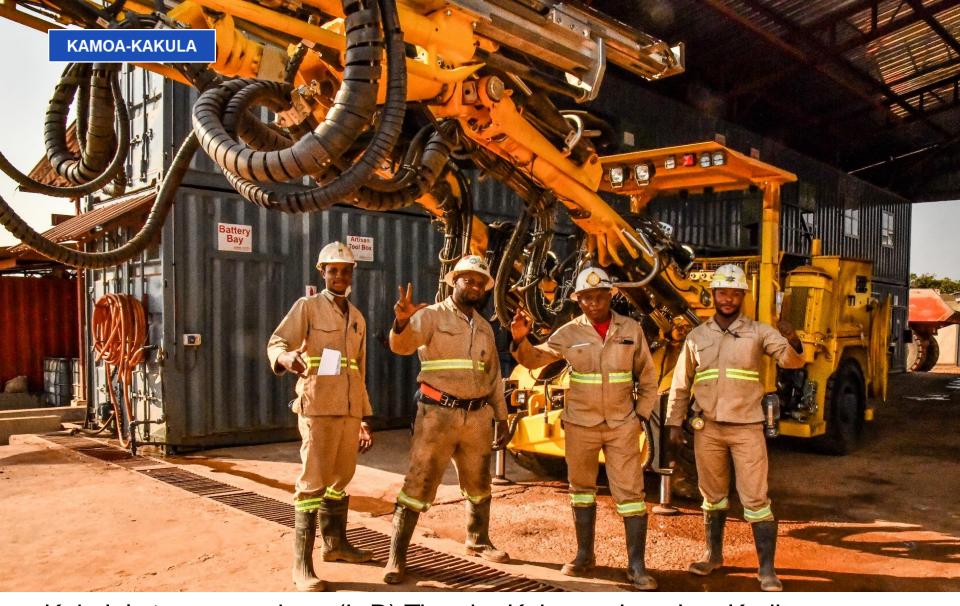
A 63-tonne Sandvik truck dumps the first load of ore into Kakula's east tip bin, for transportation to surface via the new conveyor system.

Click here to watch a short video of the first ore being delivered to surface via the new rock-handling conveyor system:

https://player.vimeo.com/video/433659430



Mioi Kabinda (left) and Kifumbe Bijimba (right) with the newly-installed magnet and rock breaker at the east ore tip bin, part of the underground ore handling system at the Kakula Mine.



Kakula's team members (L-R) Timothe Kabeya, Jean Luc Kadita, Epwila Kundjuka, Nkulu Nsungu with one of the project's newly commissioned Epiroc 282 double-boom, semi-autonomous drill rigs.

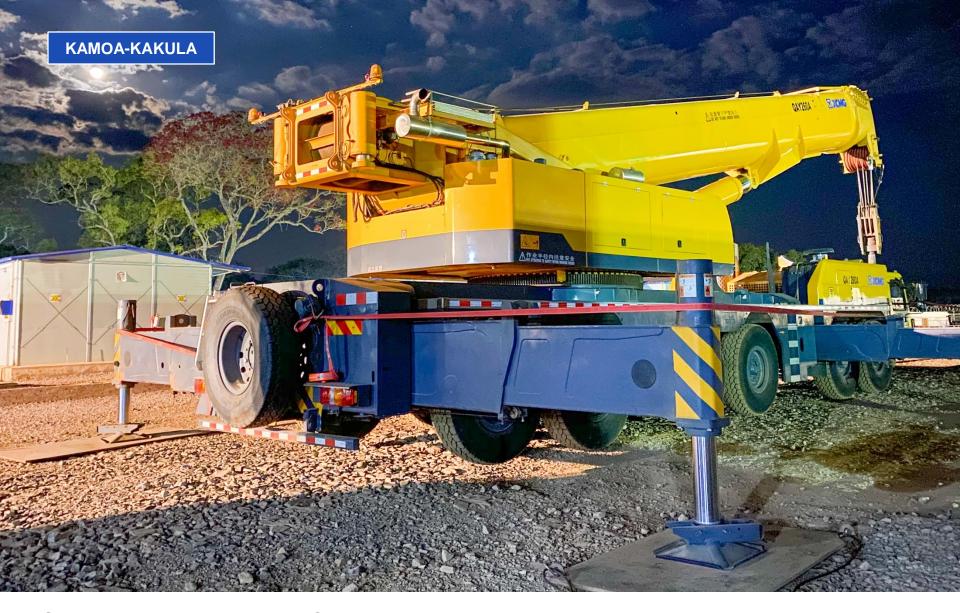


Kakula's first ore being transported to surface on the new conveyor system, which is expected to be fully commissioned by mid-July.

Click here to watch a short video of the first ore being delivered to surface via the new rock-handling conveyor system: <a href="https://player.vimeo.com/video/431759826">https://player.vimeo.com/video/431759826</a>



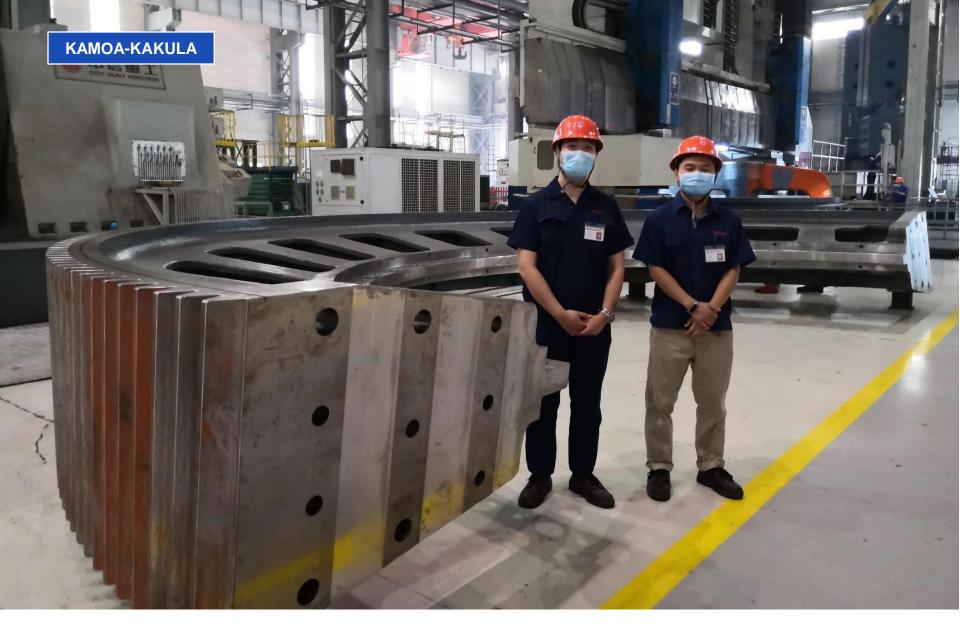
Construction of Kakula's phase-one, 3.8 million-tonne-per-annum processing plant is advancing rapidly. Kakula's ore stockpiles from the northern decline is in the upper left corner.



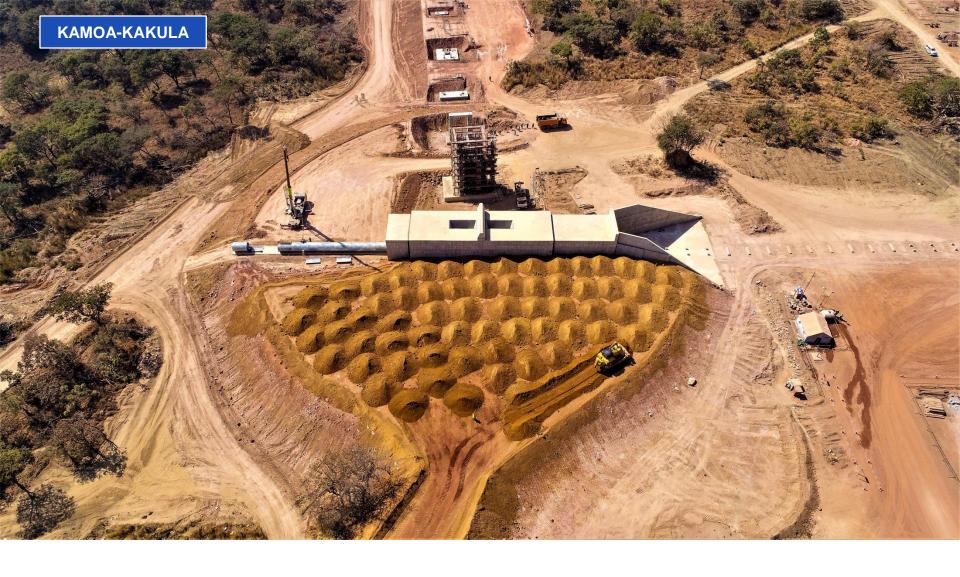
One of Kamoa-Kakula Copper Company's new heavy duty cranes that recently arrived at the minesite and is being used for the construction of the Kakula processing plant.



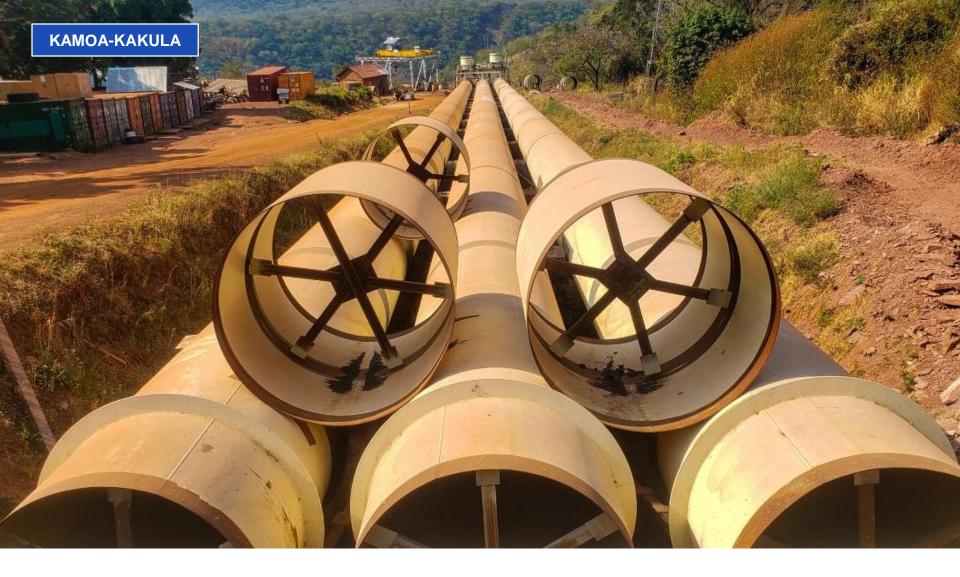
Steel support beams for Kakula's processing plant's concentrate filter being fabricated at Shanghai Modern Heavy Industries' plant in China.



One half of a girth gear for Kakula's two ball mills fabricated at Citic Heavy Industries plant in China. The gears are now en route to the minesite.



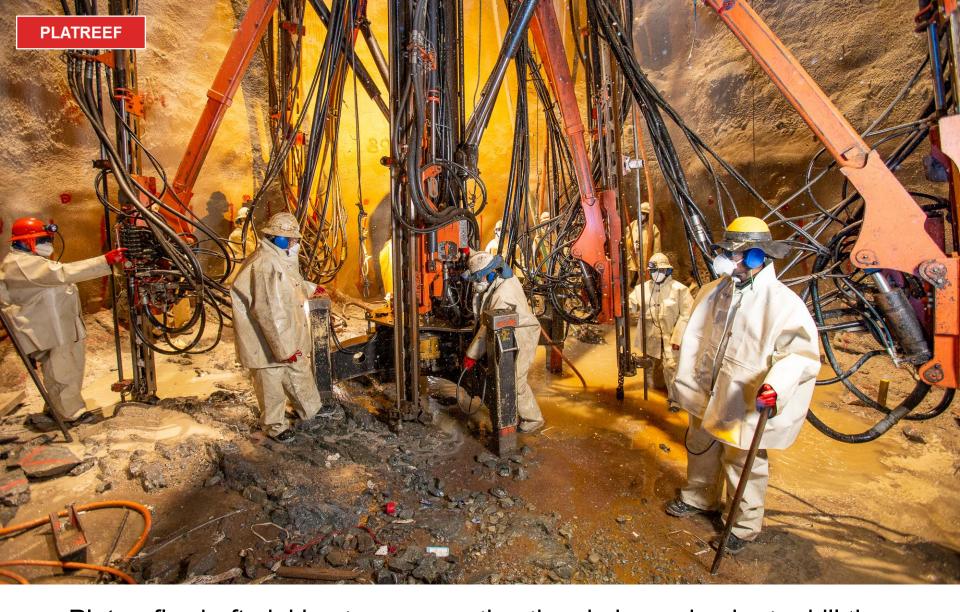
Construction of the 'high pressure grinding rolls' (HPGR) stockpile tunnel. A conveyor system is being installed to transport ore from the underground conveyor system to the surface ore stockpiles.



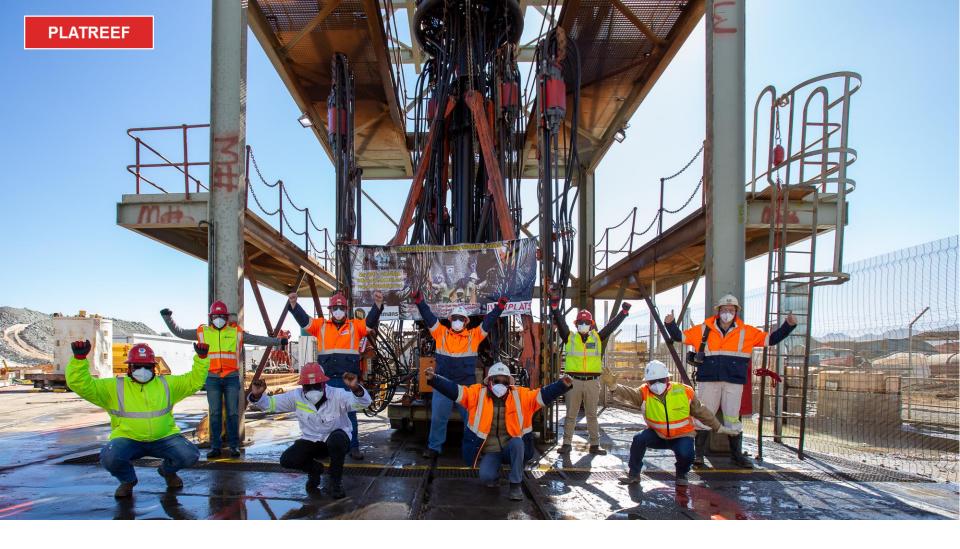
New penstocks installed at the Mwadingusha hydropower plant as part of the upgrading work at the plant to supply Kamoa-Kakula with clean, sustainable hydro electricity.



With the sinking of Shaft 1 now complete, Ivanhoe is exploring near-term development pathways at Platreef to expedite production. Shaft 1 is located approximately 350 metres away from a high-grade area of the orebody, planned for bulk-scale, mechanized mining.



Platreef's shaft-sinking team operating the six-boom jumbo to drill the final round to a depth of 996 metres below surface. Construction of the 996-metre-level station is well underway.



The Platreef mining team and its South African sinking contractor, Moolmans, have proudly achieved South African shaft-sinking industry leader status in terms of safety performance. The project remains 'Fall-of-Ground' incident free since shaft-sinking operations began in July 2016.



Sifiso Mblangwe and his shaft-sinking teammates at a pre-shift safety meeting. The team achieved a South African shaft-sinking industry leader status for its safety performance.



One of the Platreef's underground development crews at a safety meeting prior to going down Shaft 1.



Boilermaker, Aide Samuel Teffo (left); Millwright, Lerato Maake (centre); and Rigger, Innocent Nchabeleng (right), display medals they received for their excellent safety performance during the sinking of Shaft 1.



The new Grifo water pumps at Kipushi's 850-metre-level pumping station. 23



Mr. Samy installing a water collector on the Grifo pump no. 1 at the 850-metre level pumping station.



Mbiya Africa inspecting one of Kipushi's underground refuge chambers.



Children from the local village of Kaponda obtaining fresh drinking water from a new potable well constructed by the Kipushi Mine.