



# IVANHOE MINES

NEW HORIZONS

June 2018

# Forward-looking statements & Qualified Person

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Certain statements in presentation constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws, including, without limitation, the timing and results of: (i) statements regarding the ongoing development and exploration work at the Kamo-Kakula Project, including drilling, decline development, and feasibility, pre-feasibility and preliminary economic assessment (PEA) studies; (ii) statements regarding the ongoing development work, including shaft sinking, and the feasibility study at the Platreef Project; and (iii) statements regarding ongoing upgrading and development work and the pre-feasibility study at the Kipushi Project. As well, the results of the prefeasibility study and PEA of the Kamo-Kakula Project, the prefeasibility study of the Platreef Project and the PEA of the Kipushi Project constitute forward-looking information, and include future estimates of internal rates of return, net present value, future production, estimates of cash cost, proposed mining plans and methods, mine life estimates, cash flow forecasts, metal recoveries, and estimates of capital and operating costs.

Such statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Ivanhoe, its mineral projects, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. These statements reflect Ivanhoe’s current expectations regarding future events, performance and results and speak only as of the date of this presentation.

In making such statements, Ivanhoe has made assumptions regarding, among other things: the accuracy of the estimation of mineral resources; that exploration activities and studies will provide results that support anticipated development and extraction activities; that studies of estimated mine life and production rates at the Kamo-Kakula, Kipushi and Platreef projects will provide results that support anticipated development and extraction activities; that Ivanhoe will be able to obtain additional financing on satisfactory terms; that infrastructure anticipated to be developed or operated by third parties, including electrical generation and transmission capacity, will be developed and/or operated as currently anticipated; that laws, rules and regulations are fairly and impartially observed and enforced; that the market prices for relevant commodities remain at levels that justify development and/or operation; that Ivanhoe will be able to successfully negotiate land access with holders of surface rights; and that war, civil strife and/or insurrection do not impact Ivanhoe’s exploration activities or development plans.

Although the forward-looking statements or information contained in this presentation are based upon what management of Ivanhoe believes are reasonable assumptions, Ivanhoe cannot assure investors that actual results will be consistent with these forward-looking statements. They should not be read as guarantees of future performance or results. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors discussed under “Risk Factors” in Ivanhoe’s most recent Annual Information Form.

These forward-looking statements are made as of the date of this presentation and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, Ivanhoe does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this presentation. Ivanhoe’s actual results could differ materially from those anticipated in these forward-looking statements.

This presentation also contains references to estimates of Mineral Resources. The estimation of Mineral Resources is inherently uncertain and involves subjective judgments about many relevant factors. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The accuracy of any such estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation (including estimated future production from the company’s projects, the anticipated tonnages and grades that will be mined and the estimated level of recovery that will be realized), which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that ultimately may prove to be inaccurate. Mineral Resource estimates may have to be re-estimated based on: (i) fluctuations in copper, nickel, platinum-group elements (PGE), gold or other mineral prices; (ii) results of drilling, (iii) metallurgical testing and other studies; (iv) proposed mining operations, including dilution; (v) the evaluation of mine plans subsequent to the date of any estimates; and (vi) the possible failure to receive required permits, approvals and licences.

Disclosures of a scientific or technical nature in this presentation have been reviewed and approved by Stephen Torr, who is considered, by virtue of his education, experience and professional association, a Qualified Person under the terms of NI 43-101. Ivanhoe has prepared a NI 43-101 compliant technical report for each of the Kamo-Kakula Project, the Platreef Project and the Kipushi Project, which are available under the company’s SEDAR profile at [www.sedar.com](http://www.sedar.com). These technical reports include relevant information regarding the effective date and the assumptions, parameters and methods of the mineral resource estimates on the Kamo-Kakula Project, Kipushi Project and Platreef Project cited in this presentation, as well as information regarding data verification, exploration procedures and other matters relevant to the scientific and technical disclosure contained in this presentation in respect of the Kamo-Kakula Project, Platreef Project and Kipushi Project.

Building what will be  
**③** of the world's  
best mines  
in Southern Africa's  
legendary mineral fields

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## KAMOA-KAKULA

Initial development  
of two mining areas  
on **world's 4<sup>th</sup>-largest**  
copper discovery

Democratic Republic  
of Congo's Central  
African Copperbelt

## PLATREEF

Mine projected to be  
**Africa's lowest-cost producer**  
of platinum-group metals,  
plus nickel, copper & gold

Northern Limb of South Africa's  
Bushveld Complex

## KIPUSHI

**Ultra-high-grade**  
historic mine being  
upgraded to produce  
zinc, copper, silver,  
germanium & lead

D.R. Congo's  
Copperbelt

**June 11, 2018:** Ivanhoe Mines and CITIC Metal signed a long-term strategic cooperation and investment agreement that will see CITIC invest approximately C\$723 (US\$560) million to help advance three world-scale mine-development projects in Southern Africa. CITIC and Ivanhoe have shared a long-standing relationship dating back more than 15 years.



In April 2003, Robert Friedland, then Chairman of the original Ivanhoe Mines, and Wang Jun (left), then Chairman of CITIC Group, announced the formation of a strategic alliance to pursue mutual interests in mineral exploration, development and production.

# Ivanhoe and CITIC long-term strategic cooperation and investment agreement

- **CITIC Metal to invest C\$723 million (US\$560 million) to help advance Ivanhoe's three world-scale mine-development projects.**
- **CITIC Metal to acquire 19.9% stake in Ivanhoe Mines.**
- **Ivanhoe will issue 196.6 million common shares to CITIC Metal through a private placement at a price of C\$3.68 per share.**
- **CITIC Metal to make US\$100 million interim loan facility available to Ivanhoe.**
- **CITIC Metal to use its reasonable commercial efforts to arrange project financing for the first phase of development for the Kamoā-Kakula Project.**
- **Standstill agreement prevents CITIC from increasing its ownership stake to more than 19.9% until January 8, 2022.**

# CITIC has the financial resources to help Ivanhoe advance its three projects to production

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**Robert Friedland**  
*Executive Chairman  
and Founder,  
Ivanhoe Mines*

"We are confident that CITIC Metal shares our vision and has the experience and financial resources to help us advance our three projects to production, creating value for Ivanhoe's stakeholders in the Democratic Republic of Congo and South Africa, and our international shareholders."

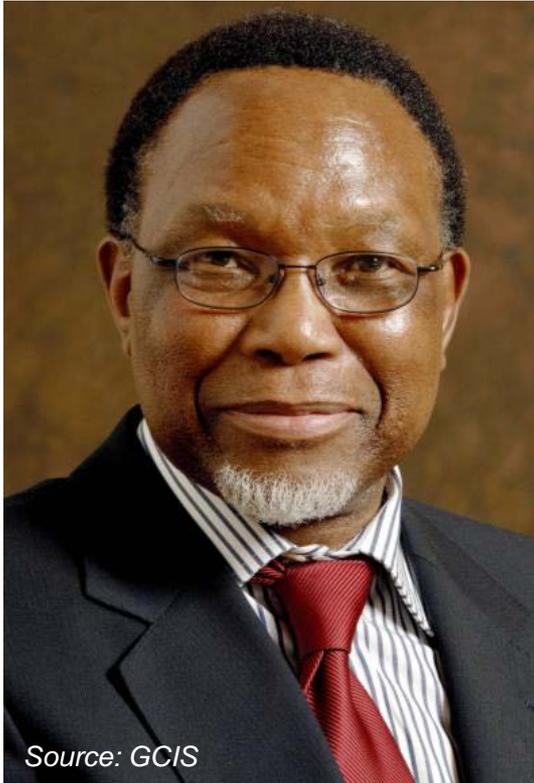
"CITIC Metal will be playing a significant role in Ivanhoe's emergence as one of the world's leading producers of copper, zinc and platinum-group metals. Today, with CITIC Metal's commitment to this investment, Ivanhoe is one step closer to becoming Canada's next important, diversified mining company."



**中信金属有限公司**  
**CITIC Metal Co., Ltd.**

# April 10, 2018: Former South African President Kgalema Motlanthe appointed non-executive director of Ivanhoe

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Source: GCIS

*"Mr. Motlanthe is widely recognized as one of the African continent's wise men. We are honoured to be able to welcome to our board an individual with such respected credentials in the international community but also with substantial experience in the mining sector."*

**Robert Friedland**  
*Executive Chairman and Founder  
Ivanhoe Mines*

# Platreef discovery & mine development

South Africa

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**April 23, 2018:**  
Shaft 1 reached a depth of more than **750 metres below surface**. Construction of the station underway at the 750-metre-level will provide initial mine development access to the orebody.

***Development work focused on initial production by early 2022.***

Members of Ivanhoe's Platreef shaft-sinking team with a "cactus grab" used to remove excavated rock from lateral mine development on the 750-metre level of Shaft 1

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# May 2018: Ivanhoe Mines secured long-term supply of treated bulk water to process ore

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Agreement provides a minimum of five million litres of treated water a day for 32 years, beginning in 2022, from the town of Mokopane's new Masodi Treatment Works.

Recycling of local, treated water is part of a sustainable approach to minimize Platreef's environmental footprint.

Agreement signing attended by (from left) Ivanplats Managing Director Dr. Patricia Makhsha (standing); Ivanhoe CFO Marna Cloete (seated); Municipal Technical Director William Nkuna; Acting Municipal Manager Marcus Mthombeni; and Mogalakwena Mayor Andrina Matsemela.

# Construction of the surface box-cut for the main production shaft (Shaft 2) headframe

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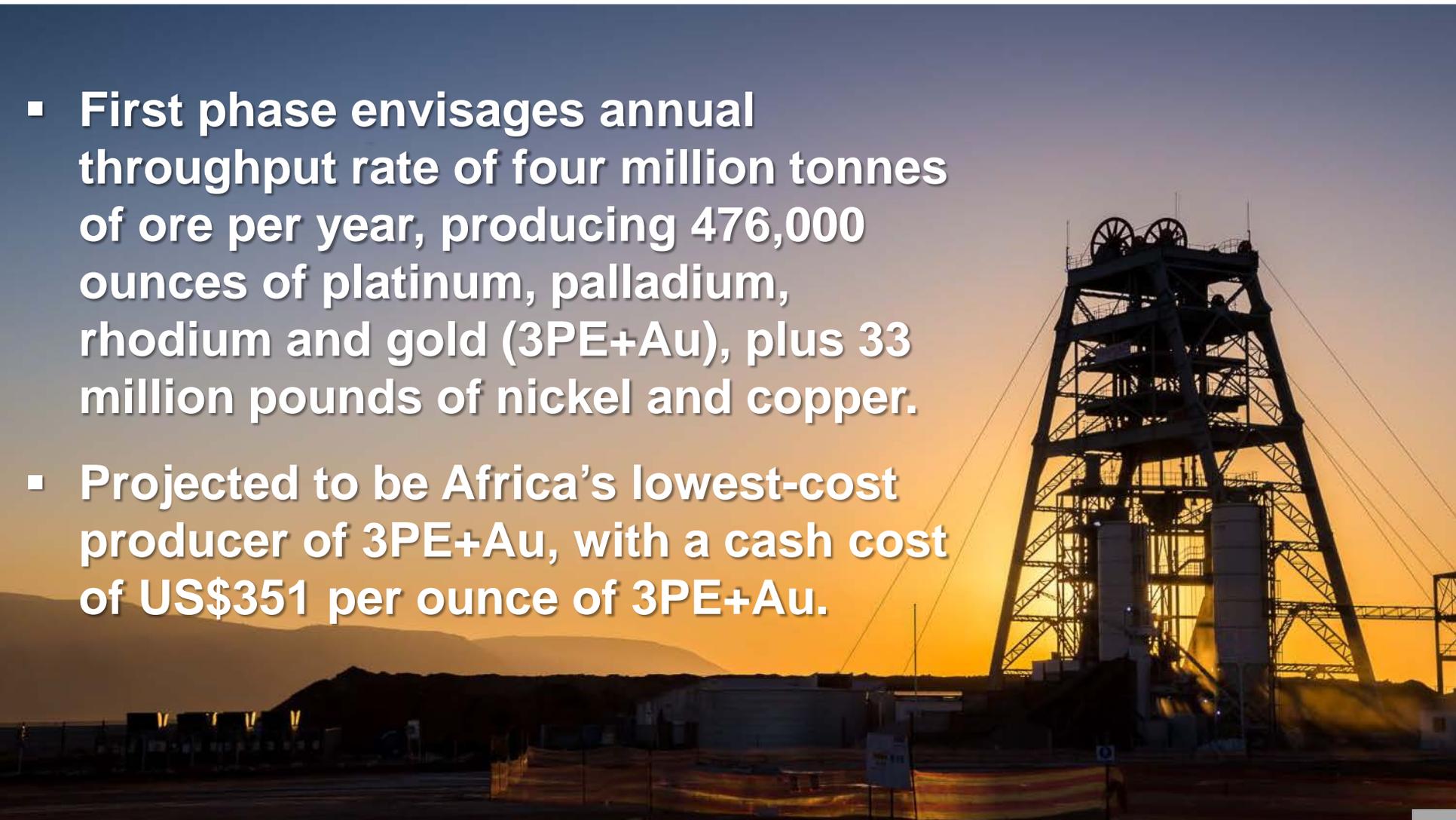


Illustration shows two cut-away perspectives of Shaft 2's 103-metre-tall concrete headframe and internal permanent hoisting facilities.

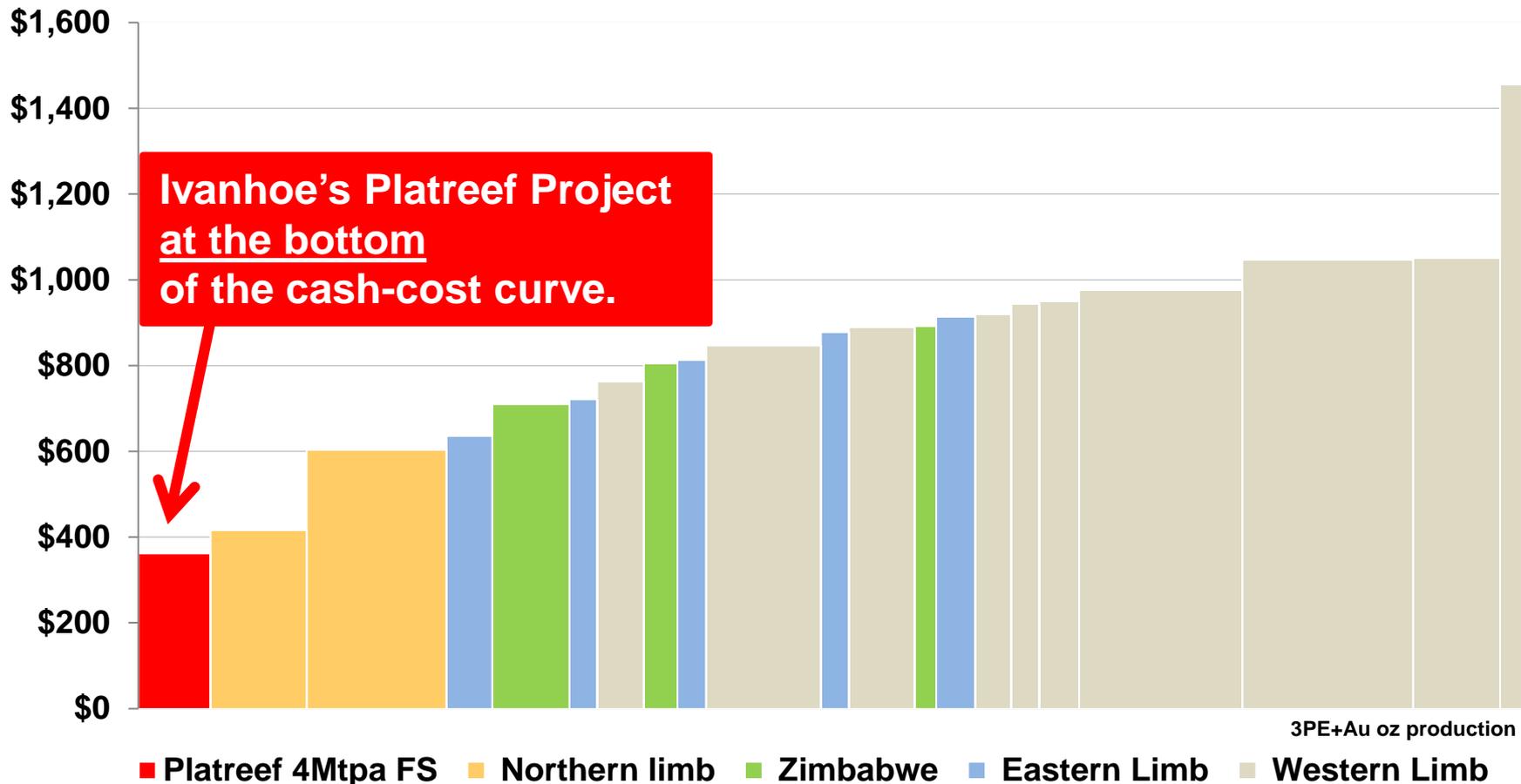
# July 31, 2017: Definitive feasibility study issued for Platreef Project

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- First phase envisages annual throughput rate of four million tonnes of ore per year, producing 476,000 ounces of platinum, palladium, rhodium and gold (3PE+Au), plus 33 million pounds of nickel and copper.
- Projected to be Africa's lowest-cost producer of 3PE+Au, with a cash cost of US\$351 per ounce of 3PE+Au.

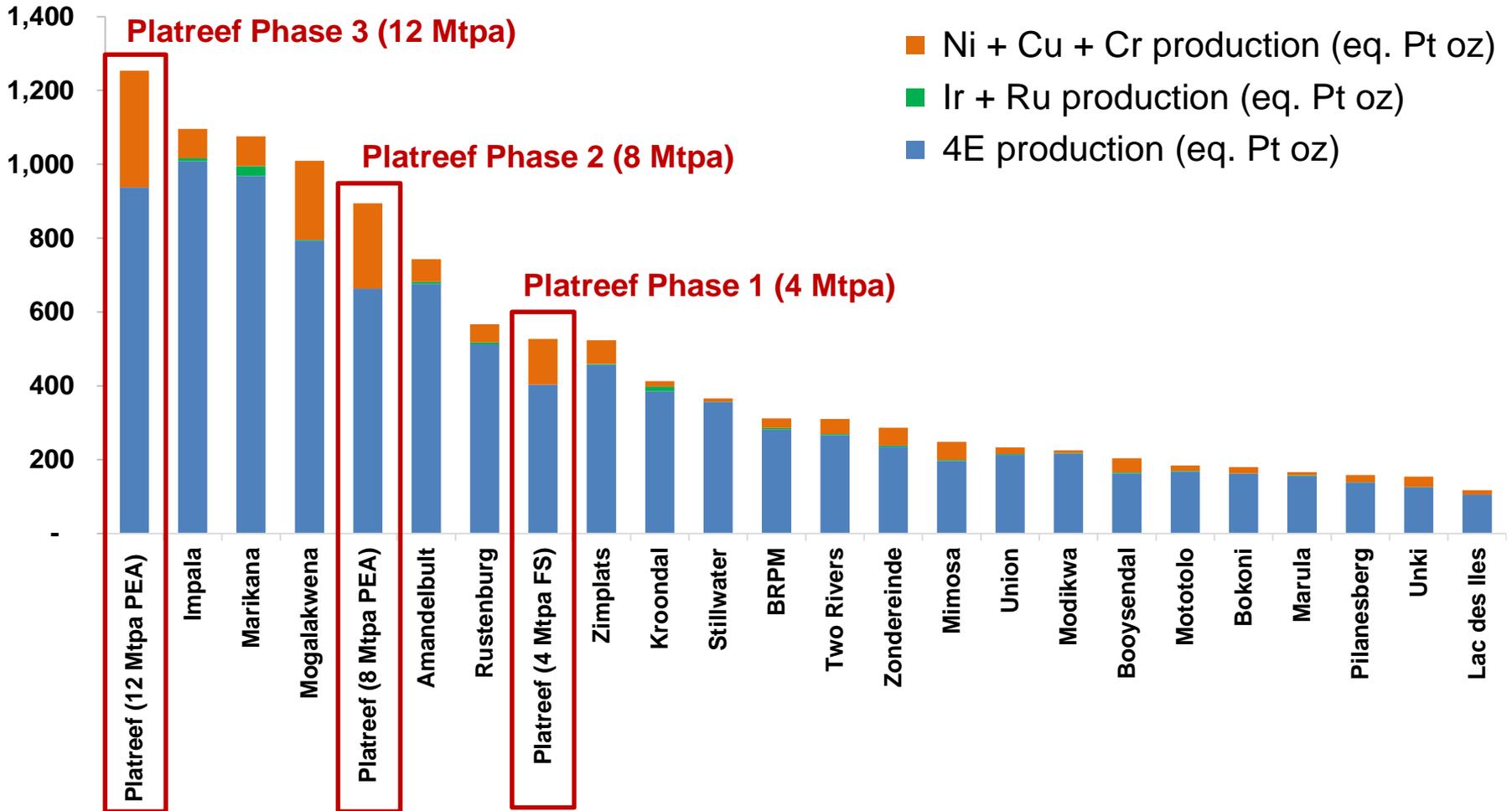


# Platreef's potential US\$351 per 3PE+Au ounce (net of base-metal by-products) at the bottom of the world's cash-cost curve



Source: SFA (Oxford). Data for Platreef Project and Waterberg are based on each project's reported DFS and PFS parameters respectively, and are not representative of SFA's view.

# At 12 million tonnes of ore per year, Platreef would be the world's largest platinum-group metals mine



Source: Production estimates for projects other than Ivanhoe's Platreef Project have been prepared by SFA (Oxford). Production data for the Platreef Project (platinum, palladium, rhodium, gold, nickel and copper) is based on reported DFS and PEA data and is not representative of SFA's view. All metals have been converted by SFA (Oxford) to platinum equivalent ounces at price assumptions of US\$1,076/oz platinum, US\$761/oz palladium, US\$1,235/oz gold, US\$821/oz rhodium, US\$5.07/lb nickel and US\$2.42/lb copper. Note: As the figures are platinum-equivalent ounces of production they will not be equal to 3PE+Au production.

**Platreef Project Financing Progressing:** German, Swedish and Canadian government institutions are arranging debt financing for Platreef. Expressions of interest received for approximately US\$900 million of a US\$1 billion finance package.

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# Platreef's B-BBEE partnership a top performer in South Africa's platinum sector

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**Platreef 26% ownership stake by Black Economic Empowerment (BBE) partners is one of the broadest empowerment transactions ever settled in South African mining.**

- **20%** held by a trust to benefit 20 local host communities, with estimated combined population of 150,000, in the vicinity of Platreef mine.
- **3%** held by a trust for Platreef's historically disadvantaged, non-managerial South African employees.
- **3%** held by a consortium of 187 local entrepreneurial companies and 333 individual shareholders.

**In 2018, Ivanplats reconfirmed its Level 3 status in its fourth verification assessment on a Broad-Based BEE scorecard.**

# Members of Platreef's apprenticeship program receive job knowledge and skills instruction at Murray & Roberts' shaft-sinking training academy



# The future of underground mining is automation

PLATREEF

Ivanhoe's Platreef Platinum Project in South Africa is ideally suited for mechanized, autonomous mining.

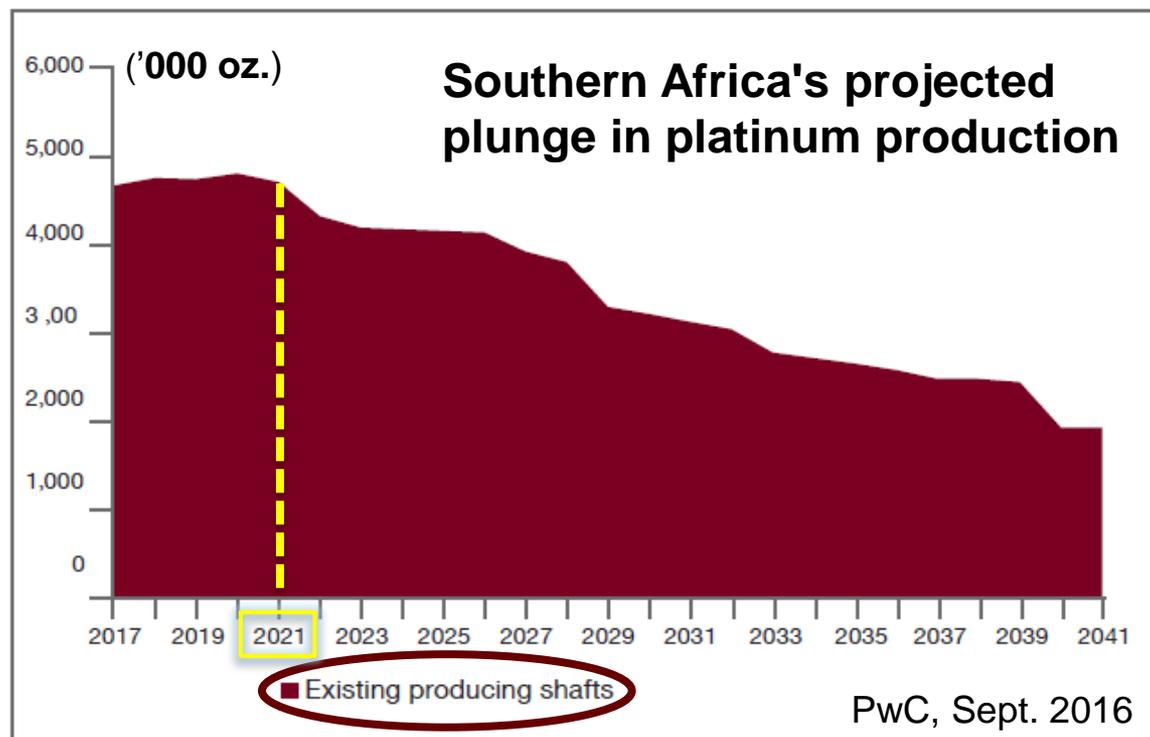


Source: MINEX Forum



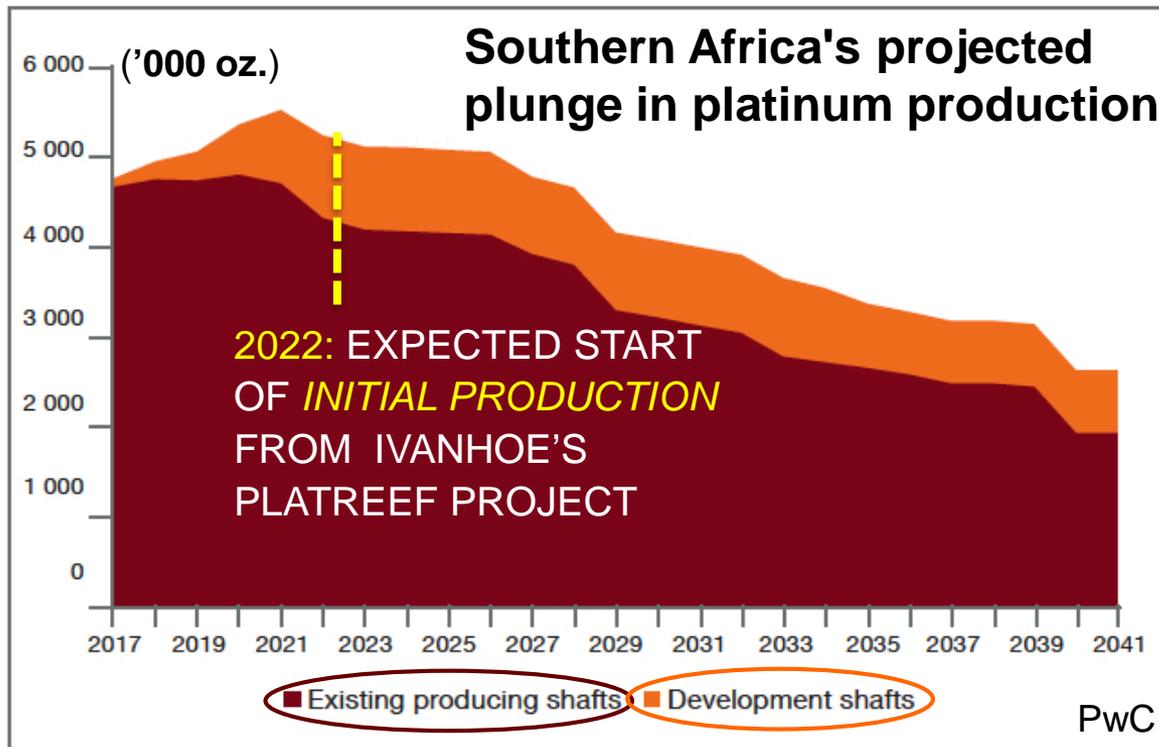
Source: GeoDrilling International

# The looming platinum “supply cliff” for Southern Africa’s existing producing mines



- Existing shafts alone will barely maintain current production to 2021.
- Then, closures of mined-out shafts will help trigger a long production decline – and higher prices.
- Filling such a supply-demand gap holds challenges and opportunities.

# Even new production now under development likely to provide only short-lived lift in platinum output



- Ivanhoe's Platreef is among new projects whose ramp-up outputs will slightly lift regional supply until 2021 – when the decline will resume.
- Projected 2021 peak output of 5.5 million ounces, even plus global supply, still will be below the average demand, net of recycling, of the past 3 years.

Source: "Platinum on a knife-edge", PwC, September 2016

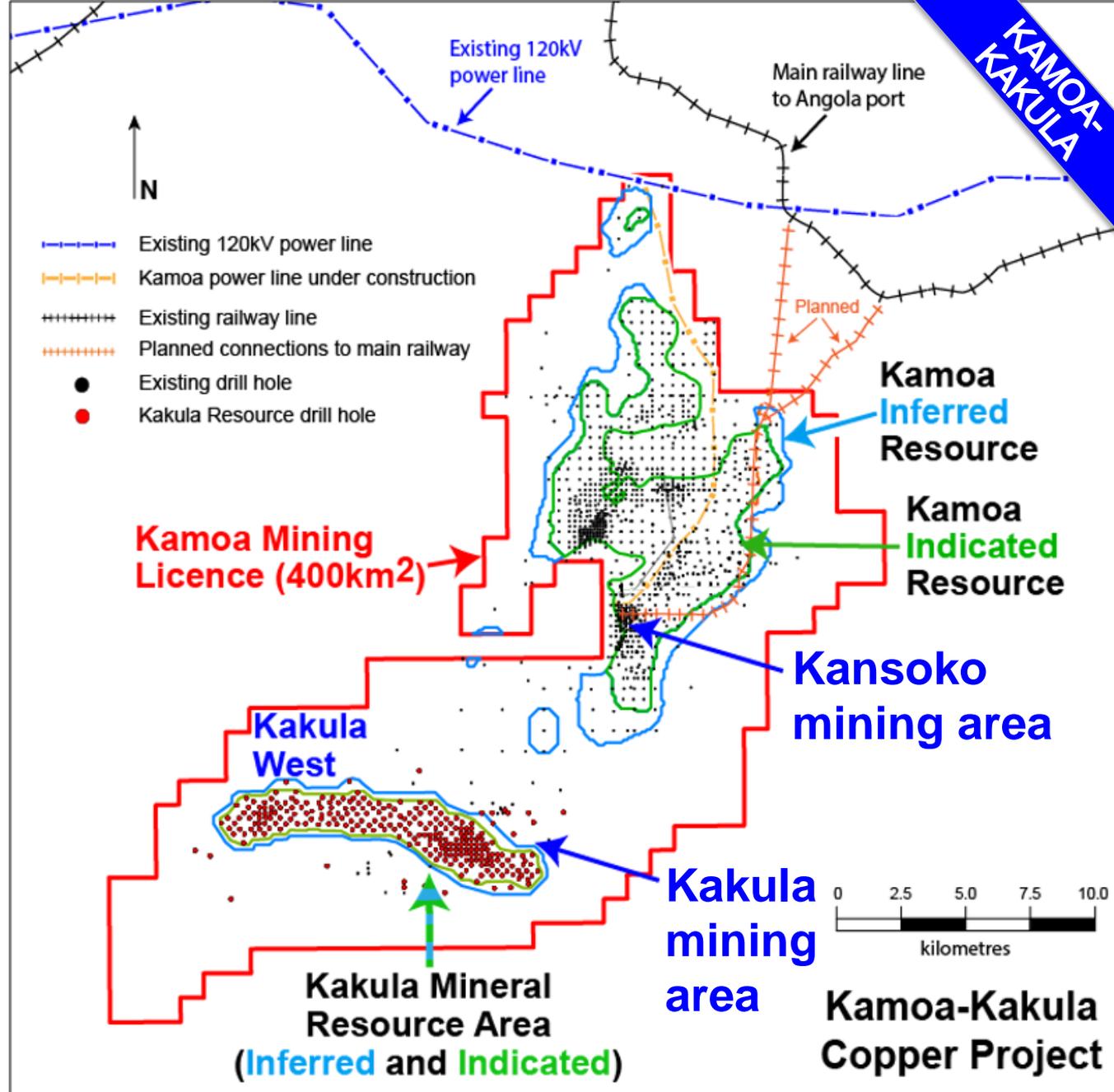
# Kamoia & Kakula: Development of two mining areas; ongoing exploration

Democratic Republic of Congo

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**Kamoa, Kakula and Kakula West**  
**Indicated and Inferred Mineral Resource areas, with existing power and rail infrastructure**



**February 2018:** A new resource estimate established Kamoia-Kakula as the world's *fourth-largest copper discovery*.

Copper grades at the two adjacent deposits are the highest, by a wide margin, of the world's top 10 copper deposits.



# Indicated Mineral Resources, Kamoa-Kakula Project, February 2018

KAMOA-  
KAKULA

Category	Cut-off Grade (Cu%)	Tonnes (millions)	Area (Sq. km)	Copper Grade	Contained Copper (kTonnes)	Contained Copper (billion lbs)
Indicated	3.0	396	33.2	4.79%	19,000	41.8
Indicated	2.5	535	44.0	4.25%	22,800	50.2
Indicated	2.0	780	53.8	3.63%	28,300	62.4
Indicated	1.5	1030	62.8	3.17%	32,500	71.7
Indicated	1.0	1340	70.1	2.72%	36,600	80.7

## Notes:

Ivanhoe's Mineral Resources Manager, George Gilchrist, Professional Natural Scientist (Pr. Sci. Nat) with the South African Council for Natural Scientific Professions (SACNASP), estimated the Mineral Resources under the supervision of Dr. Harry Parker and Gordon Seibel, both Registered Members of the Society for Mining, Metallurgy and Exploration (SME), who are the Qualified Persons for the Mineral Resource estimate. The effective date of the estimate is February 23, 2018. Mineral Resources are estimated using the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves. Mineral Resources at Kamoa are inclusive of Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. No Mineral Reserves are currently estimated at Kakula.

Mineral Resources at Kamoa are reported using a total copper (TCu) cut-off grade of 1% TCu and a minimum vertical thickness of 3 m. There are reasonable prospects for eventual economic extraction under assumptions of a copper price of US\$3.00/lb, employment of underground mechanized room-and-pillar and drift-and-fill mining methods; and that copper concentrates will be produced and sold to a smelter. Mining costs are assumed to be US\$27/t, and concentrator, tailings treatment, and general and administrative costs (G&A) are assumed to be US\$17/t. Metallurgical recovery for Kamoa is estimated to average 84%. At a 1% TCu cut-off grade, assumed net smelter returns for 100% of Mineral Resource blocks will cover concentrator, tailings treatment, and G&A costs.

Mineral Resources at Kakula are reported using a TCu cut-off grade of 1% TCu and an approximate minimum thickness of 3 m. There are reasonable prospects for eventual economic extraction under assumptions of a copper price of US\$3.00/lb, employment of underground, mechanized, room-and-pillar and drift-and-fill mining methods, and that copper concentrates will be produced and sold to a smelter. Mining costs are assumed to be US\$42/t and concentrator, tailings treatment, and G&A costs are assumed to be US\$18/t. Metallurgical recovery is assumed to average 85% at the average grade of the Mineral Resource. Ivanhoe is studying reducing mining costs using a controlled convergence room-and-pillar method. At a 1% TCu cut-off grade, assumed net smelter returns for 100% of Mineral Resource blocks will cover concentrator, tailings treatment and G&A costs.

Reported Mineral Resources contain no allowances for hangingwall or footwall contact boundary loss and dilution. No mining recovery has been applied.

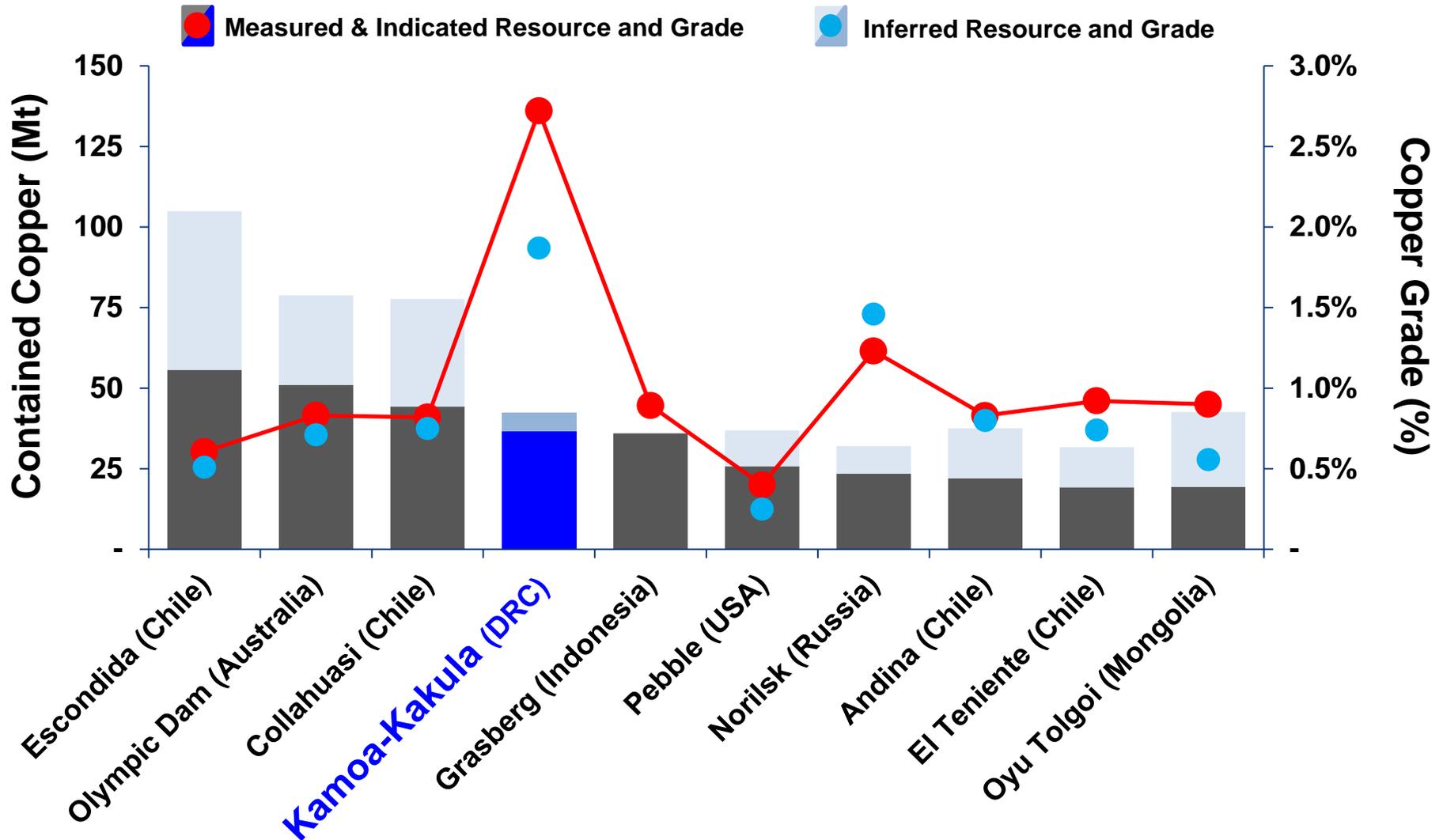
Tonnage and contained-copper tonnes are reported in metric units, contained-copper pounds are reported in imperial units and grades are reported as percentages.

Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade and contained metal content.

Resources stated in Tables 1, 2 and 3 are not additive to this table.

# Among the world's largest copper deposits, Kamoia-Kakula also has the highest copper grades

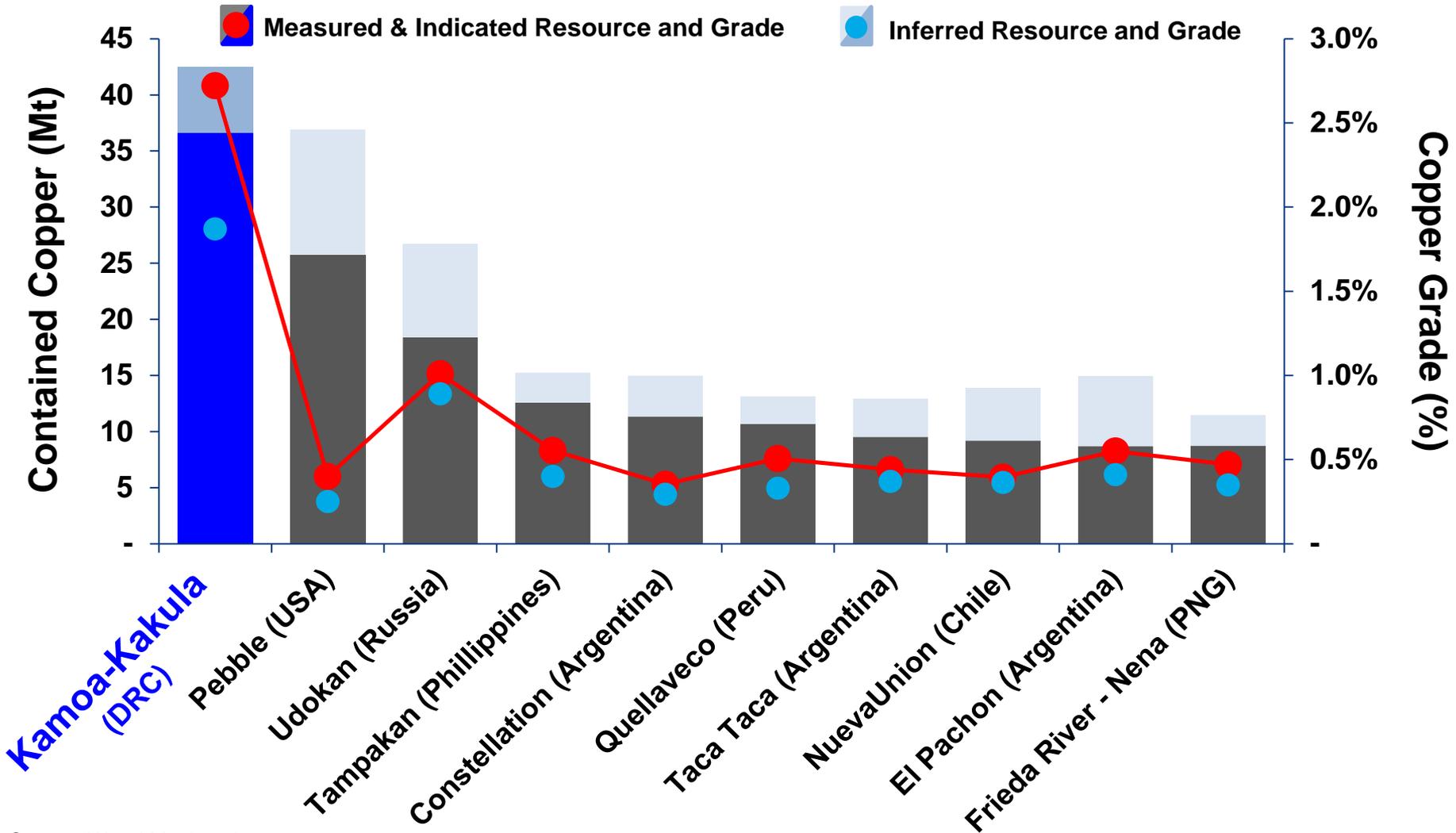
**KAMOA-KAKULA**



Source: Wood Mackenzie

\*Note: Selected based on contained copper (Measured & Indicated Resources, inclusive of Mineral Reserves, and Inferred Resources), ranked on contained copper in Measured & Indicated Resources.

# Kamoa-Kakula is the largest undeveloped copper deposit in the world

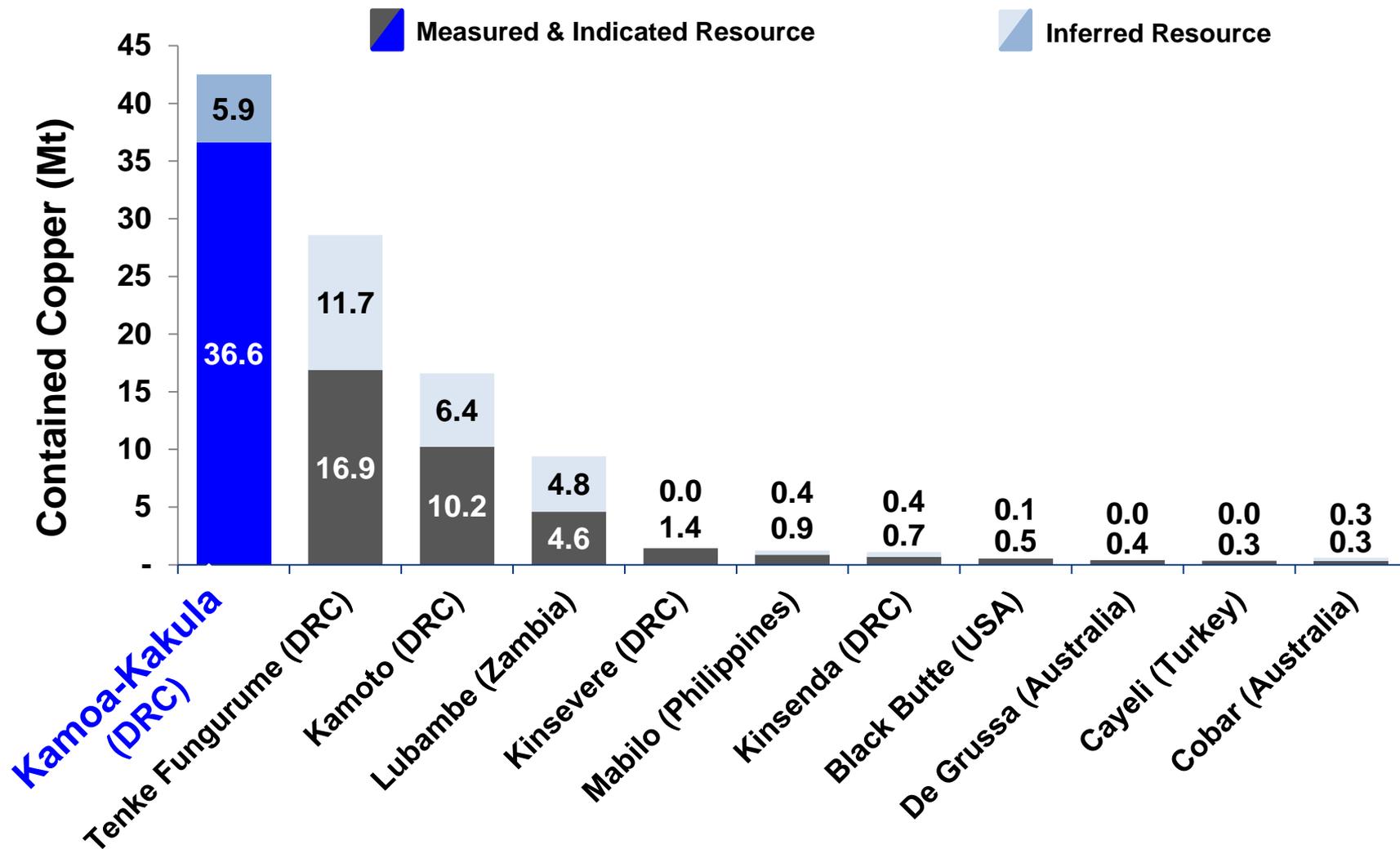


Source: Wood Mackenzie

\*Note: Contained copper in undeveloped deposits (Measured & Indicated Resources, inclusive of Mineral Reserves, and Inferred Resources), ranked on contained copper in Measured & Indicated Resources.

# Kamoa-Kakula is the largest high-grade copper deposit in the world

**KAMOA-KAKULA**

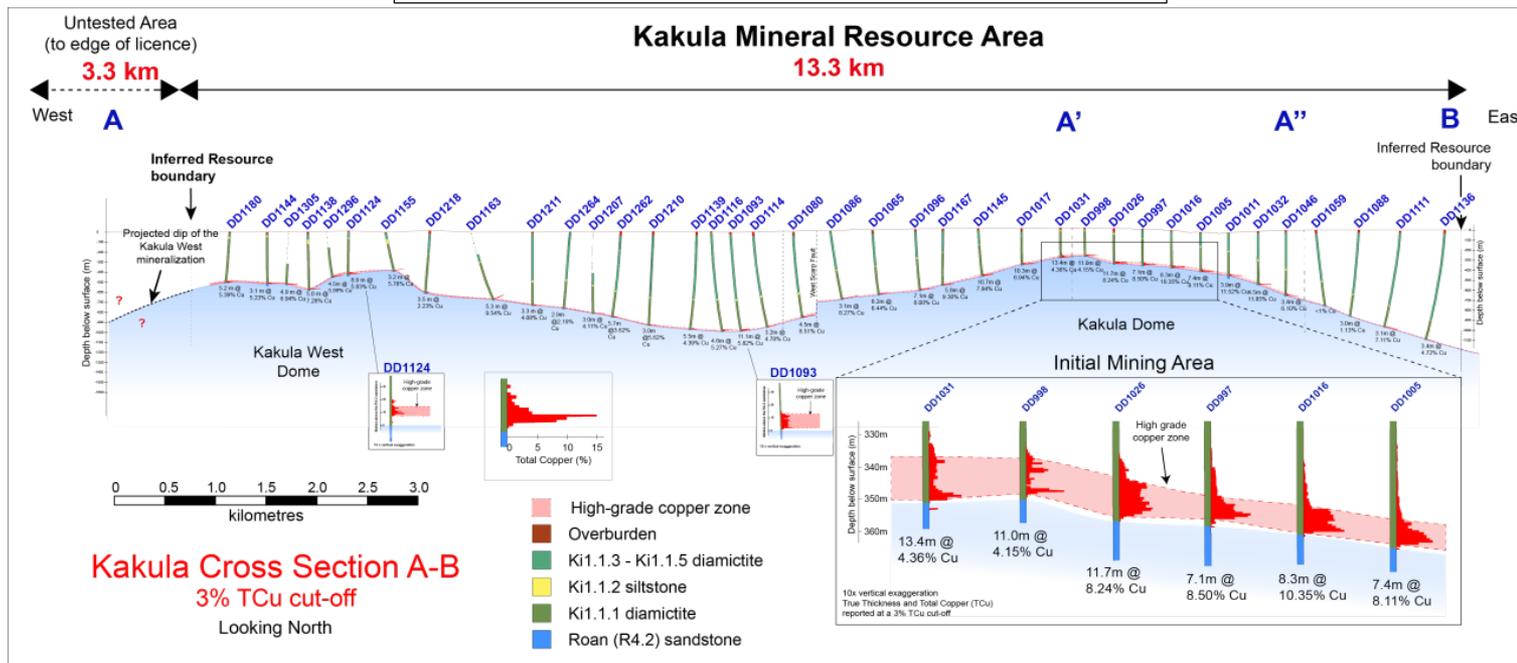
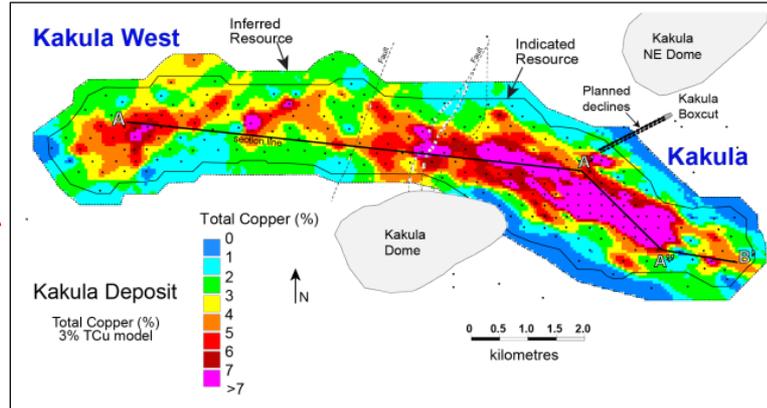


Source: Wood Mackenzie

\*Note: Contained copper in high-grade deposits (Measured & Indicated Resources, inclusive of Mineral Reserves, and Inferred Resources), with grades above 2.5% copper.

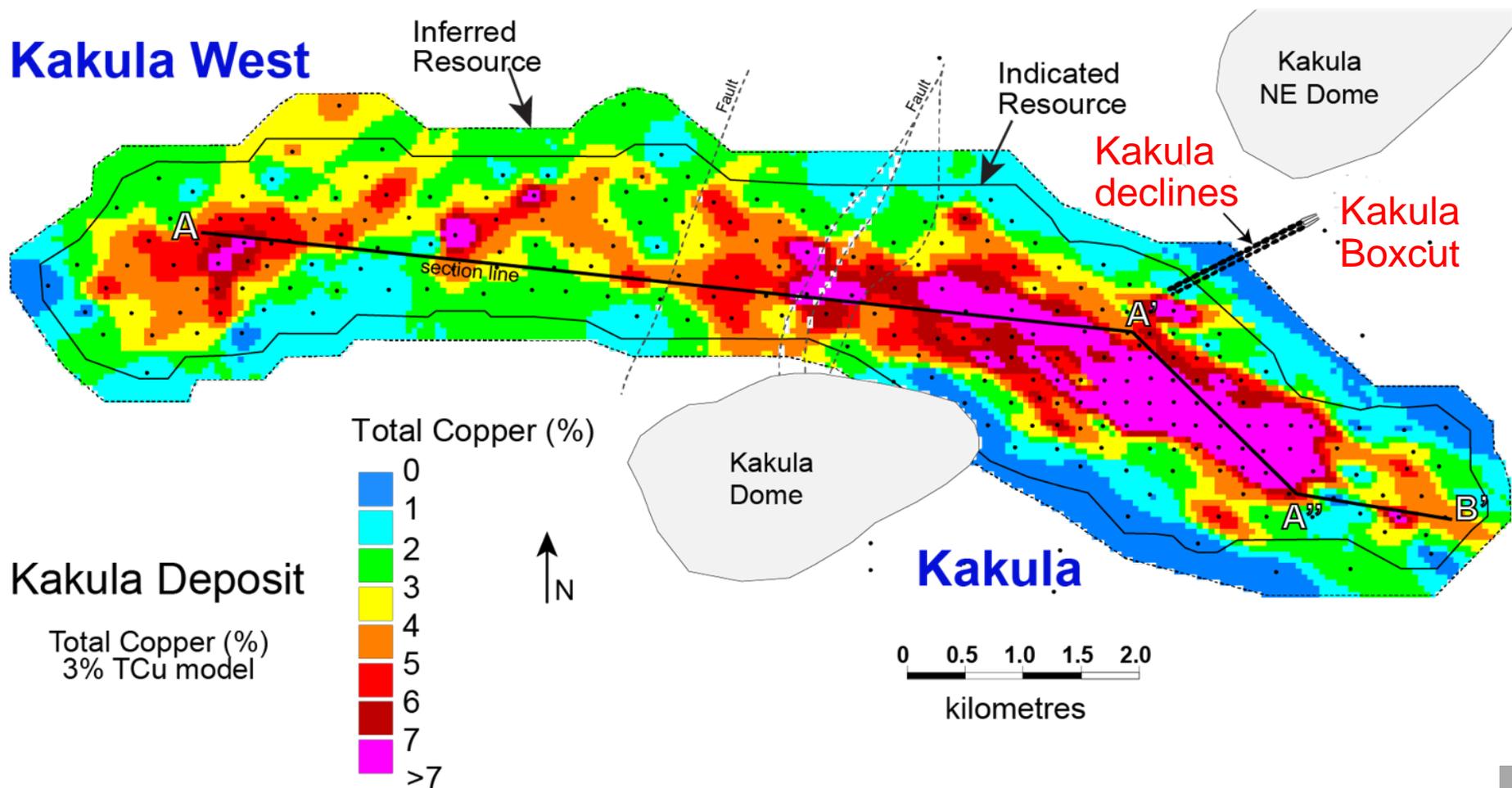
# Extent of Kakula / Kakula West Discovery

KAMOJA-KAKULA

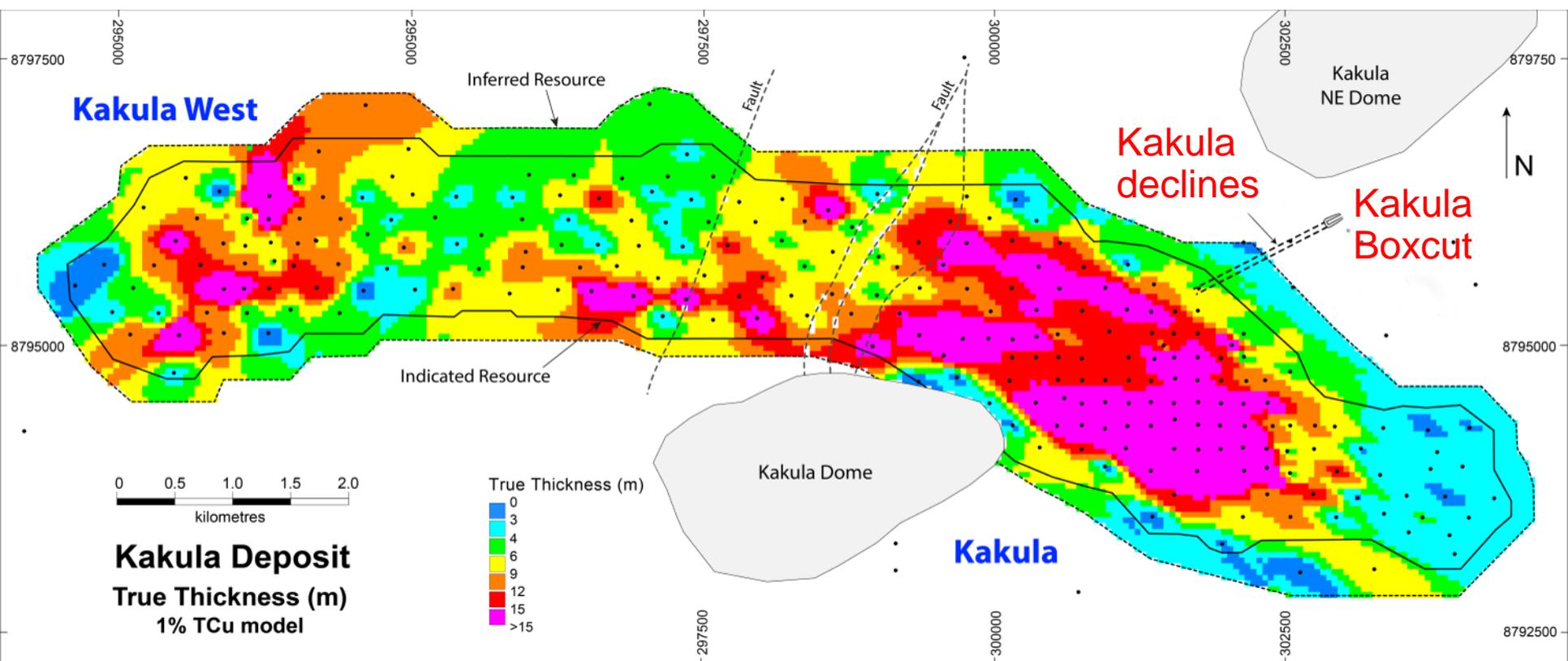


**Kakula West discovery extends known mineralization to more than 13 km – and remains open.**

# Kakula and Kakula West discovery areas showing grades of Indicated and Inferred Mineral Resource blocks at a 3% copper cut-off



# Kakula and Kakula West discovery areas showing the thickness of Indicated and Inferred Mineral Resource blocks at a 1% copper cut-off



# Development options

*Up to three mines, each 6 million tonnes a year, with central concentrator! That would be 18 million tonnes of ore each year!*

1. **Kakula mining area – being fast-tracked to production with capacity of 6 million tonnes of ore per year (Mtpa).**
2. **Kansoko mining area (at Kamoia) – development ready, also with capacity of 6 Mtpa.**
3. **Kakula West and Kamoia North – potential additional mining areas.**



*Underground roadway to Kakula's riches*

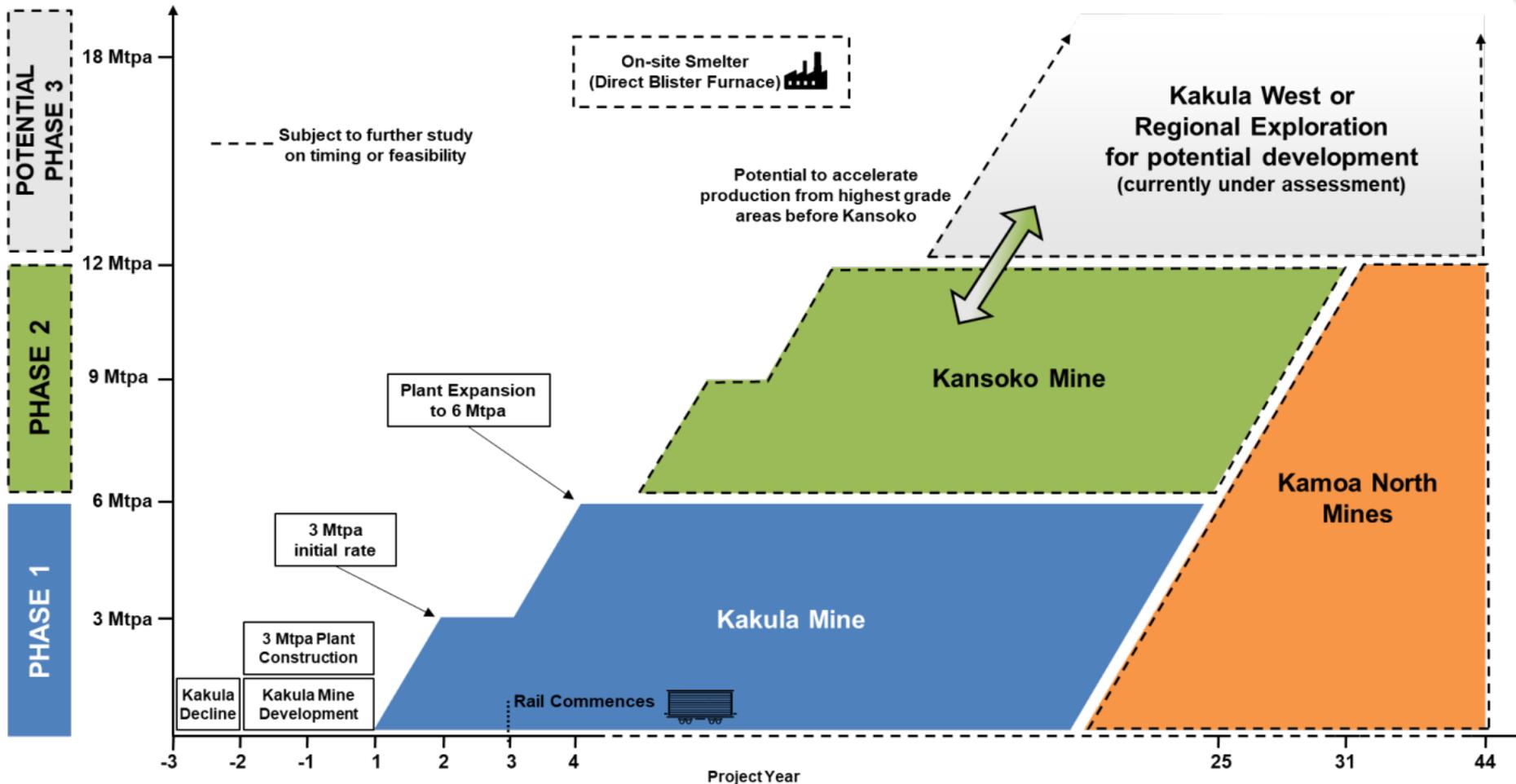
June 2018: underground development at Kakula  
now totals **more than 1,500 metres**

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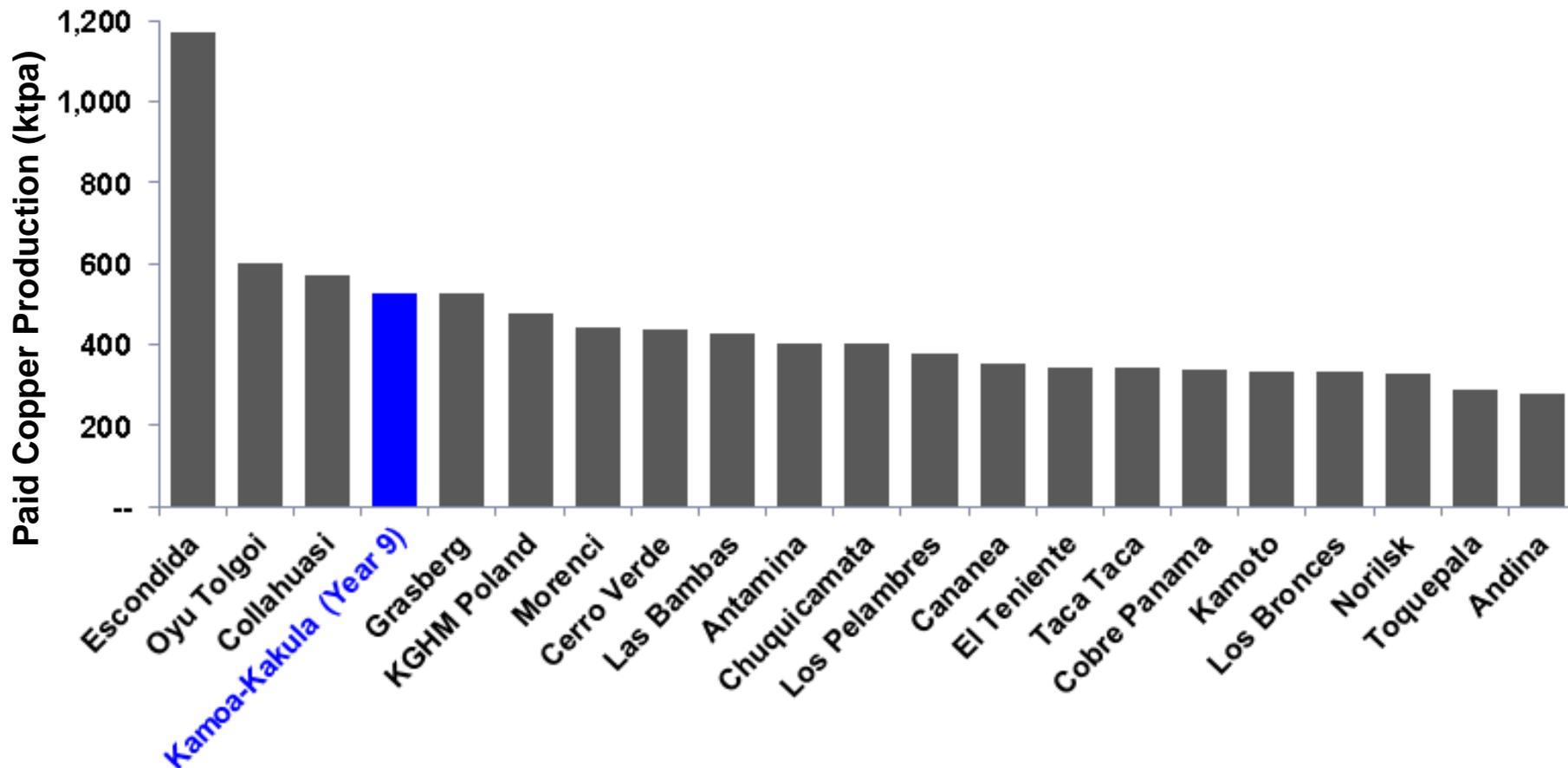
KAMO-A-  
KAKULA



# Kamoa-Kakula PEA long-term development plan

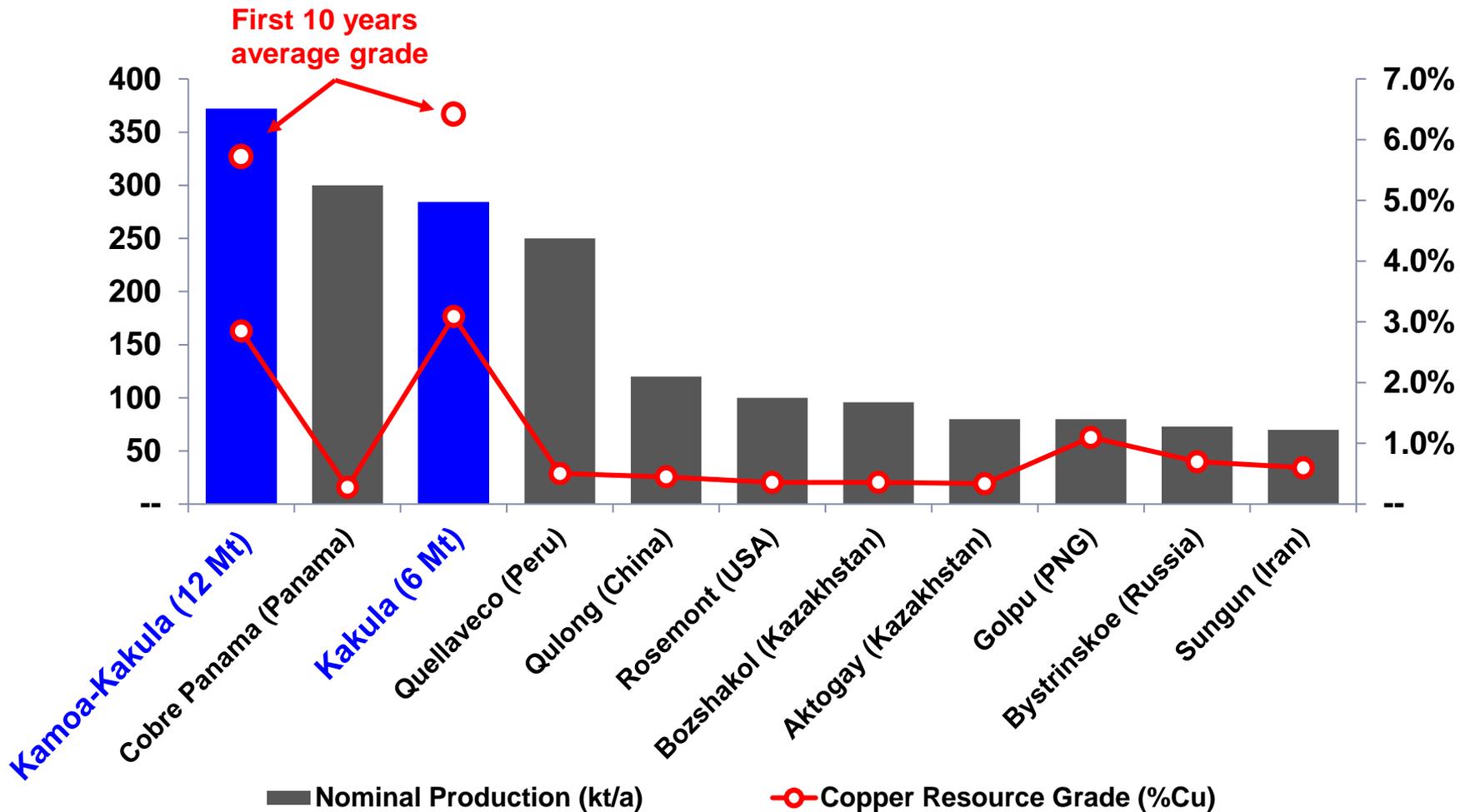


# 2025 top 20 producing mines by paid copper production



Note: Kamo-Kakula production based on projected peak copper production (which occurs in year nine) of the 12 Mtpa development plan for the Kamo-Kakula Project as detailed in the Kakula 2017 PEA. Source: Wood Mackenzie (based on public disclosure, the Kakula 2017 PEA has not been reviewed by Wood Mackenzie).

# Top 10 largest new greenfield projects (Nominal production and head grade)



Note: Top 10 largest new greenfield copper projects defined as the 10 largest greenfield copper projects classified as “base case” or “probable” and ranked by nominal copper production (with Kamo-Kakula’s first ten years’ average annual production of copper in concentrate considered to be its nominal copper production). Source: Wood Mackenzie, USGS (based on public disclosure, the Kakula 2017 PEA has not been reviewed by Wood Mackenzie).

# Exploration drilling is continuing to extend the northwestern limits of the Kakula West discovery

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KAMOA-KAKULA



# High-grade drill core containing massive chalcocite (copper mineralization) from a new drill hole at Kakula

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*Above:* Recent Kakula drill core showing massive chalcopyrite mineralization within a carbonate vein.

*Below:* Massive and bedded chalcocite within siltstone.



Chickens and eggs are among successes of the Kamoia-Kakula Sustainable Livelihoods Project, contributing to prospering economies in 14 communities near Ivanhoe's DRC projects.

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# Farmers at a local community maize field – another initiative of the Kamoia-Kakula Sustainable Livelihoods Project

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# Mwadingusha hydroelectric plant upgrade

- Mwadingusha is the first of three hydroelectric power plants in the DRC being upgraded by Ivanhoe, Zijin and SNEL to secure a supply of **clean, sustainable electricity for the development of Kamoa-Kakula.**
- Its output has tripled, to 32 megawatts (MW), and should be fully restored to its 71 MW capacity by the end of 2019.
- The Mwadingusha, Koni and Nzilo 1 plants will have combined, installed capacity of approximately **200 MW** for the national grid.

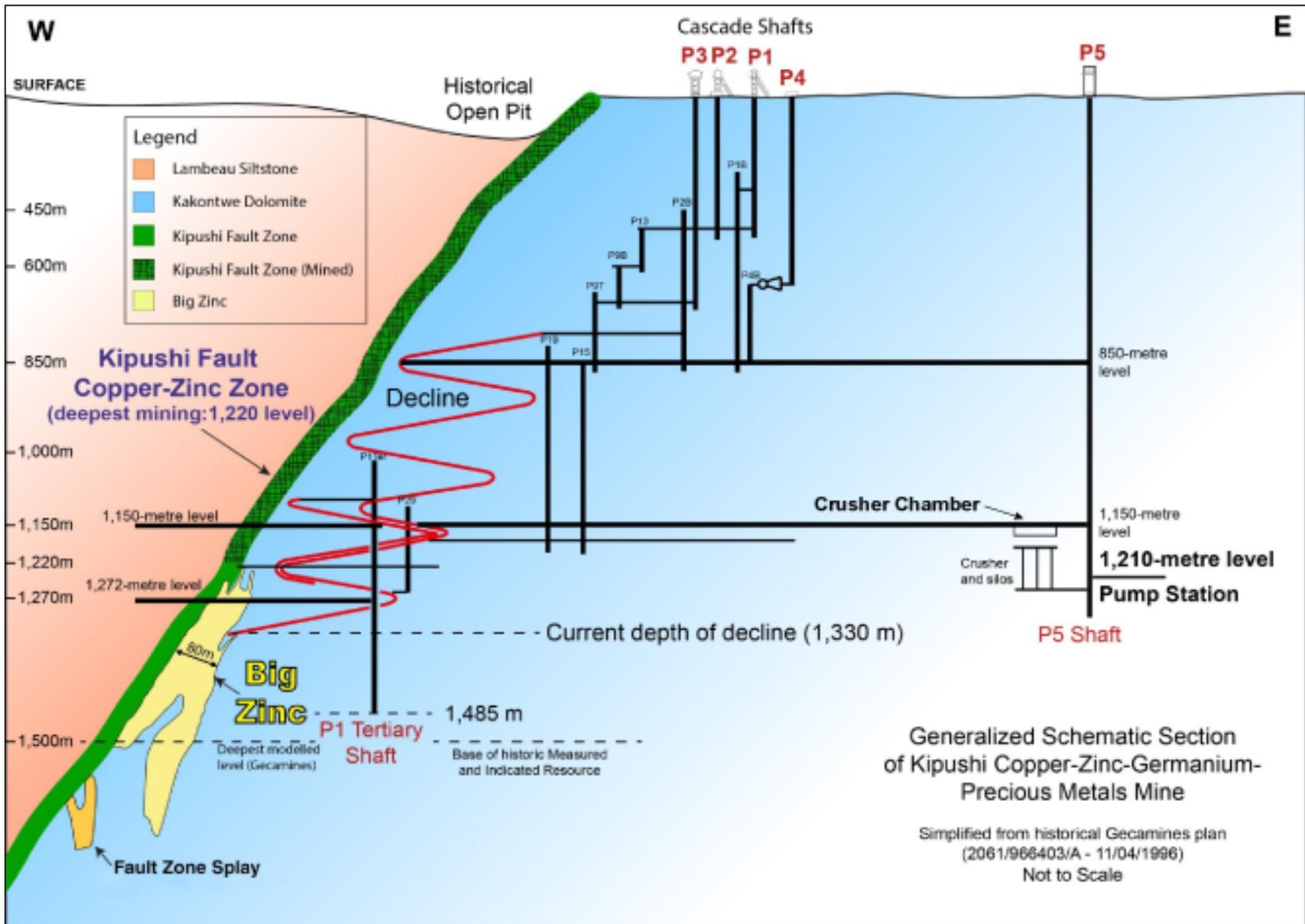




# Kipushi Mine upgrading and exploration for a new era

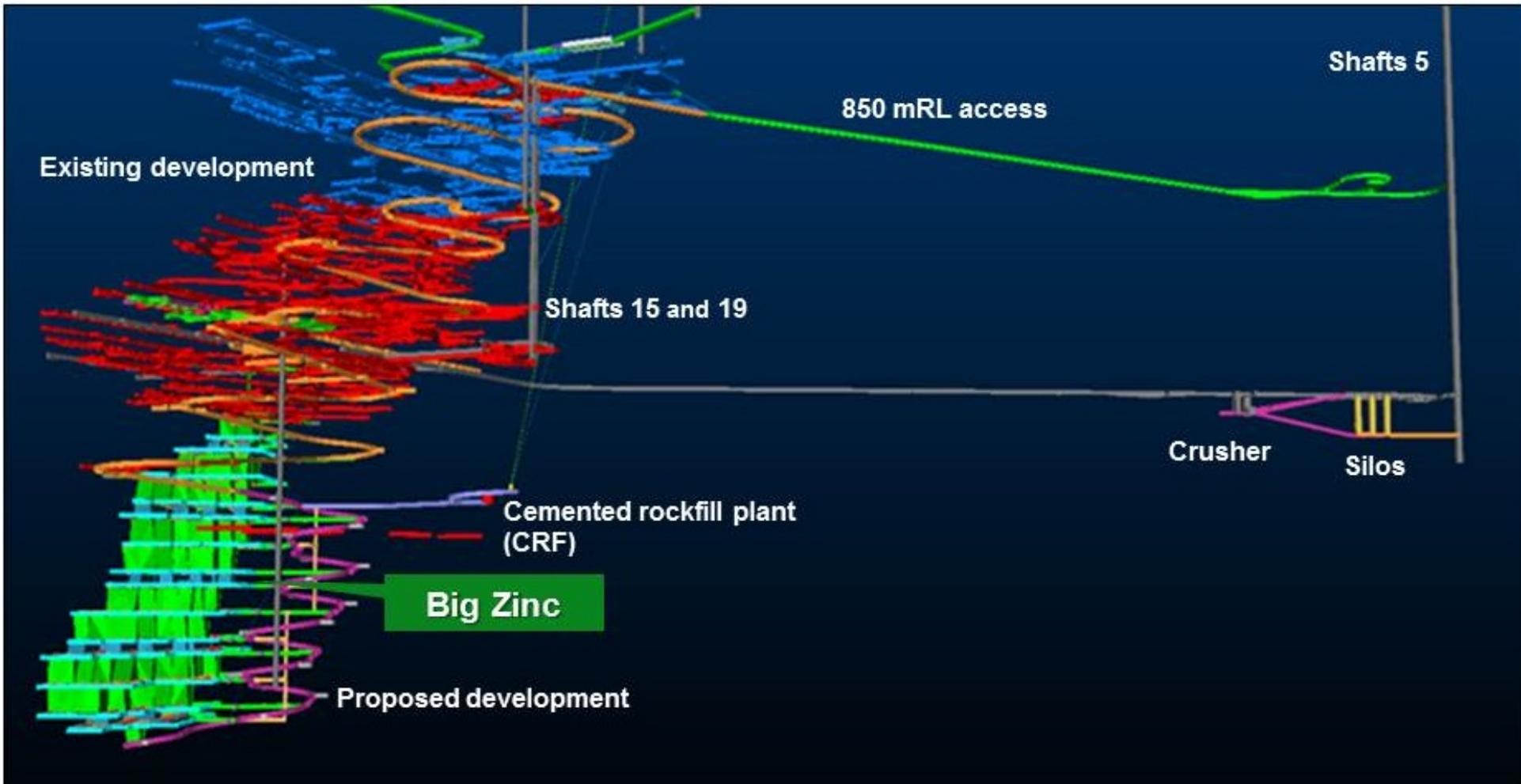
Democratic Republic  
of Congo

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- Kipushi Fault Zone was mined 1924-1993 to approx. 1,150-metre level.
- Big Zinc discovered prior to 1993 closure; never mined.

# Planned and existing development at Kipushi

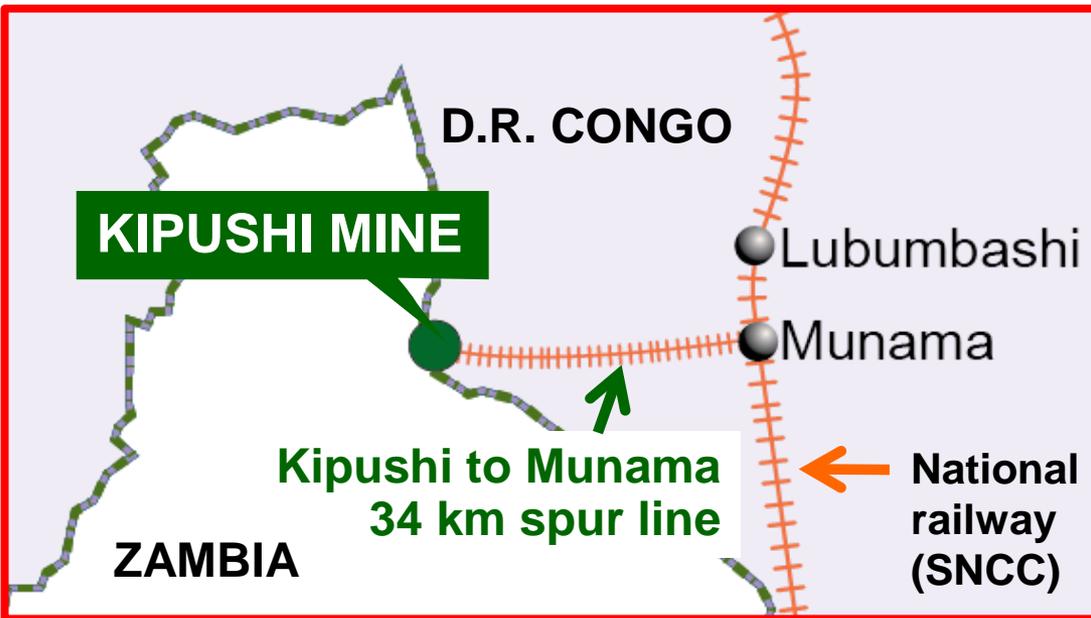


# December 13, 2017: Ivanhoe announced a pre-feasibility study for the rebirth of the historic Kipushi zinc-copper-silver-germanium mine

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The planned return to production would establish Kipushi as the world's highest-grade major zinc mine.





Construction could start later this year on the rebuilding of the 34-kilometre Kipushi spur railway line to connect with the DRC's national railway at Munama, south of Lubumbashi. The Kipushi line, which has been inactive since 2011, could be used to export Kipushi production.



Ivanhoe signed an MOU with the national railway, Société Nationale des Chemins de Fer du Congo (SNCC), in October 2017 to finance the rebuilding.

◀ Representatives of SNCC and Ivanhoe's Kipushi team at Munama railway station.

# Main-frame component for rock crusher secured on base plate 1,150 metres underground, ready for reassembly and commissioning

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# Upgraded 1,150-metre-level ore conveyor belt at the historic, high-grade Kipushi zinc-copper-lead-germanium mine

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# Control-room operators at Kipushi's Shaft 5



***Know for Sure*** initiative has equipped 252 health facilities with electronic DekiReaders for automated malaria testing and trained more than 600 healthcare workers. It is sponsored by Ivanhoe Mines and Zijin Mining, in collaboration with FioCorporation, of Toronto, and the DRC Ministry of Health.

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# Community adult literacy program at Kipushi, sponsored by Ivanhoe Mines and implemented in partnership with AlfaCongo

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Thank you.

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