



Resolute

ASX Announcement

14 December 2018

Sublevel Caving success at Syama

Underground Sublevel Cave now operational

Project Delivered on time and on budget

Highlights

- Sublevel cave mining commences on budget and as scheduled in December 2018
- First production ring fired on the 1105 level
- Commissioning of fully autonomous fleet to commence in January 2019
- Ramp-up to full production rate of 2.4Mtpa targeted for June 2019

Resolute Mining Limited (Resolute or the Company) (ASX:RSG) is pleased to announce the successful commencement of sublevel cave ore production from the new Syama Underground Mine in Mali, West Africa.

The extraction of first ore from the southern end of the 1105 level of the Syama sublevel cave marks the greatly anticipated beginning of the main caving operation at the Syama Underground Mine and the achievement of a major milestone for the Company.

Resolute's Managing Director and CEO, Mr John Welborn, was delighted to be on-site at Syama for the commencement of the new sublevel cave underground mine:

"The successful development of the Syama Underground Mine represents a pivotal moment in the long history of Resolute. Syama will be the world's first, purpose built, fully automated sublevel cave gold mine. It is a world class, long life, low cost asset that will deliver long term benefits to our shareholders, stakeholders, and local Mali communities for years to come."

"Syama will be the most sophisticated and advanced gold mine in Africa. Our investment in exploration, infrastructure, technology, power, and innovation at Syama has transformed a world class orebody into a world class mine. Resolute has an ambition to be a leader in sustainable and responsible economic growth in Africa. We recently announced plans to build a new 40 MW Syama Solar Hybrid Power Plant which will deliver an expected 40% savings on power costs and is expected to be the world's largest mine based, off-grid fully integrated independent solar hybrid power plant.

"The commissioning of Project 85, a series of sulphide processing plant upgrades, will enable us to achieve improved recoveries from high-grade ore sourced from the new sublevel cave.

"The combination of mine automation, improved recoveries, and lower cost power has the potential to increase Syama site production to 300,000 ounces of gold per annum and reduce Life-of-Mine All-In Sustaining Costs to below US\$750 per ounce.

"The Syama Underground Mine is an achievement that builds Resolute's African development expertise demonstrated in earlier successes at Obotan and Golden Pride. The new mine also builds on the Company's underground technical achievements demonstrated in pioneering the sublevel shrinkage mining method at the



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Mount Wright Underground Mine in Ravenswood, Queensland.

“I congratulate and applaud the Resolute team who have worked tirelessly to deliver the Syama Underground Mine from development to production on time and on budget.”

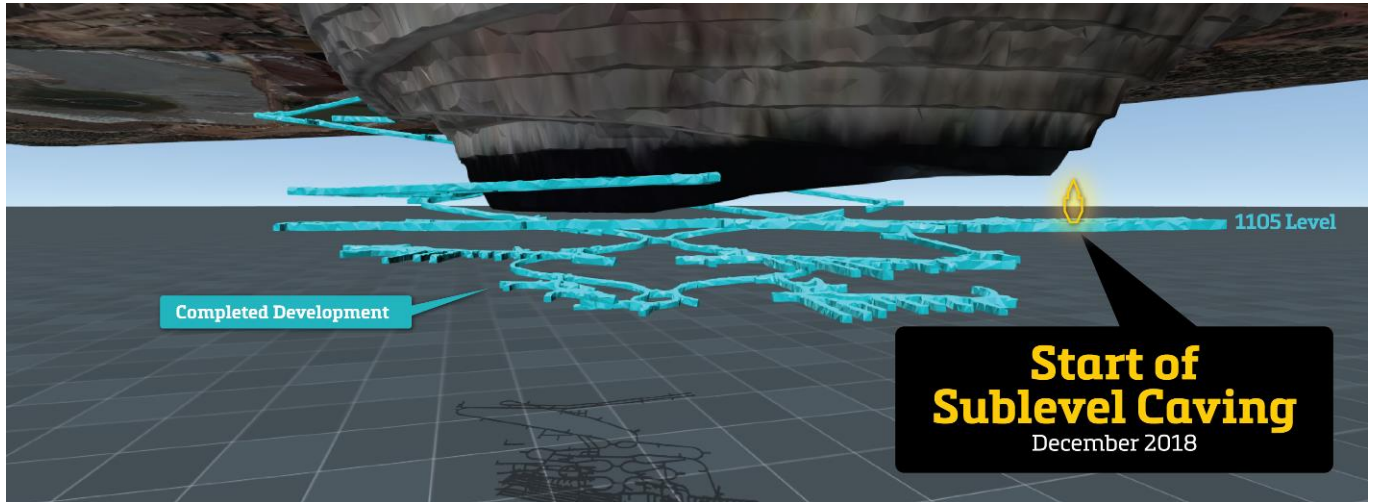


Figure 1: 3D model of Syama Sublevel Cave showing location of first blast on level 1105

Background

In July 2018, Resolute announced a Feasibility Study update for the Syama Underground Mine based on an Ore Reserve of 3.0 million ounces of gold which delivered Life-of-Mine All-In Sustaining Costs of US\$746 per ounce (see ASX Announcement dated 3 July 2018).

Development of the mine began in October 2016. First development ore was delivered during the March 2017 quarter and first long-hole stopping ore was produced during the September 2018 quarter.

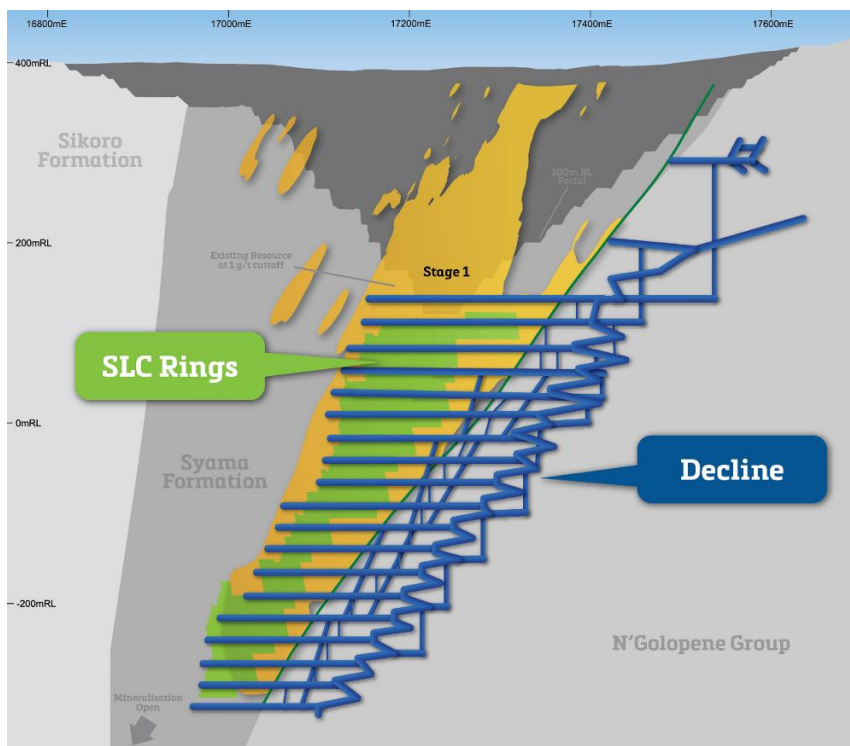


Figure 2: Cross section of Syama ore body showing sublevel, cave ring and decline layouts



Timeline

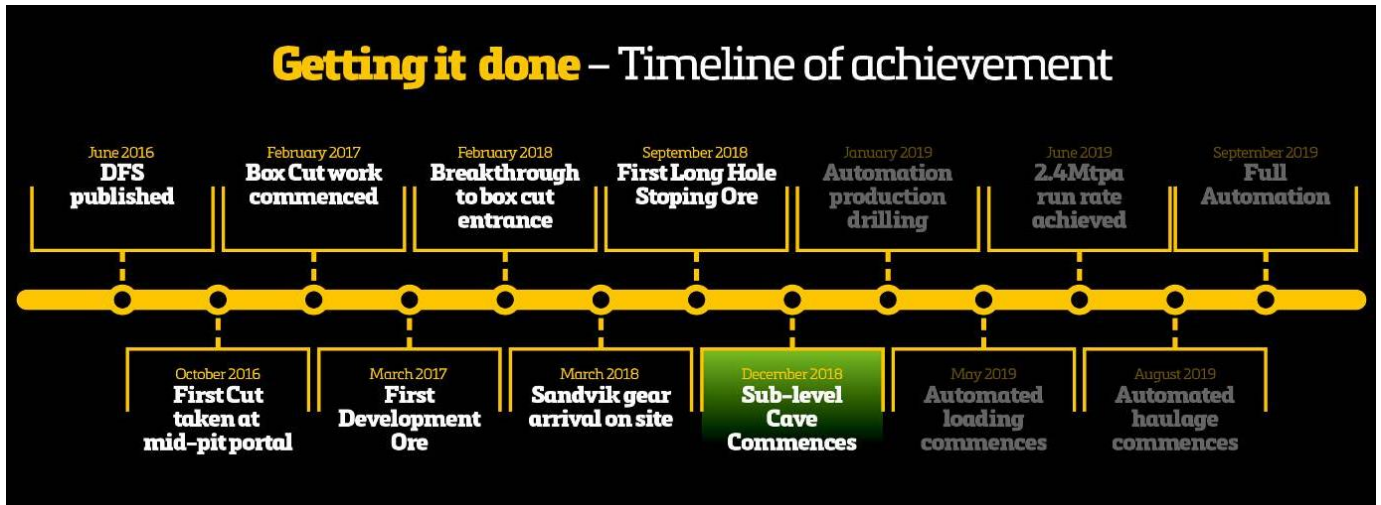


Figure 3: Getting it done – Timeline of achievement for the Syama Underground Mine

Development

The initial development of the sublevel cave infrastructure including the twin declines and access to the first four sublevel levels of the cave, the 1130, 1105, 1080 and 1055 sub levels, has been established.

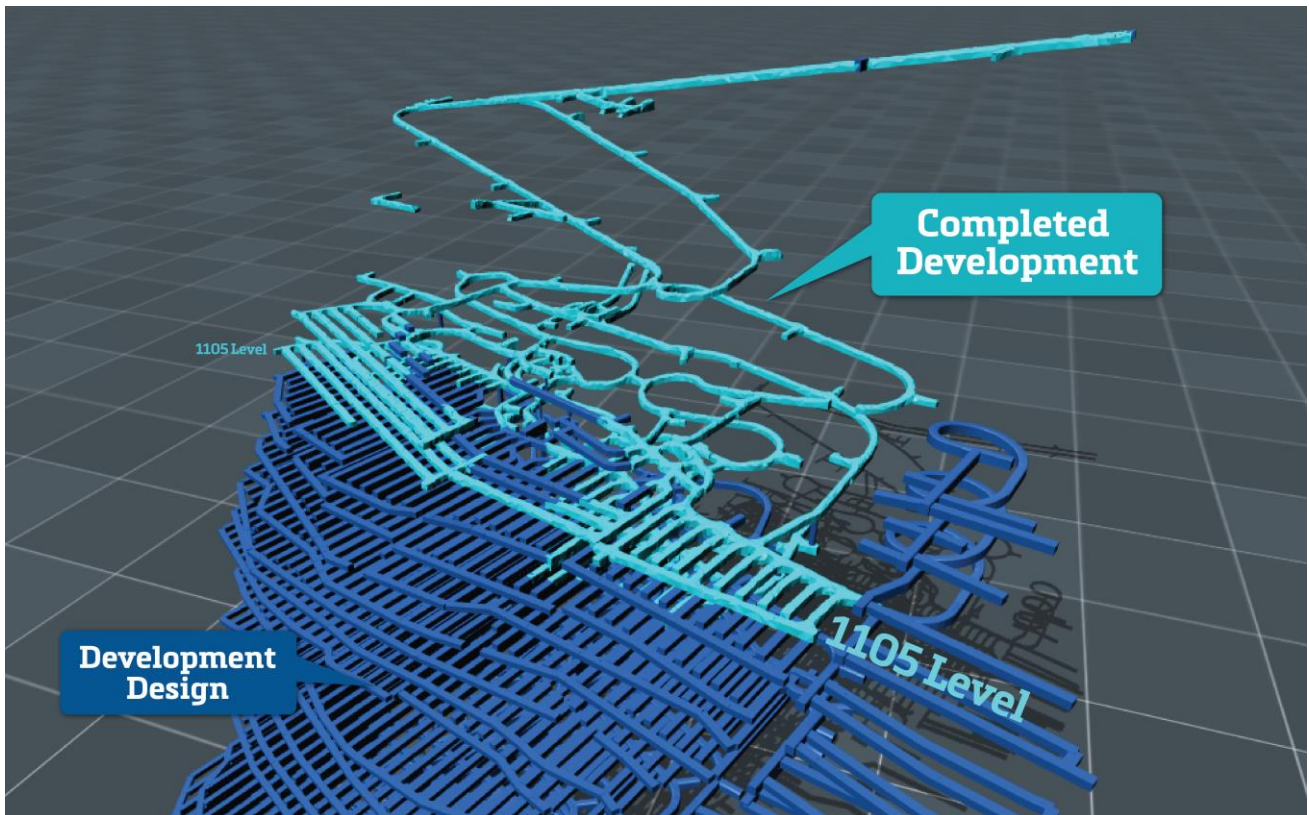


Figure 4: 3D model of Syama Underground Mine development design and progress to date

The work completed to enable the sublevel cave to commence includes:

- ✓ 15 km of decline, level, and vertical development;
- ✓ extraction of ~1.5Mt of waste and development ore;
- ✓ fan, pump, and ventilation infrastructure;



- ✓ operational control procedures and controls;
- ✓ safety systems;
- ✓ ground control management;
- ✓ geotechnical and cave modelling;
- ✓ completion of the box cut;
- ✓ completion of the twin declines to the 1055 level; and
- ✓ development of four sublevel cave production levels (1130, 1105, 1080, and 1055).

Approximately 400,000 tonnes of development and long hole stoping ore have been extracted from the underground mine to date. Mining rates will gradually build up over the first half of 2019 and are expected to reach nameplate capacity of 200,000t tonnes per month by the end of June 2019.

Sublevel Cave

Sublevel caving is an advanced and highly efficient low-cost bulk underground mining method that provides early access to ore. Mining commences at the top of the deposit and develops downwards. Ore is mined from sublevels spaced at regular intervals throughout the deposit. A series of ring patterns are drilled and blasted from each sublevel, and broken ore is extracted out after each blast. Sublevel caving comprises a series of repetitive activities and is ideally suited to automation.

Syama is well suited to the sublevel caving mining method because of its scale, width, orientation, and uniformity of grade. Unlike other bottom-up caving methods (block cave, panel cave) sublevel cave mining is a top-down method and therefore does not require large initial investments in mining infrastructure prior to commencement.

The Syama sublevel cave commenced on the 1105 level with the firing of the first production ring. Production drilling continues in the 1105, 1130 and 1200 levels as the Syama Underground Mine advances towards the targeted full production rate of 2.4Mtpa.



Figure 5: Oblique view of production draw point showing typical ring design



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Automation

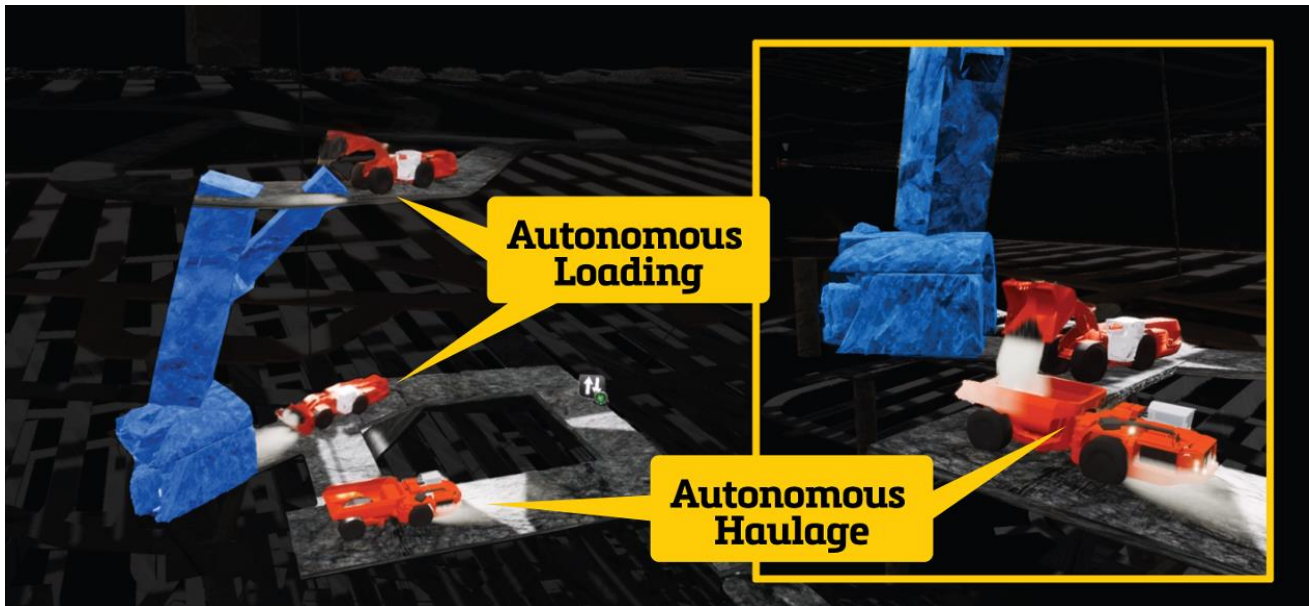


Figure 6: 3D visualisation of automated loading and haulage

The automation of the Syama Underground Mine is a key driver of lower costs. The installation of infrastructure to support fully autonomous mining continues as development areas are completed and become accessible. Trials conducted by Sandvik have confirmed the ability of automated trucks to switch from underground laser positioning to GPS guidance on the surface to allow fully autonomous delivery of ore from the mine to the mill.

Having commenced production from the sublevel cave, work will now focus on commissioning of the automation fleet. When fully commissioned the autonomous mining operation will comprise:

- automated long hole production drilling;
- automated loading; and
- automated haulage from underground loading station to above ground ROM pad.

In addition to lowering costs, automation will increase safety and productivity at Syama and create and sustain numerous highly skilled jobs in Mali for the life of the mine.

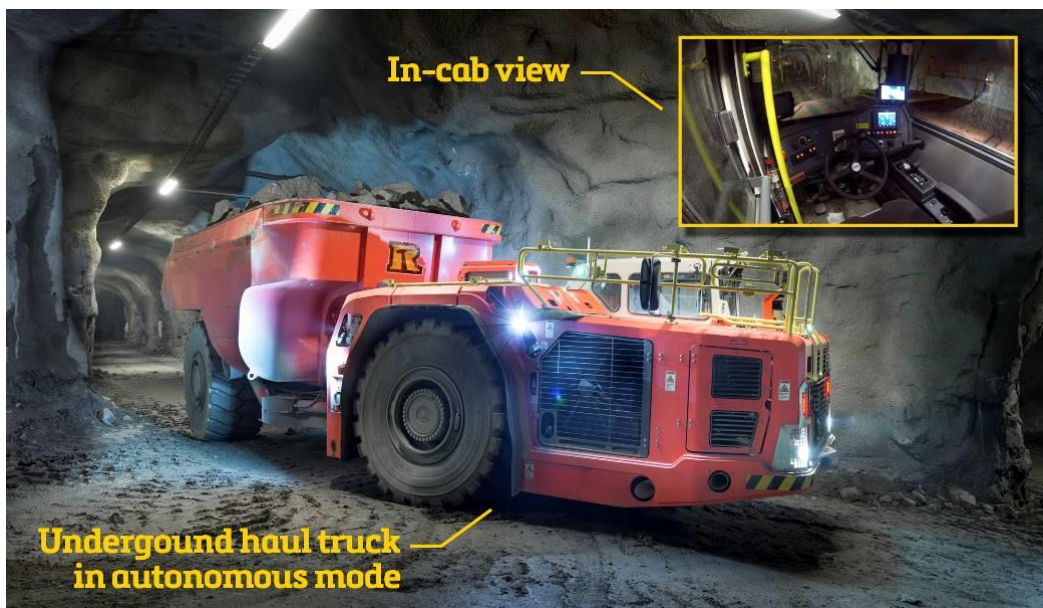


Figure 7: Underground haul truck in autonomous mode



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Next Steps

Sublevel caving will continue at the 1105 level and additional production areas will be established on the 1130 and 1080 sublevels. Ore production is expected to achieve the full production rate of 2.4Mtpa by June 2019.

Syama Underground Monthly Production (Tonnes)

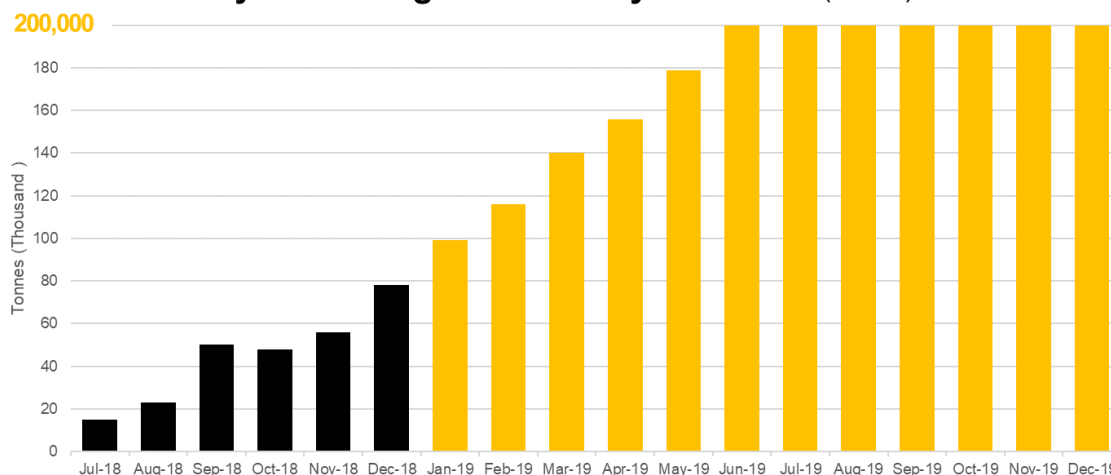


Figure 8: Syama Underground monthly production chart

Commissioning of Resolute’s fully autonomous fleet will commence in January 2019 beginning with automated long-hole drilling. Commissioning of autonomous loading of haul trucks is scheduled to commence in May 2019 and autonomous haulage will commence in August 2019.

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ASX:RSG Capital Summary

Fully Paid Ordinary Shares: 757,512,088
Current Share Price:
A\$1.07 as at 13 December 2018
Market Capitalisation:
A\$810 million
FY19 Guidance:
300,000oz @ AISC US\$960/oz (A\$1,280/ounces)

Board of Directors

Mr Martin Botha *Non-Executive Chairman*
Mr John Welborn *Managing Director & CEO*
Ms Yasmin Broughton *Non-Executive Director*
Mr Mark Potts *Non-Executive Director*
Ms Sabina Shugg *Non-Executive Director*
Mr Peter Sullivan *Non-Executive Director*

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About Resolute

Resolute is a successful gold miner with more than 28 years of experience as an explorer, developer, and operator of gold mines in Australia and Africa. The Company has operated nine gold mines which have produced more than 8 million ounces of gold. Resolute currently owns three gold mines, the Syama Gold Mine in Mali (Syama), the Ravenswood Gold Mine in Australia (Ravenswood) and the Bibiani Gold Mine in Ghana (Bibiani). For the financial year ending 30 June 2019, Resolute expects to produce 300,000 ounces of gold at an All-In Sustaining Cost of US\$960 per ounce (A\$1,280 per ounce). The Company has a pathway to annual gold production in excess of 500,000 ounces from a Global Mineral Resource base of 16.5 million ounces.

Syama is a world class, robust, long-life asset capable of producing more than 300,000 ounces of gold per annum from existing processing infrastructure. Resolute is currently developing the world's first fully automated underground gold mine at Syama which will deliver a low cost, large scale operation with a mine life beyond 2032.

Ravenswood has been consistent performer and an integral part of Resolute's business for more than a decade. The highly successful Mt Wright Underground Mine continues to produce as the Company transitions back to a large scale, low cost open pit mining operation which will extend the mine life to at least 2032.

Bibiani is a potential long life, high margin operation and represents a growth opportunity for Resolute.

Resolute is actively exploring over 5,300km² of potential world class tenure in Africa and Australia searching for opportunities to expand and improve the Company's operations. A portfolio of strategic investments in highly prospective, well managed African-focused gold exploration companies has been established to provide a pipeline of future development opportunities.

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