Resolute

Mine Gold. Create Value.

Presentation by Mr John Welborn, Managing Director & CEO

Austmine 2017 – Mining Innovation Conference, Perth, 22-24 May 2017

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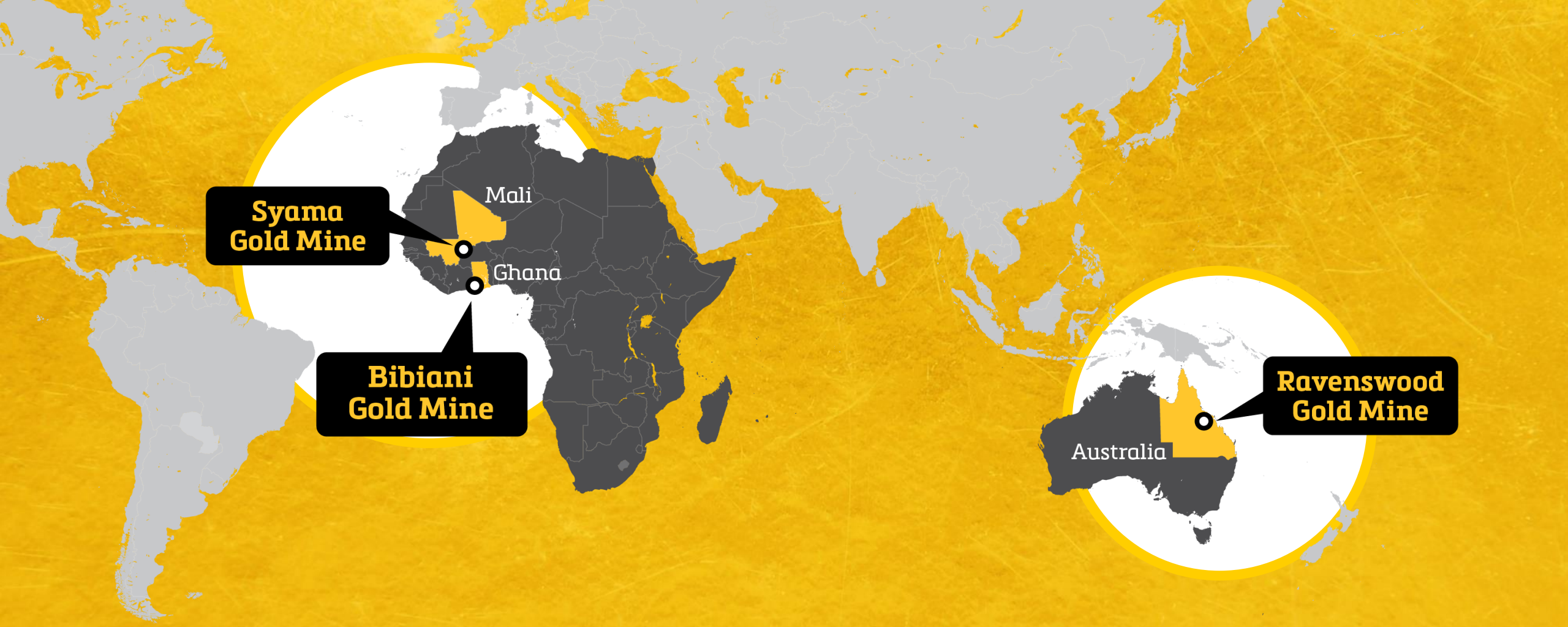

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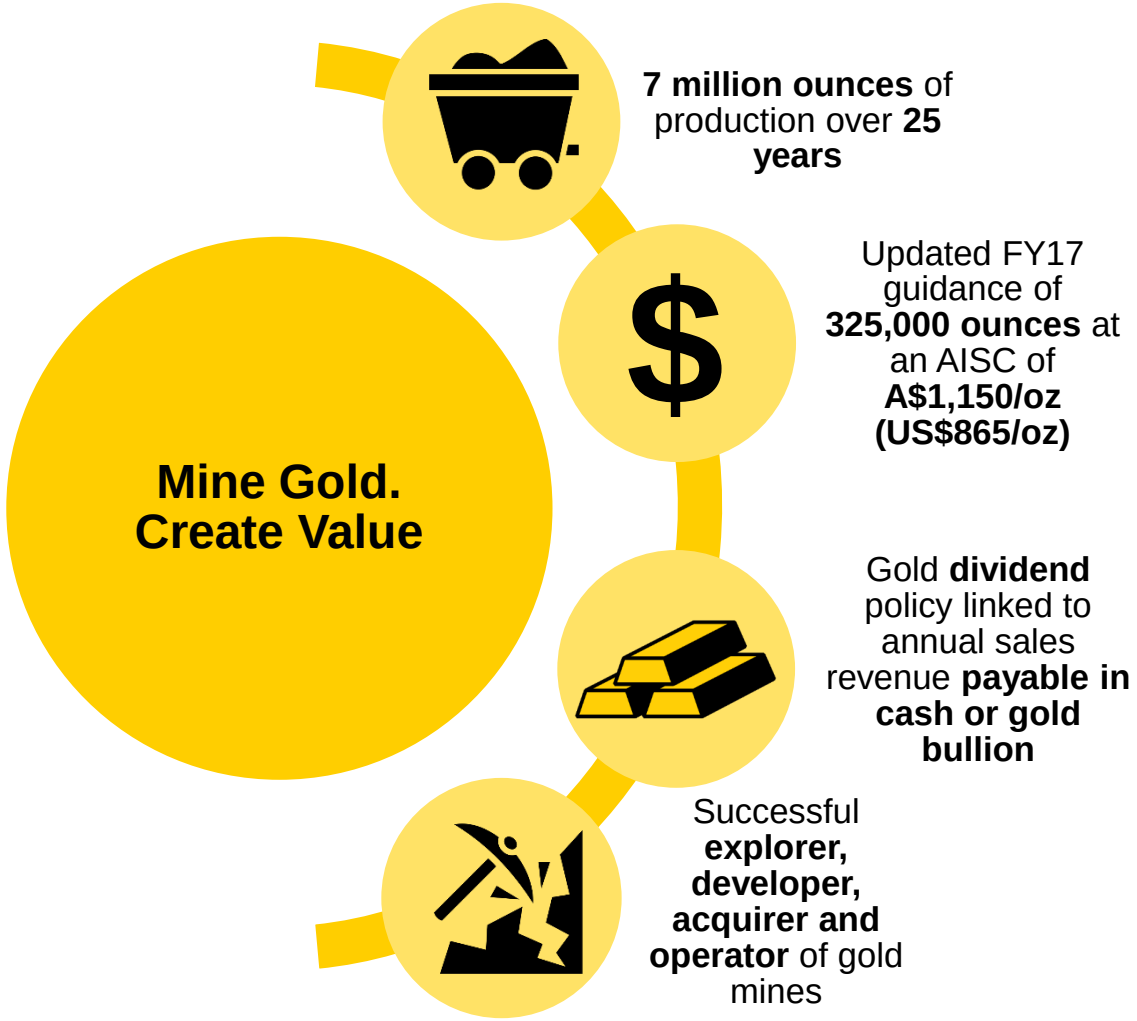
Mine Gold. Create Value.

Value creation through Innovation

Mining gold to create enduring value



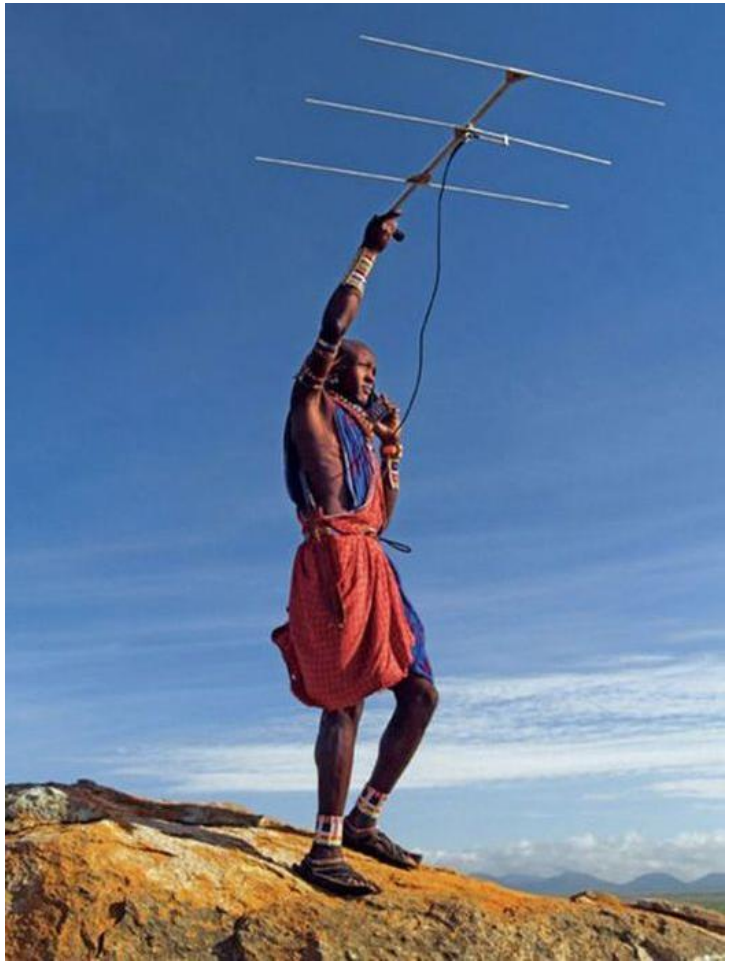
Value creation through innovation:

- Syama Underground Mine – 12 years producing up to **250,000ozpa @ AISC of US$881/oz**
- Ravenswood Expansion Project – 13 years producing up to **140,000ozpa @ AISC of US$880/oz**
- Bibiani Gold Mine – aiming for 10+ years mine life producing more than **100,000ozpa @ AISC of US$858/oz**

Innovation – A novelty?

Definition:
1. A new idea, device or method;

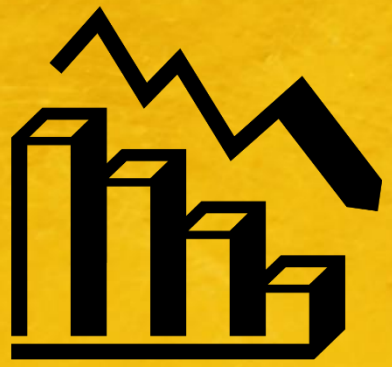
2. the adoption, assimilation, and exploitation of a value-added **novelty**; development of new methods of production; establishment of new systems that increase production, provide better safety, and lower costs. It is both a process and an outcome.



Mine Gold. Create Value.

Developing >10 year gold mines
Syama Underground and Ravenswood Expansion Project

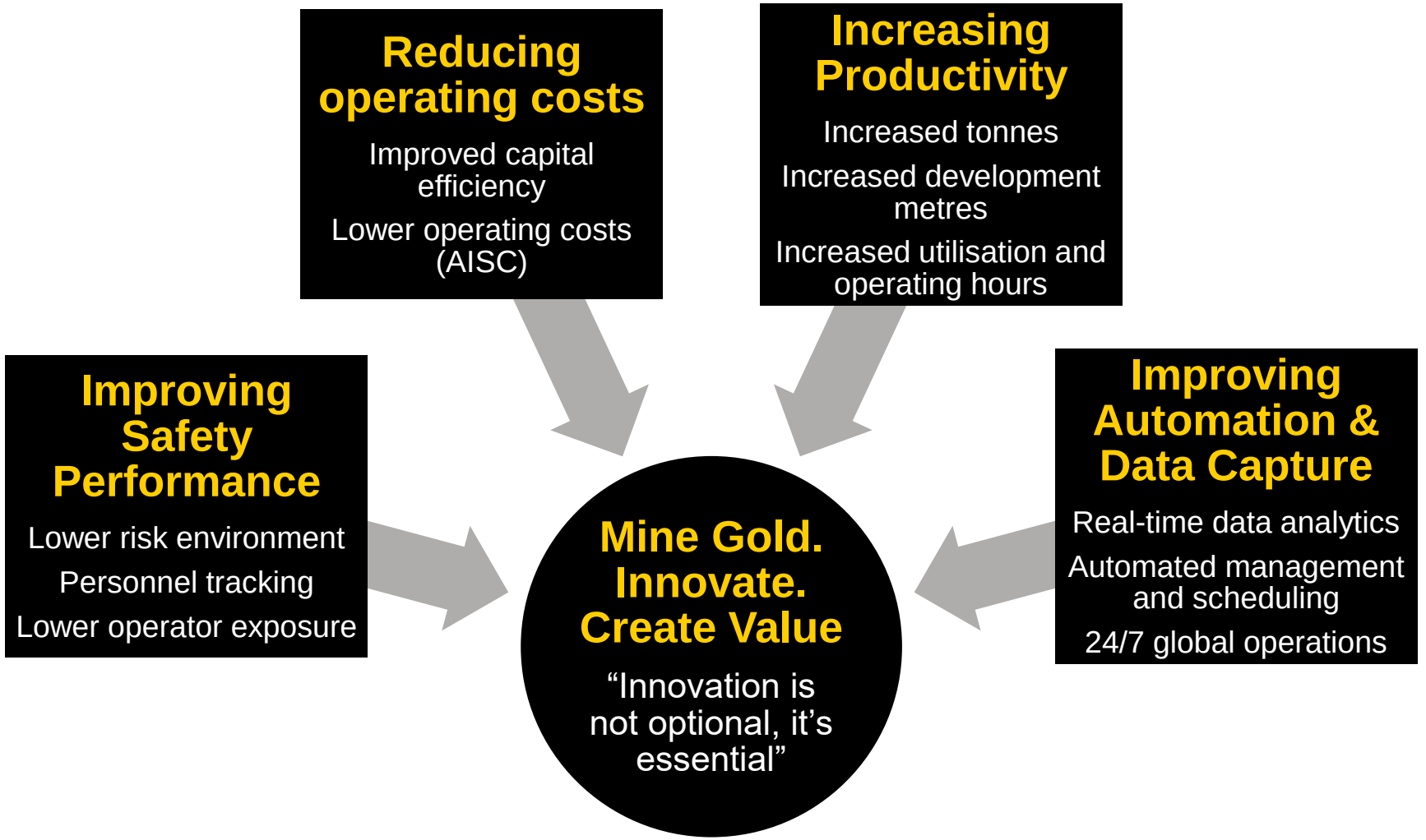
Exploration Success
Nafolo discovery at Syama
Bibiani drilling success



Reducing
All-In Sustaining Costs (AISC) through **innovation**

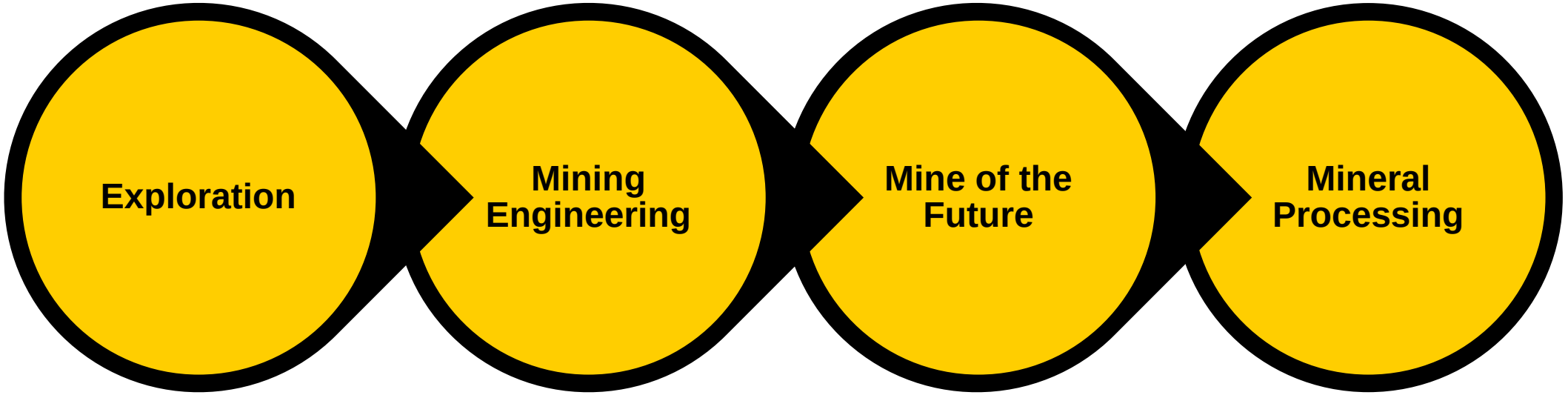
Robust **Cash, Bullion & Listed Investments**
A$291M (US$218M)

Mine Gold. Innovate. Create Value



Resolute value chain

Innovation is essential across the entire business



- Nafolo discovery
- Syama deeper drilling extensions
- Bibiani resource expansion

- Resolute pioneered the Sublevel Shrinkage mining method at Mt Wright
- Large-Scale Sublevel Caving at Syama
- Taking the learnings from Mt Wright to Africa

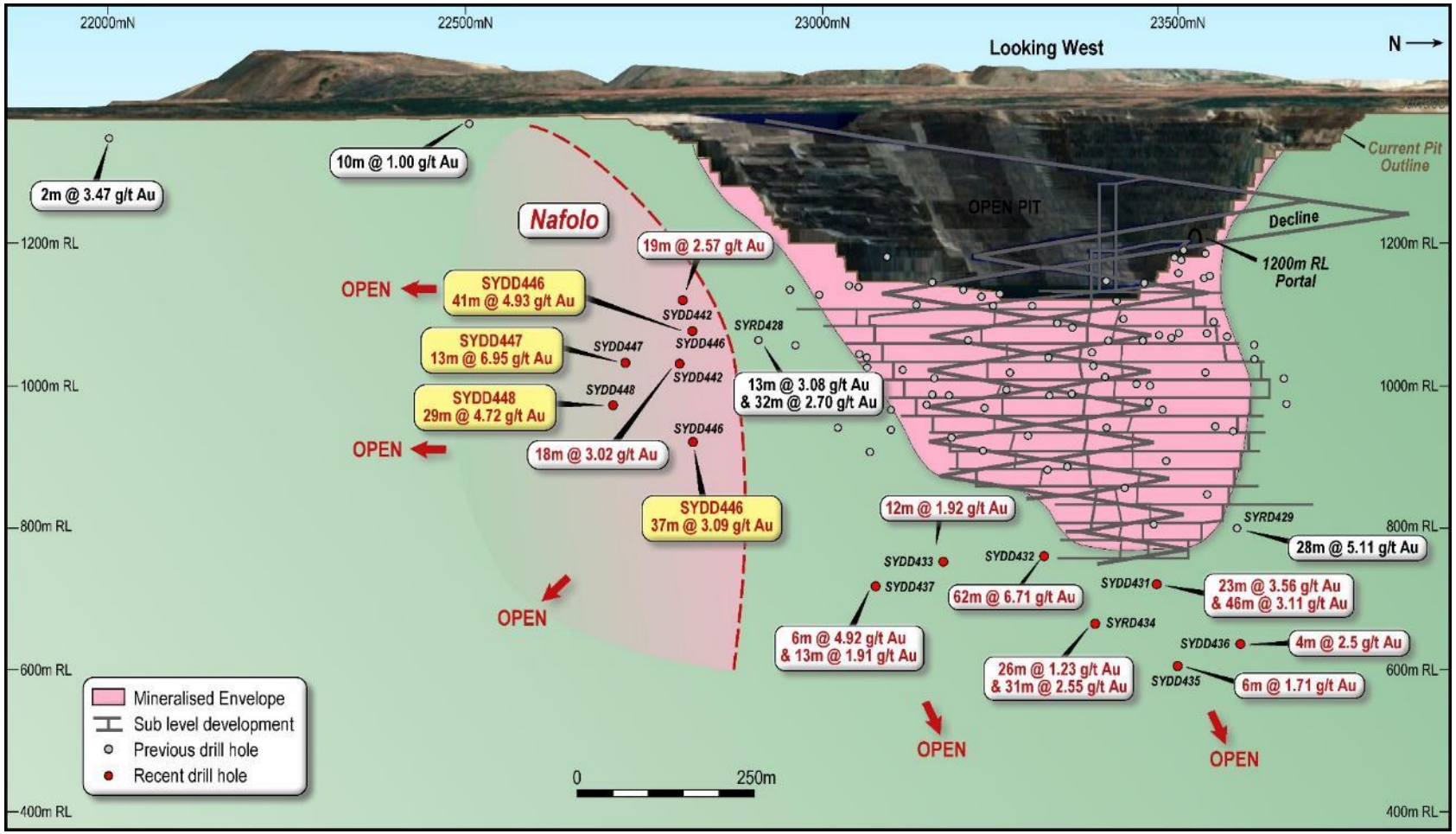
- Increased productivity, lower operating costs
- Improved safety
- 24/7 global operations
- Improved automation and data analytics

- Double refractory sulphide processing success
- Project 85
- Low Carbon Roast (LCR) technology

Exploration and innovation

Exploration is innovation

Nafolo…a game changing new discovery



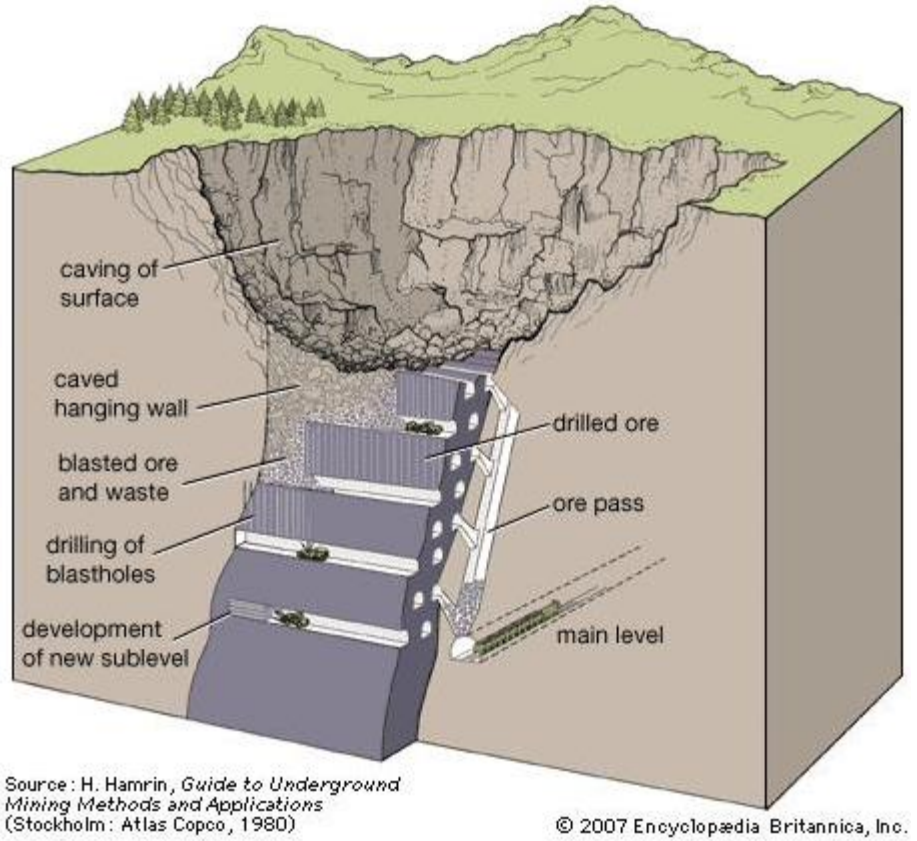
- Adjacent to 8Moz Syama Deposit
- Untested along strike and at depth
- Potential to transform Syama operation

Mining and innovation

Sublevel Cave Mining

A highly efficient, top-down, bulk mining method

- Controlled, high-productivity ore delivery
- Highly mechanised / amenable to automation
- Low up-front capex
- Early access to ore without leaving a crown pillar below the open pit
- A flexible method with ability to adapt cut-off grades depending on economic inputs
- Minimal production and scheduling requirements



Mt Wright Sublevel Shrinkage Mining

Innovation in bulk underground mining engineering

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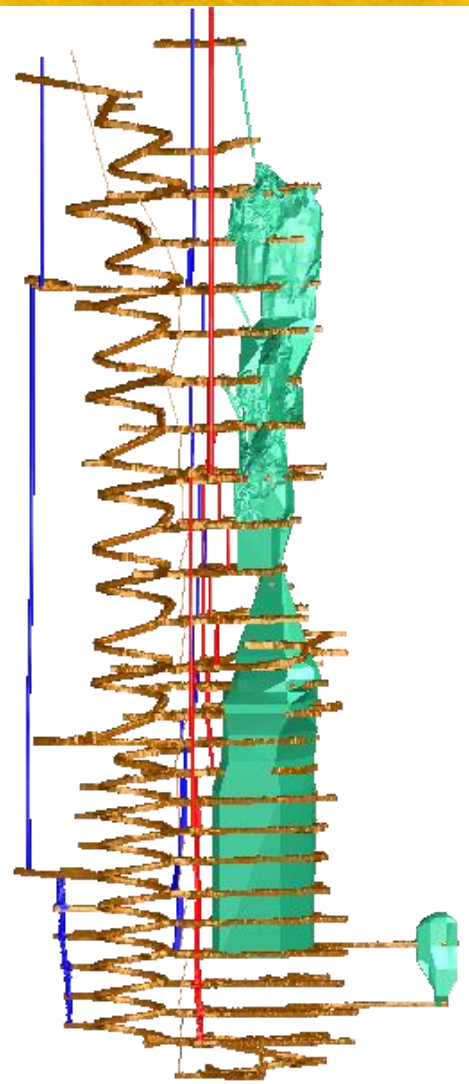
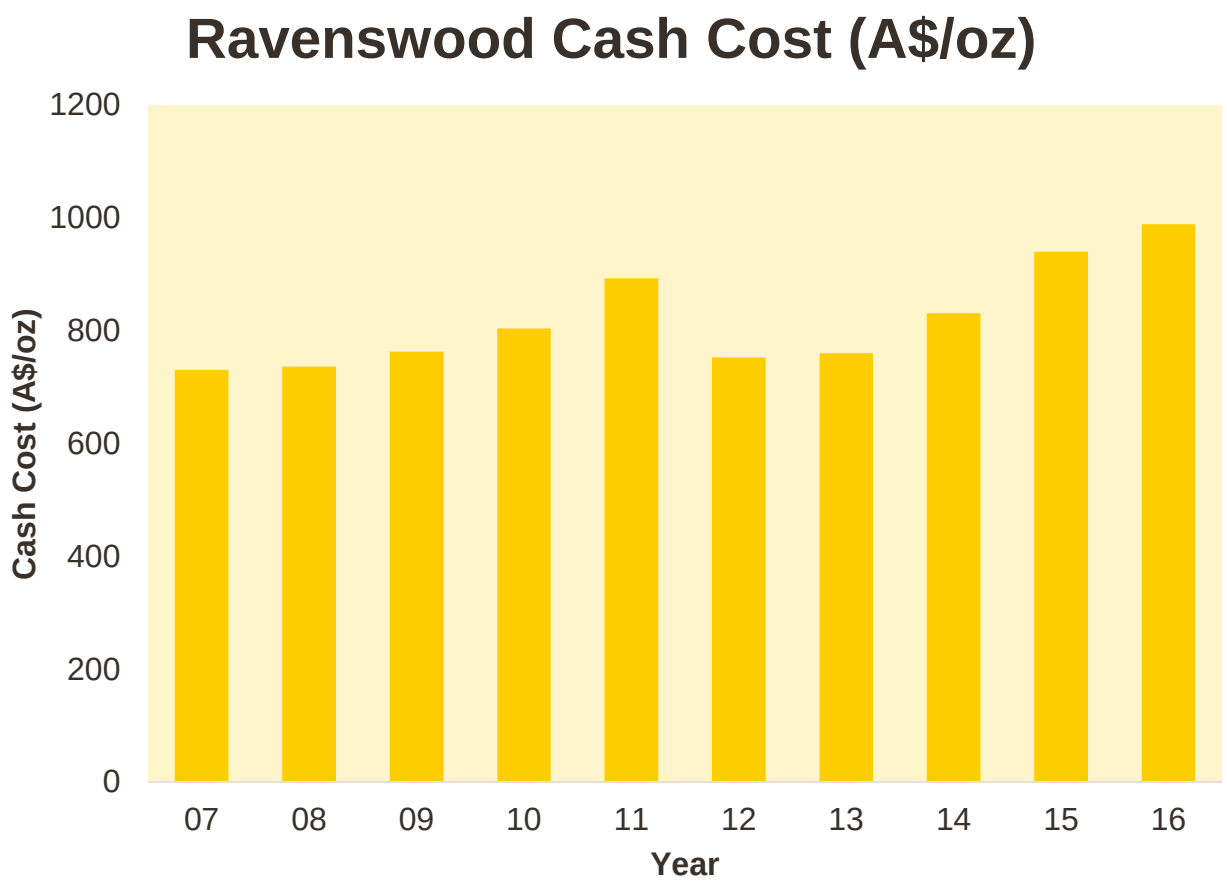
- Sublevel Shrinkage with Fill is mined like Sublevel Caving but fill is continuously introduced to protect infrastructure and minimise dilution
- Sublevel shrinkage is an innovative mining method pioneered at Mt Wright to:
  - maximise productivity
  - protect infrastructure due to original design based on open stoping with post fill
  - improve safety and lower operating costs



Mt Wright Mining Innovation

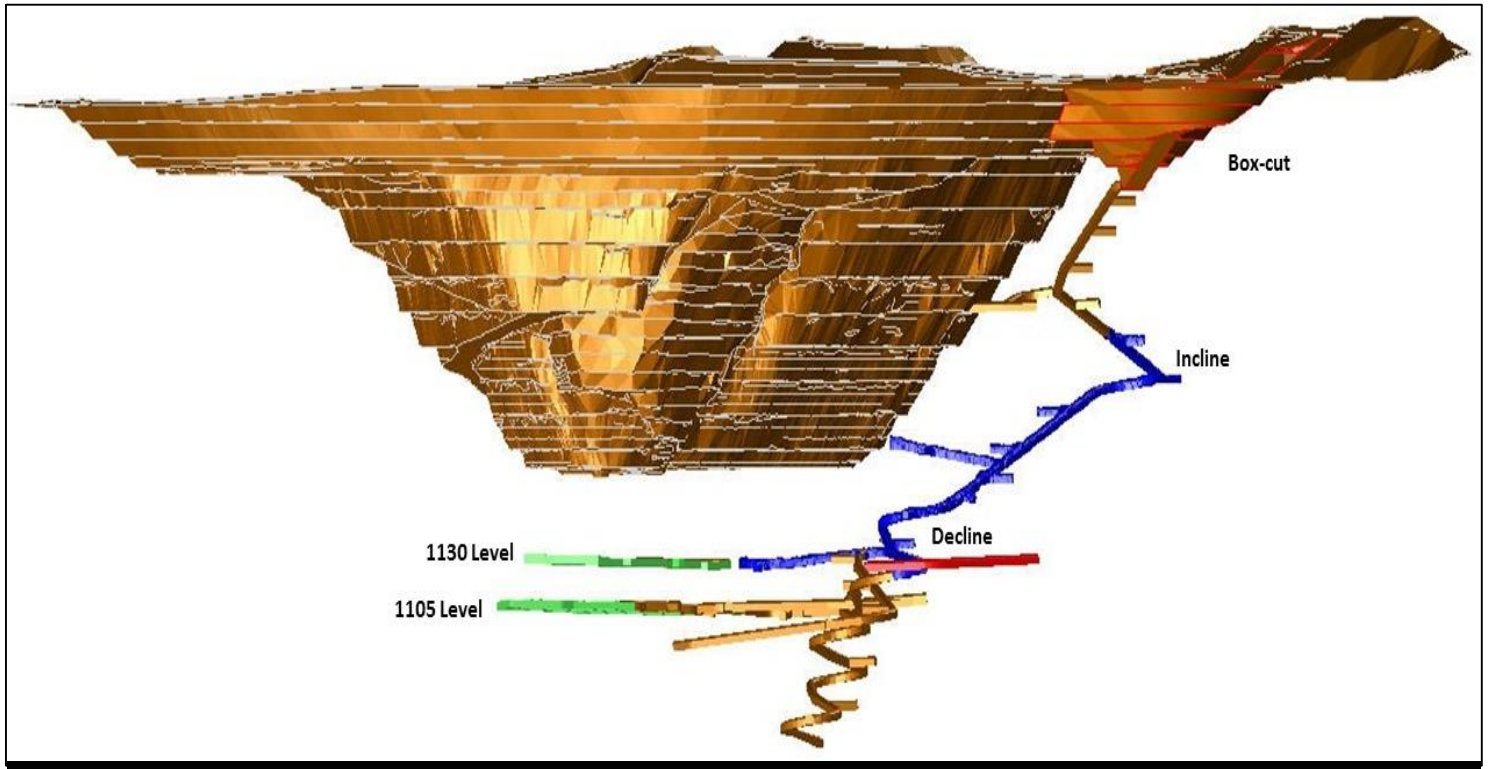
A low cash cost bulk underground mining method



- The Sub Level Shrinkage (SLS) method has maximised production and minimised up front capital
- Sublevel shrinkage has proven to be very cost efficient in mining a ~2.5g/t orebody at an average cash cost of A$850/oz over the last 5 years, down to a depth of ~900m below surface
- Innovation in underground mining engineering has transformed Mt Wright into one of Australia's most successful underground mines

Syama Underground

Heavily automated, highly mechanised mine of the future

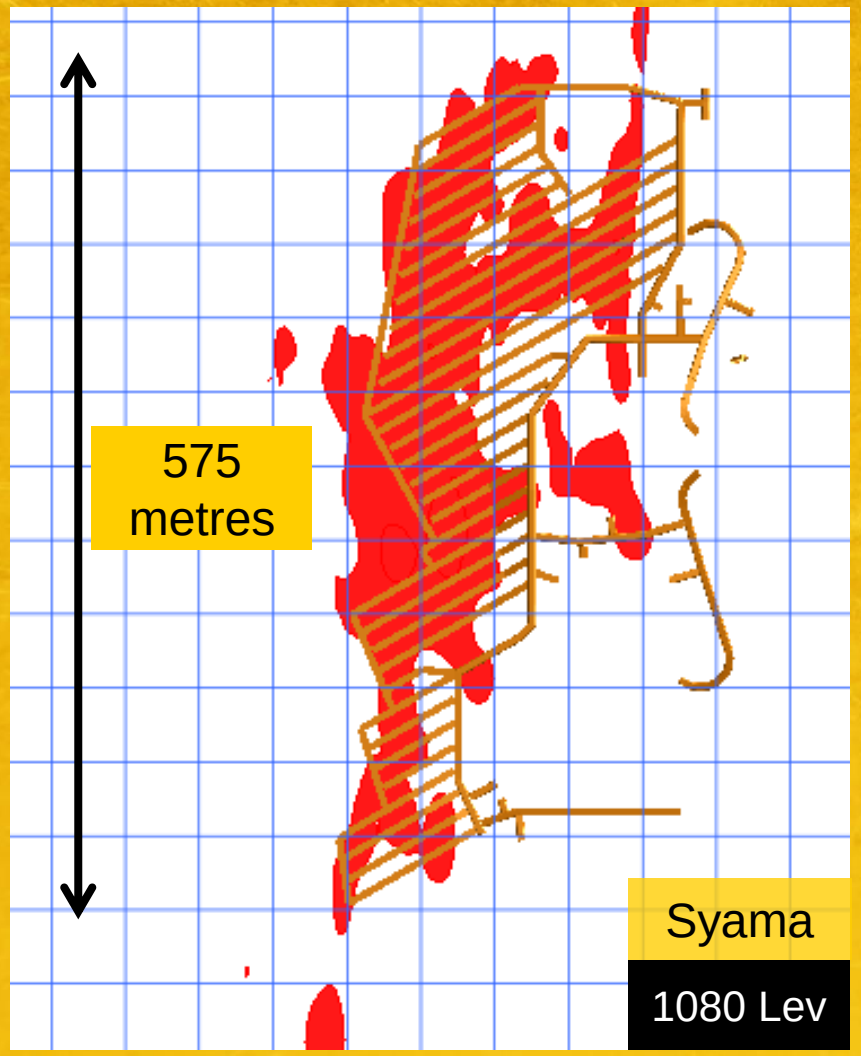


Syama Underground SLC development progress (blue) to plan

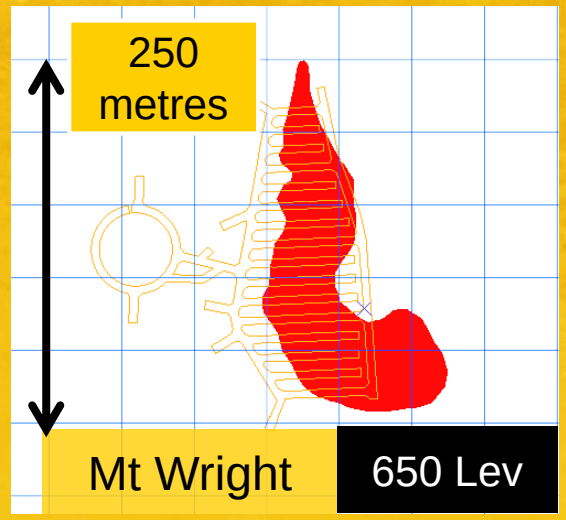
- Excavation of the surface boxcut has commenced (on track for completion in late CY17)
- Mine development has commenced on the first production level (1130 Level)
- First ore from development ore drives has commenced
- Initial SLC production ore on track for 2nd half of CY18

Syama v Mt Wright

Key criteria comparison



	Mt Wright achieved	Syama expected
Oz/vertical metre	2,400 oz/m	6,300 oz/m
Tonne of stope ore/metre of development	318t/metre of development	343t/metre of total development
Vertical advance per year	51m/yr LoM average	39m/yr LoM average
Grade	2.73g/t	2.81g/t
Steady state production rate	1.5Mtpa	2.4Mtpa
Mine life	11yrs from start, 7.5yrs as SLS	12yrs from start, 10yrs as SLC
Design depth	850m below surface	600m below surface



"The success of the Mt Wright underground mine demonstrates our ability to operate a world class sublevel cave at Syama"

Grid spacing – 50 metres

What is a mine of the future?

An underground mine of the future is a (rock) factory

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What is an underground mine of the future?

- Bright, clean & dry
- Fresh air (no diesel fumes, fully electric)
- Minimal operators (critical maintenance personnel only)
- Real-time communication and management
- A pleasant and safe working environment
- A (rock) factory is a low cost underground mine of the future with automated mining

Automation and innovation

Automated Underground Mining

Syama Mine of the Future

- Syama has potential for fully automated loading and hauling offering **increased productivity** and **lower operating costs**
- Allows **upskilling of local workforce** using latest technologies in underground mining
- **Improved safety** with fewer operators and personnel underground
- **Automated** fleet and production **management and scheduling**

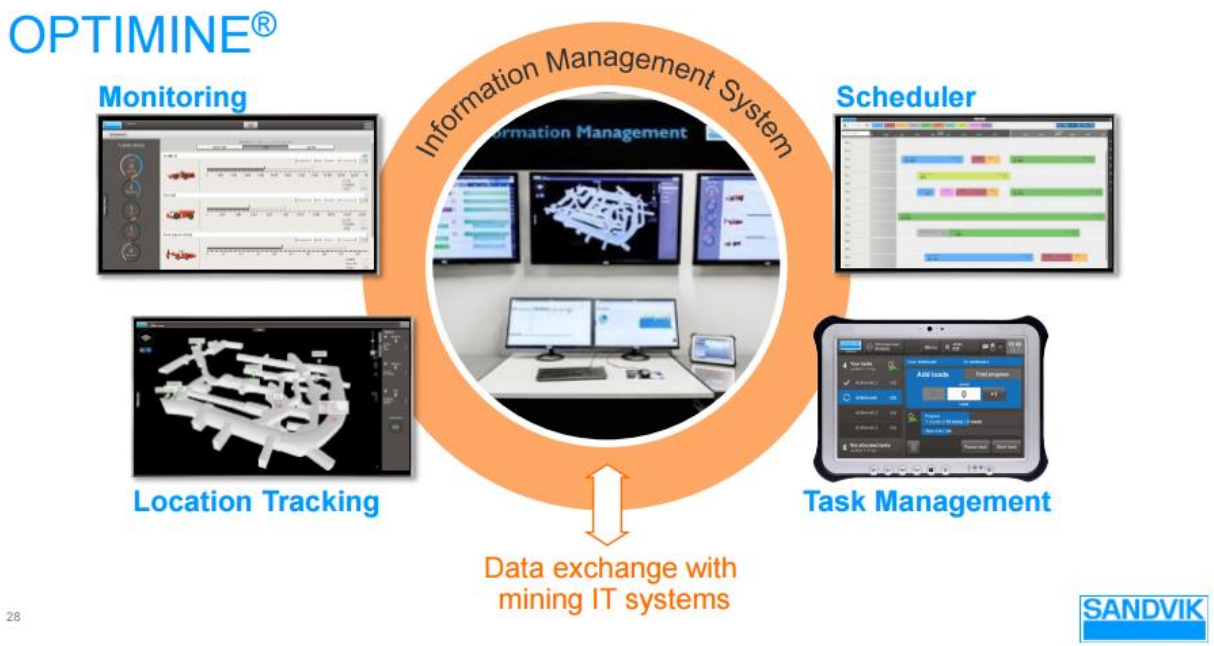
Automated Underground Mining

Syama Mine of the Future

- **Real-time tracking, monitoring and data analytics** of equipment and personnel
- Availability of equipment data and production performance **anywhere in the world**
- Automation allows for **high performance draw control** critical to a successful Sublevel Cave
- Automation allows for **production over shift change** and during blasting clearance
- **Less damage to equipment** with less operator error and lower maintenance costs

Syama and Optimine®

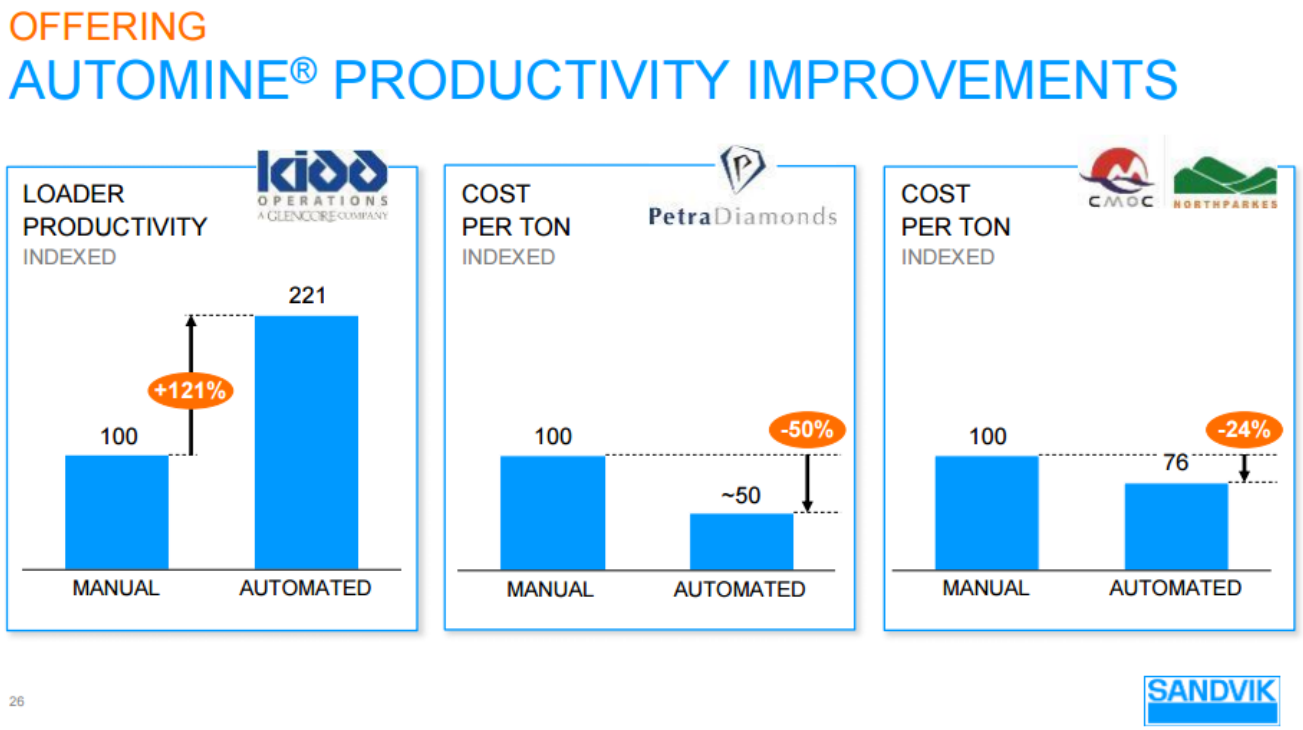
Optimising the mine plan in real-time



- Improved monitoring and real-time scheduling allows **increased production efficiency**
- Production and equipment monitoring drives improved **real-time management** and supervision
- Predictive modelling for **preventative maintenance** and more effective production scheduling in real-time

Syama and AutoMine®

Increased productivity and lower operating costs



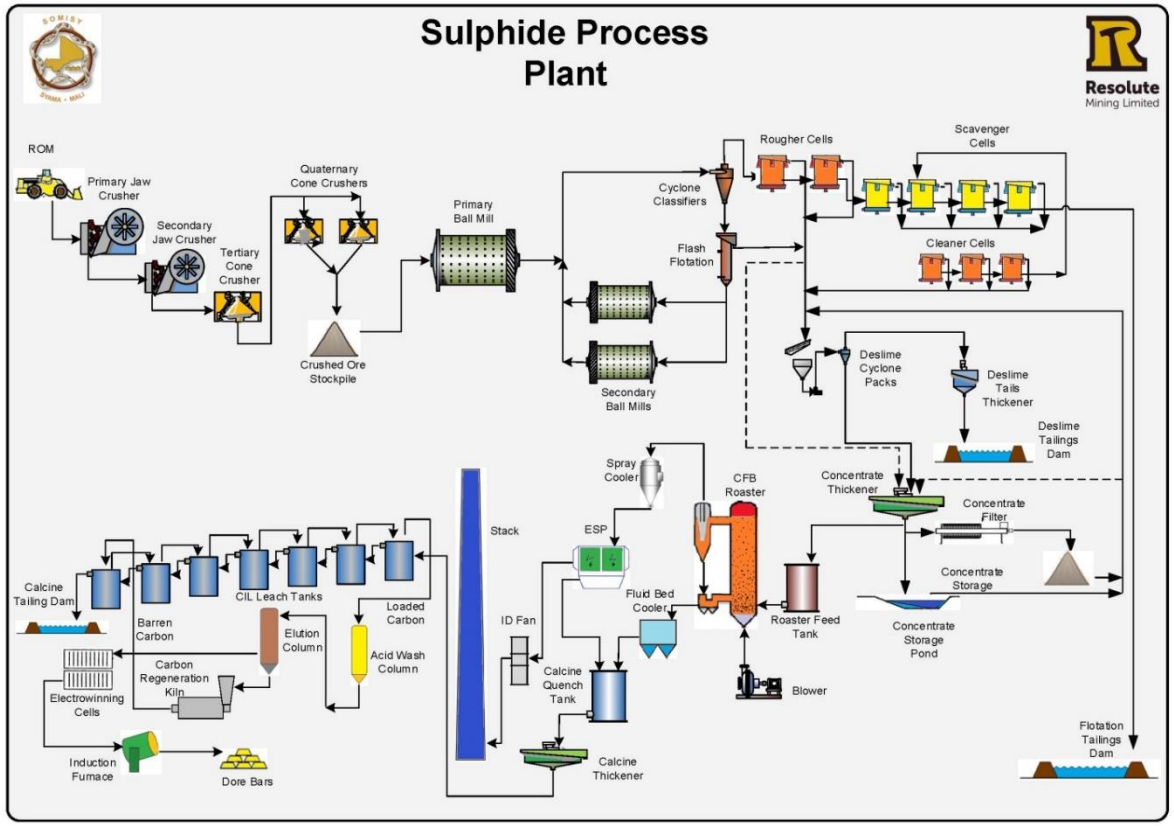
- Greater utilisation of equipment with **24/7 continuous production**
- Longer operating hours = more tonnes = **lower unit costs**
- Production execution from **remote locations** = lower unit costs
- **Less damage** to equipment = **less maintenance** = increased utilisation of equipment

Processing and innovation

Refractory sulphide ore processing

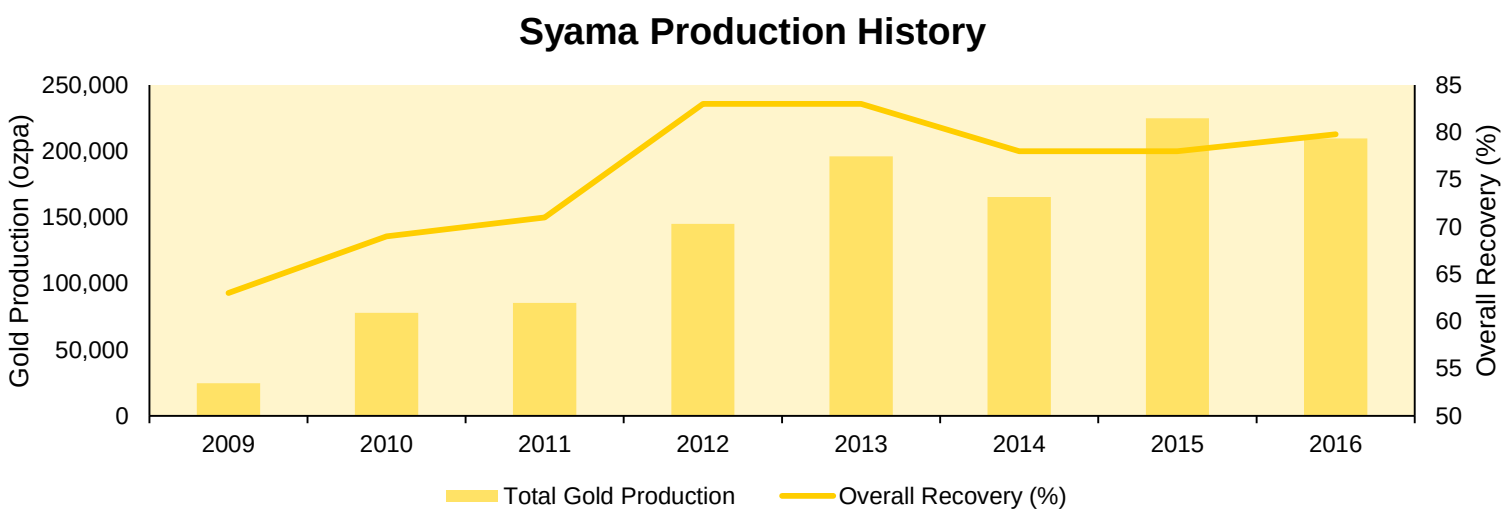
A competitive advantage in refractory ore processing

- The Syama ore is double refractory: pyrite occluding fine grained gold and high levels of organic carbon
- The combination of preg-robbing carbon and refractory sulphides was a problem encountered by previous owners
- Previous owners used ‘whole-of-ore’ roasting
- Resolute has successfully improved overall recoveries with concentrate roasting
- Processing innovation has generated significant value gains at Syama with potential to benefit other orebodies globally

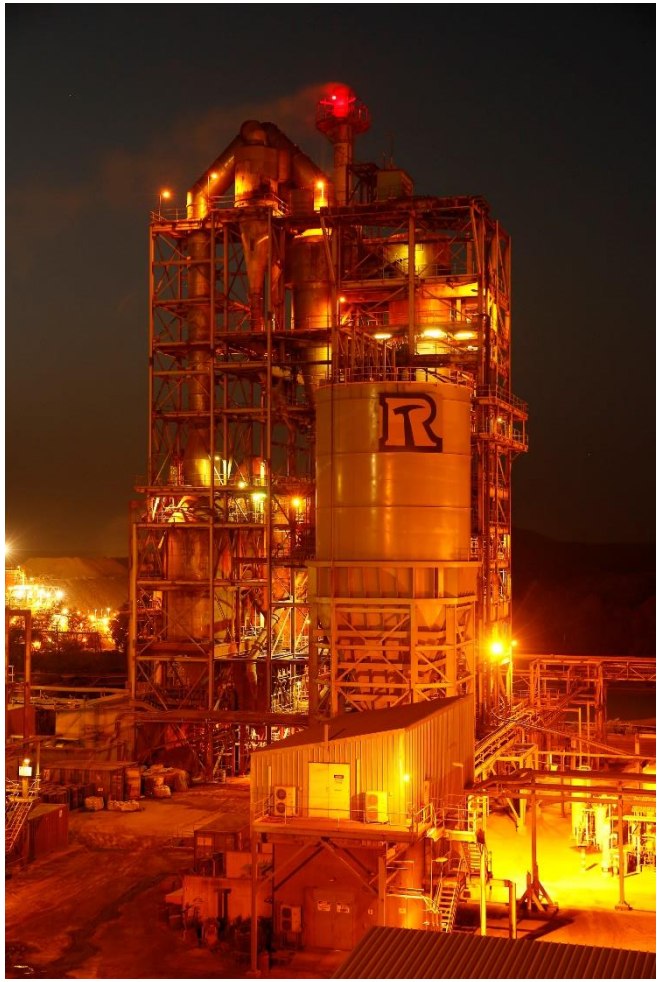


Syama gold processing innovation

Double refractory sulphide processing success



- A successful history of improving sulphide recoveries
- Developing a Low Carbon Roast (LCR) technology in partnership with Outotec®
- LCR will deliver a significant reduction in preg-robbing organic carbon and increased CIL recoveries



Syama Project 85

Targeting overall gold recovery of above 85%

Calcine CIL tanks

Flotation tails thickener

- Overall project is 44% complete (as at mid-May 2017)
- Staged commissioning of Project 85 remains on track for the end of March 2018

Resolute

Innovation is not optional… it’s essential.

Mine gold. Create value.

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