



Presentation to Investor Briefing Webcast

Craig Jetson, Managing Director & CEO, will hold an Investor Briefing on Tuesday 15 December 2020. The event will be via a live webcast commencing at 9:00 am Australian Eastern Daylight Time (UTC + 11 hours), with presentations expected to conclude at 10:15 am, followed by a question and answer session.

Topics covered

- St Barbara's strategic focus
- Operating safely and sustainably
- Driving Building Brilliance to operate with excellence and empower our people
- Delivering strong financial returns to our shareholders
- Operations and expansions overviews
- Conducting exploration and development activities

Presenters

Craig Jetson, Managing Director and CEO
 Garth Campbell-Cowan, Chief Financial Officer
 Val Madsen, Executive General Manager People
 Jason Morin, General Manager Leonora Operations
 Jason Robertson, General Manager Simberi Operations
 Laird Brownlie, General Manager Atlantic Gold Operations
 Roger Mustard, General Manager Exploration

Webcast link

Participants can register and join the briefing at <https://kapara.rdbk.com.au/landers/a4e9f9.html>
 The event will be listen only with the opportunity to submit questions via the webcast player during the briefing. An on-demand recording will be available after the event.

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St Barbara Investor Briefing

15 December 2020

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The Company estimates its reserves and resources in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves 2012 Edition ("JORC Code"), which governs such disclosures by companies listed on the Australian Securities Exchange.

Non-IFRS financial information: We supplement our financial information reporting determined under International Financial Reporting Standards ("IFRS") with certain non-IFRS financial measures, including cash operating costs. Details of these are set out in the Appendix.

Financial figures are in Australian dollars unless otherwise noted. Financial year is 1 July to 30 June. This presentation is not audited.

Unless otherwise noted, information in this report that relates to Mineral Resources or Ore Reserves is extracted from the report titled 'Ore Reserves and Mineral Resources Statements 30 June 2020' released to the ASX on 24 August 2020. Full details of recent exploration results in ASX release 21 October 2020 '*Q1 September FY21 Quarterly Report*'.

Australian Securities Exchange (ASX) Listing code "SBM"

American Depositary Receipts (ADR OTC code "STBMY") through BNY Mellon,

www.adrbnymellon.com/dr_profile.jsp?cusip=852278100

Title slide picture: Leonora Operations, Western Australia

Published: 15 December 2020



St Barbara's strategic focus

Operating safely and sustainably

Driving Building Brilliance to operate with excellence and empower our people

Delivering strong financial returns to our shareholders

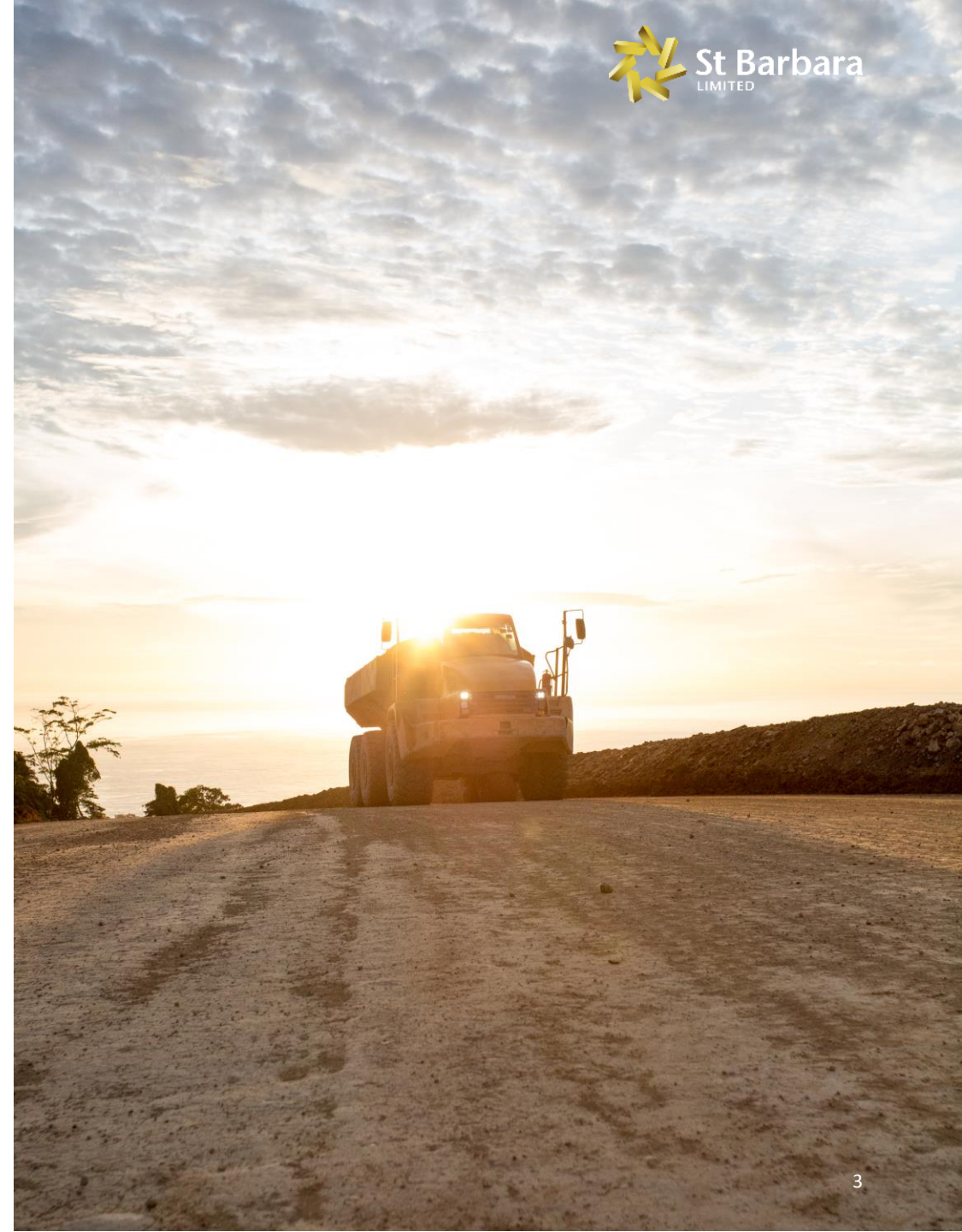
Operations and expansions overviews

Conducting exploration and development activities

Summary and closing remarks

Q&A

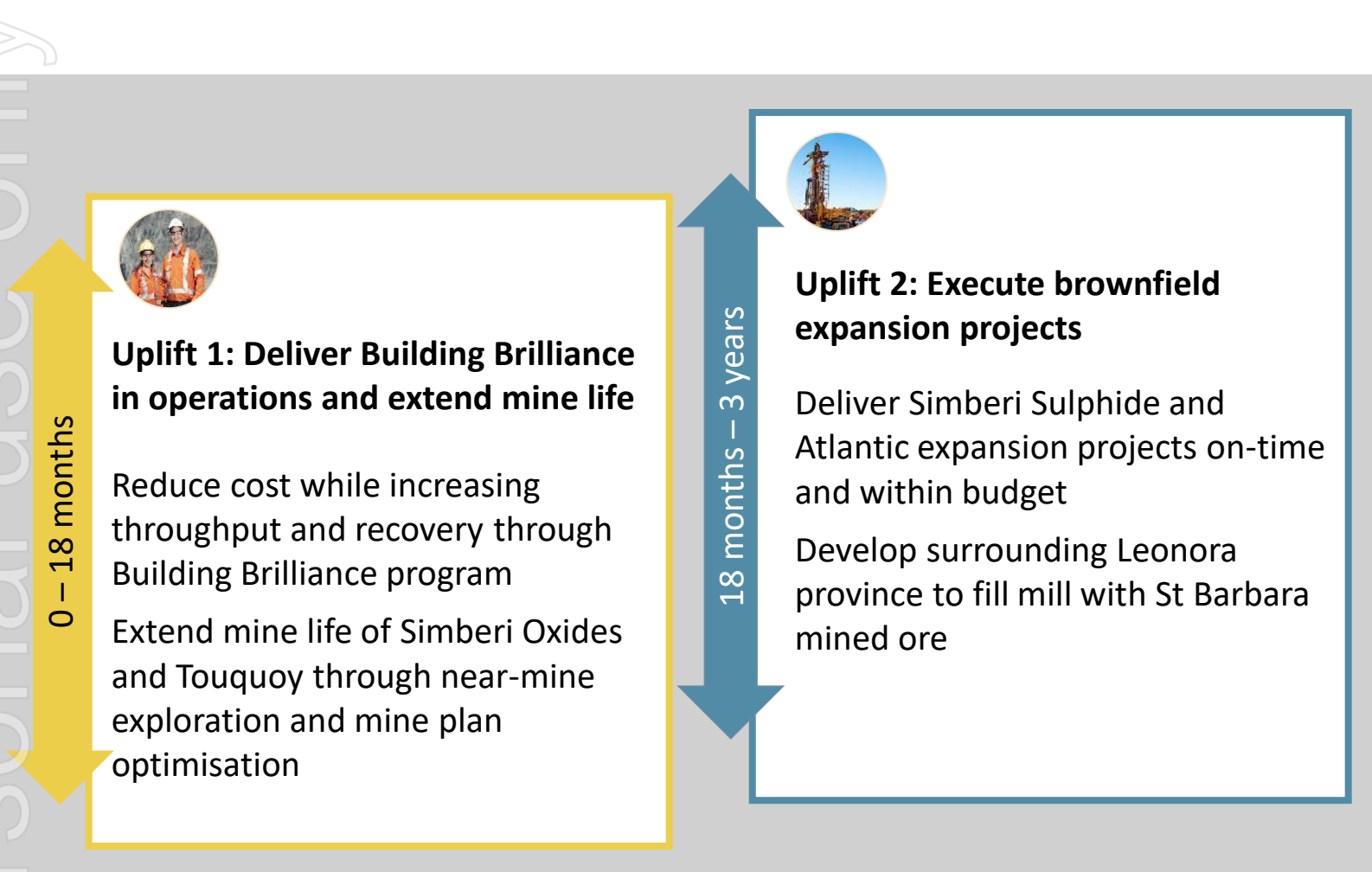
Appendices



St Barbara's strategy will be delivered in three uplifts, focusing on Building Brilliance and brownfield expansion projects in the near-term

Three stages of uplift for St Barbara

■ Focus for today's presentation



To deliver these uplifts we have defined the priorities and capabilities required



Our capability focus

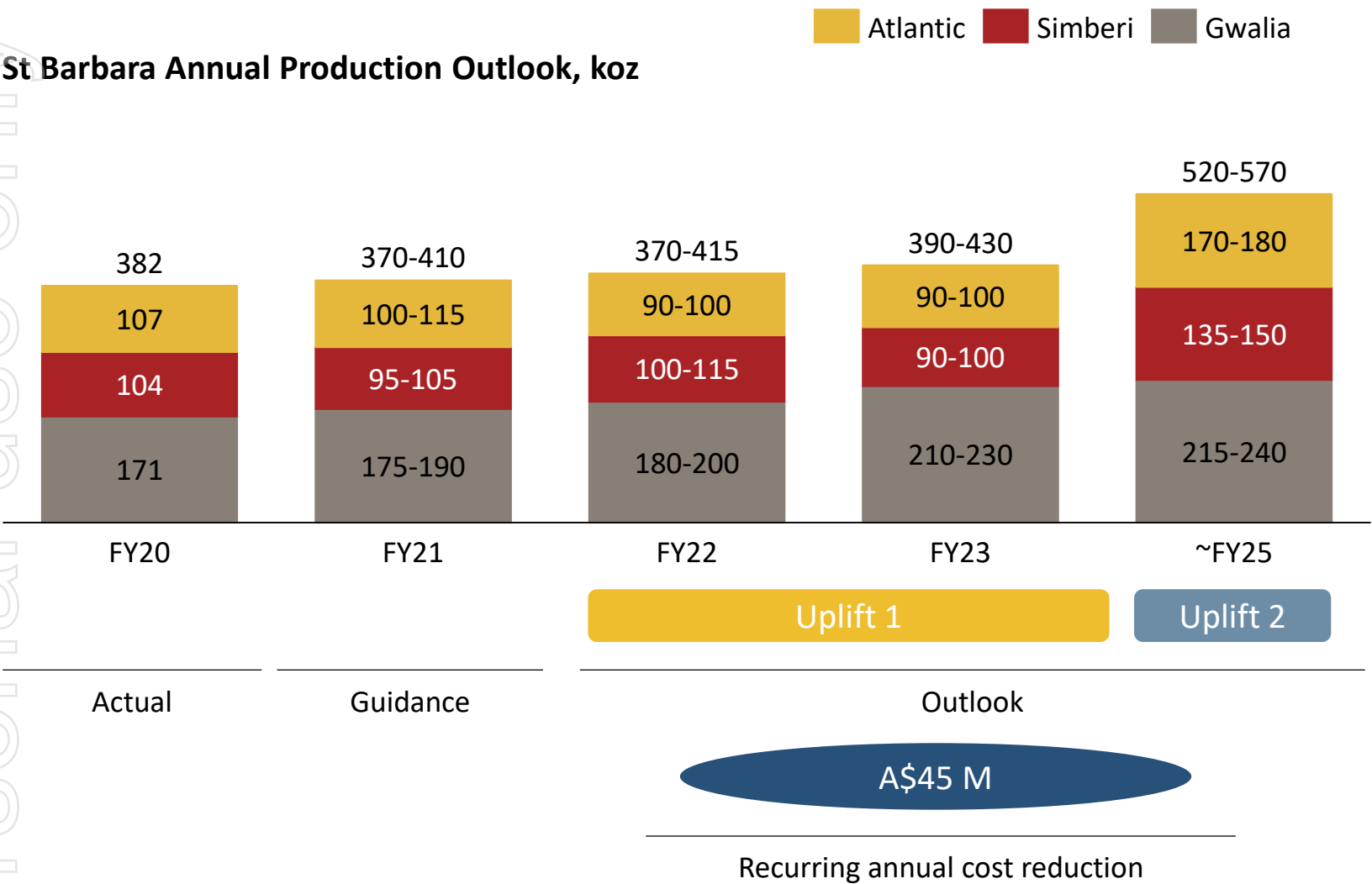
- Execution discipline**
Driving disciplined delivery on commitments across the business, and disciplined control and management of capital
- Short interval control**
Closed loop continuous improvement feedback between planning and execution
- People leadership**
Ensuring high performing leaders at all levels to drive results for St Barbara
- Asset productivity**
Improving our efficiency in utilising and maintaining our equipment
- Technology and innovation**
Leveraging digital analytics to drive next horizon of improvements
- Continuous improvement capability**
Embed our management operating system to drive performance

Our vision is to be a brilliant, global mining company that grows sustainably and creates enduring, positive impacts.

Our strategy provides a path to grow production +40% from 382 koz to 520-570 koz and reduce recurring cost by A\$45 M



St Barbara Annual Production Outlook, koz



We have a pathway to grow our production profile through Uplift 1 and Uplift 2

Uplift 1 comes from Building Brilliance

- Maintain production at Atlantic and Simberi under declining grades
- Steadily increasing production at Gwalia

Uplift 2 comes from brownfield expansion projects at each asset

- Driving near-term expansions at Gwalia
- Assumes Atlantic’s Beaver Dam production fully ramped up by FY23 – contingent on permitting

A team with extensive operational and technical experience is now in place to deliver our strategy

Executive Leadership team



Craig Jetson, Chief Executive Officer
Former Executive GM at Newcrest for Lihir in PNG



Evan Spencer, Chief Operating Officer
Former CEO Nevada Copper
Former COO and CEO at Kasbah Resources



Joined St Barbara within the last 12 months



Recently promoted



Garth Campbell-Cowan, Chief Financial Officer
10+ years experience with St Barbara finance team



Val Madsen, Executive General Manager People
7+ years experience with St Barbara in HR, HSE and Community

Operational and technical expertise



Jason Robertson, GM Simberi
Former GM Operations at Millennium Minerals
Former Processing Manager at Newcrest for Lihir in PNG



Jason Morin, GM Leonora
Former GM at Nevada Gold (Barrick) for Turquoise Ridge – largest US underground mine
Former GM at Boliden



Laird Brownlie, GM Atlantic Gold
Joined St Barbara in 2019 through Atlantic Gold acquisition
Former BP and GM of Cliffs Natural Resources (Cleveland-Cliffs)



Meryl Jones, Head of Business Development
10 years experience with St Barbara business development team



Justine Fisher, Head of People, Communications and Corporate Affairs
Former GM at Clean TeQ
20 years experience in the mining industry



Roger Mustard, GM Exploration
5+ years experience leading St Barbara exploration agenda



Matt Kebbel, Project Director
20 years experience in resources project development and delivery



Brett Ascott, Head of Technical Services and Innovation
Former Technical Services Manager at Resolute Mining



Sarah Standish, General Counsel and Company Secretary
Former General Counsel at Imdex
15+ years experience in Australia and Internationally

St Barbara's strategic focus

Operating safely and sustainably

Driving Building Brilliance to operate with excellence and empower our people

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St Barbara is taking action across our sustainability commitments



SAFETY ALWAYS

Target is **Zero Harm**

TRIFR¹ 40%

improvement in FY20

Embed CARE behaviours
across all operations

A workplace **safe from**
injury, bias,
discrimination and harm



EMPOWERED PEOPLE DIVERSE TEAMS

We are the only mining
company to be a **WGEA²**
Employer of Choice
(2015-2020)

Continue to **meet and**
exceed diversity
objectives—two new
targets set in 2020

71% employee
engagement in 2019,
with annual surveys



STRONGER COMMUNITIES

Delivering on action
plan to **address risks of**
Modern Slavery

Extending 'CARE' to
community – mental
health, domestic
violence & community
wellbeing

Supporting **next**
generation of
Indigenous leaders
through consultation
and education



RESPECTING THE ENVIRONMENT

Carbon neutral by 2050
and by 2025 at **Atlantic**
Operations

Targeting **18% reduction**
in CO₂ per ounce of gold
produced by 2030

Operations **do not**
compete with
agricultural or domestic
for water

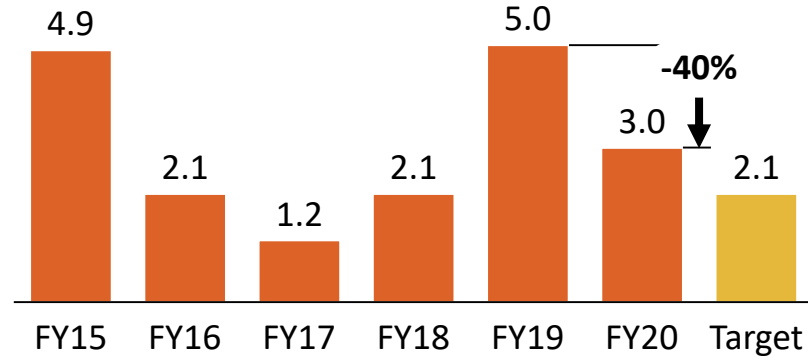


GROWING SUSTAINABLY

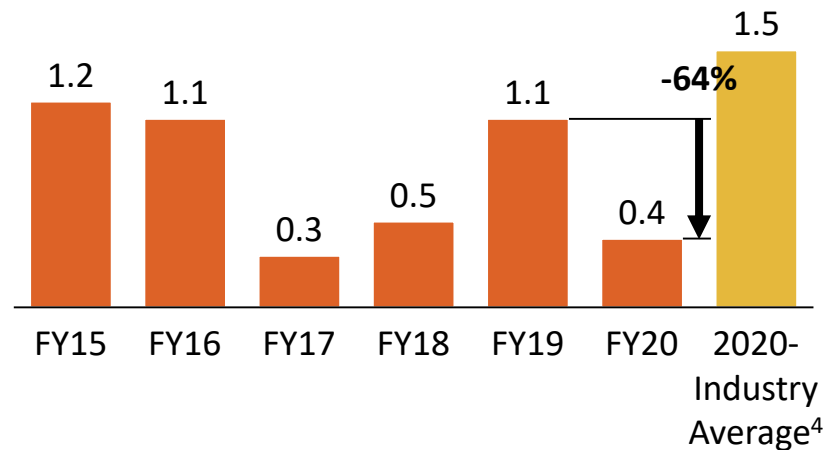
Growing our business
sustainably, where it
makes sense, and with
strong governance
practices, means we can
add value for everyone:
our shareholders, our
people and our
communities.

Safety always: we maintain an industry-leading safety record

St Barbara
TRIFR¹



St Barbara
LTIFR³



We take an holistic approach to safety

TRIFR¹ ahead of mining industry average²

Conduct regular **Gender Safety Audits** to keep our people safe from injury, bias, discrimination and harm

Rapidly implemented **COVID-19 Management Plan and Infectious Diseases Standard**

40%

improvement in TRIFR¹

3

Months injury free



1. Total Recordable Injury Frequency Rate (12 month average, total recordable injuries per million hours worked)
2. According to the latest report from Safe Work Australia FY18
3. Lost Time Incident Frequency rate (12 month average, total recordable injuries per million hours worked)
4. Australian Mining benchmark FY20 – Western Australian gold companies

Empowered people in diverse teams: diversity across our workforce continues to increase

	Objectives	FY20	FY21 YTD	Target by 30 June 2022
Group	Maintain the percentage of women on the board	33%	33%	33%
	Maintain nil gender pay gap for like-for-like roles	0%	0%	0%
Australia	Increase the proportion of women in the Australian operations workforce	26%	28%	30%
	Reduce the Australian operations Overall Gender Pay Gap	12%	13%	8%
	Maintain the percentage of women who return to work after a period of Parental Leave	100%	100%	80%
	Increase the proportion of Aboriginal employees in the Australian operations	3%	2%	5%
PNG	Increase the proportion of women in the workforce at Simberi	15%	16%	18%
Canada	Increase the proportion of women in the workforce at Atlantic Gold	-	21%	30%
	Increase the proportion of First Nations employees in Atlantic Gold	-	3%	5%

We are at the forefront of inclusion and diversity in the minerals industry

Initial signatory to WGEA¹ Pay-Equity pledge with Craig Jetson, Managing Director & CEO appointed **Pay Equity Ambassador**

Submitted gender data to **Bloomberg's Gender Equality Index**

Achieved **28% representation of women in Australian operations workforce** in 2020

Employer of choice for Gender Equality (WGEA)

6 years running



Respecting the environment: we are taking steps to reduce environmental footprint and being recognised for our efforts

We are taking action to reduce our carbon footprint

Atlantic Gold is on-track to be carbon neutral by 2025; using renewable power sources, batteries and low-footprint expansion projects

Leonora is using innovative solutions to reduce their emissions footprint; new absorption chillers run on waste mine heat, smart mine layout reduces truck mileage (and emissions)



*Paste aggregate fill (PAF)
at Leonora Operations*



*Recycled plastic slabs at
Beaver Dam*

We have been recognised externally

Rated as 'Leading' in the materials sector for ESG reporting by Australian Council of Superannuation Investors (ACSI)

Rated in the 2nd quintile in Macquarie's 2019 Environmental Social Governance (ESG) Ratings Survey

Received the second Gold Waterwise Business Award for our Leonora Operations (2012 and 2020)

New climate change targets: meeting our obligations for Paris 2015

Ongoing record of no long-term harm and no widespread impact



St Barbara's strategic focus

Operating safely and sustainably

**Driving Building Brilliance to operate
with excellence and empower our people**

Delivering strong financial returns to our
shareholders

Operations and expansions overviews

Conducting exploration and
development activities

Summary and closing remarks

Q&A

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Building Brilliance will deliver lasting value

What is Building Brilliance?

- Company-wide program to rapidly and sustainably improve performance
- Focused on creating enduring value for St Barbara; addressing historical challenges and constraints
- We have a detailed plan to deliver A\$80 to A\$120 M annual cash contribution by FY23
- Plan based on rigorous diagnostic of each asset's unique opportunities
- Empowers whole organisation to take an owner's mindset



Why do we believe it will work

- We've strengthened our leadership team with experienced operators who have achieved this previously
- We're using a proven approach that has delivered impact for other global mining companies
- Our people are being empowered to drive improvement, supported by the required tools and capabilities
- Comprises 200 initiatives spread across 75 initiative owners
- We have already delivered results in mining productivity at Simberi, development at Leonora and processing rates at Atlantic

Building Brilliance is an integrated company-wide transformation that can create A\$80-120 M of annualised cash contribution for St Barbara

Cumulative cash contribution delivered annually (A\$M)

	FY21	FY22	FY23
Atlantic	10-12	15-25	20-30
Leonora	15-20	30-50	40-60
Simberi	5-8	15-25	20-30
Total	30-40	60-100	80-120

Across sites, roughly 1/3 of value comes from cost reductions while 2/3 of value comes from volume improvements¹

One-time capital implementation cost over FY21-22:

A\$20-30 M²

Most initiatives require no up-front investment
Those that require investment have an average payback period of **5 months**

1. Additional throughput based on gold price of A\$2,200 and a baseline cost figure based on FY20 fixed costs and variable costs scaled for future volumes

2. Not included in guidance

**Building
Brilliance is
focused on
cost and
productivity to
deliver
sustainable
operational
improvement**

Atlantic

Mill de-bottlenecking – alleviating bottleneck in grinding circuit
Maintenance efficiency – improving shut down planning and timing
Spend control – standing up process to scrutinise discretionary spend

Leonora

Development efficiency – improving shift planning, streamlined teams for development advancement and rehabilitation
Drilling speed – rolling out innovations on loading fleet to operate tele-remote from surface
Spend control – improving spend discipline across site

Simberi

Mining fleet productivity – payloads, reducing delays throughout shift, increasing availability
Materials handling efficiency – improving throughput on Ropecon to reduce material handling cost
Spend control – improving spend discipline across site

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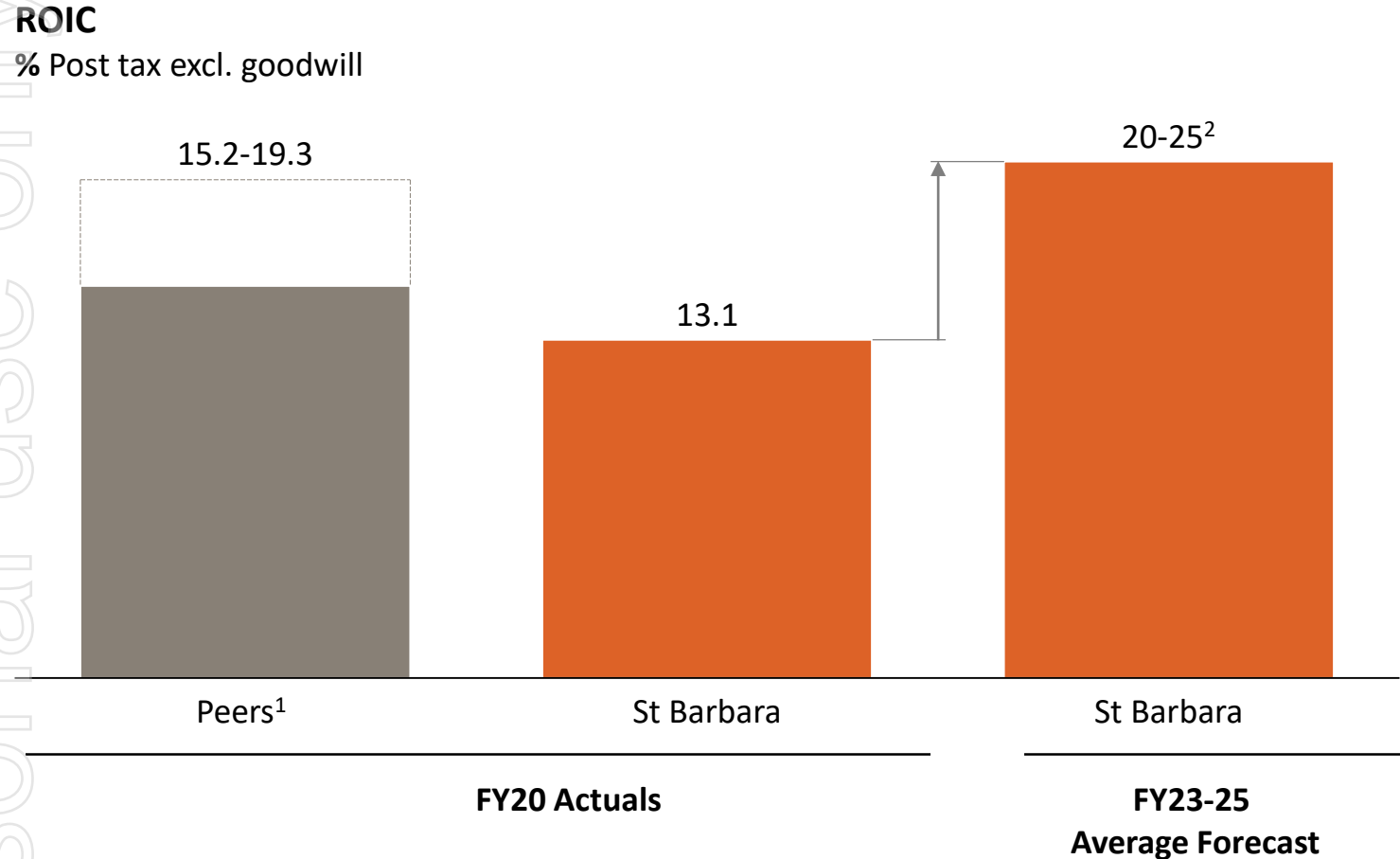
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St Barbara will create superior shareholder returns by...

- A** Improving Return On Invested Capital (ROIC) through Building Brilliance and by investing in high-return brownfield expansion projects
- B** Maintaining strong balance sheet through rigorous capital discipline
- C** Continuing to pay dividends

A: Building Brilliance and Brownfield projects to improve ROIC by optimising existing assets



1. Saracen, Northern Star, Evolution
2. Based on long-term A\$2,200/oz gold price

Current St Barbara ROIC is impacted by:

Atlantic acquisition in FY19

Permitting delays for Atlantic expansion projects

Delivery of building brilliance and brownfield projects will increase St Barbara ROIC

Brownfield projects utilise existing infrastructure, improving capital efficiency

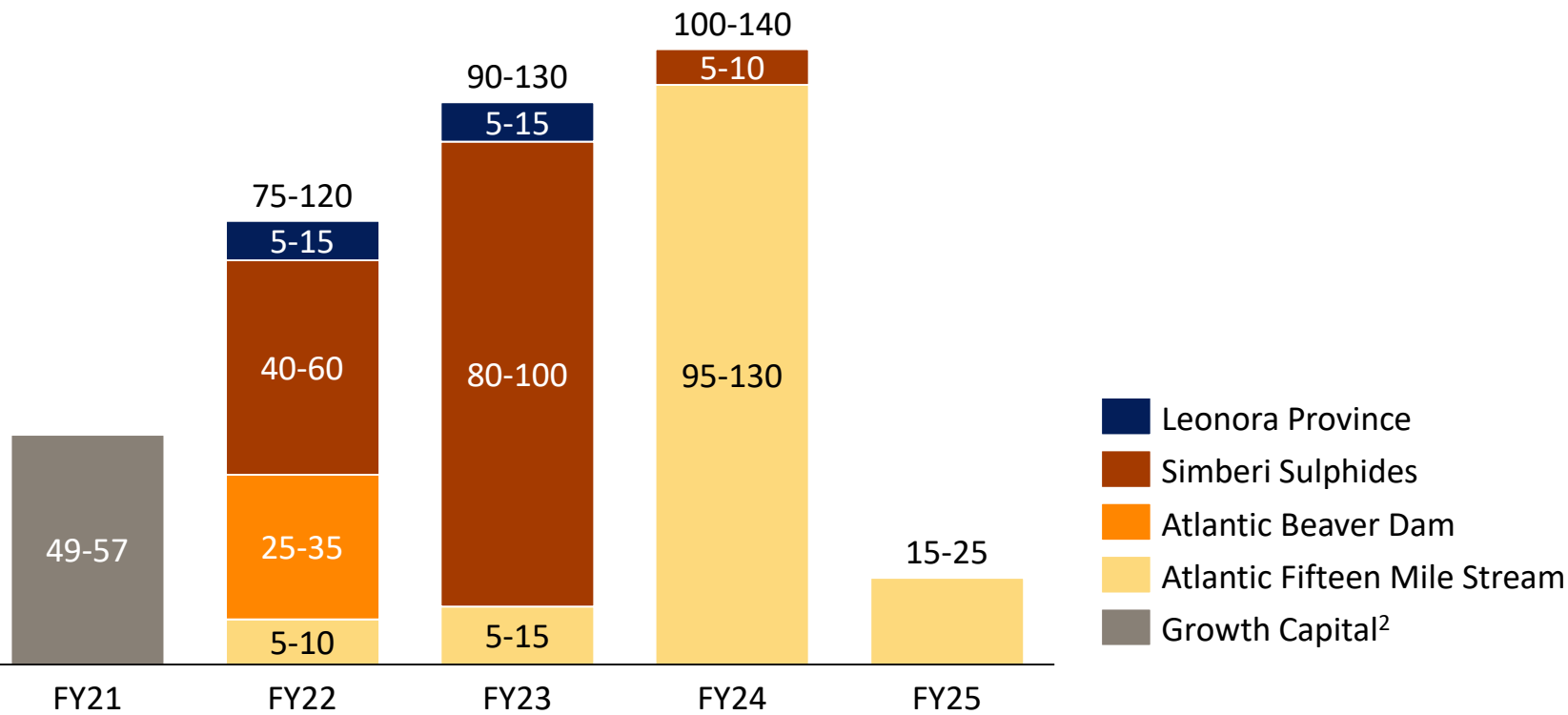
Projects at Simberi and Atlantic have competitive Internal Rate of Return

Building Brilliance cost and productivity improvements will lift operating margins

B: Rigorous capital discipline will maintain a strong balance sheet

St Barbara Growth Capital Outlook¹

A\$M



Forecast growth capex over FY22-25 is estimated at A\$280 to A\$415 M

Plan to **fund growth capex with cash flows** from operations and debt

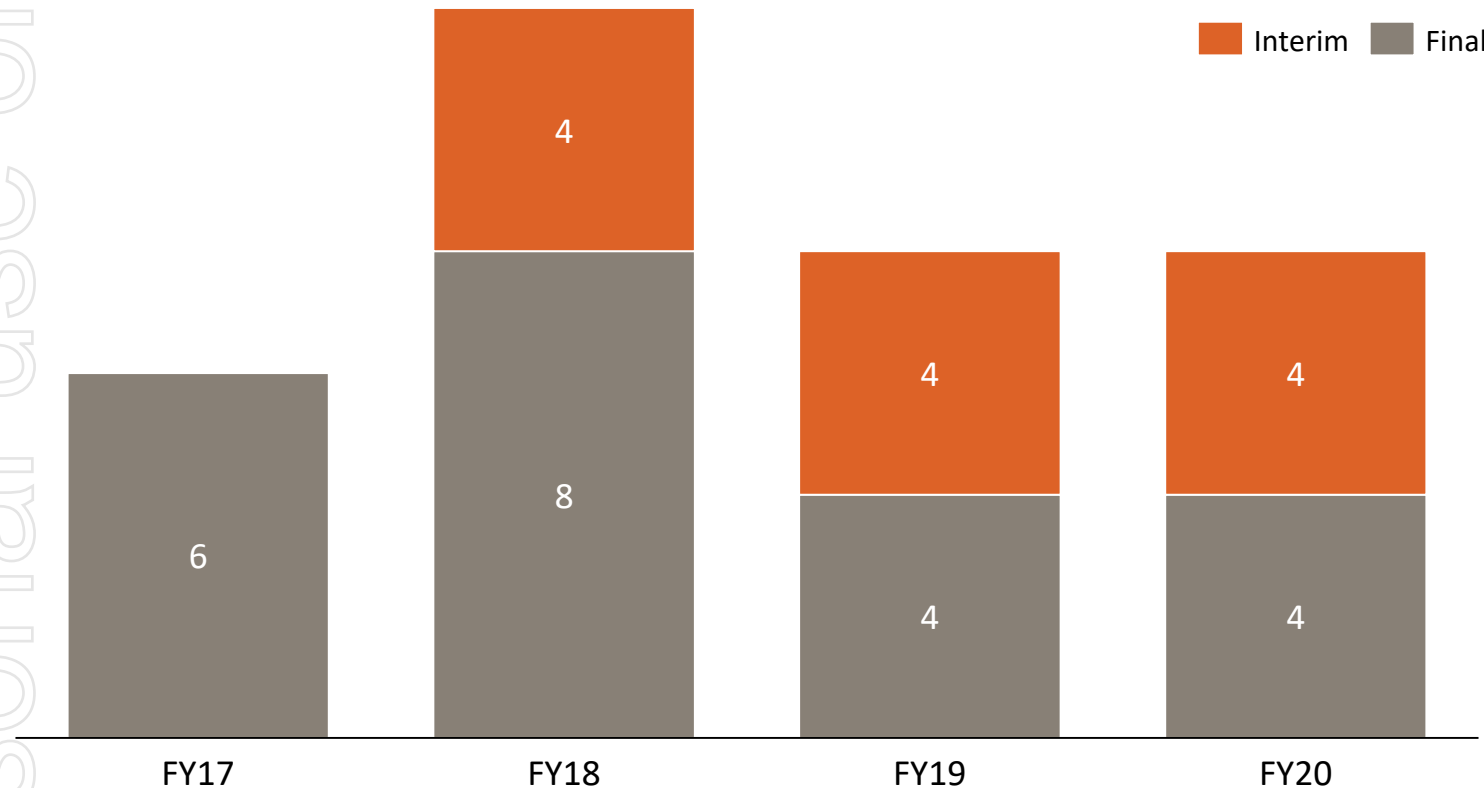
Opportunities to optimise expansion project capex by improving designs

1. Does not include Building Brilliance implementation costs, or sustaining capital
2. Growth Capital comprises FY21 guidance of A\$30-32 M at Leonora, A\$15-20 M at Atlantic and A\$4-5 M at Simberi

C: Continuing to pay dividends is a key consideration in our capital management

Historical dividends since FY17

Cents per share



St Barbara's policy on dividends continues to be determined by the financial performance and capital requirements

The Company is focused on maintaining dividends and utilising available franking credits

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- Atlantic
- Simberi

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Leonora Operations



Gwalia underground mine

FY 21F Production	175 – 190 koz
FY 21F AISC	A\$1,435 – \$1,560 per ounce
Ore Reserve	1.9 Moz
Mine life	FY 31



Innovation and debottlenecking development at Gwalia will provide near-term uplift while expansions in Leonora province develop



Completed ventilation expansions to shift constraint to development and specifically bolting cycle



Near-term objective is to stabilize operations through Building Brilliance, lock in our toll milling arrangements to fill our mill while we develop our Leonora province plan



Management team refreshed with deep technical and operational expertise and demonstrated early successes in development



Exciting potential in broader Leonora province with multiple potential ore sources from Gwalia Intermediates, Gwalia Shallows, stockpiles and historical open pits (e.g. Tower Hill)

Leonora strategy over two uplift horizons

Uplift 1

FY21-23

Deliver on Building Brilliance effort in near-term to continue improving performance

- Stabilise and uplift development and production
- Reduce unit costs through improved spend discipline

Continue to **orchestrate toll milling arrangements** to fully utilise mill and reduce unit costs

Complete advanced optimisation of Intermediates to include in our future plans

Uplift 2

FY24-25+

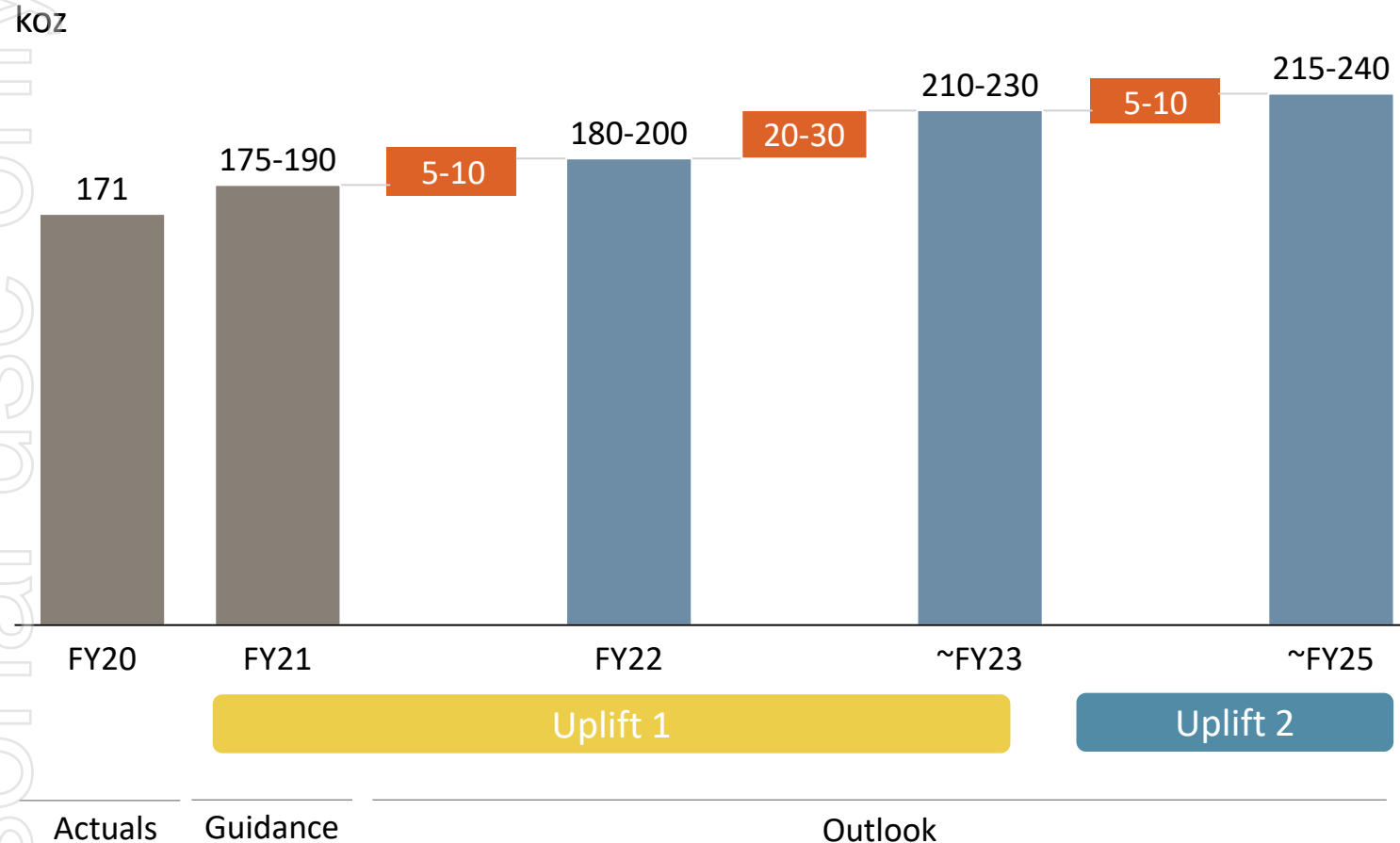
Further expand production base from Gwalia underground through other ore sources such as Gwalia Shallows, stockpiles and historical open pits

Evaluate **expanding capacity** of Leonora processing plant

Phase out toll milling and replace tonnes with St Barbara produced ore

Production will grow in Leonora through near-mine and province development

Leonora annual production



Note: Future production targets are uncertain and contain material which are classified as inferred resources and exploration targets (ASX 5.16.3 & 5.16.5)
 FY23 production breakdown: 39% Proven Reserve, 40% Probable Reserve, 1% Indicated Resource, 4% Inferred Resource, 17% Exploration Target
 FY25 production breakdown: 9% Proven Reserve, 9% Probable Reserve, 1% Measured Resource, 74% Indicated Resource, 5% Inferred Resource

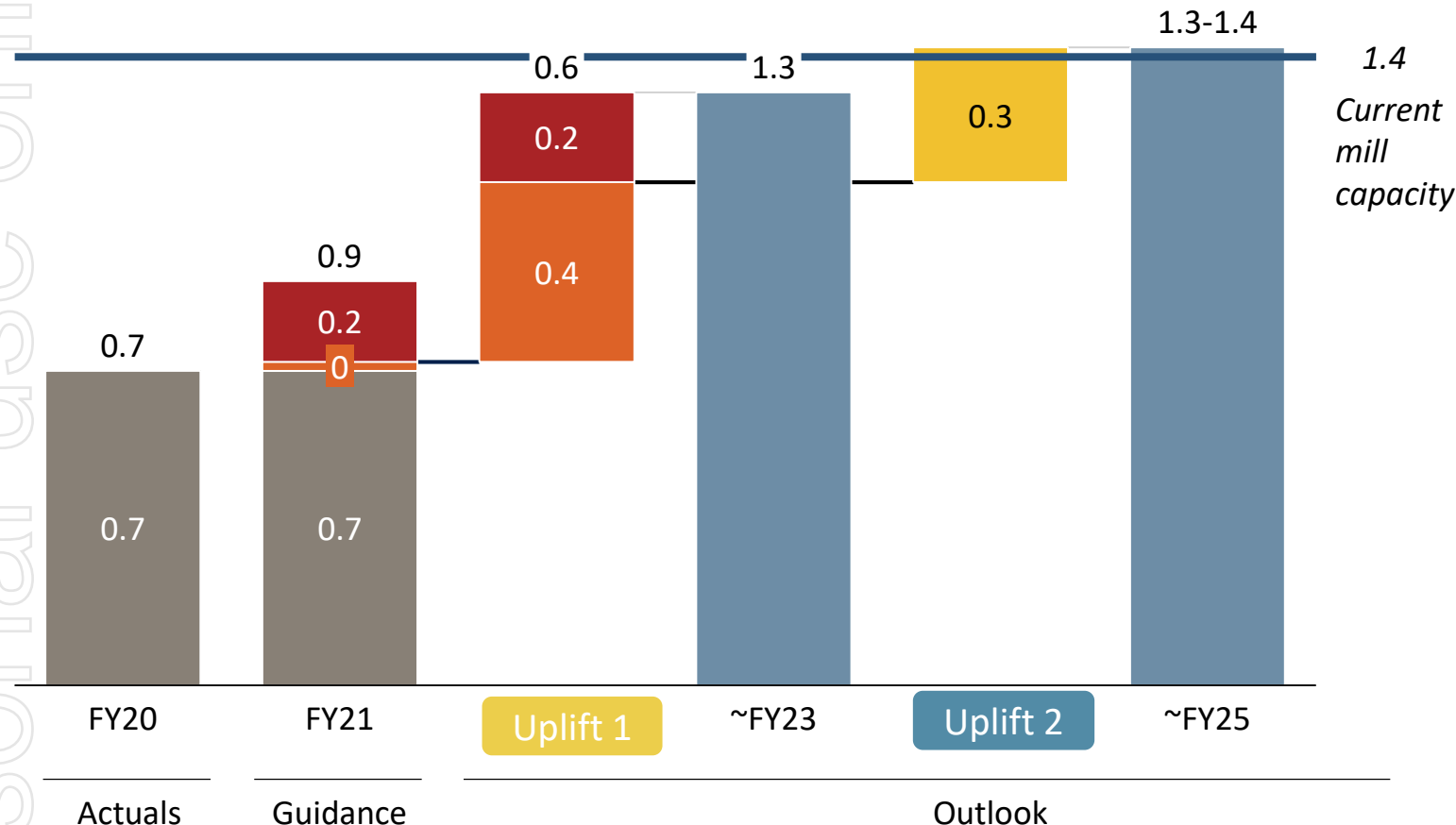
Operations summary

- Building Brilliance is focused on improving development and productivity in current mining areas while also planning reduction of annual recurring cost by ~A\$20 M per year starting 1H FY22
- New mining fronts also being optimised to counter declining grade from current mining areas
- Additional ore sources in Leonora province will be brought on to fill the mill with St Barbara mined ore to uplift ounce delivery from operation
- Based on the current cost profile, the Building Brilliance annualised cost saving and lift in production our expectation is that **AISC will be in the range of \$1,100/oz to \$1,200/oz by FY23**

Our strategy at Leonora is to fill the mill

- Gwalia underground
- Building Brilliance improvements and new U/G mining fronts
- Toll milling (one-off arrangements)
- Leonora province total

Annual mill throughput (Mt)




Uplift #1: Maximise the value from current operations through productivity improvements and cost reduction




- Achieve consistency in performance with Building Brilliance and open new mining fronts
- Maximise mill throughput through operational improvements and low capital options
- Process additional ore with toll milling to reduce costs, while exploring and developing other opportunities in province

Uplift #2: Realise opportunities in the Leonora province to expand production

- Explore options in Gwalia Shallows, historical open pits and stockpiles
- Replace toll-milling ore with St Barbara mined material from ore sources in surrounding areas
- Consider expansion of mill capacity or explore other outside tolling arrangements to maximise production

Building Brilliance is driving substantial productivity improvements

 Details on following slides

		FY21 YTD	FY22 target	Demonstrated best performance ¹
Development	 Improve lateral and decline development m/day	13	18	20
Drill & blast	 Accelerate production drilling m/day	190	230	269
Load & haul	 Increase production bogging rate tpd	880	1,050	1,375
	De-bottleneck haulage TKM/day	31k	42k	46k

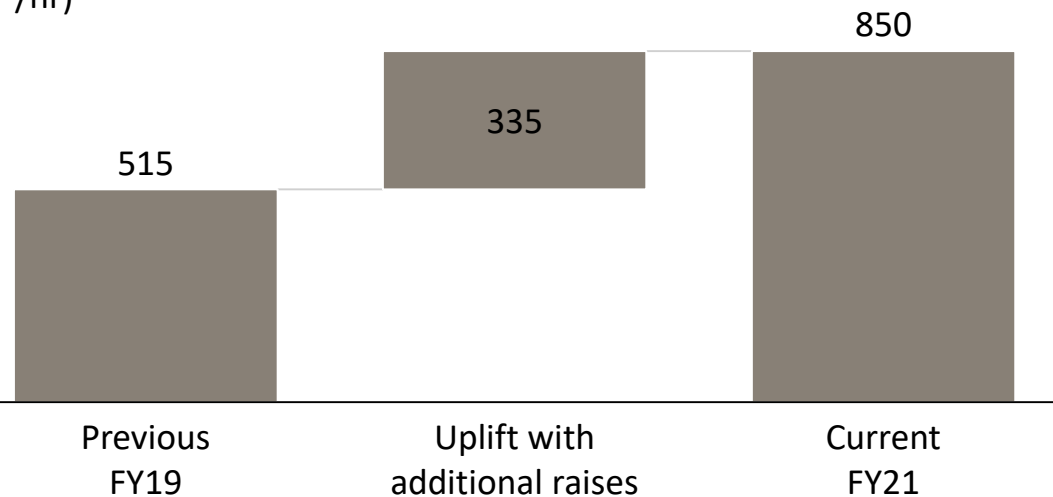
1. Average of days with top decile performance in FY20

A Development rates +50% after removal of ventilation constraint and launch of Building Brilliance initiatives

Constraint has shifted from ventilation to development at Gwalia

- Completion of vent raises has allowed for consistent operation below 1,600 mL towards Life-of-Mine
- Additional development is now the constraint on growing production due to smaller stope sizes in the forward mine plan to ensure minimal dilution

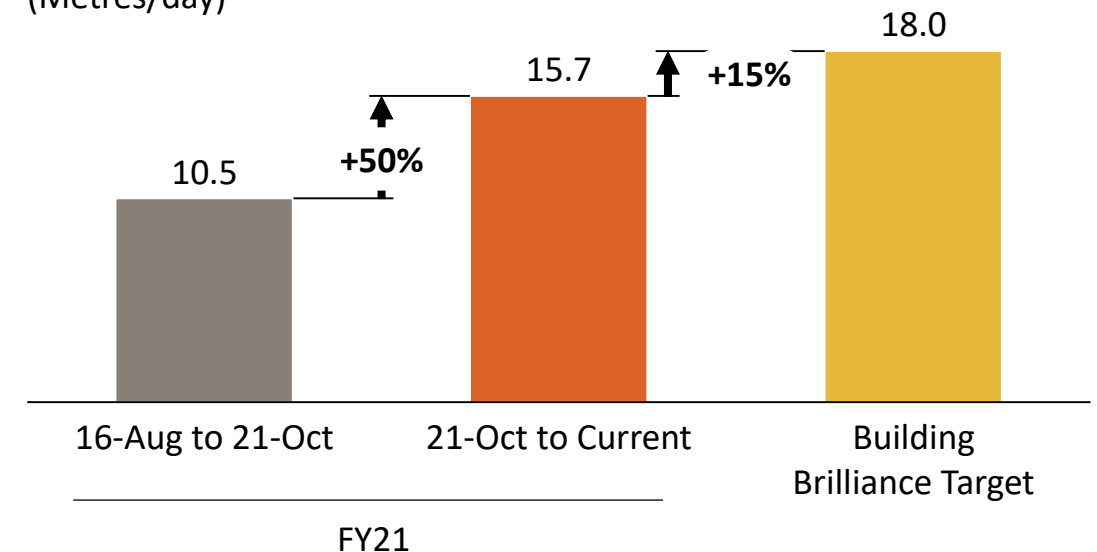
Ventilation capacity (m³/hr)



Reviewed and implemented improvements in mine planning process

- Improved overall mine planning process from life-of-mine to daily basis
- Core team focused on development advancement
- Rehabilitation assigned to a separate crew to reduce interactions

Lateral development rates (Metres/day)



A Leading innovation by deploying Boltec bolter

Shortening the development cycle through accelerated ground support

Description of initiative

Current situation

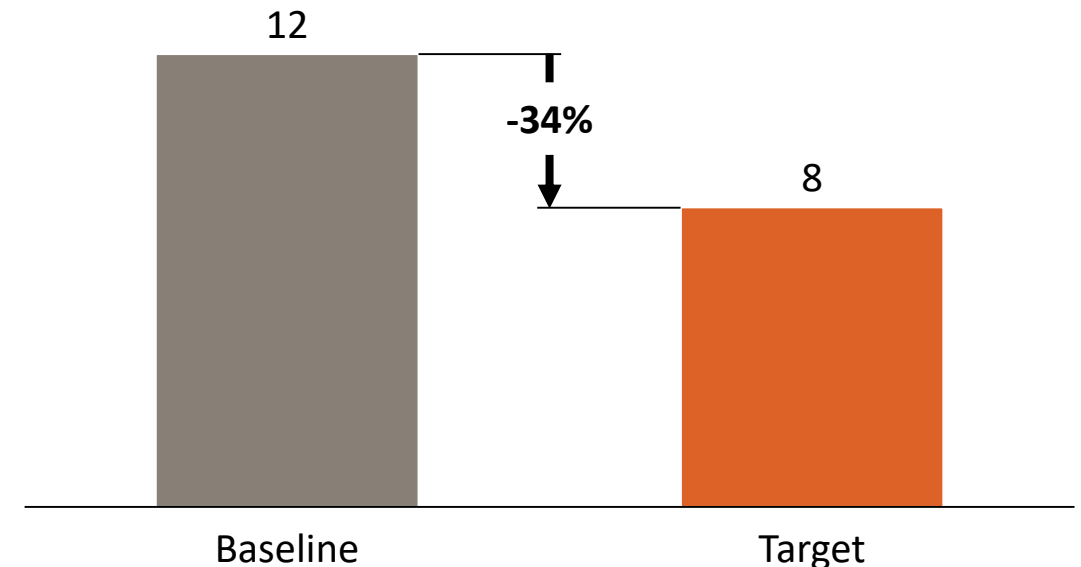
Bolting cycle makes up ~50% of required Jumbo time to support a heading.

Jumbos need two passes to install a bolt on a heading. This process is time-consuming and prone to error and rework

Solution

The new Epiroc Boltec drills the hole and installs bolt in one pass, reducing bolting and development time

Bolting cycle time (hours)



Value creation (annual cash contribution)

A\$4 M

to begin value delivery by Q3 FY21

B Established remote operating setup to expand productivity window

Ensuring stable 24/7 production drilling to accelerate the stoping cycle

Description of initiative

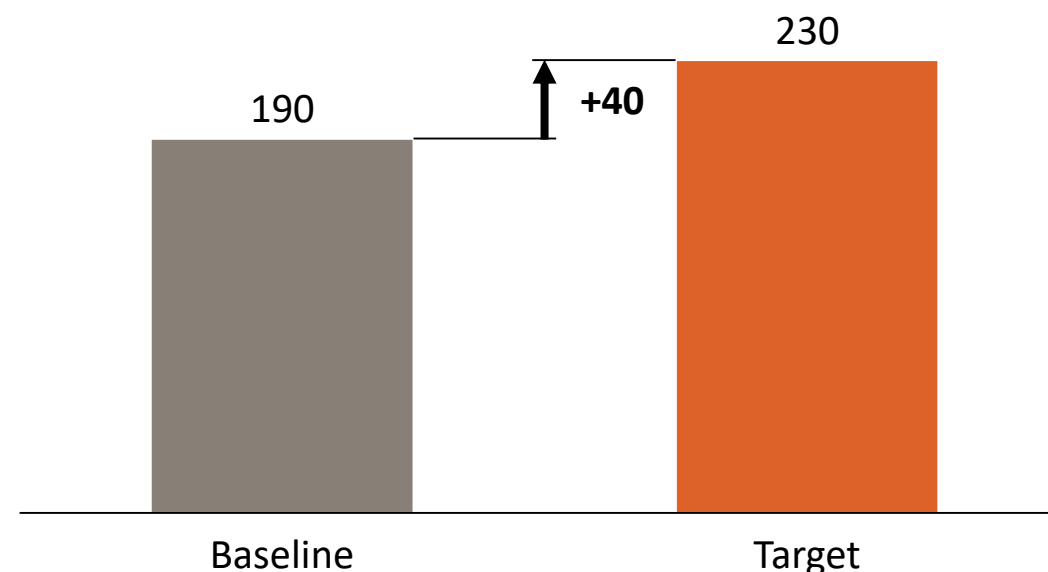
Current situation

Production drills are under-utilized during shift change. Auto-drilling remote functionality is under-utilized due to sub-optimal setup and pattern design

Solution

Use underground Wi-Fi to remotely operate production drilling through all shift changes

Production drill metres by improving shift change (metres per day)



Value creation (annual cash contribution)

A\$4 M

to begin value delivery by Q3 FY21

C Rolling out automation to lift underground loader productivity

Accelerating the stope extraction rate and keeping trucks full of ore

Description of initiative

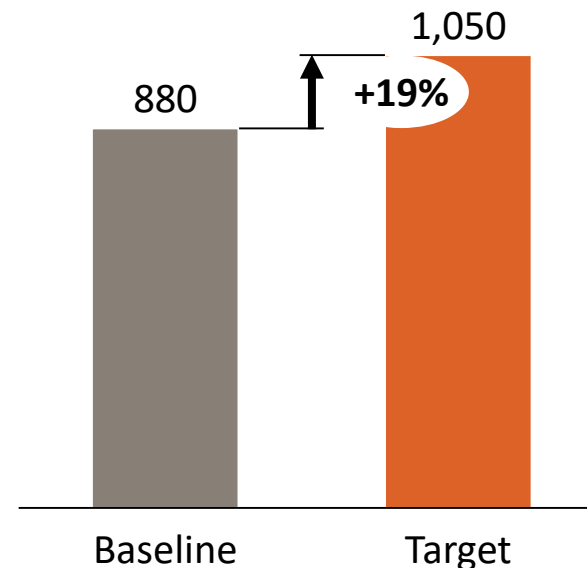
Current situation

Loaders are often under-utilised during shift change and transport time due to mine depth. Loaders often damaged due to poor current technology (camera visibility)

Solution

Deploy Automine functionality to allow one operator to remotely operate 2-3 loaders at a time from surface to improve utilization & maximise work hours

Loader productivity (tonnes per day)



Recently installed tele-remote loader operating station at surface in Leonora

Value creation (annual cash contribution)

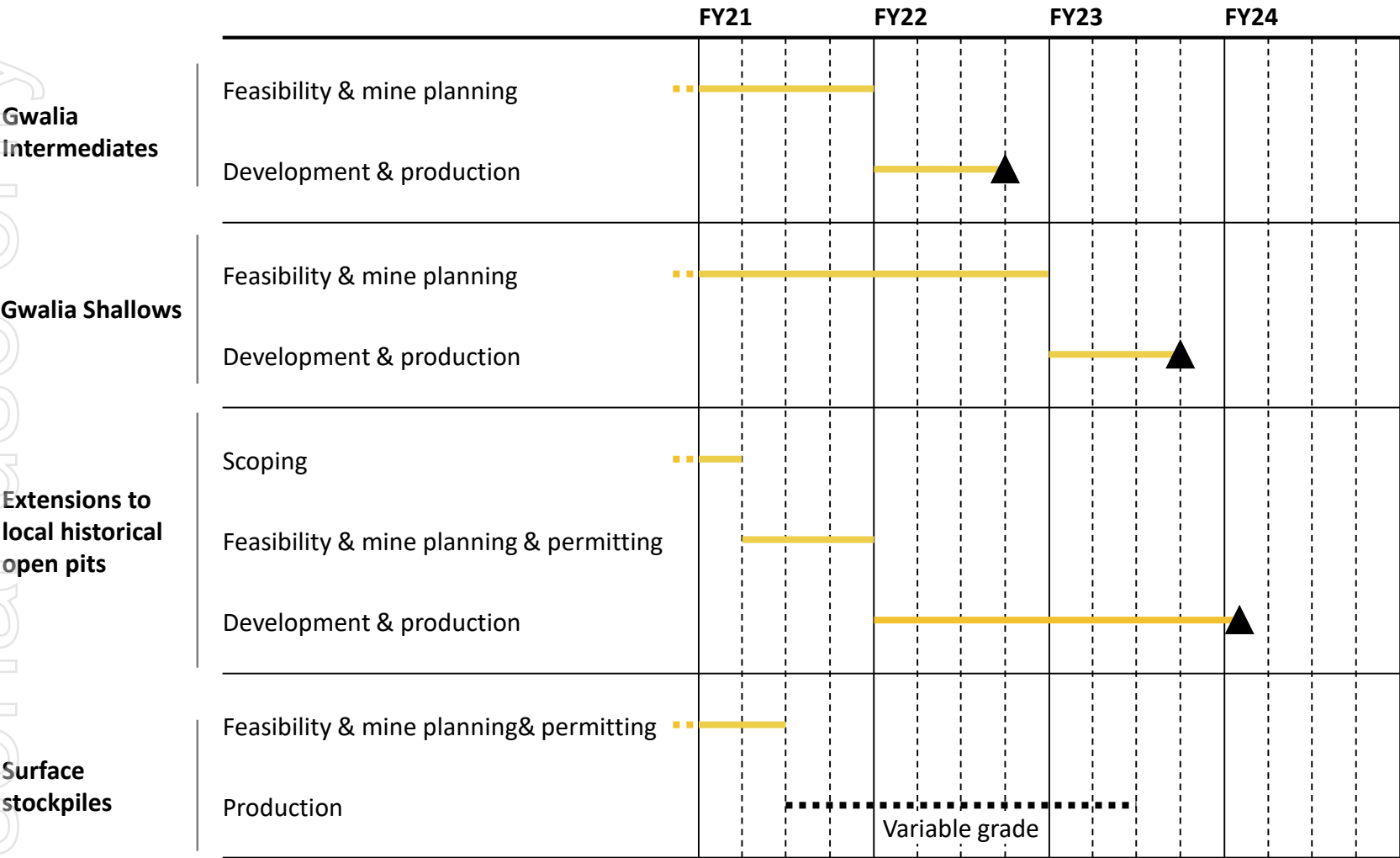
A\$7 M

to begin value delivery by Q3 FY21

Leonora province plan is to ramp up production from near-mine opportunities

Indicative timeline for Leonora Province development

▲ First ore



Plant at Leonora has up to **0.4 Mt in spare capacity** (1.4 Mt total)

Toll milling has been underway during FY21 and will **continue until at least mid-FY23**

Plan is to develop the Leonora province to **maximise throughput of St Barbara owned ore to displace toll-milled ore**

Source: Leonora technical services team; Tower Hill Pre-Feasibility Study

St Barbara respects and values all our stakeholders



Cultural Awareness Training

We engage with Traditional owners of the land

Encouraging proactive and transparent community engagement and involvement in St Barbara's operations, with education opportunities through apprenticeships

Cultural Awareness Training and bush immersion in Aboriginal culture

Working to reach our target of 5% Aboriginal employees at our Australian operations; current representation is 3%



Leonora Shooting Stars team

We support the indigenous leaders of tomorrow

Shooting Stars, a netball program that has helped increase school attendance of Aboriginal & Torres Strait Islander girls by 19% above the school average in 2019

Clontarf Foundation uses sport to initially attract young Aboriginal and Torres Strait Islander men to school, and then keep them coming.



Clontarf Kalgoorlie Academy at St Barbara's Perth Office

We value our true partnership with the Leonora community

We are embedded within the community by...

... participating in school and community events



... sponsoring community events like Leonora Bike Challenge and Leonora Cup



... celebrating community at our Leonora Family Day



... delivering career pathways talks with local students



... sponsoring Goldfield Girls leadership program for Aboriginal women



... raising awareness with the community about mental health



Leonora is using innovative solutions to reduce emissions footprint

Installation of absorption chiller runs on mine waste heat – 5,000 t CO₂ emission reduction

Absorption chiller at Gwalia mine runs on waste heat
Reduced emissions by ~ 5,000 t CO₂ per annum
Plan to expand the program – two more chillers are being scoped



Absorption chiller



Installation of Absorption chiller

Underground crushing station reduces transport emissions – 3,000 t CO₂ emission reduction

Underground crushing and concrete pumping infrastructure station – known as 'Paste Aggregate Fill' or PAF
Allows all rock waste to be stored underground
Reduces miles of underground truck travel by ~18%
Reduced emissions by ~ 3,000 t CO₂ per annum



Paste Aggregate Fill

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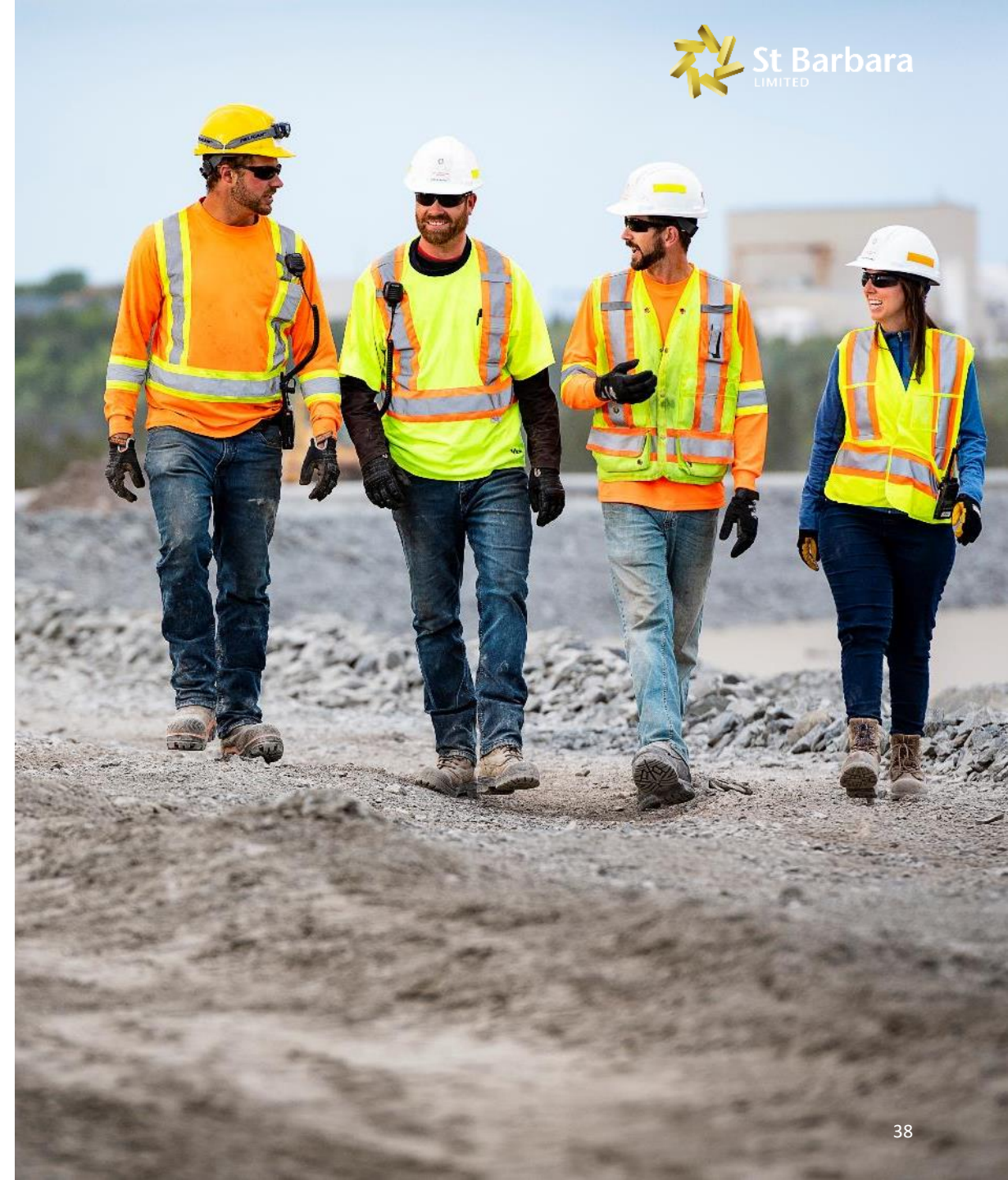
- Simberi

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Atlantic Operations



Touquoy open pit mine

FY 21F Production	100 – 115 koz
FY 21F AISC	A\$955 – \$1,100 per ounce
Ore Reserve	1.7 Moz
Mine life	FY 31



Atlantic's priorities are to deliver consistent production at Touquoy while navigating brownfield expansion permitting



Atlantic Gold is a low-cost operation with tremendous expansion potential in a stable jurisdiction



Touquoy has driven productivity and cost improvements to reliably deliver on guidance. We are planning to extend Touquoy mine life through mine design optimisation.



Building Brilliance will improve productivity and spend discipline at Touquoy to maintain production and cash flow under declining grade. This methodology will be replicated across the expansion projects to maximise value creation



Structured process in place to enable and accelerate expansion projects through permitting and stakeholder management

Atlantic strategy provides uplift over two horizons

Uplift 1

FY21-23

Deliver on Building Brilliance effort in near-term to continue improving on performance

- Maintain production
- Reduce unit costs through improved spend discipline

Touquoy already extended ~8 months - continue to search for additional near-mine production through optimising mine design and successful near-mine exploration

Work with local Nova Scotia stakeholders to progress permitting and design of **Beaver Dam and Fifteen Mile Stream**

Uplift 2

FY24-25+

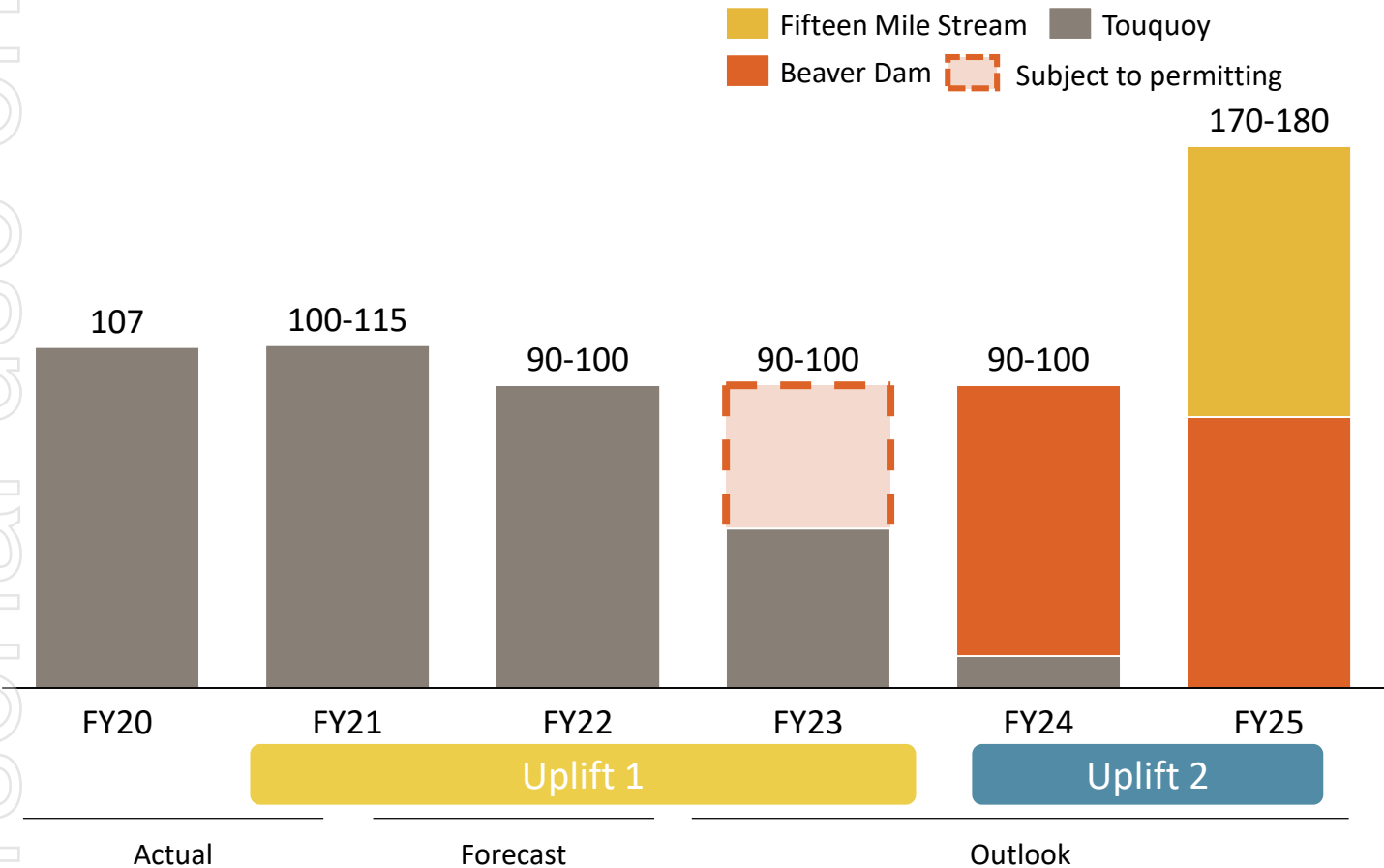
Design, construct and **begin production at Beaver Dam and Fifteen Mile Stream**

Finalise permitting, design and construction plan for Cochrane Hill and begin production

Process medium and low grade stockpiles from Touquoy

Extending Touquoy to sustain production trajectory while ramping up expansion projects

Annual production outlook koz

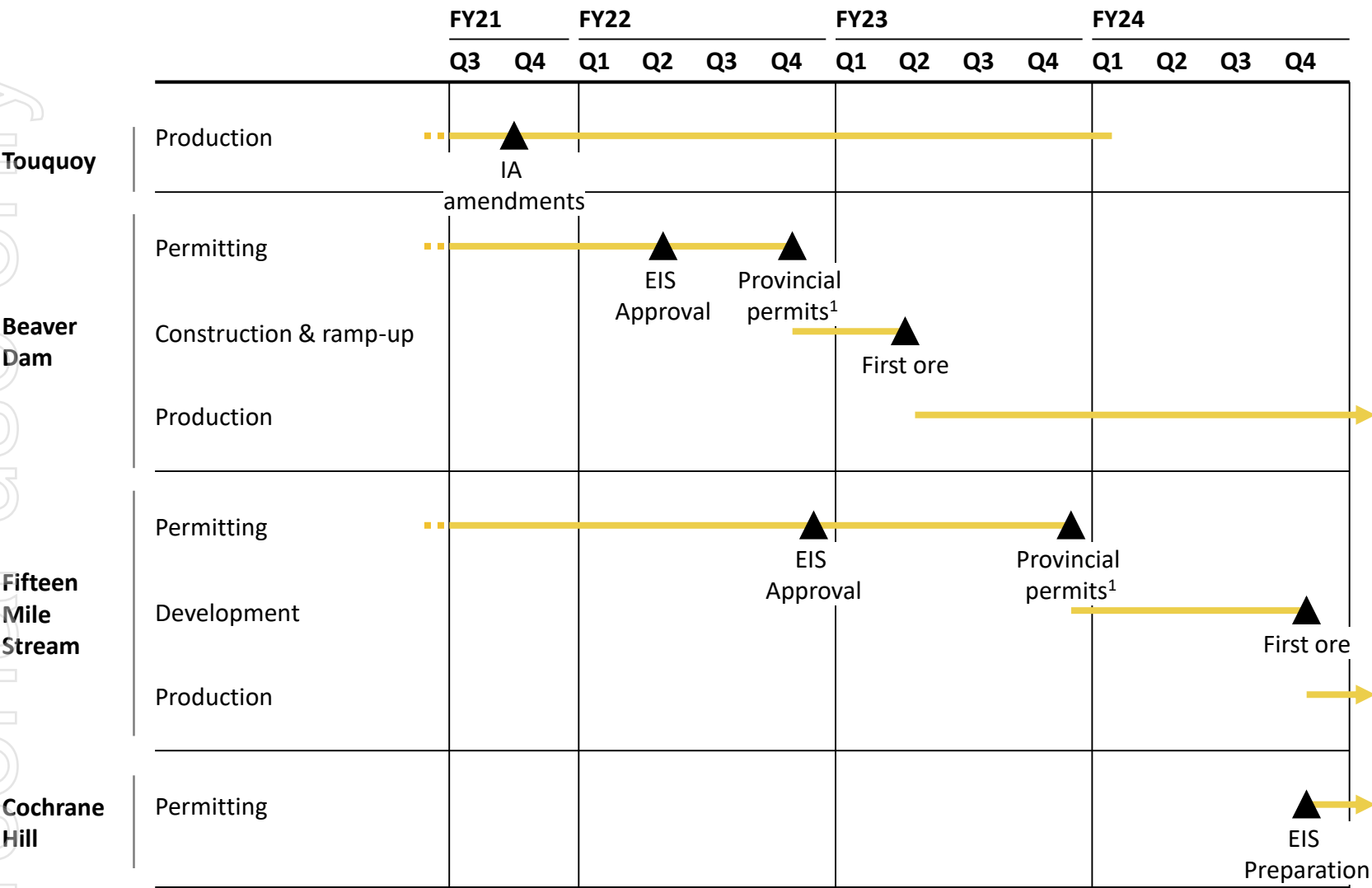


Operations summary

- Building Brilliance productivity initiatives will maintain production levels before expansion projects come online
- Building Brilliance also reduces **annual recurring costs by approximately A\$10 M per year** starting in FY22
- Brownfield project timelines may be accelerated through project simplification and construction optimisation
- We are collaboratively working with stakeholders and governments to accelerate permitting where possible to bring forward production
- AISC unit cost is expected to continue at the FY21 range at current production levels, before the Building Brilliance annual **cost reduction benefit that equates to around \$100/oz**

Atlantic brownfield expansion projects are progressing to provide long-term stable production

Indicative timeline for Atlantic project development



Changes in Federal regulatory permitting have impacted project timelines

Beaver Dam

- Satellite pit (37 km from Touquoy mill)
- Minimal infrastructure utilising innovative solutions and technology
- Dedicated team to facilitate permitting

Fifteen Mile Stream

- EIS Submission in February 2021
- Requires EIS and provincial approvals

Cochrane Hill

- Decision in October 2020 on Archibald Lake defers any decision on conservation subject to outcome of EIS process

1. Provincial permits: Industrial Approval; Wetland Alteration; Water Withdrawal Authorization; Fisheries Authorization; Metal and Diamond Mining Effluent Regulations Schedule 2.

Building Brilliance is focused on driving operational improvements in the Touquoy mill

x Details on following slides

	Baseline	FY21 target	Demonstrated best performance FY19-20
A Optimise mill availability	91%	95%	95% ¹
B Increase mill throughput per day	331	360	346 ²
C Maximise average recovery	92%	94%	96% ²

Improvements will be driven by

- Optimise mill throughput control
- Rationalise shutdown planning
- Review discretionary spend through the Spend Control Tower

Improved infrastructure

- Install a pebble crusher to increase mill throughput
- Implement a “Safebox” system at the mill to increase the circuit availability
- Install downcomer on the leach tanks to increase recovery
- Deploy Teletrac for mobile operators performance management and blast movement tracking

1. Best quarter performance
2. Top decile performance

A Atlantic has already demonstrated +5% mill availability by optimizing the maintenance strategy

Description of initiative

Current situation

Milling circuit is the processing plant bottleneck and half of downtime is linked to planned shutdown maintenance

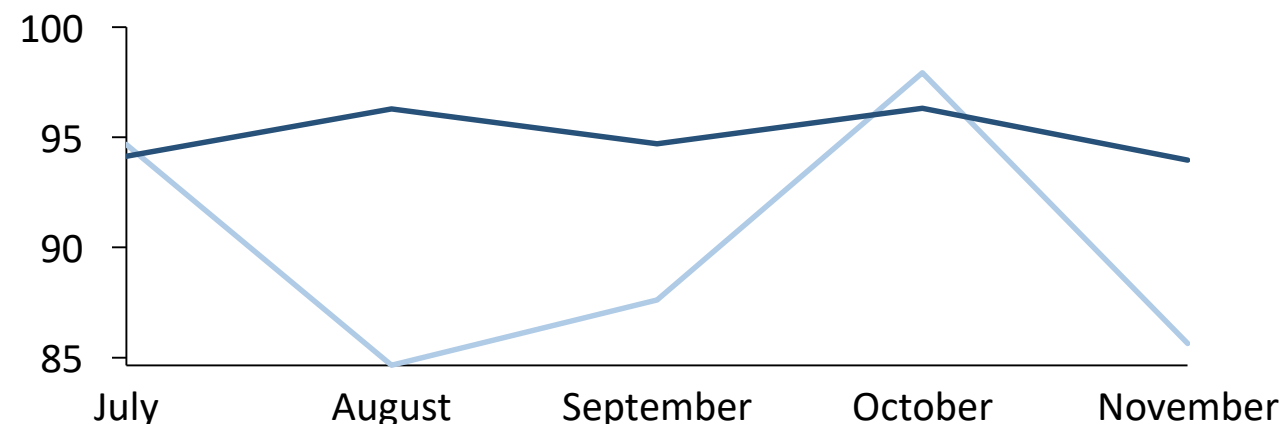
Solution

Deploy condition-based maintenance strategy instead of calendar-based shutdowns

Separate crusher and mill shutdowns to reduce shutdown duration

Mill availability (%)

— 2019 Availability — 2020 Availability



1H FY20 average: 90% 1H FY21 average: 95%

Value creation, annual cash contribution uplift

~A\$3 M

to begin value delivery by Q2 FY21

B Increasing plant throughput by debottlenecking the grinding circuit

Description of initiative

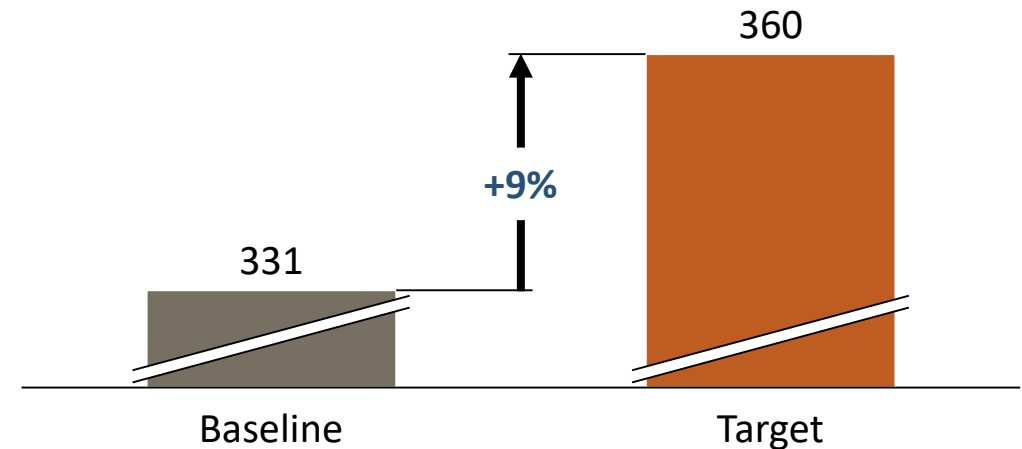
Current situation

Current steady throughput delivered by processing plant is 331tph driven by capacity of the grinding circuit

Solution

Increase mill's ability to grind and optimise particle size distribution to debottleneck grinding circuit

Throughput (tonnes per hour)



Value creation (annual cash contribution)

~A\$15 M

to begin value delivery by Q3 FY21

C Increasing recovery by improving circulation inside leaching tanks

Description of initiative

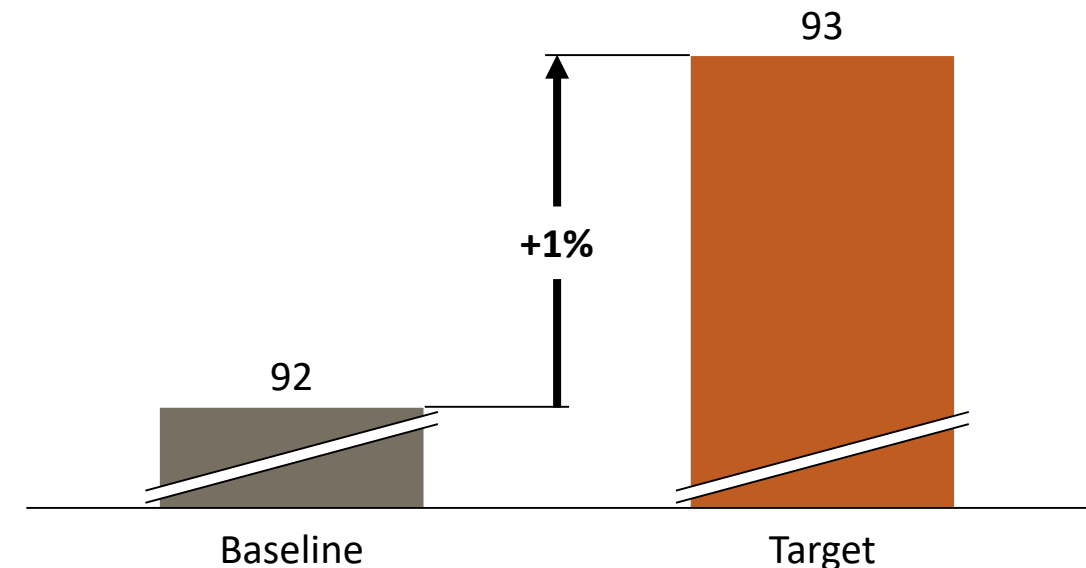
Current situation

Leach circuit does not have downcomers installed to improve circulation and improve retention time of ore being processed. Short-circuiting prevents proper mixing and retention time in leaching reducing recovery

Solution

Downcomers will be installed to maximize retention time at a low cost to improve recovery

Recovery (%)



Value creation (annual cash contribution)

A\$2 M

to begin value delivery by Q4 FY21

St Barbara is focused on meaningful community engagement in Nova Scotia

St Barbara has principles for community engagement...

- Engage in a **positive, open, timely and transparent way** with all stakeholders to **support existing and future operations**
- **Maximise the positive impact of St Barbara operations** on local economies through **employment and training opportunities** and **supporting the development of local businesses**
- **Build social licence to operate** in local communities by embedding ourselves into the community social fabric
- Conduct operations and interactions with local communities in a **manner consistent with internationally recognised principles on security and human rights**

... which guide how we work with stakeholders in Nova Scotia

- Engaging with regulators, government servants and elected officials to foster positive dialogue with St Barbara around **existing operations and future expansion plans**
- Working with government to deliver green energy initiatives to be **carbon neutral by 2025**
- **Creating local employment opportunities**
- Pro-actively engaging in provincial “One Window” permitting process to **ensure decision-makers understand timelines and needs**
- Contributing as a member of Mining Association of Nova Scotia (MANS) to **aid industry awareness**
- **Contribute to Nova Scotia community** development through donations and volunteering

St Barbara is committed to supporting Nova Scotian communities

We helped keep people to stay connected during COVID-19 lockdown



We donated iPads to seniors to maintain connectivity with family and friends

100 year old Eva Day uses a new iPad to speak with her family



We helped local schools celebrate graduation remotely

Worked with local municipalities to display banners acknowledging students' accomplishment

Donated bursaries to support students in their studies

We support local charities to reduce poverty in the province through donations and volunteering



Atlantic Gold is on-track to be carbon neutral by 2025

Leading St Barbara's global efforts to reduce emissions

Leading the mining industry globally for carbon neutrality

Initiatives

Status



30 kW scalable salt-water battery technology at Touquoy site, powered by solar panels
Additional 100 kW has been added

Complete
Installed in Q3 FY20



150 kW of solar panels installed at Touquoy, powering the administration buildings

Complete
Additional 60 kW being installed in Q3 FY21



Investigating opportunities for wind turbines at Touquoy site

Concept study underway



Designing Beaver Dam site to minimise carbon footprint:

Inflatable buildings to create ultra low plant footprint
Utilising renewable power from Touquoy

Concept study underway



Water treatment using liquid nitrogen avoids need for treatment

Recycled plastic slabs for foundations

St Barbara's strategic focus

Operating safely and sustainably

Driving Building Brilliance to operate with excellence and empower our people

Delivering strong financial returns to our shareholders

Operations and expansions overviews

- Leonora
- Atlantic
- **Simberi**

Conducting exploration and development activities

Summary and closing remarks

Q&A

Appendices



Simberi Operations



Simberi open pit mine

FY 21F Production	95 – 105 koz
FY 21F AISC	A\$1,665 – \$1,840 per ounce
Ore Reserve	0.3 Moz oxide & 1.8 Moz sulphide
Mine life	FY 24 (sulphide project PFS mine plan to FY 35)



Simberi has successfully extended oxide mine life and is navigating toward the Sulphide project with a strengthened management team



Simberi has successfully extended oxide mine life to FY24 allowing for a stable mill feed of ~100 kozpa leading up to potential Sulphide production commencing in FY25



Oxide extension success has been due to targeted near-mine exploration activities, and productivity and cost improvements to maintain AISC per ounce



Management team with proven PNG experience has been brought on to deliver remaining oxide and navigate process for developing Sulphide



Progress on Sulphide Feasibility Study is showing potential to expand processing plant capacity from 2.7 Mt to 3.5 Mt by debottlenecking to improve profitability



Working closely with PNG officials and our communities to progress Sulphide permitting and approvals

Simberi strategy provides uplift over two horizons

Uplift 1

FY21-23

Deliver on Building Brilliance effort in near-term to continue improving on performance

- Stabilise production
- Reduce unit costs through improved spend discipline

Current oxide mine life already extended ~2 years – we will continue to focus on near mine exploration to maintain production profile ahead of sulphides

Work with local PNG stakeholders to progress permitting and design of **sulphides brownfield expansion project**

Uplift 2

FY24-25+

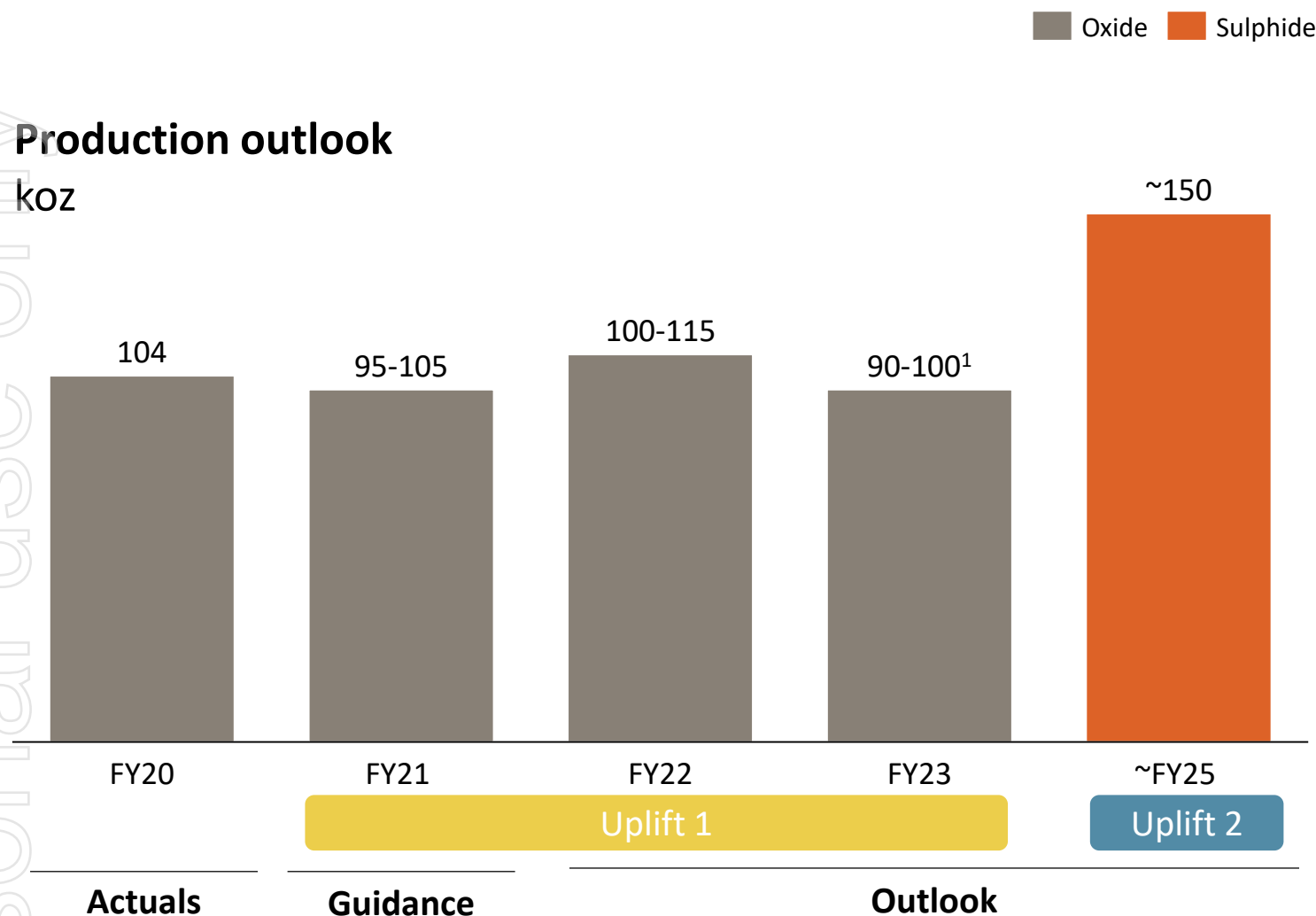
Transition processing from oxide to sulphide ore

Evaluate **expanding capacity** of Simberi sulphides processing plant

Oxide production will be maintained at ~100 koz per year, providing a bridge to Sulphides

Production outlook

koz

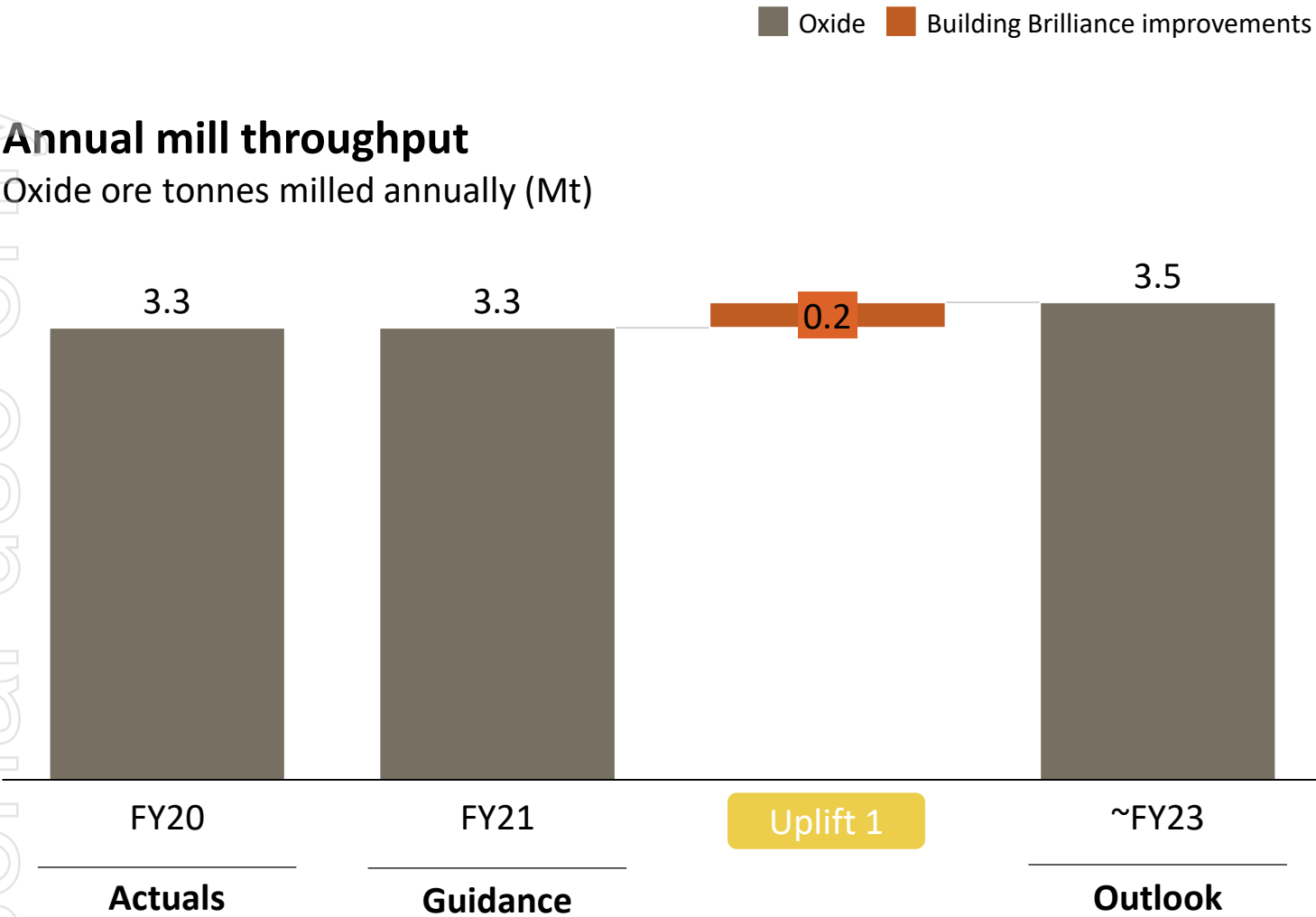


1. 10% inferred oxide resources

Operations summary

- Extending oxide mine life through near-mine exploration
- Improving productivity with Building Brilliance, while also **reducing annual recurring spend by approximately A\$15 M** per year by 1H FY22
- Investing in maintenance to improve equipment availability
- Progressing permitting and feasibility study for Sulphides expansion
- Expect production profile to maintain until Sulphides brownfield project comes online
- At the current oxide production levels the AISC unit cost is anticipated to be similar to FY21 before the Building Brilliance annual **cost reduction benefit that equates to around A\$150/oz**

Our strategy at Simberi is to increase throughput by improving reliability ahead of Sulphide project ramp up



Building brilliance will increase mill throughput

- Improve plant maintenance processes to maximise equipment uptime
- Embed reliability improvements ahead of sulphides brownfield expansion

Building Brilliance has put focus on improving crucial operational Key Performance Indicators

x Details on following slides

	Baseline	FY22 target	Demonstrated best performance ¹
A Increase haul availability	60%	70%	72%
B Maximise mill throughput	9ktpd	11ktpd	12ktpd

This uplift will be driven by

Equipment Productivity

- Scheduling of downtime to maximise uptime across system (shutdown maintenance, refueling)
- Payload productivity
- Loader utilisation – already up ~5% from FY20 due to refueling downtime efficiency initiative

Maintenance Reliability

- Overhaul of the mobile fleet
- Increased preventative maintenance and move to condition based monitoring
- Installation of supporting maintenance tools – reliability incident management system, pronto scheduling and reliability engineers onboarded

¹. Average of days with top decile performance in FY20

A Haul fleet availability improvements

Rapidly approving amount of productive time for trucks

Description of initiative

Current situation

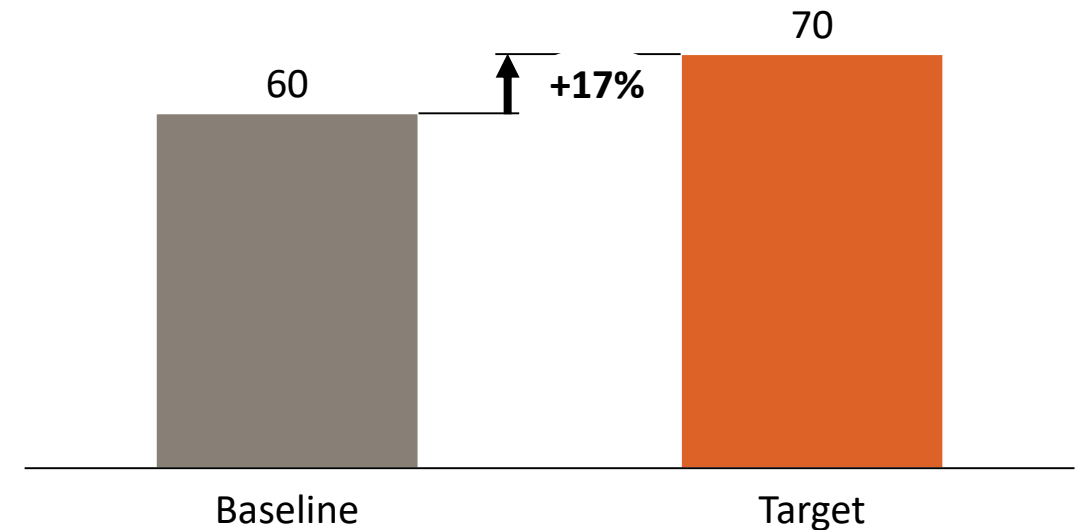
Portion of the fleet are often down for repair with recurring failures causing low availability

Solution

Complete diagnostic of trucks that are operating sub-optimally, prioritise defects which will halt operations. All repairs to be completed by December 2020 and processes updated by May 2021.

Implement new preventative maintenance program to maintain repaired fleet

Truck availability (%)



Value creation (annual cash contribution)

A\$5 M

to begin value delivery by Q4 FY21

A Haul fleet payload productivity

Scheduled scraping of truck-beds to increase effective payloads of haul fleet

Description of initiative

Current situation

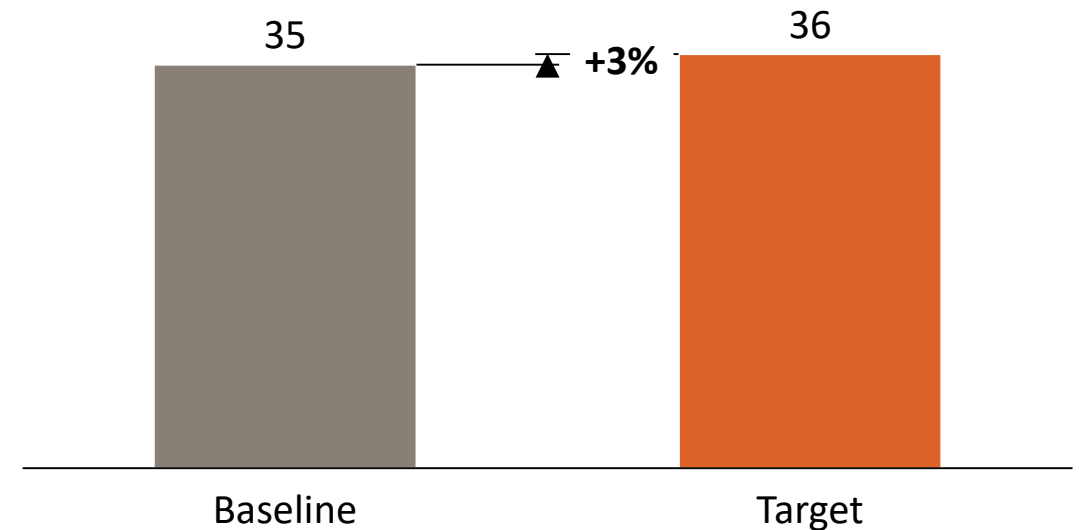
Due to the sticky/adhesive nature of material moved haul units accumulate dried material in the truck bed

Material has not been regularly cleaned from the beds leading to a overall decline in effective payload (10-15% of capacity)

Solution

Introduce a scraping schedule whereby the truck beds are regularly scraped out by a digger to remove accumulations and increase the average effective payload

Effective productive load (tonnes)



Value creation (annual cash contribution)

A\$1 M

to begin value delivery in Q2 FY21

B Maximising mill throughput

Feeder breaker upgrade to deal with harder ore and reduce oversized material

Description of initiative

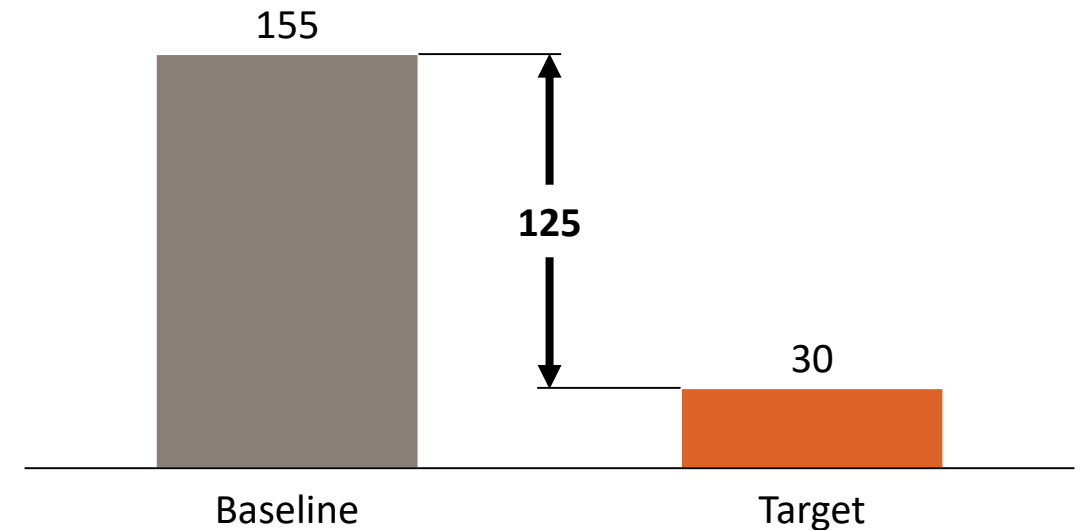
Current situation

Feeder breaker was designed for softer ore than is currently being processed. The current more competent ore damages the feeder breaker which blocks the mill feed chute and consumes more energy in the SAG mill than designed

Solution

Modifications to the breaker including pick reinforcements are expected to improve circuit uptime and overall performance

SAG mill downtime from blockages (hours per year)

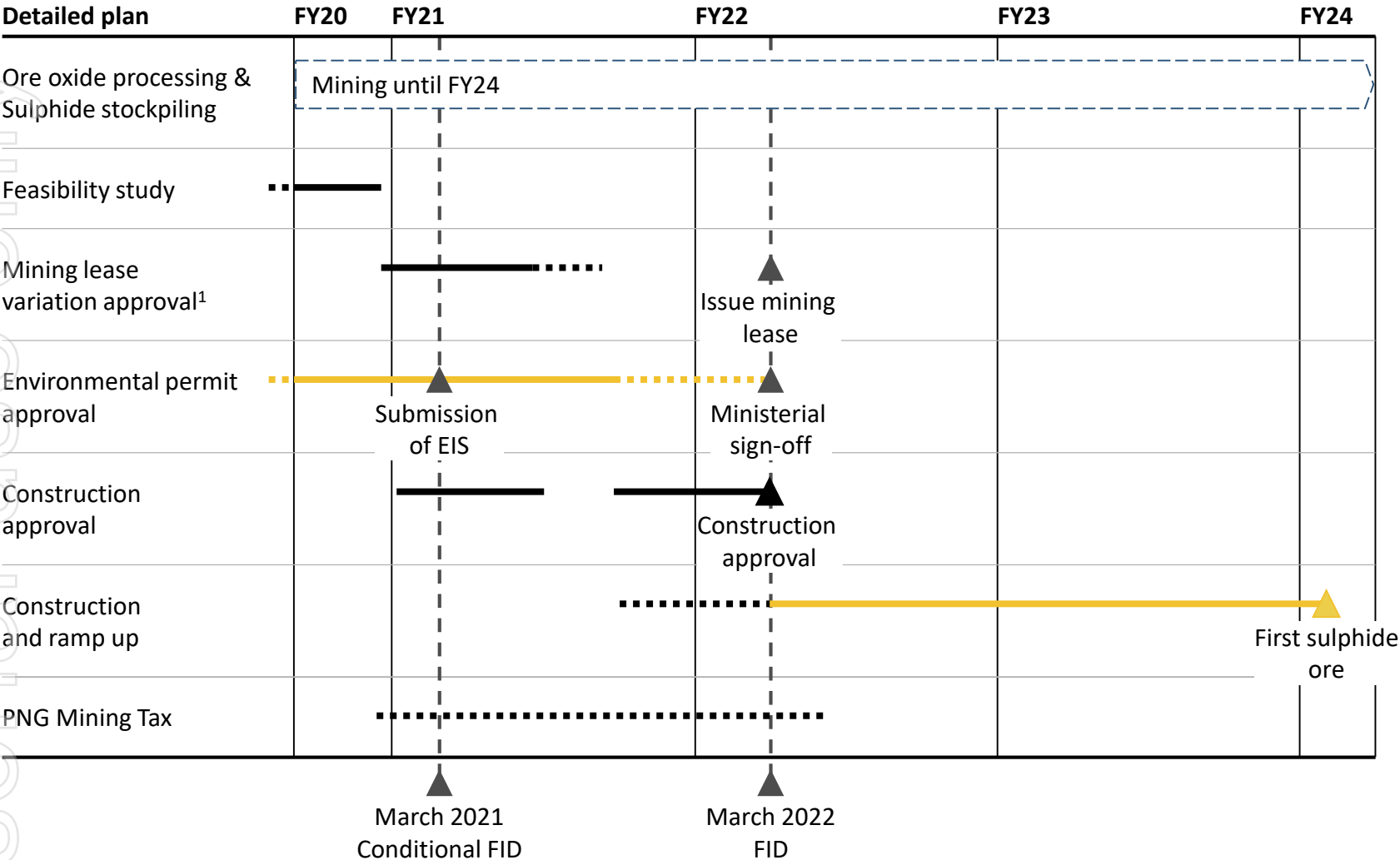


Simberi brownfield expansion will maintain production beyond FY24



Simberi sulphides expansion project indicative timeline

Timeline variability Critical path



- Simberi sulphides expansion is an extension of existing operations**
- Utilises existing infrastructure on Simberi Island
 - Maintains mining methodology; requires deepening of existing pits
 - Requires an amendment to the existing mining lease to allow for processing of sulphides—new lease is not required
 - Does not exceed current processing or deep-sea tailings pipe throughput
- St Barbara is managing risks around the project timeline**
- Engaging with government and stakeholders to discuss project
 - Potentially bringing forward long lead item purchases
 - Starting detailed design ahead of final permit approval
 - Making conditional investment decisions under legislative uncertainty

1. Required for sulphide processing of any kind
Source: St Barbara SME interviews; expert interviews; PNG Environmental Act

We have defined steps to manage the Mining Tax uncertainty and permitting process which are critical to success of Sulphides

	November 2020	March 2021	January - April 2022
Permitting process	Engagement with local communities, provincial government, federal government and regulators	Apply for Environmental permit and Mining Lease Variation; current lease is only for oxides mining and processing Environmental approval with high levels of consultation and approval timeline of up to 12 months	Receive final permitting approvals from Ministers
Mining Tax changes	Engage with industry and regulators	Expect next iteration of PNG Mining Act to enter parliament; timing for this decision is highly uncertain Early iterations of policy could significantly reduce value of any sulphides processing project	Make “Go/No-Go” decision on construction based on latest Mining Tax iteration

St Barbara is committed to Simberi community health



We worked with community to keep Simberi COVID-19 free

- Established community committee for COVID management
- Tested incoming community members to the island
- Implemented daily screening before work shifts & crew change
- Donated 1,000 Rapid Test Kits to New Ireland Provincial Government
- Set-up COVID-19 hand wash stations in local schools



We support the Simberi Mine Clinic and Maragon clinic to provide community healthcare

- Treats ~30 patients per day – majority are locals
- St Barbara owns, staffs and equips Simberi Mine clinic. Maragon Clinic receives support from St Barbara. We have recently upgraded both facilities
- Provides support for medication supply, medivacs, government vaccine program, ante-natal and family-planning clinics, mosquito net distribution and referrals to hospital
- Facilitates visits by Australian Doctors International and Fred Hollows Foundation

We will continue to support local businesses on Simberi & Tabar Islands

We spend A\$1M per month with local land owners by...

... leasing and renting local vehicle and equipment



... local landowner companies working in the mine



... utilising local boat operators and maintainers



... purchasing local meat, fish and vegetables for the camp and supporting re-establishment of a cocoa industry



... developing mariculture projects

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Operations and expansions overviews

**Conducting exploration and
development activities**

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St Barbara has a medium term plan to replenish its resources through near-mine exploration while building options for future Greenfield growth

0 – 18 months

Uplift 1: Near mine development



Extend Touquoy life through mine cut backs

Identify resources in **Gwalia Intermediates and Shallows**

Convert Inferred Simberi Oxide Resources to Measured and Indicated resources

18 months – 3 years

Uplift 2: Province development



Further **expand production** across Leonora province

Continued drilling to define resources within the **Moose River Corridor**

Deliver brownfield expansion projects at Simberi and Atlantic

3+ years

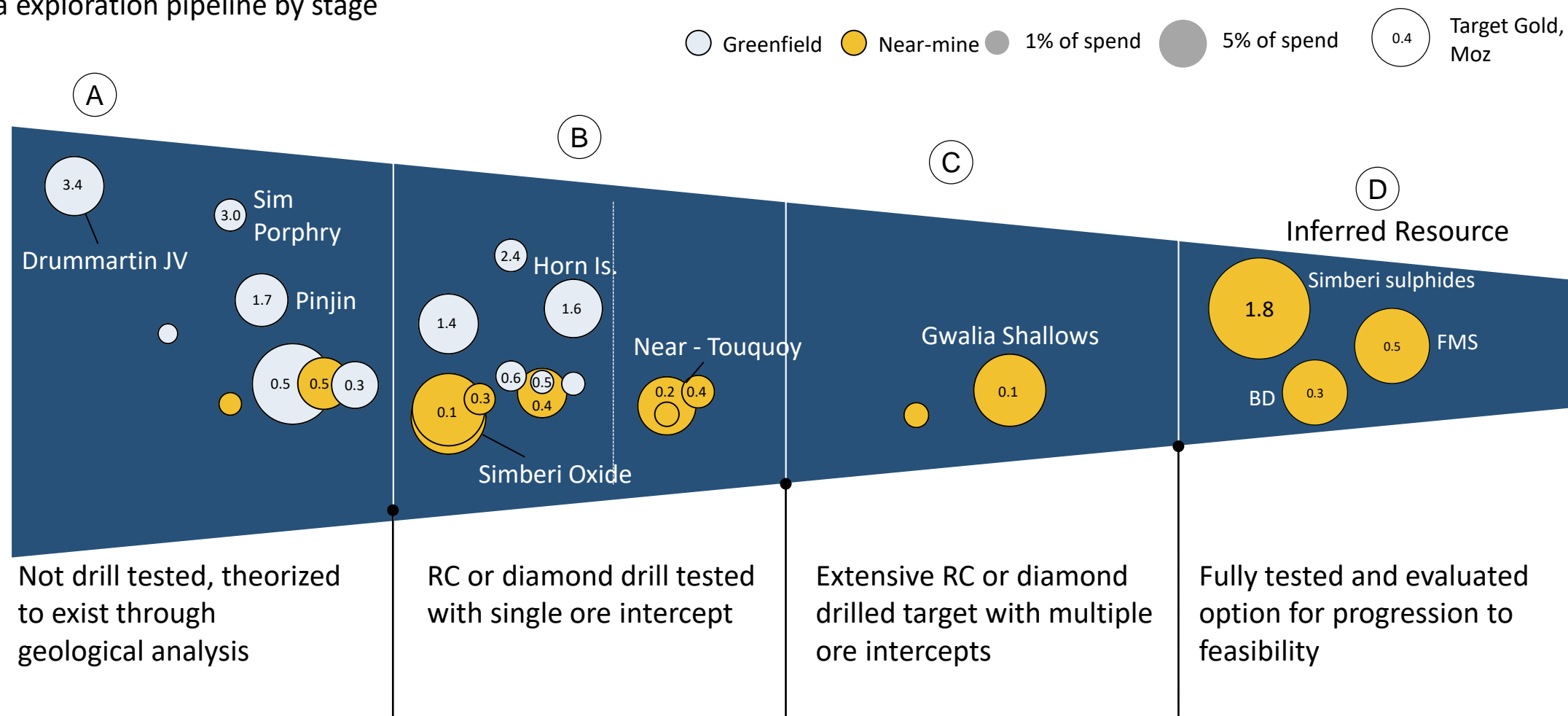
Uplift 3: Greenfield exploration



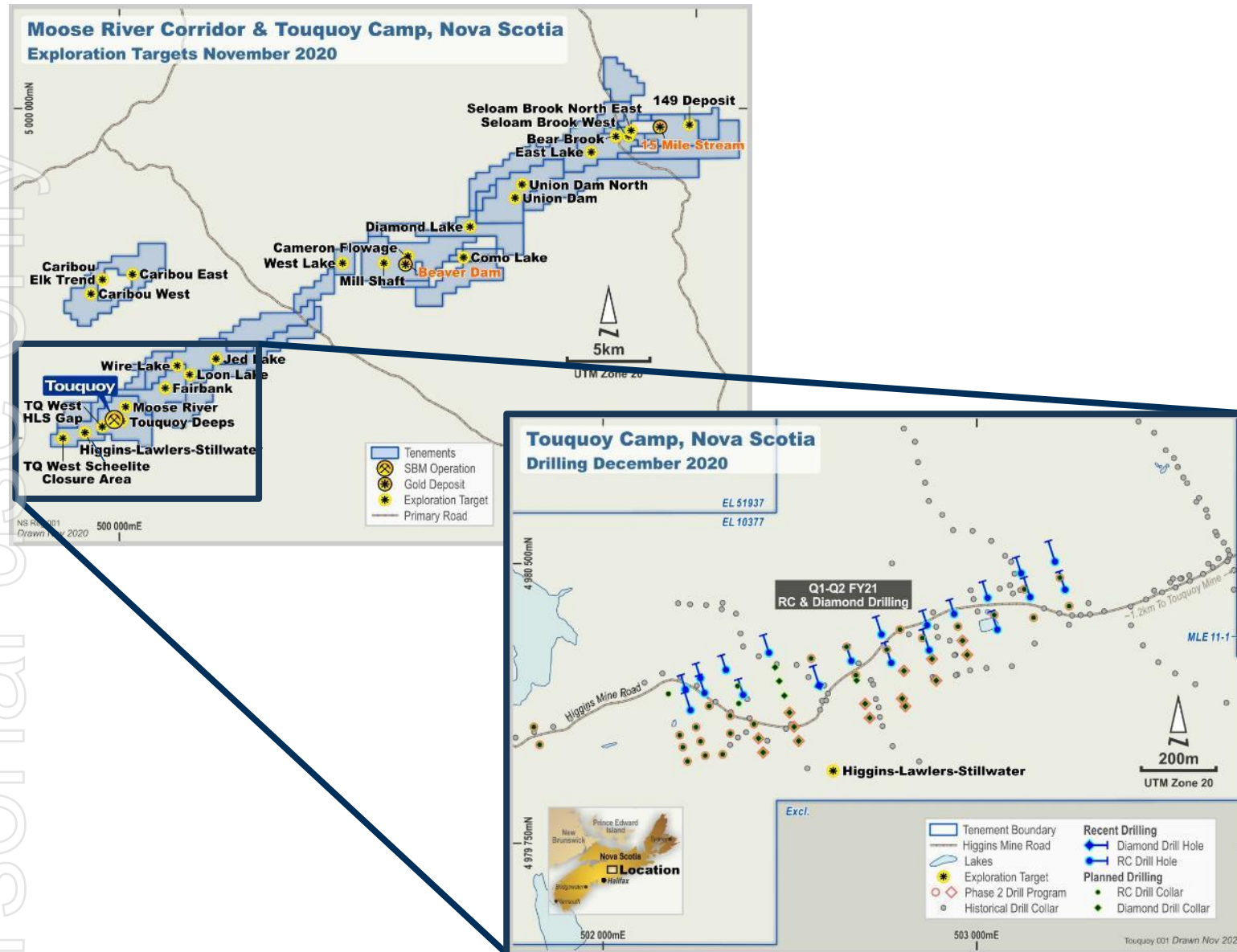
Identify attractive opportunities in stable jurisdiction with long mine life and low future unit costs

Our current exploration pipeline is prioritising near mine targets at Gwalia, Touquoy and Simberi, with 52% of spend on those targets

St Barbara exploration pipeline by stage



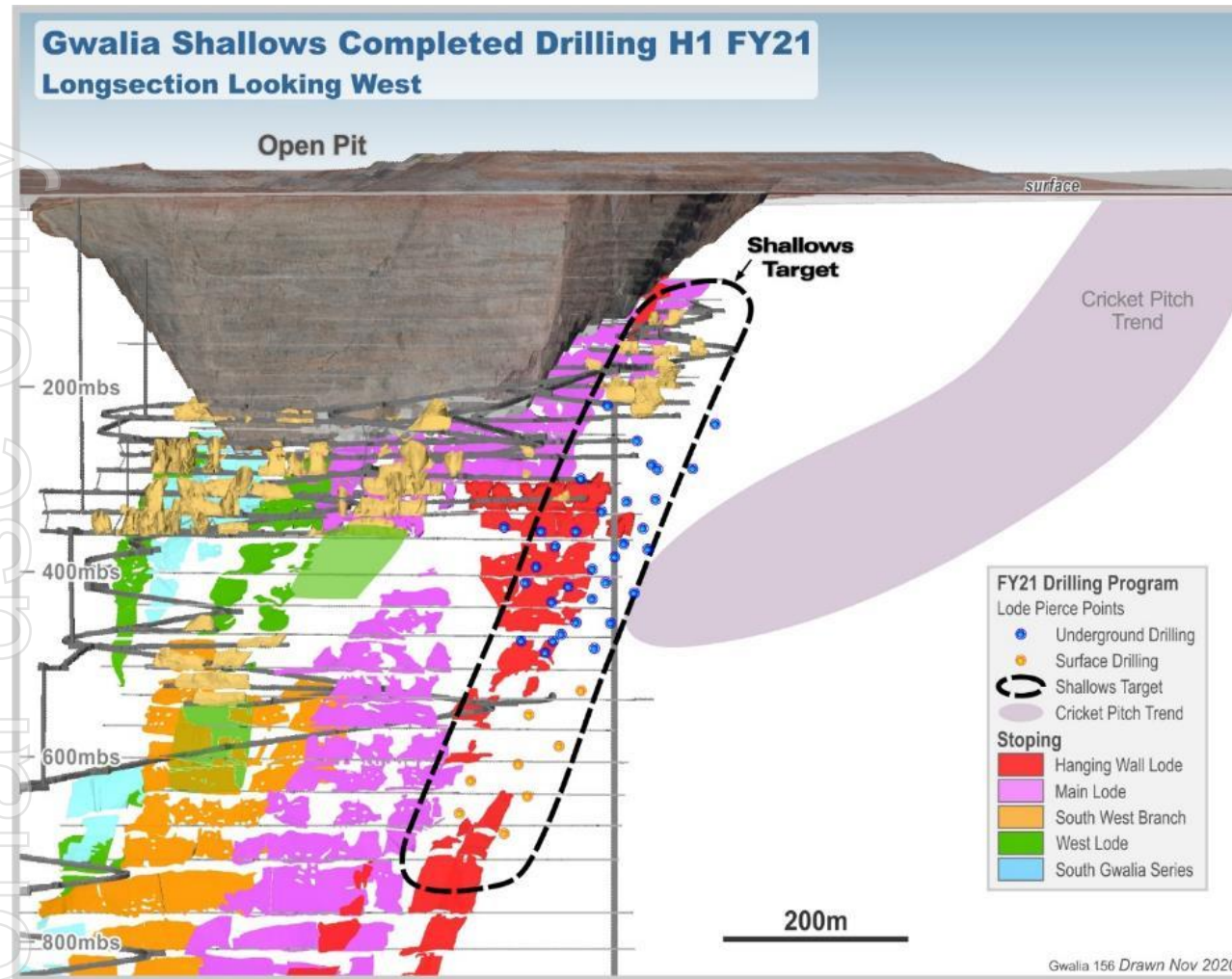
Prospects near Touquoy are under review



Higgins-Lawlers-Stillwater is a promising prospect located near Touquoy open pit

- Located 2 km southwest of Touquoy open pit
- 19 RC and diamond drill holes completed for 1,988m of a 29 hole, 2,950m program testing a 1.1km strike length
- Intersected zones of veining and sulphides
- Subject to results, a second phase of drilling is planned

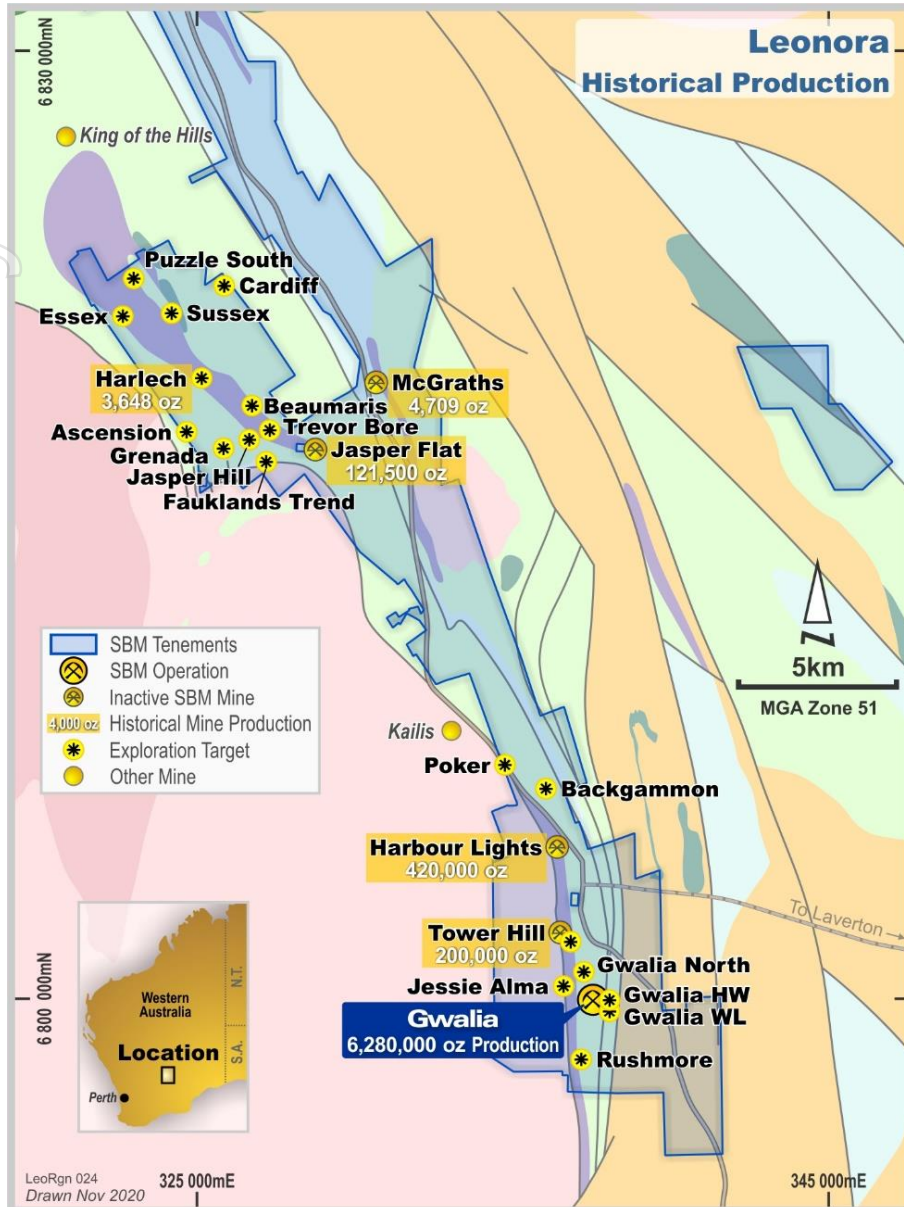
Gwalia resource estimate is well advanced



Gwalia Shallows is an exploration target; resource estimate planned in 2H FY21

- 36 hole underground diamond drill program for 8,812 m and 8 surface hole diamond drill program for 4,719 m was completed
- Tested the northern extension to the Gwalia Lode System to the north above 700 mbs
- Results received and wireframes completed in preparation for resource estimation

Leonora Province



Historical gold production from several sites located within the St Barbara tenements includes:

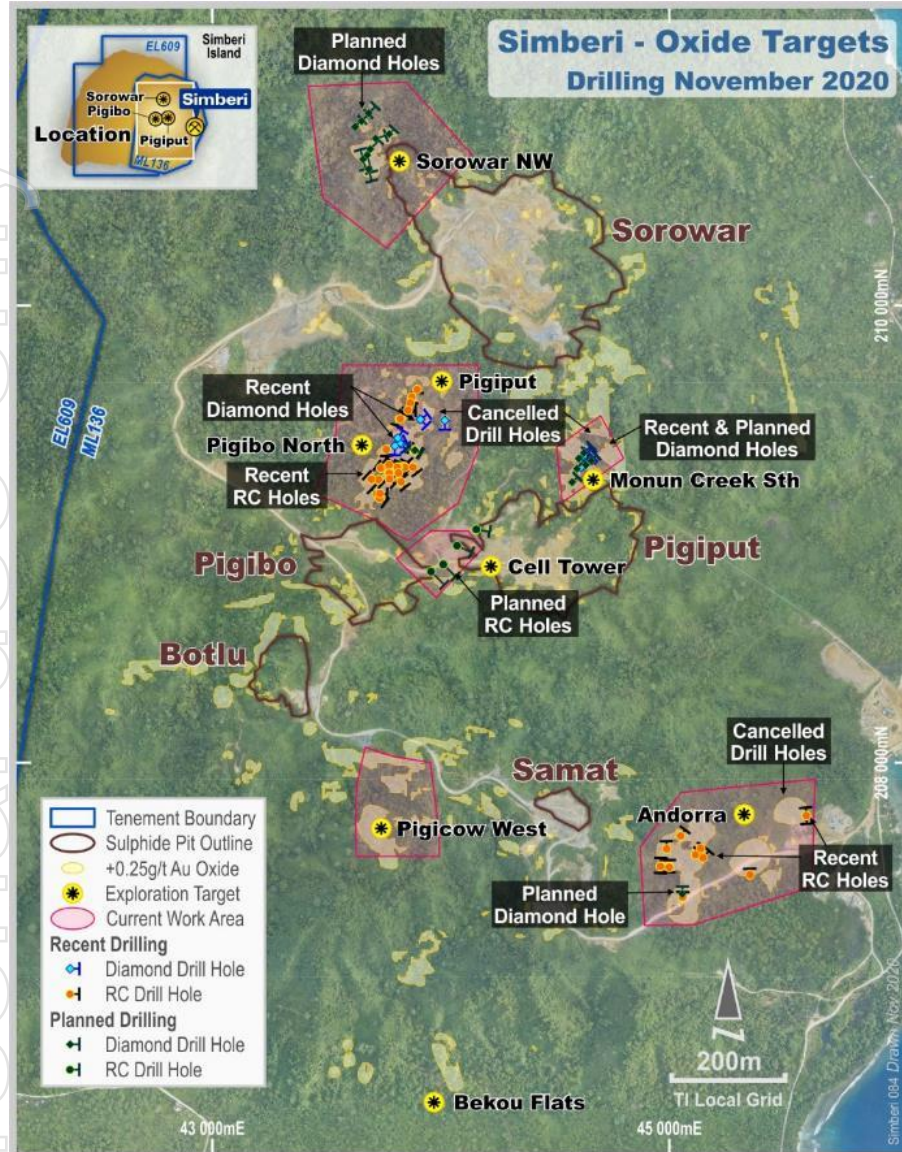
- Tower Hill – 200,000 ounces (several sources)
- Harbour Lights – 420,000 ounces
- Jasper Flat – 121,500 ounces

Tower Hill has a current Resource of 625,000 ounces and Reserves of 306,000 ounces

The non-JORC compliant resources present at Harbour Lights and Jasper Flat and their along strike and down dip potential will be assessed

We plan to target these areas in the near-term

Targeted exploration of near-mine oxide opportunities are underway at Simberi



Drilling programs are underway to convert current Inferred oxide ounces to reserves and to identify additional Inferred oxide ounces

- RC and diamond drill program underway testing 6 oxide targets within ML136
- 52 holes already completed for 2,195 metres
- Drilling completed at Pigibo North, Andorra and Monun Creek South
- Drilling to be completed at Sorowar Northwest, Pigicow West and Cell Tower
- Drilling results are currently being reviewed and assessed for oxide mineralisation

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In 2020, we have:

- A clear strategy to deliver shareholder value
- Updated our operating model and appointed an experienced leadership team to deliver this strategy and grow the Company
- Launched our Building Brilliance program with benefits already being realised

Looking ahead, we will:

- Deliver Uplifts #1 and #2 of our strategy, increasing production by >40% to 520 to 570 koz by FY25
- Consider greenfield opportunities to provide value-accretive uplift in production in the longer term

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St Barbara
LIMITED

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Snapshot of St Barbara (SBM.ASX) – A global ASX 200 gold producer



Market

Market Capitalisation¹ A\$1.7 B @ A\$2.47/share

Outstanding shares¹ 705 M

Liquidity² 6 M/day (0.8%)

Financial

FY20 EPS³ A\$0.18

FY20 total dividend A\$0.08

Cash at bank⁴ A\$93 M

Debt⁵ A\$105 M

Reserves / Resources

Ore Reserves (JORC)⁶ 6.0 Moz

Mineral Resources⁶ 11.6 Moz

St Barbara has a strong balance sheet supported by operational performance providing a platform for growth

1. As at close 14 Dec 2020. 2. 3 months to 14 Dec 2020. 3. Basic EPS for FY20. 4. As at 30 Sep 2020. 5. As at 30 Sep 2020 debt comprises C\$100 M syndicated debt facility (repayment date July 2022), excluding A\$28 M lease liabilities. 6. As at 30 June 2020, refer corresponding Ore Reserves and Mineral Resources slides.

Consolidated production, costs and guidance summary

Production Summary Consolidated		Q1 Sep FY20 AG full qtr	Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Year FY20	Q1 Sep FY21	Guidance FY21
<i>St Barbara's financial year is 1 July to 30 June</i>		<i>Qtr to 30 Sep 2019</i>	<i>Qtr to 31 Dec 2019</i>	<i>Qtr to 31 Mar 2020</i>	<i>Qtr to 30 Jun 2020</i>	<i>Year to 30 June 2020</i>	<i>Qtr to 30 Sep 2020</i>	<i>Year to 30 June 2021</i>
Production								
Atlantic ¹	oz	22,355	29,067	26,032	29,209	106,663	27,226	100 to 115 koz
Gwalia	oz	38,153	42,022	39,684	51,297	171,156	22,625	175 to 190 koz
Simberi	oz	27,061	23,070	25,831	28,106	104,068	23,139	95 to 105 koz
Consolidated	oz	87,569	94,159	91,547	108,612	381,887	72,990	370 to 410 koz
Mined Grade								<u>Milled grade</u>
Atlantic	g/t	0.86	1.02	0.91	0.88	0.93	0.95	1.33
Gwalia	g/t	7.8	8.0	8.1	7.0	7.7	8.1	8.3
Simberi	g/t	1.09	1.03	1.05	1.07	1.06	1.19	1.25
Total Cash Operating Costs								
Atlantic	A\$/oz	747	669	773	675	713	669	n/a
Gwalia	A\$/oz	1,124	1,016	1,117	1,041	1,071	1,560	n/a
Simberi	A\$/oz	1,440	1,704	1,459	1,360	1,482	1,481	n/a
Consolidated	A\$/oz	1,125	1,077	1,116	1,025	1,083	1,203	n/a
All-In Sustaining Cost								
Atlantic	A\$/oz	970	823	951	988	928	1,008	955 to 1,100 ²
Gwalia	A\$/oz	1,559	1,471	1,556	1,389	1,485	2,592	1,435 to 1,560
Simberi	A\$/oz	1,603	1,851	1,629	1,467	1,631	1,678	1,665 to 1,840 ³
Consolidated	A\$/oz	1,421	1,364	1,405	1,301	1,369	1,711	1,360 to 1,510

1. Atlantic Gold was acquired on 19 July 2019. Atlantic Gold production, grade and costs prior to this date provided for comparison. Reported Q1 Sep FY20 production included 4,362 ounces produced by Atlantic Gold prior to acquisition
2. C\$880 to C\$1,010 per ounce @ AUD/CAD 0.92
3. US\$1,185 to US\$1,305 per ounce @ AUD/USD 0.71

Guidance summary – exploration, capex, production profile

Exploration Guidance FY21

A\$ M

Australia

- Leonora Region 8 – 9
- Pinjin WA, Lake Wells WA, Back Creek NSW 10 – 11

Tabar Island Group, PNG 2 – 3

Nova Scotia, Canada 10 – 12

Consolidated 30 – 35

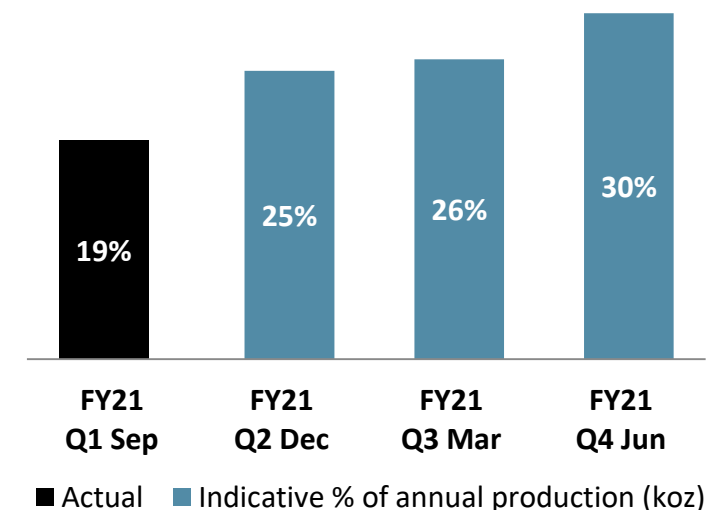
Capex

Guidance FY21

	Sustaining	Growth
	A\$ M	A\$ M
Gwalia	70 – 80	30 – 32
Simberi	12 – 15	4 – 5
Atlantic	15 – 20	15 – 20
Consolidated	97 – 115	49 – 57

FY21 Production

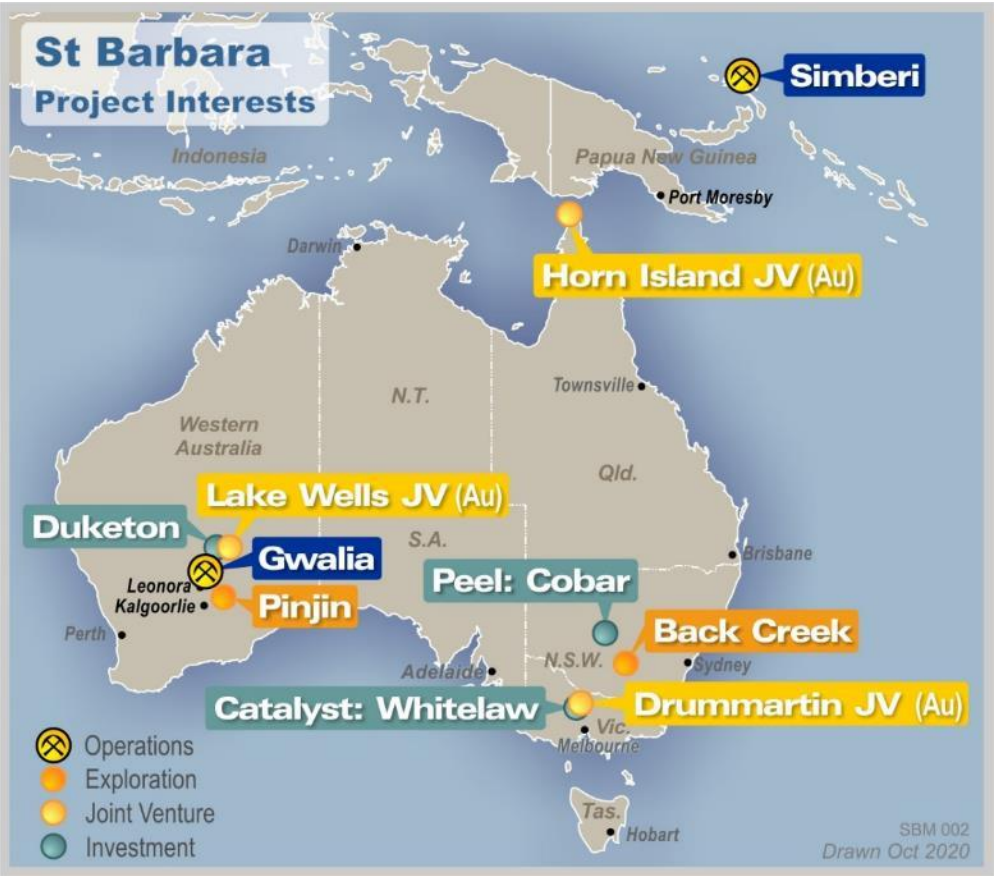
Indicative Quarterly Guidance Profile



Figures rounded to nearest percent and may not add due to rounding.

Hedging summary as at 15 December 2020

Financial Year	Volume ounces	Price \$/oz	Type	Delivery	Delivery schedule	Announced
FY21	10,964	C\$1,759	Forward	Dec 2020 to Feb 2021	Quarterly	24 Feb 2020 ¹
Mar 21 to Dec 22	78,010	C\$2,050	European call options	Apr 2021 to Dec 2022	Monthly	24 Feb 2020 ¹



Joint ventures with Australian explorers

Drummartin with Catalyst Metals (ASX:CYL)

Horn Island with Alice Queen (ASX:AQX)

Lake Wells with Australian Potash (ASX:APC)

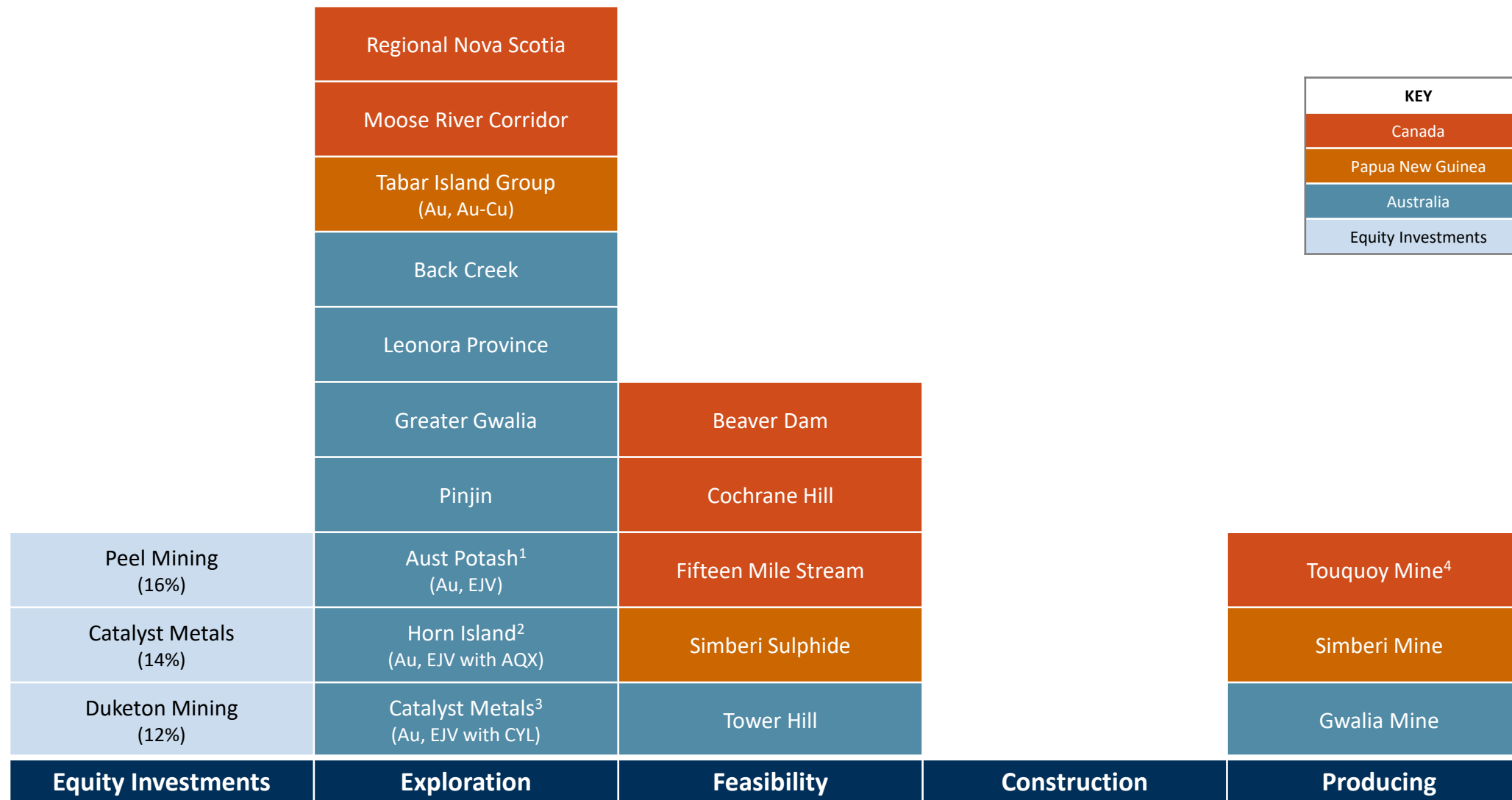
Equity investments in Australian explorers

Catalyst Metals Limited (ASX:CYL) 14%

Duketon Mining Limited (ASX:DKM) 12%

Peel Mining Limited (ASX:PEX) 13%

Project pipeline



1. Earn-in and Joint Venture Agreement with Australian Potash announced 8 October 2018
2. Earn-in and Joint Venture Agreement in Horn Island with Alice Queen announced 5 June 2019
3. Earn-in and Joint Venture Agreement with Catalyst Metals announced 25 November 2020
4. For full explanation refer to ASX release 7 September 2020 "St Barbara completes acquisition of Moose River Resources Inc"

Ore Reserves Summary as at 30 June 2020

Project	Proved			Probable			Total		
	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)
Gwalia, (WA)	1,583	8.0	409	7,824	5.9	1,483	9,407	6.3	1,892
Tower Hill, (WA)	-	-	-	2,572	3.7	306	2,572	3.7	306
Simberi Oxide, (PNG)	1,702	1.3	73	6,035	1.1	220	7,737	1.2	293
Simberi Sulphide, (PNG)	1,386	2.6	114	21,253	2.4	1,651	22,638	2.4	1,765
Simberi Stockpiles, (PNG)	678	0.6	12	-	-	-	678	0.6	12
Atlantic Gold, (NS)	21,370	1.2	796	23,700	1.1	851	45,070	1.1	1,647
Atlantic Gold Stockpiles, (NS)	5,450	0.5	89	-	-	-	5,450	0.5	89
Total All Projects	32,168	1.4	1,493	61,384	2.3	4,511	93,552	2.0	6,005

Notes

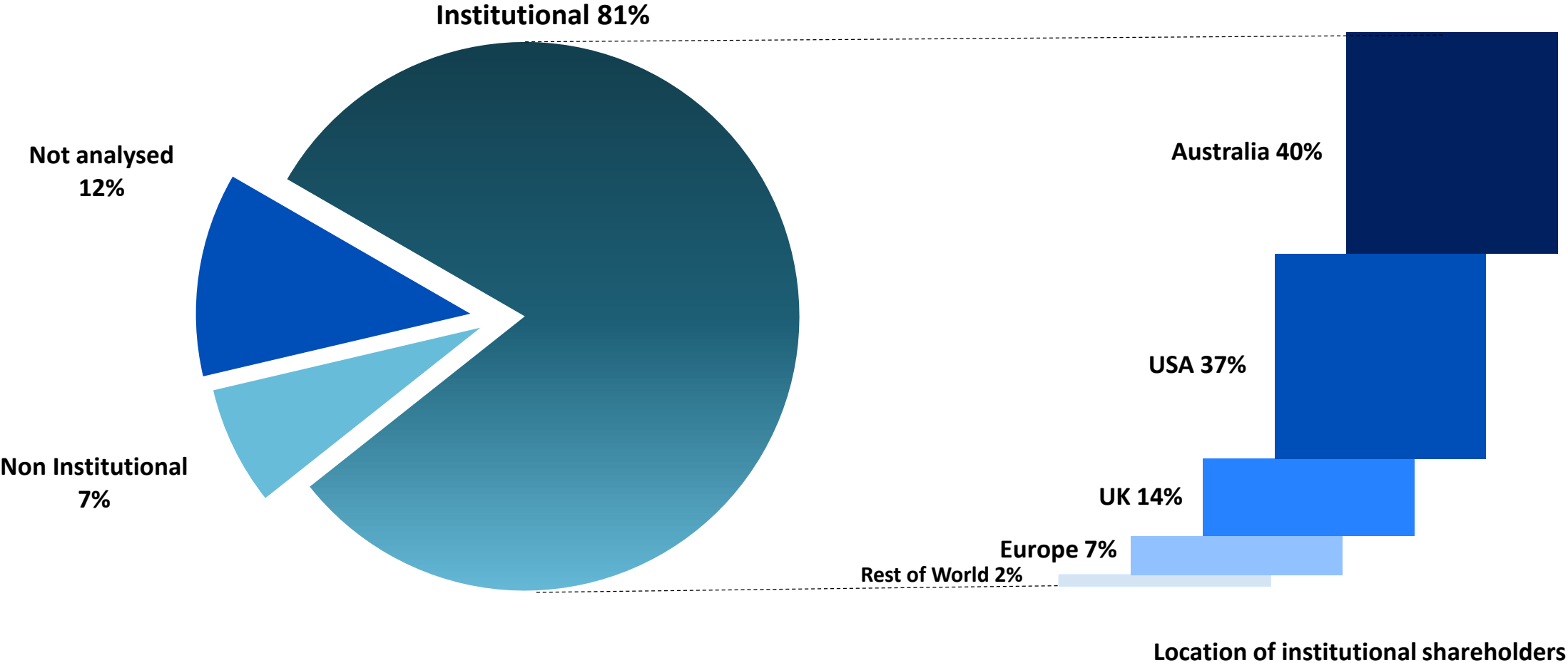
- Ore Reserves are based on a gold price of: Gwalia (AU\$1,600/oz), Tower Hill (AU\$1,250/oz), Simberi and Atlantic Gold (US\$1,300/oz)
- Cut-off Grades Gwalia (4.7 g/t Au), Tower Hill (2.8 g/t Au), Simberi Oxide (0.5 g/t Au), Atlantic Gold (0.3 g/t Au – 0.5 g/t Au)
- Mineral Resources are reported inclusive of Ore Reserves
- Data is rounded to thousands of tonnes and thousands of ounces. Discrepancies in totals may occur due to rounding
Full details are contained in the ASX release dated 24 August 2020 'Ore Reserves and Mineral Resources Statements 30 June 2020' available at www.stbarbara.com.au

Mineral Resources Summary at 30 June 2020

Project	Measured			Indicated			Inferred			Total		
	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)
Gwalia, (WA)	3,991	6.4	819	17,403	6.0	3,353	1,201	5.5	214	22,595	6.0	4,386
Tower Hill, (WA)	-	-	-	4,604	3.9	574	489	3.3	51	5,093	3.8	625
Simberi Oxide, (PNG)	2,197	1.2	90	8,062	1.1	280	8,542	0.9	260	18,801	1.0	630
Simberi Sulphide, (PNG)	3,119	1.5	168	52,642	1.6	2,772	16,699	1.4	747	72,459	1.6	3,687
Atlantic Gold, (NS)	24,281	1.1	868	32,399	1.1	1,102	7,203	1.1	256	63,883	1.1	2,227
Total All Projects	33,587	1.8	1,945	115,110	2.2	8,081	34,134	1.4	1,529	182,832	2.0	11,555

Notes

1. Mineral Resources are reported inclusive of Ore Reserves
 2. Cut-off Grades Gwalia (2.5 g/t Au), Tower Hill (2.5 g/t Au), Simberi Oxide (0.4 g/t Au), Simberi Transitional and Sulphide (0.6 g/t Au), Atlantic Gold (0.3 g/t Au)
 3. Atlantic and Simberi Mineral Resources are reported constrained by a US\$1,800/oz pit shell
 4. Data is rounded to thousands of tonnes and thousands of ounces. Discrepancies in totals may occur due to rounding
- Full details are contained in the ASX release dated 24 August 2020 'Ore Reserves and Mineral Resources Statements 30 June 2020' available at www.stbarbara.com.au



Board of Directors



Tim Netscher

Chairman – Non Executive

Appointed Director February 2014. Appointed Chairman July 2015.

Mr Netscher is an experienced international mining executive with extensive operational, project development, transactional and sustainability experience gained in senior executive and board roles over many years. Mr Netscher's experience covers a wide range of resources including nickel, coal, iron ore, uranium and gold and regions including Africa, Asia and Australia. Mr Netscher is non-executive chairman of Gold Road Resources Limited and a non-executive director of Western Areas Limited.



David Moroney

Director – Non Executive

Appointed March 2015

Mr Moroney is an experienced finance executive with more than 30 years' experience in senior corporate finance roles, including 15 years in the mining industry, and extensive international work experience with strong skills in finance, strategic planning, governance, risk management and leadership. Mr Moroney is an independent non-executive director of WA Super (Western Australia's largest public offer superannuation fund).



Stef Loader

Director – Non Executive

Appointed November 2018

Ms Loader is a company director, geologist and former mining executive with experience in mining operations, mineral exploration and project development. Ms Loader's experience covers a wide range of commodities and regions including copper and gold in Australia, Laos, Chile and Peru, and diamonds in Canada and India. Ms Loader advises organisations, as a director and consultant, in the areas of leadership, strategy and regional economic development and is Independent Chair of Port Waratah Coal Services Limited and a non-executive director of Clean TeQ Holdings Ltd.



Craig Jetson

Managing Director and CEO

Appointed February 2020

Mr Jetson is a highly experienced career mining executive, having most recently served as Executive General Manager Cadia, Lihir and Global Technical Services at Newcrest Mining Limited (ASX: NCM). Previously, he was GM Lihir and prior to that held long-term senior operating roles at Nyrstar and Zinifex in Australia, USA, Canada and Europe. Mr Jetson has experience in successfully leading challenging businesses in complex operating environments, together with deep technical knowledge.



Kerry Gleeson

Director – Non Executive

Appointed May 2015

Ms Gleeson is an experienced corporate executive with over 25 years' boardroom and senior management experience across Europe, North America and Australasia. A qualified lawyer in both UK and Australia, Ms Gleeson has significant experience in international governance, strategic mergers and acquisitions and complex finance transactions, as well as in risk and crisis management. Ms Gleeson is an Independent Non-Executive Director of New Century Resources Limited and Trinity College, University of Melbourne.



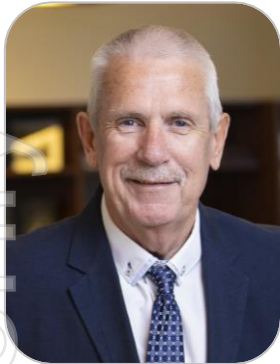
Steven Dean

Director – Non Executive

Appointed July 2019

Mr Dean's extensive international mining experience includes a wide range of commodities and regions including gold in Canada and Australia, metallurgical coal in North America, and copper, zinc and energy in Canada, United States, Chile and Peru. Previously Chairman and CEO of Atlantic Gold Corporation, and former President of Teck Cominco Limited (now Teck Resources Ltd), Canada's largest diversified resource company, Mr Dean is Chairman and CEO of Artemis Gold Inc, Chairman of Oceanic Iron Ore Corp and a director of Sierra Metals Inc and Velocity Minerals Ltd.

Executive Leadership Team



Craig Jetson

Managing Director and CEO
Appointed February 2020

Mr Jetson is a highly experienced career mining executive, having most recently served as Executive General Manager Cadia, Lihir and Global Technical Services at Newcrest Mining Limited (ASX: NCM). Previously, he was GM Lihir and prior to that held long-term senior operating roles at Nyrstar and Zinifex in Australia, USA, Canada and Europe. Mr Jetson has experience in successfully leading challenging businesses in complex operating environments, together with deep technical knowledge.



Evan Spencer

Chief Operating Officer
Joined 2020

Mr Spencer joined St Barbara in November 2020 as Chief Operating Officer. He is a mining executive with more than 25 years of industry experience across a wide range of executive, senior management and operational roles in Australia and internationally, including Papua New Guinea. Most recently he was President and CEO of Nevada Copper Corporation and prior to that held executive roles at Kasbah Resources, Asian Mineral Resources and Kagara, as well as senior roles at Barrick. Mr Spencer has significant experience in mine planning, project development, feasibility studies, permitting and business development.



Garth Campbell-Cowan

Chief Financial Officer
Joined 2006

Mr Campbell-Cowan is a Chartered Accountant with 30 years' experience in finance and management positions across a number of different industries. He is responsible for the Group's Finance function, covering financial reporting and accounting, treasury, taxation, business analysis, capital management, procurement and information technology. Prior to joining St Barbara, he was Director of Corporate Accounting at Telstra and has held senior finance leadership roles with WMC, Newcrest Mining and ANZ.



Val Madsen

Executive General Manager People
Joined 2013

Ms Madsen joined St Barbara in September 2013 and leads the Human Resources and Health, Safety, Environment and Community functions. With a Masters in Education and a number of other business qualifications and accreditations, Ms Madsen has particular experience in organisational development, training and development, diversity and employee engagement. Prior to joining St Barbara, Val worked for Newcrest Mining and has extensive experience in Human Resources.

Exploration Results

The information in this presentation that relates to Exploration Results is based on information compiled by Dr Roger Mustard, who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Mustard is a full-time employee of St Barbara and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Mustard consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mineral Resource and Ore Reserve Estimates

The information in this presentation that relates to Mineral Resources or Ore Reserves for Gwalia, Tower Hill, Simberi and Atlantic Gold is extracted from the report titled '*Ore Reserves and Mineral Resources Statements 30 June 2020*' released to the Australian Securities Exchange (ASX) on 24 August 2020. The report is available to view at stbarbara.com.au. The Company confirms that it is not aware of any new information or data that materially affects the estimates of Mineral Resources or Ore Reserves and that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original ASX announcement.

Full details are contained in the ASX release dated 24 August 2020 '*Ore Reserves and Mineral Resources Statements 30 June 2020*' available at stbarbara.com.au.

Non-IFRS measures

We supplement our financial information reporting determined under International Financial Reporting Standards (IFRS) with certain non-IFRS financial measures, including cash operating costs. We believe that these measures provide meaningful information to assist management, investors and analysts in understanding our financial results and assessing our prospects for future performance.

All-In Sustaining Cost (AISC)

All-In Sustaining Cost is based on Cash Operating Costs, and adds items relevant to sustaining production. It includes some, but not all, of the components identified in World Gold Council's Guidance Note on Non-GAAP Metrics - All-In Sustaining Costs and All-In Costs (June 2013). Refer most recent quarterly report available at stbarbara.com.au for example.

Cash contribution

Cash flow from operations before finance costs, refer reconciliation of cash movement in the most recent quarterly report available at stbarbara.com.au

Cash operating costs

Calculated according to common mining industry practice using The Gold Institute (USA) Production Cost Standard (1999 revision). Refer most recent quarterly report available at stbarbara.com.au for example

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