



Presentation to BMO Capital Markets 30th Global Metals & Mining Conference

Attached is a presentation by Mr Craig Jetson, Managing Director and CEO, to analysts and investors attending BMO Capital Markets 30th Global Metals & Mining Conference this week.

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BMO 30th Global Metals & Mining Conference

1 - 5 March 2021



Craig Jetson

Managing Director and Chief Executive Officer

BMO



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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.

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 27 January 2021 '*Q2 December 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: 3 March 2021



Acknowledgement of Country

We at St Barbara acknowledge the Traditional Custodians of the land upon which we operate and recognise their unique cultural heritage, beliefs and connection to these lands, waters and communities.

We pay our respects to all members of these Indigenous communities, and to Elders past, present, and emerging. We also recognise the importance of continued protection and preservation of cultural, spiritual and educational practices.

Because we value treating all people with respect, we are committed to building successful and mutually beneficial relationships with the traditional custodians throughout our areas of operation.



We're here to create value in everything we do, for our people, our communities and our shareholders

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

We are St Barbara

An ASX 200 global gold producer



We are an experienced operator with gold mining operations in Australia, Canada and Papua New Guinea.

We are committed to growing our company sustainably and have a pipeline of growth projects that will provide employment, ongoing investment and benefits in each of the regions in which we operate.

We respect the environment, neutralise our impact and have set a target to be carbon neutral at Atlantic Gold by 2025 and at all operations by 2050.



We are guided by our five commitments and our values-led culture



SAFETY ALWAYS

Zero harm is always our target. Zero harm to all people as we responsibly operate our assets to their full potential. This focus on safety guides everything we do.



EMPOWERED PEOPLE DIVERSE TEAMS

We are an employer of choice committed to inclusion and diversity. We provide a caring work environment where our talented people are happy, thrive, feel safe and can fulfil their potential.



STRONGER COMMUNITIES

We strive to help our communities thrive, grow and prosper. We build meaningful relationships, investing time and energy to ensure local communities are enriched by being our neighbours.



RESPECTING THE ENVIRONMENT

We are committed to caring for the environment. We think differently to find solutions to actively manage and neutralise our impact; because we care about the environment and our planet.



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.

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



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**

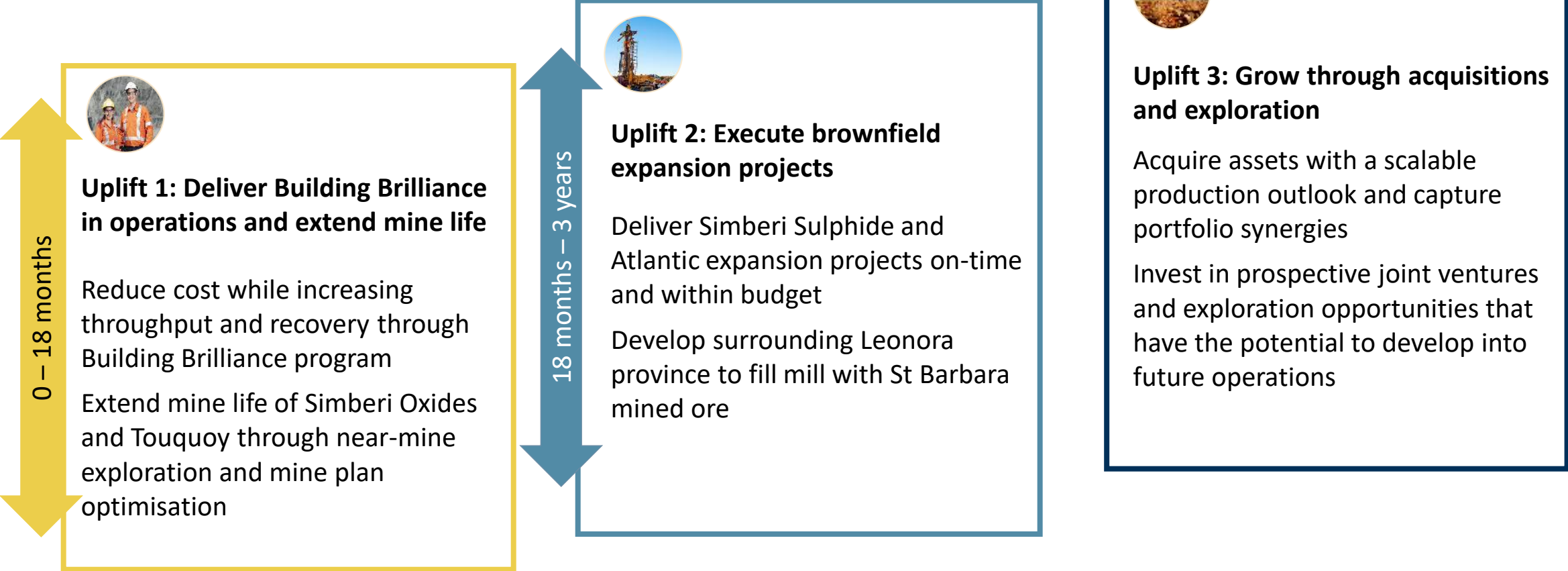
1. Additional throughput based on gold price of A\$2,200 and a baseline cost figure based on FY20 fixed costs and variable costs scaled for future volumes

2. Not included in guidance

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



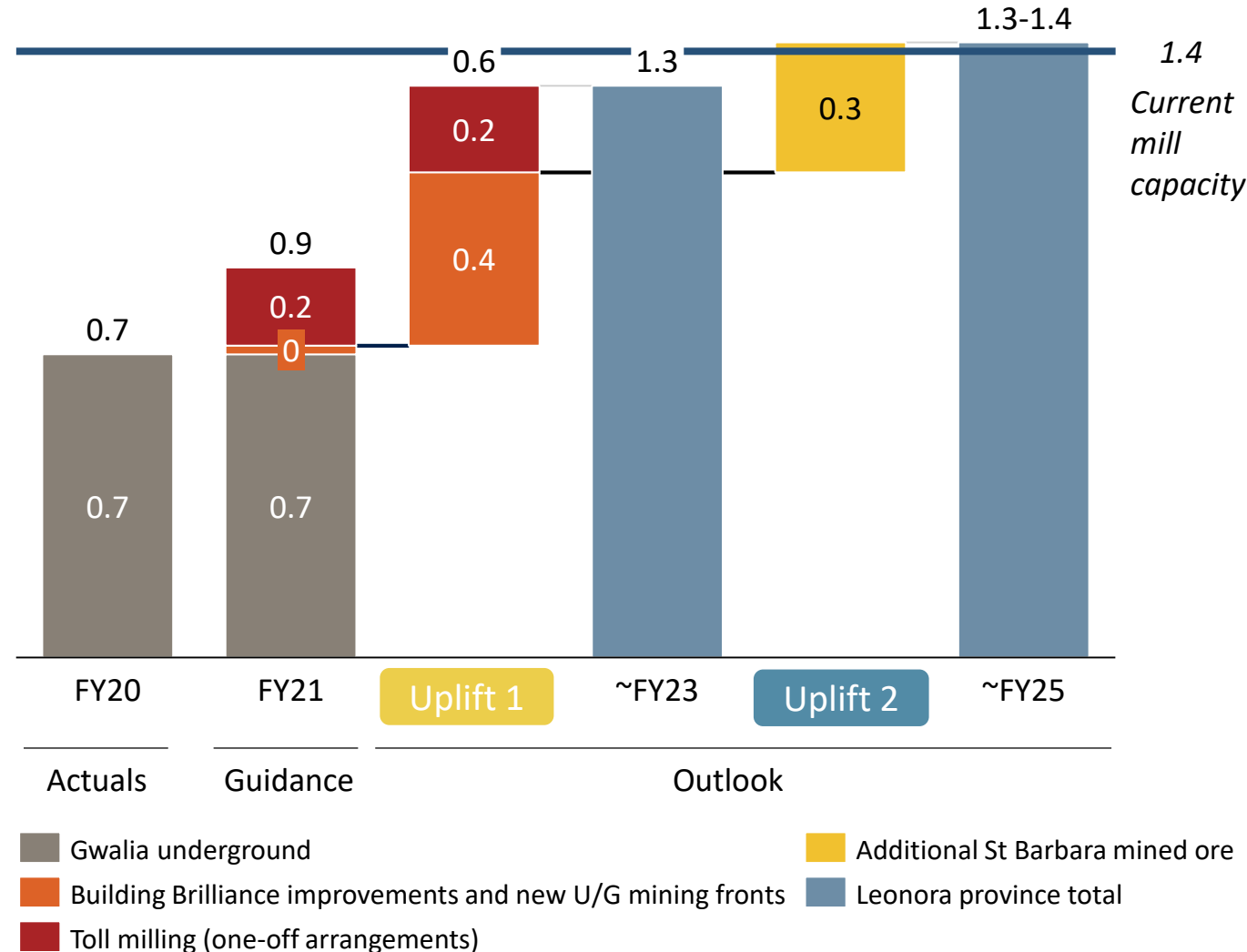
Three stages of uplift for St Barbara



Our strategy at Leonora is to fill the mill



Annual mill throughput (Mt)



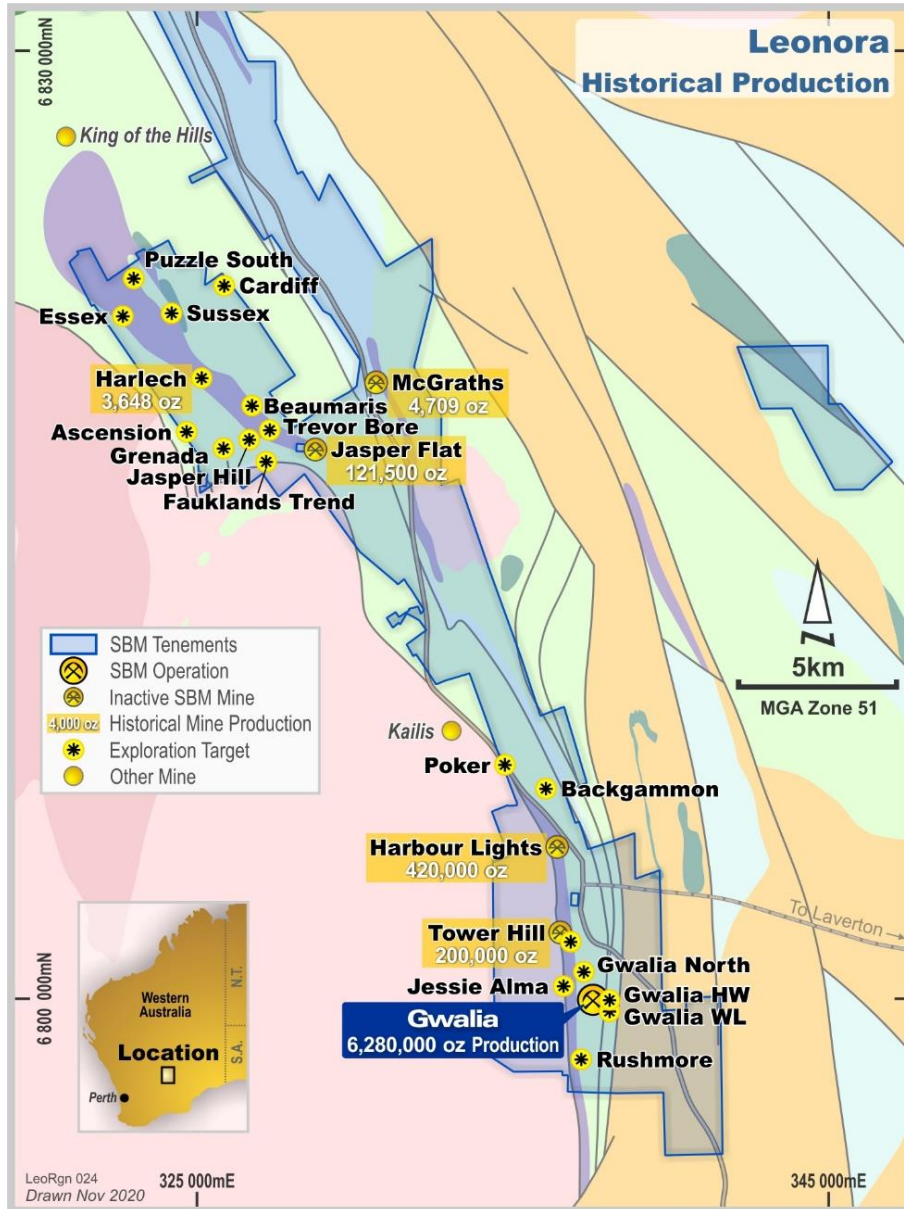
Uplift #1: Maximise the value from current operations through productivity improvements and cost reduction

- 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

Leonora Province

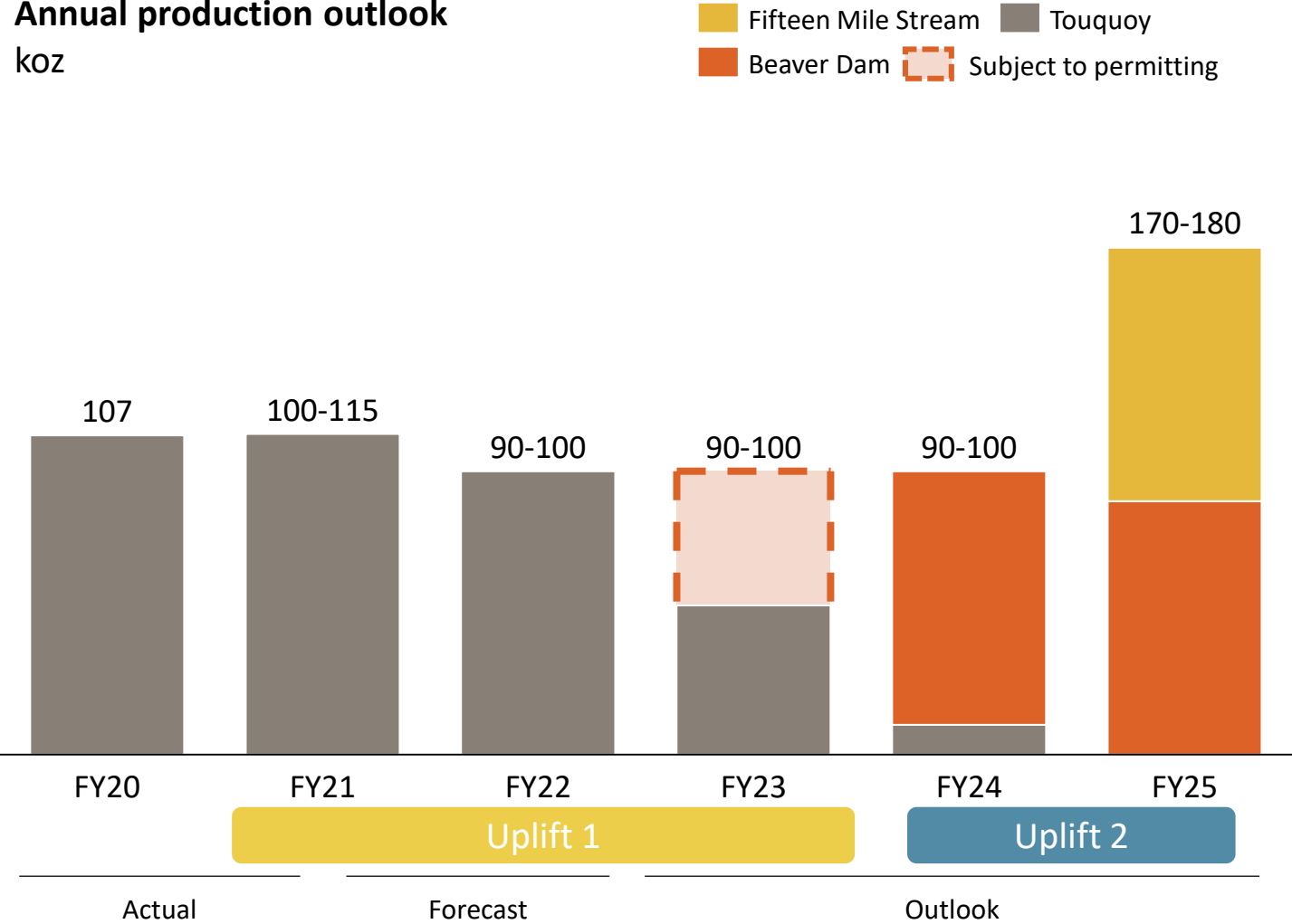


- An internal review completed in December 2020 assessed the current resource, mineral inventory base and historical stockpiles (with some milled in December and January)
- The next stage is a strategic action plan, with a number of initial scopes now advanced and in the planning phase
- Work is commencing on assessing additional stockpiles at Braemore Sands and larger bulk stockpiles at Tower Hill. Further desktop assessment of an ore sorting trial is also planned
- Fully understanding throughput capacity of the Gwalia mill is a key focus area.

Extending Touquoy to sustain production trajectory while ramping up expansion projects



Annual production outlook koz



Operations summary

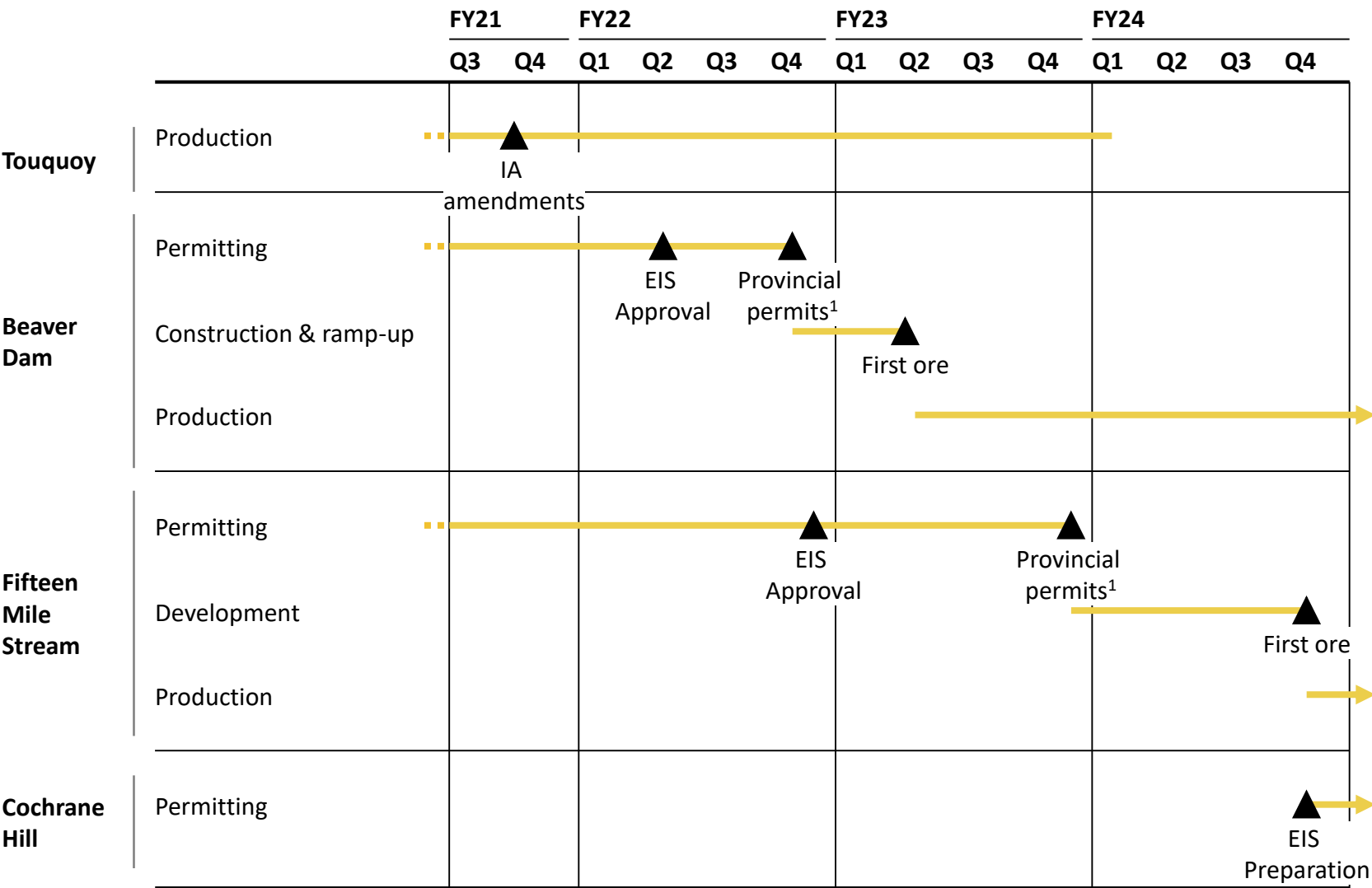
- Building Brilliance productivity initiatives will maintain production levels before expansion projects come online
- Building Brilliance also reduces **annual recurring costs by approximately A\$10 M per year** starting in FY22
- Brownfield project timelines may be accelerated through project simplification and construction optimisation
- We are collaboratively working with stakeholders and governments to accelerate permitting where possible to bring forward production
- AISC¹ 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 A\$100/oz**

1. Non-IFRS measure. 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).

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 Submitted 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

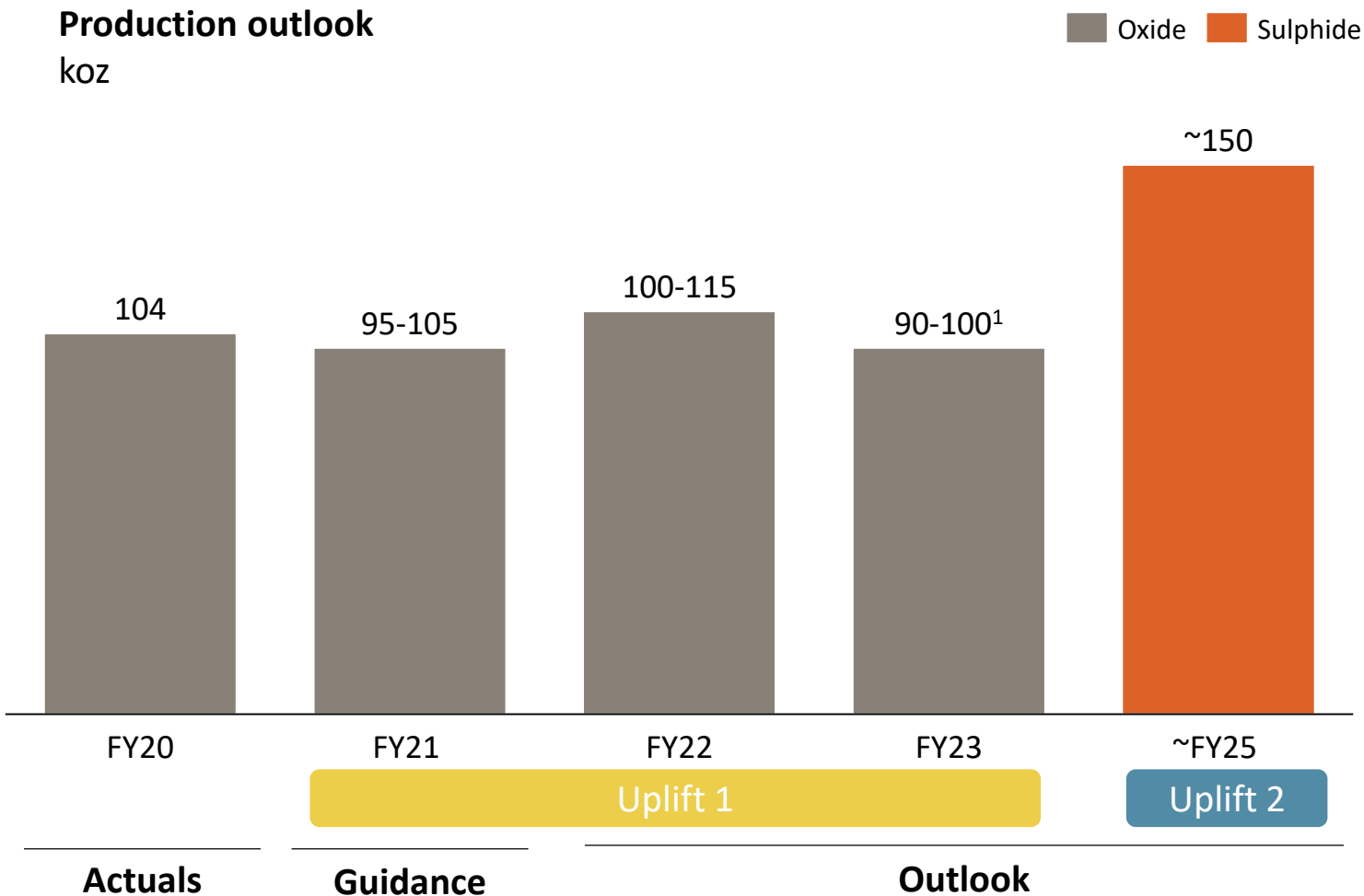
1. Provincial permits: Industrial Approval; Wetland Alteration; Water Withdrawal Authorization; Fisheries Authorization; Metal and Diamond Mining Effluent Regulations Schedule 2

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



Production outlook

koz



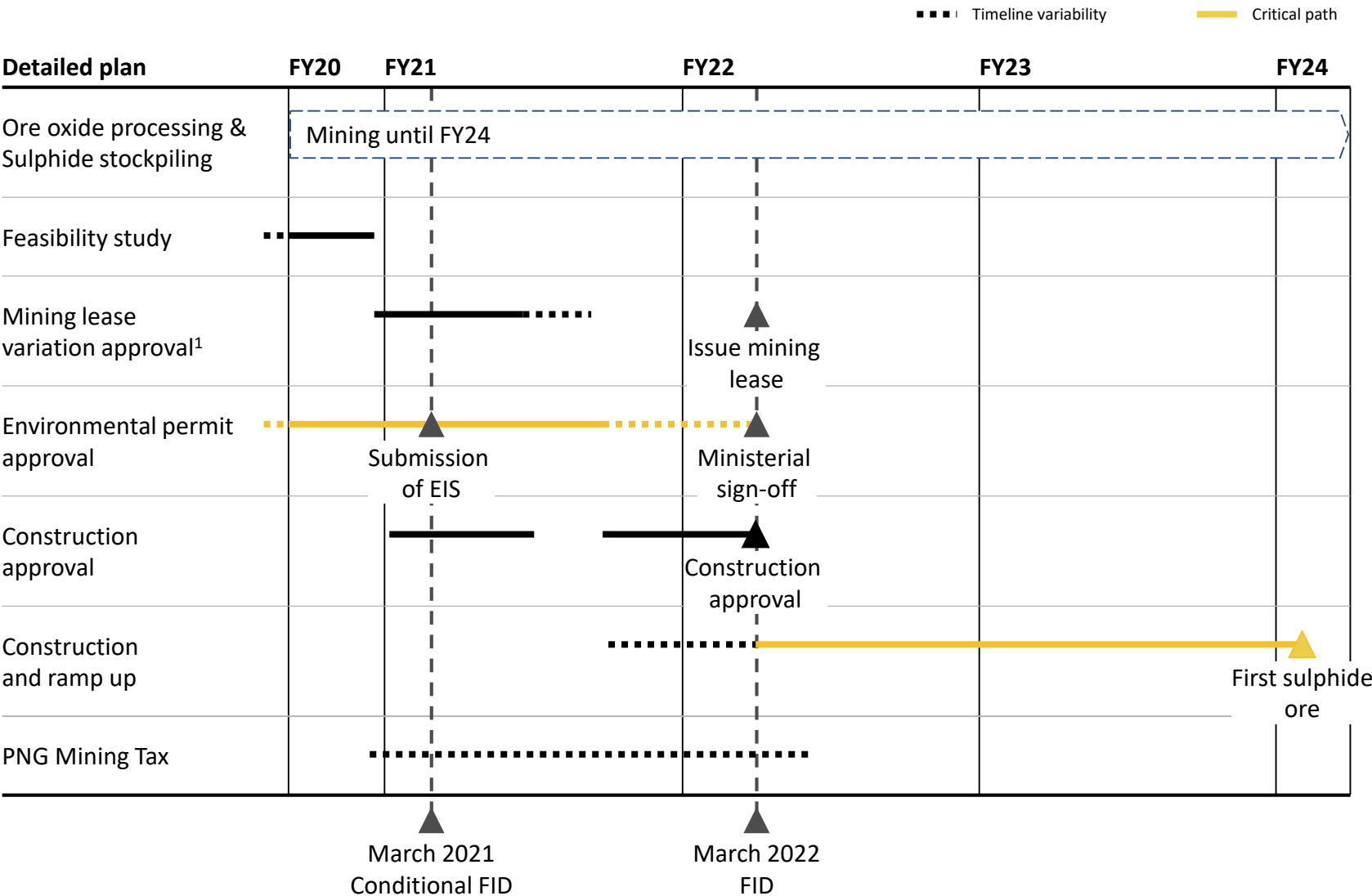
Operations summary

- 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**

1. 10% inferred oxide resources

Simberi brownfield expansion will maintain production beyond FY24

Simberi sulphides expansion project indicative timeline



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

Investor Relations enquiries



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