

Northern Star Resources Ltd

Non-Energy Minerals – Au

NST A\$7.35

Northern Star Resources (NST) is a global-scale Australian gold producer with world class projects located in highly prospective and low sovereign risk regions of Australia and North America. The Company has a portfolio of high-quality, high-margin underground and open pit gold mines, and is firmly focused on delivering superior shareholder returns. Northern Star continues to invest in building its asset base through strategic acquisitions and aggressive exploration to extend the mine lives across its world class operations.

Company Data

Number of shares	1,165.1M
Market Capitalisation (\$m)	8,179.2
Free float (%)	98.6
12-month high/low	\$11.48/\$7.02
Average Daily Turnover (\$m)	N/A
% S&P/ASX200	0.414%
DDM Ranking	101
% All Ordinaries	0.359%
GICS Industry Group	Mining

Source: FactSet, BPC

Mineral Resource

KCGM Mineral Resource

27.4Moz Au

KCGM Ore Reserve

11.9Moz Au

NST Total Mineral Resource

56.4Moz Au

NST Total Ore Reserve

20.7Moz Au

Share Price Performance



Source: FactSet, Barclay Pearce Capital

KCGM MILL OPTIMISATION PRE-FEASIBILITY STUDY UPDATE

On 28th of June 2022, Northern Star Resources Ltd (NST) announced results from the Kalgoorlie Consolidated Gold Mines (KCGM) Pre-Feasibility Study (PFS), with the following highlights:

Highlights:

- NST presented three mill expansion options that were considered as part of the KCGM Mill Optimisation Pre-Feasibility Study:
 - Expand to 17Mtpa milling capacity – Bolt-on expansion;
 - Expand to 24Mtpa milling capacity – 70% process plant refurbishment;
 - Expand to 22Mtpa milling capacity – Full rebuild (greenfield process plant); and
 - Maintain 13Mtpa milling capacity – Steady State.
- All three mill expansion options are financially compelling (post tax) and deliver meaningful operational benefits:
 - At gold price of A\$2,250/oz:
 - IRR: 13–26%; and
 - Payback: 3-5 years.
 - At spot price of A\$2,600/oz:
 - IRR: 16-31%; and
 - Payback: 2-5 years.
 - Capex: A\$440M – A\$1,400M;
 - Substantial increase in NPV;
 - Gold production growth of 100-200kozpa; and
 - KCGM AISC reduction up to A\$200/oz.
- Next steps include finalising the Feasibility Study, where opportunities to further maximise value may be progressed, subject to an investment decision.

MD comment:

NST MD, Stuart Tonkin, said: “While we are confident and well-positioned to pursue a mill expansion at KCGM given access to a highly skilled workforce and our recent major project experience, maintaining the current 13Mtpa milling capacity is an option that remains firmly on the table.

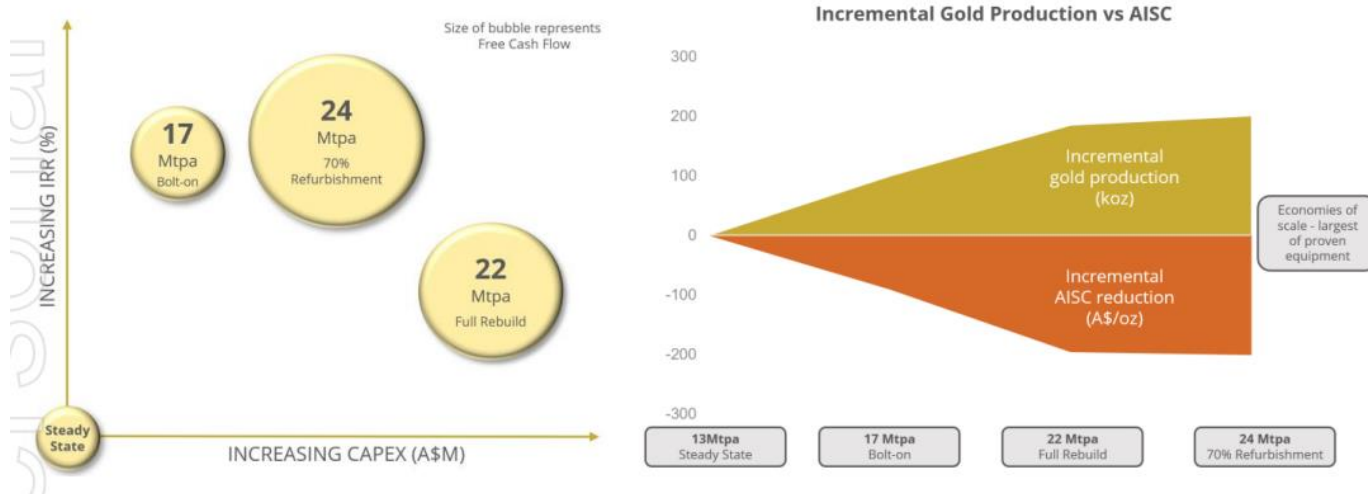
Regardless of the outcome of the final feasibility work to determine the most valuable option, the KCGM pathway to 650kozpa by FY26 remains unchanged, with regional synergies and production growth enabling a lower AISC position than we are achieving today.”

BPC comment:

- The PFS determined that the three mill expansion options are financially compelling and offer significant operational benefits to potentially create substantially more value than maintaining today’s 13Mtpa milling capacity. The PFS work showed an expanded mill capacity, underpinned by a simplified processing circuit flow sheet, could lower KCGM’s AISC by up to A\$200/oz as well as boost annual production by up to 200,000oz.
- But “maintaining the current 13Mtpa milling capacity is an option that remains firmly on the table”.

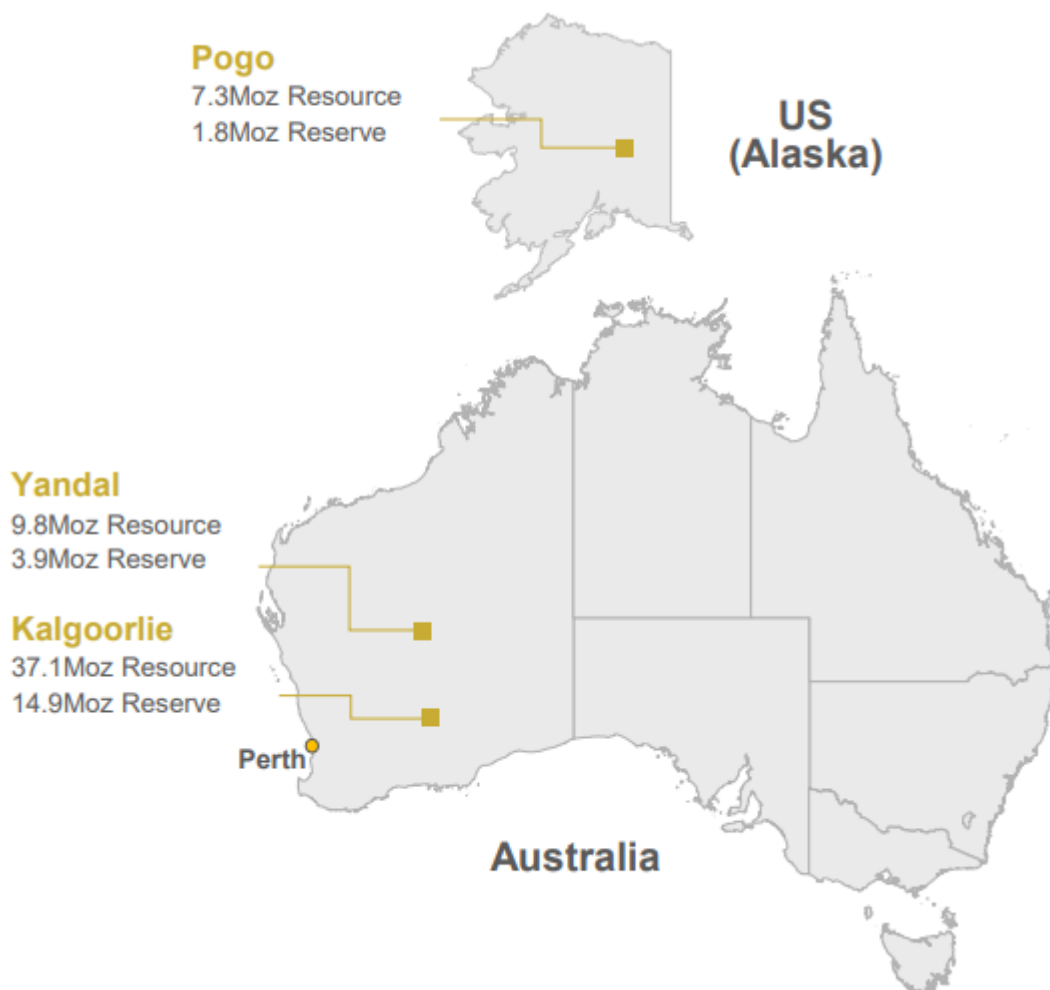
Appendix A.

Pre-feasibility study: three mill expansion options being considered



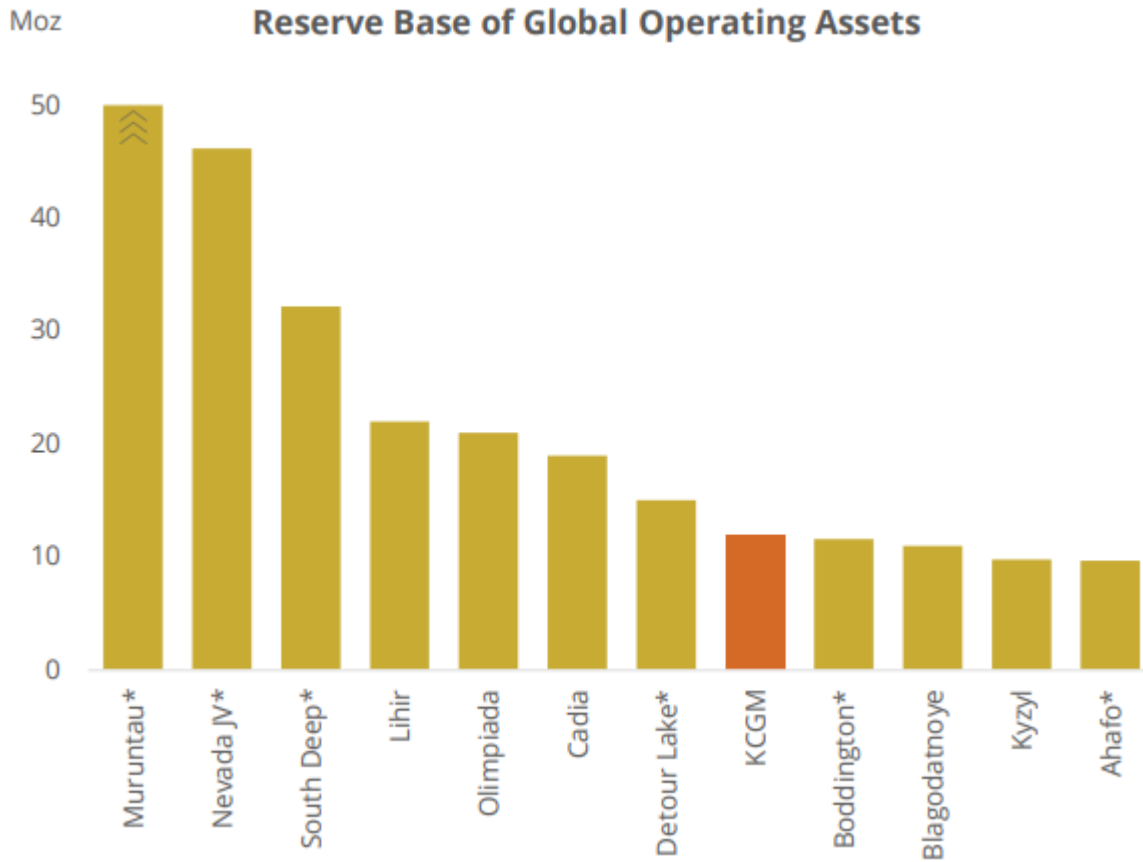
Appendix B.

Project location, Mineral Resource and Ore Reserves



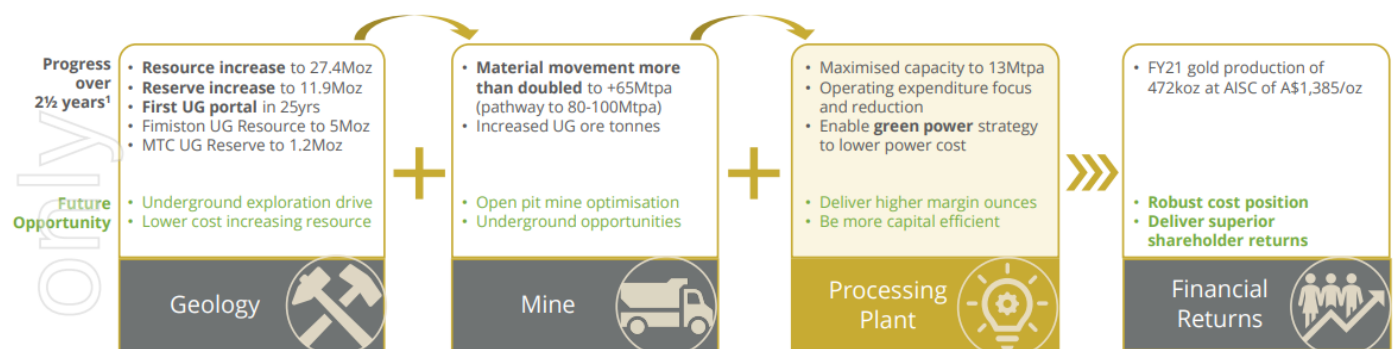
Appendix C.

KCGM Reserve Base



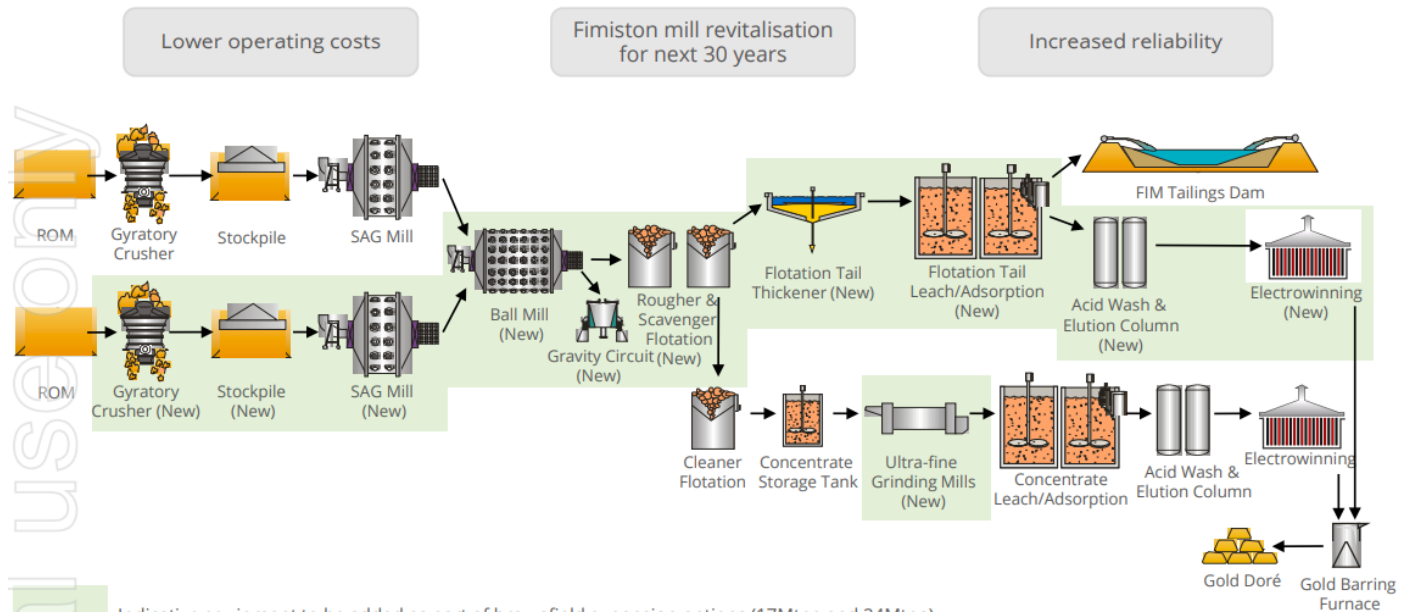
Appendix D.

Progress at KCGM but more optimisation to come



Appendix E.

Pre-feasibility study: A simplified flow sheet



Appendix F.

Indicative schedule from FID

Task	Year 1	Year 2	Year 3	Year 4
Engineering and Design	[Progress bar]			
Construction	[Progress bar]			
Commissioning and Ramp-up				[Progress bar]
Throughput	13 Mtpa			17-24 Mtpa

3 Options	Capital Cost (A\$M)			
From A\$440M to A\$1,400M Inclusive of ~20% contingency	15%	35%	35%	15%

Disclaimer

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Hold – Describes stocks that are neither a buy nor underperform.

Underperform – Describes stocks that we expect to provide a total return (price appreciation plus net yield) of less than minus 10% within a 12-month period.

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28 June 2022

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