



A rapidly growing tier-1 gold miner - for global investors  
Macquarie Australia Conference - May 2020



NORTHERN STAR  
RESOURCES LIMITED

# Resources & Reserves

## Ore reserves and mineral resources reporting of Northern Star

This presentation contains estimates of Northern Star's ore reserves and mineral resources, as well as statements about KCGM's mineral resources and mineral reserves. The information in this presentation that relates to the ore reserves and mineral resources of Northern Star has been extracted from the following: the ASX release by Northern Star titled "Northern Star Set for Further Production Growth as Reserves and Resources Jump +30%" and dated 1 August 2019 and, in the case of the Yandal Project only (which ore reserves and mineral resources estimates are incorporated from the acquisition of Echo Resources Limited by Northern Star), please refer to the ASX release by Echo Resources Limited titled "Noosa Mining and Exploration Conference" dated 19 July 2019. A copy of these announcements is available at [www.asx.com.au](http://www.asx.com.au) or <https://www.nsrld.com/investor-media/news/>. Northern Star confirms that it is not aware of any new information or data that materially affects the information included in that announcement and, in relation to the estimates of Northern Star's ore reserves and mineral resources, that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed. Northern Star confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from those announcements.

It is a requirement of the ASX Listing Rules that the reporting of mineral resources and ore reserves in Australia comply with the Australasian Joint Ore Reserves Committee Code for Reporting of Mineral Resources and Ore Reserves (the "JORC Code"), whereas mining companies in other countries may be required to report their ore reserves and/or mineral resources in accordance with other guidelines.

Investors should note that while Northern Star's mineral resources and ore reserves estimates comply with the JORC Code (such JORC Code-compliant mineral resources and ore reserves being "Mineral Resources" and "Ore Reserves"), they may not comply with the relevant guidelines in other countries, and in particular do not comply with (i) National Instrument 43-101 (Standards of Disclosure for Mineral Projects) of the Canadian Securities Administrators ("Canadian NI 43-101 Standards"); or SEC Industry Guide 7, which governs disclosures of mineral reserves in registration statements filed with the US Securities and Exchange Commission (the "SEC"). Information contained in this presentation describing mineral deposits may not be comparable to similar information made public by companies subject to the reporting and disclosure requirements of Canadian or US securities law. In particular, SEC Industry Guide 7 does not recognise classifications other than proved and probable reserves and, as a result, the SEC generally does not permit mining companies to disclose their mineral resources, including indicated and inferred resources, in SEC filings. Accordingly, if Northern Star was reporting in accordance with SEC Industry Guide 7, it would not be permitted to report any mineral resources, including indicated and inferred resources, and the amount of reserves reported by Northern Star may be lower than its estimates. You should not assume that quantities reported as "resources" will be converted to reserves under the JORC Code or any other reporting regime or that Northern Star will be able to legally and economically extract them. In addition, investors should note that under SEC Industry Guide 7, mine life may only be reported based on ore reserves. Mine life estimates in this presentation assume that a portion of non-reserve resources will be converted to ore reserves, which would not be permitted under SEC Industry Guide 7.

## Mineral reserves and mineral resources reporting of KCGM

The mineral reserves and mineral resources estimates for KCGM were derived from a report entitled "Competent Person Report Kalgoorlie Consolidated Gold Mines (KCGM)" dated 7 February 2019 and provided to Northern Star by Newmont ("KCGM Competent Person Report"). This report formed the basis of public disclosure of resources and reserves by Newmont dated 21 February 2019 (United States Securities and Exchange Commission Form 10-K Annual Report for the fiscal year ended December 31, 2018, page 50), which sets out the mineral reserves and mineral resources of KCGM as at 31 December 2018.

These estimates in respect of the KCGM Operations, and included in the KCGM Competent Person Report, were prepared by KCGM for the Joint Venture partners (Newmont and Barrick at the time of preparation of the estimates). The KCGM estimates are effective as at 31 December 2018 and, so far as Northern Star is concerned, are the most recent, available mineral resources and mineral reserves estimates for the KCGM Operations.

The mineral resources and mineral reserves estimates for the KCGM Operations were prepared using the National Instrument 43-101 (Standards of Disclosure for Mineral Projects) of the Canadian Securities Administrators (the "Canadian NI 43-101 Standards"). NI 43-101 is a national instrument for the Standards of Disclosure for Mineral Projects within Canada.

Accordingly, the mineral reserves and mineral resources estimates for KCGM were prepared using the Canadian NI 43-101 Standards and do not purport to be reported in accordance with or otherwise compliant with the JORC Code. Because the estimates have not been prepared in accordance with the JORC Code, they are classified as "foreign estimates" under the ASX Listing Rules. A Competent Person under the JORC Code has not yet done sufficient work to classify such foreign estimates as Mineral Resources or Ore Reserves in accordance with the JORC Code, however Northern Star notes the similarity of the Canadian NI 43-101 Standards and the JORC Code. It is currently uncertain whether, following evaluation and/or further possible exploration work by Northern Star, these foreign estimates will be able to be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code. In relation to the reliability of the foreign estimates of mineral resources and mineral reserves (of KCGM) contained in this presentation, the following should be noted that: the foreign estimates are not reported in accordance with the JORC Code; a Competent Person has not yet done sufficient work to classify the foreign estimates as Mineral Resources or Ore Reserves in accordance with the JORC Code; it is currently uncertain whether, following evaluation and/or further exploration work, these foreign estimates will be able to be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code; and for now, these foreign estimates have not been published with all the supporting data and such foreign estimates have not been verified by independent third parties. For more detail about the mineral resources and mineral reserves estimates for KCGM included in this presentation, including as to their reliability and other information required to be included pursuant to ASX Listing Rule 5.12, please refer to the announcement released to ASX by Northern Star on 17 December 2019. Northern Star is not in possession of any new information or data relating to these foreign estimates that materially impacts on the reliability of the estimates or Northern Star's ability to ultimately classify the Canadian NI 43-101 estimates as Mineral Resources or Ore Reserves in accordance with the JORC Code.

# Forward Looking Statements

## Forward Looking Statements

Northern Star Resources Limited has prepared this announcement based on information available to it. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement. To the maximum extent permitted by law, none of Northern Star Resources Limited, its directors, employees or agents, advisers, nor any other person accepts any liability, including, without limitation, any liability arising from fault or negligence on the part of any of them or any other person, for any loss arising from the use of this announcement or its contents or otherwise arising in connection with it.

This announcement is not an offer, invitation, solicitation or other recommendation with respect to the subscription for, purchase or sale of any security, and neither this announcement nor anything in it shall form the basis of any contract or commitment whatsoever. This announcement may contain forward looking statements that are subject to risk factors associated with gold exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, Resource and Reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

\*All currency conversions in this document were converted at a spot conversion rate of AUD/USD of \$0.6584.



# Early adopters of ESG and our assets are in Tier-1 areas

## Our Sustainability Vision

"Delivering responsible environmental and social business practice that lead to both the creation of strong economic returns for our Shareholders, and shared value for our Stakeholders."

### Sustainability Summary

- Peer group leader (2017) - **first sustainability reporting disclosures**
- Peer group leader (2018) - **support United Nations Sustainable Development Goals**
- Peer group leader (2018) - **first disclosures of climate change risks**
- Peer group leader (2019) - **align with Taskforce on Climate Related Financial Disclosure recommendations**
- Multi-year sector leading safety results - **LTIFR and TRIFR consistently below peer group**
- Record **A\$1.44B economic value** add in CY19



Alignment of  
business,  
Shareholder and  
Stakeholder  
aspirations

### Sustainability Initiatives Snapshot

- Progressed our **Mental Health Strategy**, targeting 20% of NST employees accredited as mental health first aiders, knowing that healthy workers go home to healthy homes, which create healthy communities
- Local procurement** spend of **A\$246M** across Goldfields and Fairbanks/Delta Regions for CY19
- Completed **climate change risk assessments** across our business – limited material exposure to our business model
- Community investment up 74%** in CY19 to A\$1.49M
- Established **A\$10M COVID-19 Community Fund** in the Mar-20 quarter

### Environmental Scorecard

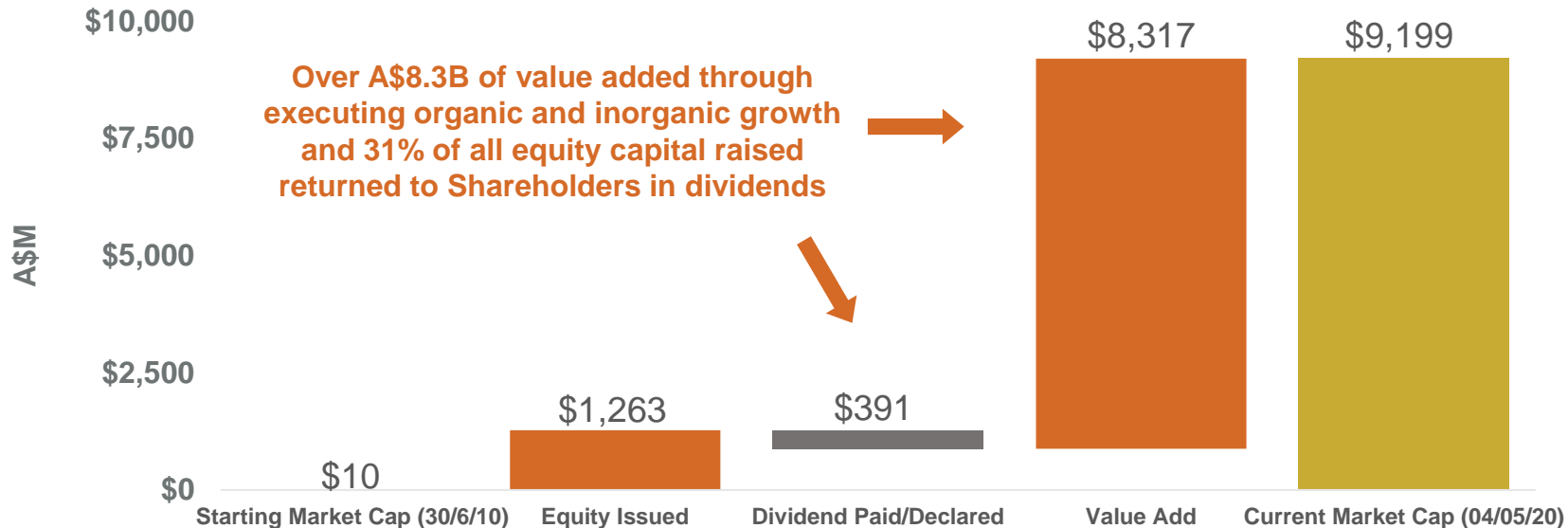
- Zero significant environmental incidents** or regulator infringements since acquisition of current portfolio of operating assets
- Introduction of a **progressive rehabilitation strategy** in 2019 to further enhance biodiversity of pre-NST legacy areas
- Introduction of our Board-level **Environment, Social and Safety sub-committee** in 2018, chaired by a Non-Executive Director

# COVID-19: Swift reaction, long term value preservation

- **Social Responsibility and the health and safety of all Stakeholders sits at the very core of the Northern Star business**
- NST moved early and decisively to implement a suite of strict COVID-19 mitigation measures, both at our Australian and Alaskan Operations
- In addition to the social distancing and health/hygiene measures put in place at our operations, NST moved early to preserve our strong balance sheet. Measures include:
  - *Deferring* the payment of the declared A7.5¢/share interim dividend until later in CY20 and;
  - *Deferring* the Company's remaining CY20 hedges until CY21; simultaneously mitigating 2020 delivery risk whilst allowing for delivery should NST wish to continue pro-actively clearing its hedge book commitments
- Establishment of a Community COVID-19 Fund with up to A\$10M in committed funds to assist local health services, communities and businesses
- Rapid implementation of COVID-19 measures in the March quarter caused short term disruption to operations but NST now has a manageable and profitable operating platform

# Value Creation – delivering returns to Shareholders

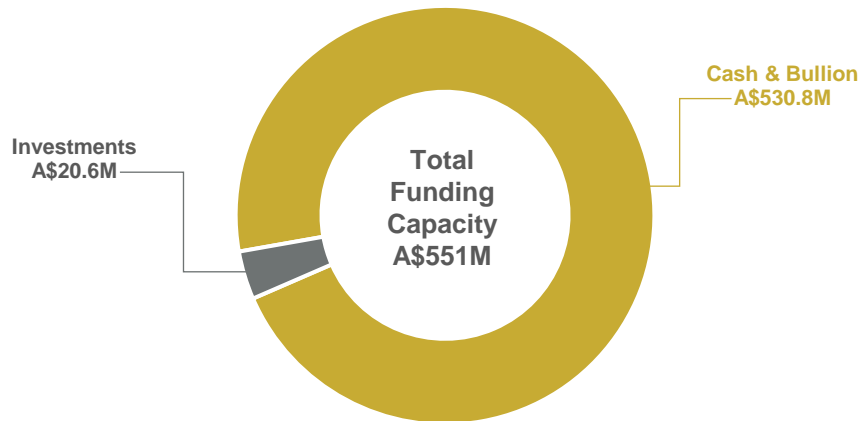
- Northern Star's strategy of balancing organic growth with well executed M&A has generated over A\$8.3B of value for Shareholders since the first acquisition in 2010
- This strategy has been achieved through operational excellence, investing heavily into exploration, growing production, optimising assets and financially disciplined inorganic growth
- NST has returned 31% of all equity capital raised in the form of fully-franked dividends to our Shareholders; the full financial year dividend is expected to be paid as per normal terms (same timeframe and equal to 6% of group revenue)



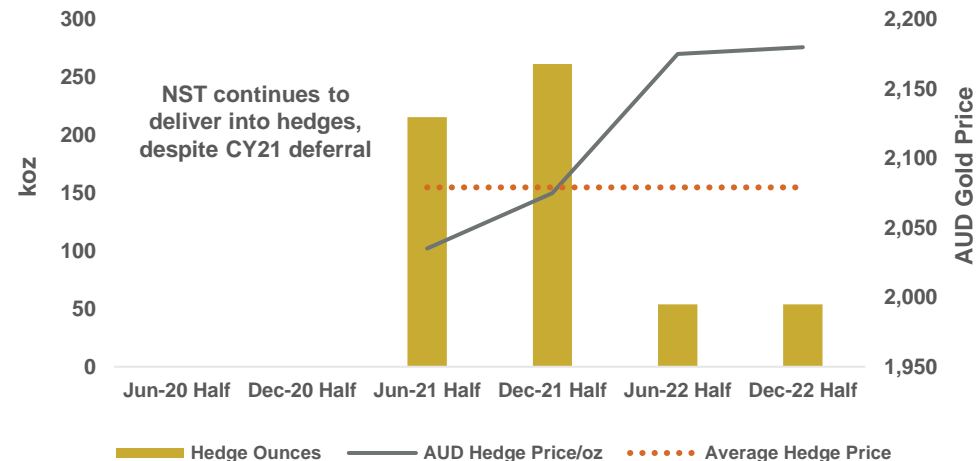
# Growing cash generation, balance sheet flexibility

- One of the key differentiators of the Northern Star business is our balance sheet; this strength has allowed for counter cyclical acquisitions and sector leading returns to Shareholders
- Post KCGM acquisition moderate gearing levels as at 31 March 2020; 11% net debt to equity\* allowing funding of opportunistic organic or inorganic growth opportunities
- The business has available cash/liquid resources of A\$551M at 31 March 2020
- Despite deferral of CY20 hedges (to CY21), NST continues to deliver into the hedge book

Total Liquidity as at 31 March 2020



Hedge Profile



\*Net debt is calculated as: Borrowings (less amounts recognised from change in lease accounting standard) less cash and bullion as at 31 March, divided by shareholders equity. balances are unaudited and provisional in respect of KCGM.

# March Quarter FY20 – Key Highlights

**Set up a COVID-19  
manageable,  
operational and  
profitable platform**

**239koz sold at an  
AISC of A\$1,590/oz**

**Underlying FCF of  
A\$89M (after  
investing ~A\$66M in  
growth capital)**

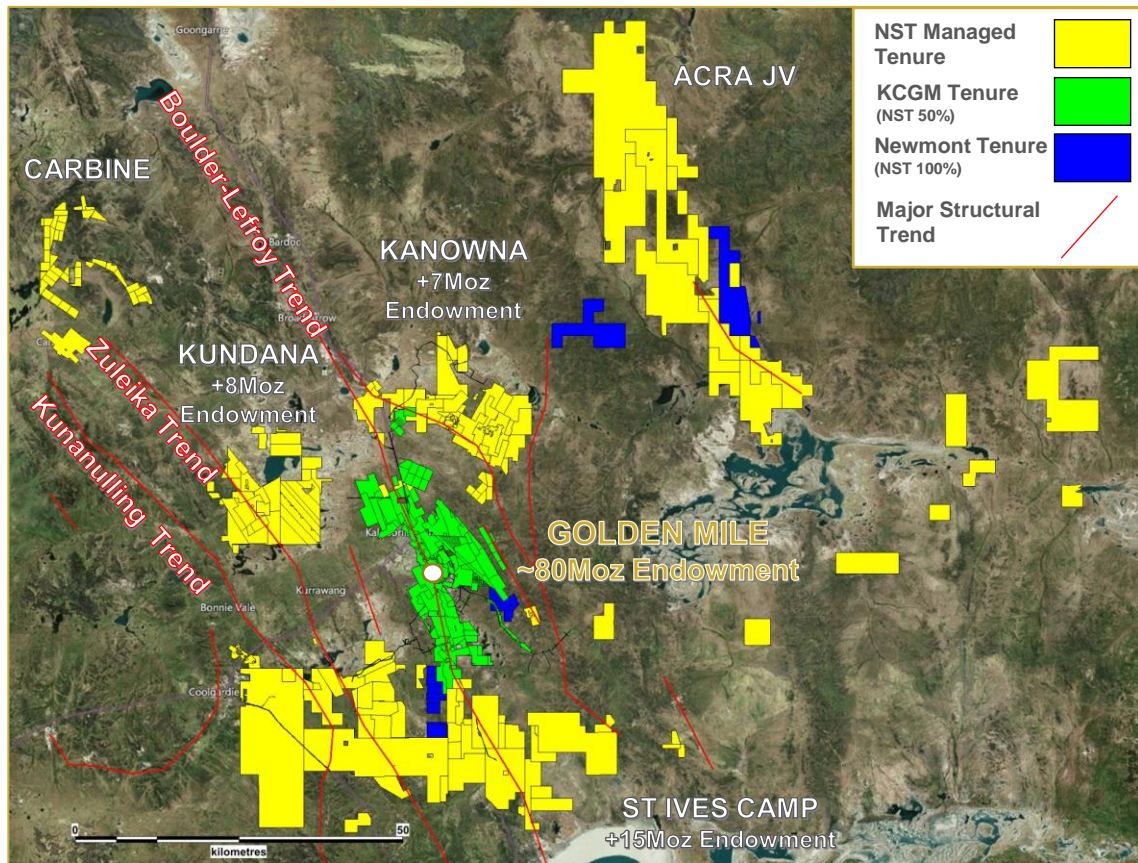
**Successful  
completion of the  
KCGM acquisition**

**Pogo momentum  
continues with  
another positive  
QoQ performance**

**Creation of an  
A\$10M COVID-19  
Community Fund**



# KCGM consolidates Northern Star's Kalgoorlie footprint

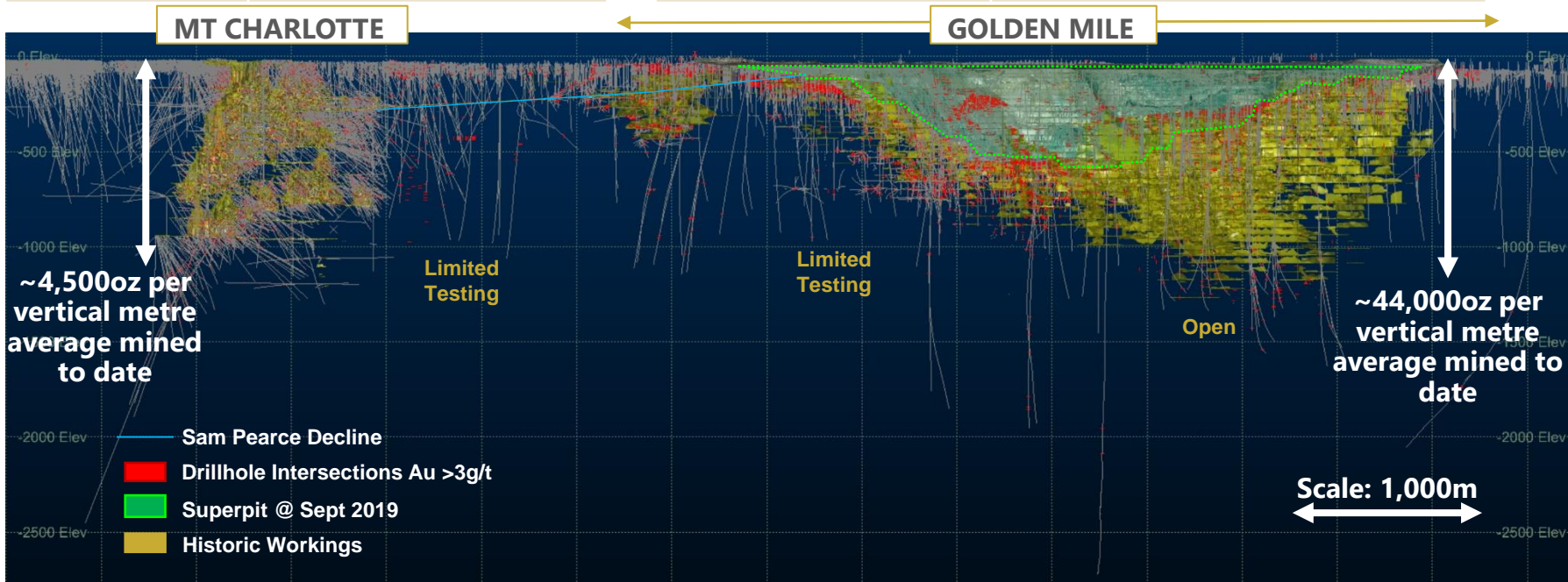


- Northern Star has accumulated unprecedented exposure to the world-class Kalgoorlie mineral district, which has produced +100Moz of gold since the late 1800's
- World class infrastructure including a large-scale open pit, well established underground operation and a 13Mtpa processing facility
- Significant tenure provides exciting organic growth opportunities for NST
- NST attributable production in first quarter of ownership was 60koz at an AISC of A\$1,452/oz

# The World Class Golden Mile and Mt Charlotte Systems

MT CHARLOTTE	
Years of Operation:	1963 – Present
Production / Oz Produced (1963- Oct 2019)	48.2Mt @ 3.7g/t Mined 5.5Moz Produced
Endowment (Production + RES + RSV*)	6.1Moz

GOLDEN MILE (Fimiston)	
Years of Operation:	1893 – Present
Production / Oz Produced (1893- Oct 2019)	414.2Mt @ 5g/t Mined <b>62Moz Produced</b>
Endowment (Production + RES + RSV*)	73Moz



\* Resource and Reserves are as at 31 December 2018. 2019 YTD production to October 2019 has been subtracted to estimate endowment

# Integration of KCGM adds another Tier-1 asset

Extends portfolio mine life, adding meaningful production beyond 2030

## 1. Kalgoorlie Operations (100%)

**Mine type:** U/G

**Processing:** CIL / CIP plant with throughput of 3.2Mtpa

YTD<sup>1</sup> FY20 sold: 238koz Au

YTD<sup>1</sup> FY20 AISC: A\$1,545/oz (US\$1,017/oz)

Au Reserves: 2.1Moz Au @ 4.0g/t

Au Resources<sup>3</sup>: 6.5Moz Au @ 4.0g/t

## 2. KCGM (50%)

**Mine type:** Open Pit / U/G

**Processing:** CIP plant with throughput of 13Mtpa

YTD<sup>1</sup> FY20 sold<sup>2</sup>: 60koz Au

YTD<sup>1</sup> FY20 AISC: A\$1,452/oz (US\$956/oz)

Au Reserves: 3.14Moz @ 1.1g/t

Au Resources<sup>3</sup>: 5.8Moz @ 1.4g/t

## 3. Jundee Operations (100%)

**Mine type:** U/G

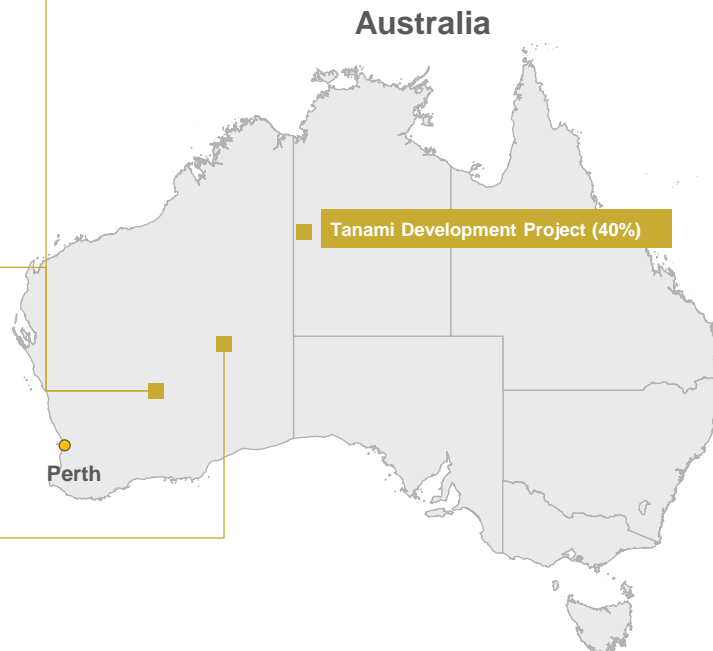
**Processing:** CIL / CIP plant with throughput of 2.2Mtpa

YTD<sup>1</sup> FY20 sold: 216koz Au

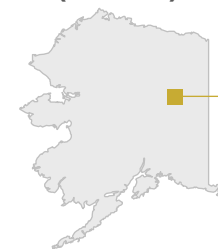
YTD<sup>1</sup> FY20 AISC: A\$1,101/oz (US\$725/oz)

Au Reserves: 1.6Moz Au @ 3.8g/t

Au Resources<sup>3</sup>: 4.6Moz Au @ 3.4g/t



## US (Alaska)



## 4. Pogo Mine (100%)

**Mine type:** U/G

**Processing:** CIP plant with throughput of 1Mtpa

YTD<sup>1</sup> FY20 sold: 123koz Au

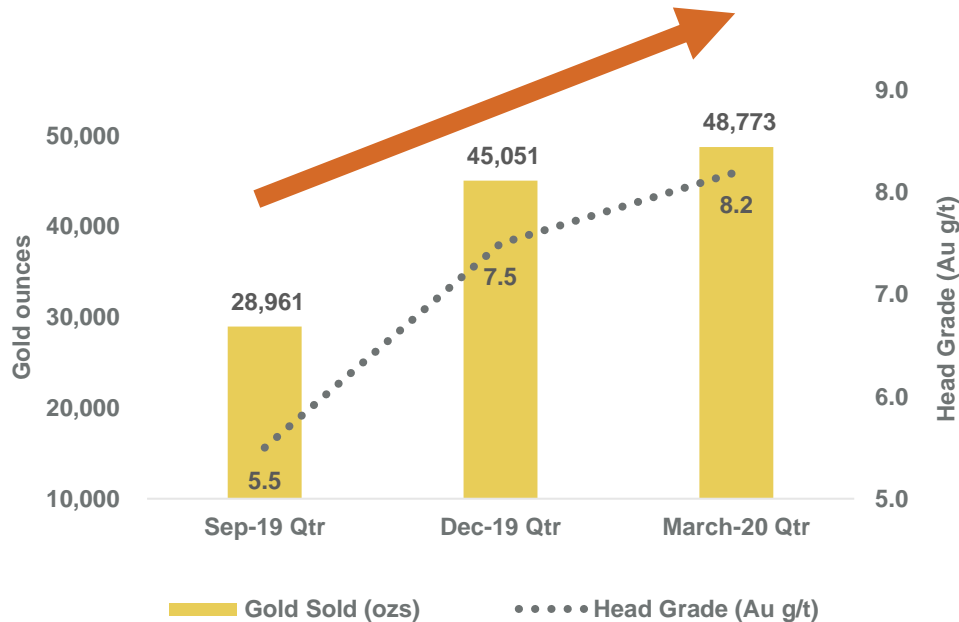
YTD<sup>1</sup> FY20 AISC: US\$1,420/oz (A\$2,157/oz)

Au Reserves: 1.5Moz Au @ 7.5g/t

Au Resources<sup>3</sup>: 5.9Moz Au @ 9.6g/t

# Pogo: Inflection point reached, momentum maintained

## Pogo FY20 Production

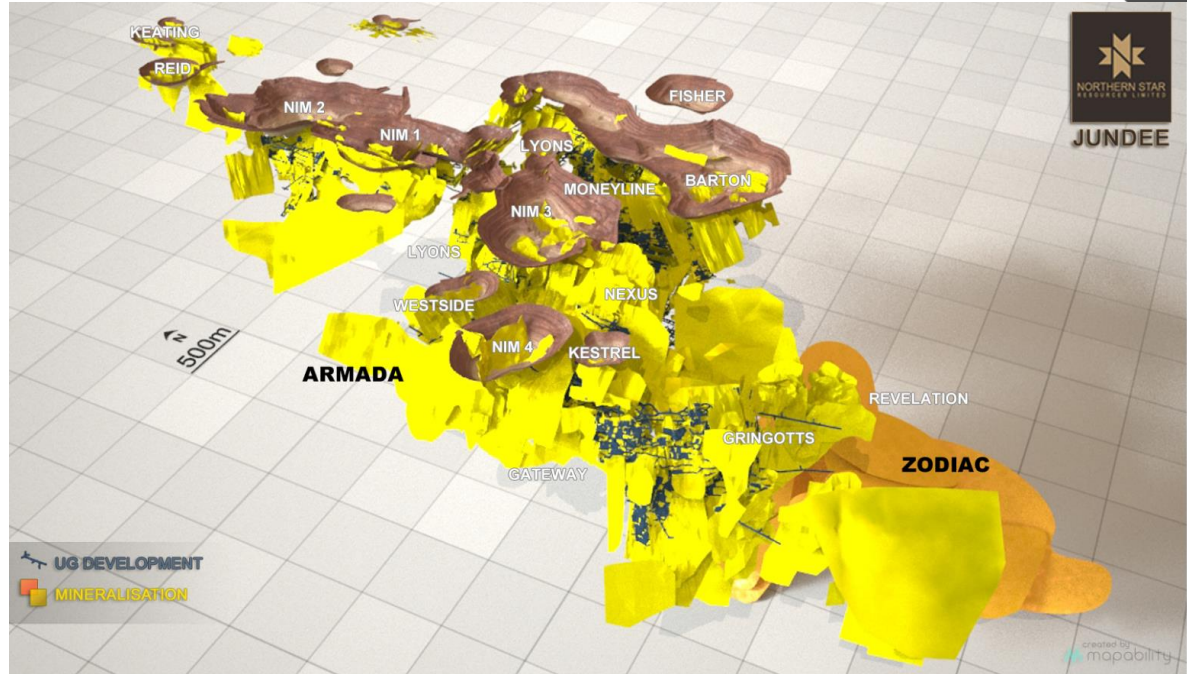


- Despite COVID-19 related disruption, Pogo's transition plan remains intact with March quarter maintaining positive momentum following the December quarter inflection point
- 68% increase in production ounces** and **49% increase in head grade** FY20 YTD, driven by new mining areas and increased contribution of stope ore sources
- YTD Pogo gold mined of 146koz at 7.2gpt
- Stope production continues from new mining areas, including Liese 1, Fun Zone and South Pogo



# Jundee: Mill expansion on schedule

- **March quarter FY20:** 75koz mined and 53koz sold at an AISC of A\$1,389/oz (US\$915/oz)
- **A\$22M plant upgrade** increasing capacity from 2.2Mtpa to 2.7Mtpa; on track for commissioning in the June 2020 quarter
- Substantial 60koz gold stockpile predominately of Ramone open pit ore ready for processing once commissioning complete
- Potential to incorporate the Bronzewing assets from the Echo acquisition into Jundee



# Kalgoorlie: Poised for a stronger June quarter

- **March quarter FY20:** 77koz mined and 77koz sold at an AISC of A\$1,619/oz (US\$1,066/oz)
- COVID-19 disruption, the suspension of mining at Raleigh underground (pending further NST evaluation) and the processing of lower grade stockpiles resulted in March quarter production 10% lower than forecasted, however;
- NST's Kalgoorlie operations are poised for a stronger June quarter as COVID-19 mitigation measures stabilise and first production from Moonbeam deposit at Kundana (NST 100%) comes online

Arctic / North Pit

Millennium

Centenary

Strzelecki

Pope John

Xmas/Moonbeam

Raleigh

Raleigh South

Pegasus/Pode

Rubicon

Hornet



← 100% NST / 51% NST →





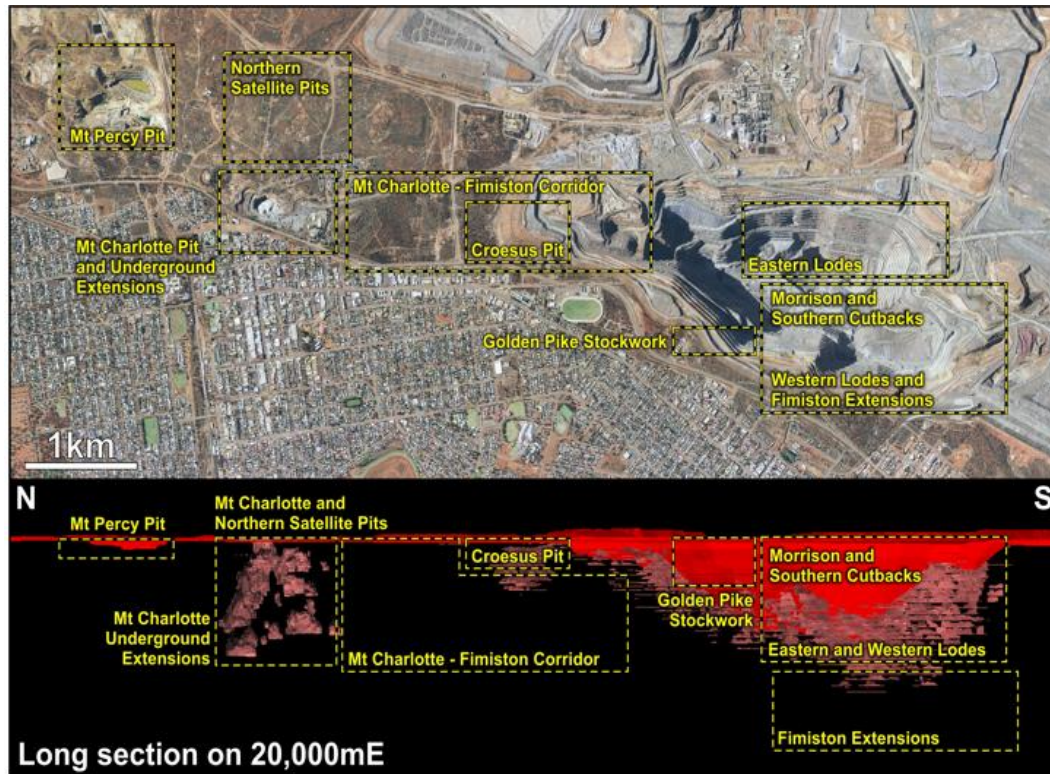
NORTHERN STAR  
RESOURCES LIMITED

# Appendix



# Longer term KCGM growth potential

## KCGM GROWTH PROJECTS

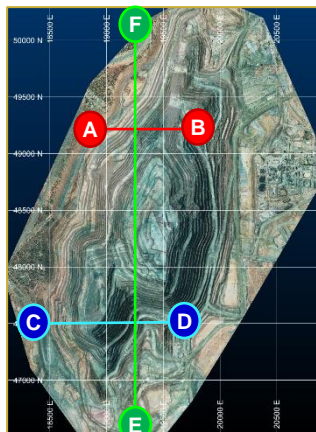


<b>FIMISTON UNDERGROUND</b>	<ul style="list-style-type: none"> <li>Mineralisation not extracted by previous underground mining. This includes parallel structures, high grade pillars and fill materials around historic workings, in addition to unmined lodes beneath the historic workings</li> </ul>
<b>FIMISTON SOUTH</b>	<ul style="list-style-type: none"> <li>Open pit and underground potential on the south-eastern part of the open pit. Drilling since 2016 has added ~3Moz of resource to this target</li> </ul>
<b>MT CHARLOTTE AREA</b>	<ul style="list-style-type: none"> <li>Mt Charlotte area underground potential, including extensions to Mt Charlotte main orebody, Hidden Secret, Mt Ferrum and Kalgoorlie East Lodes</li> </ul>
<b>STOCKWORKS</b>	<ul style="list-style-type: none"> <li>Charlotte-style stockwork mineralisation in Golden Mile Dolerite throughout the Golden Mile (e.g., Golden Pike Stockwork, Central Corridor, Mt Percy)</li> </ul>
<b>REGIONAL EXPLORATION</b>	<ul style="list-style-type: none"> <li>Advancement of early to intermediate stage exploration projects, including Mt Percy, Central Corridor and Hannan's South etc.</li> </ul>

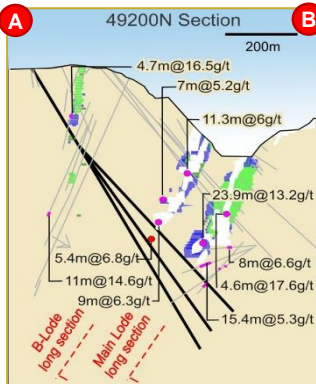


# Fimiston Underground Potential

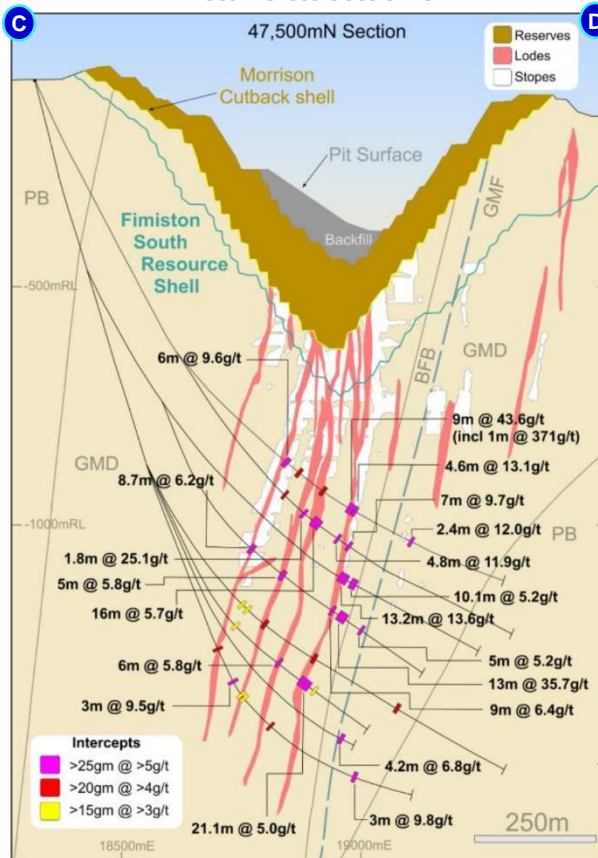
Fimiston Plan View



Cross Section A-B

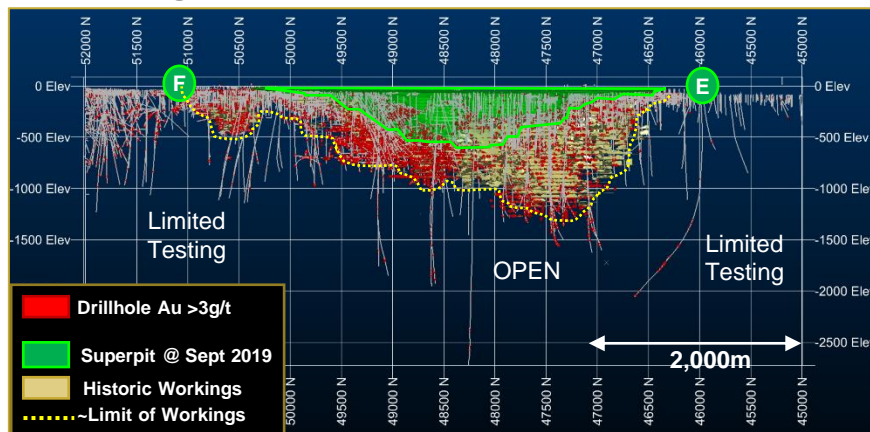


Fimiston Cross Section C-D



- Total production on the Golden Mile for past 125 years has totalled ~62Moz
- Drilling by KCGM between 2016 and 2018 (section C-D) demonstrates that there are **unmined ore lodes** amongst the historic workings in addition to extensions of the Fimiston lodes **unmined beneath historic workings**
- Drill Testing Beneath the pit and historical workings is severely limited

Fimiston Long Section E-F



# Northern Star Resources Limited

ASX Code: NST

An Australian gold miner – for global investors

## Investor Enquiries:

Kurt Walker

Level 1, 388 Hay Street, Subiaco 6008 Western Australia

T: +61 8 6188 2100

E: [info@nsrltd.com](mailto:info@nsrltd.com)

W: [www.nsrltd.com](http://www.nsrltd.com)

Inventum 3D Page Links [click here](#)

