ASX Announcement
22 July 2021

NORTHERN STAR 2021 INVESTOR DAY AND LIVE Q&A SESSION

Northern Star Resources Limited (ASX: NST) is pleased to release its 2021 Investor Day presentation. This virtual presentation can be viewed at:

https://webcast.boardroom.media/northern-star-resources-ltd/20210722/NaN60efcc6648e7d5001bc65a54

The presentation materials are attached to this announcement.

Presenters include:

Michael Chaney AO, Non-Executive Chair
Stuart Tonkin, Managing Director
Marianne Dravnieks, Executive Manager - People & Culture
Hilary Macdonald, General Counsel & Company Secretary
Michael Mulroney, Chief Geological Officer
Simon Jessop, Chief Operating Officer - Kalgoorlie Operations
Luke Creagh, Chief Operating Officer - Yandal & Pogo Operations
Morgan Ball, Chief Financial Officer
Troy Irvin, Chief Investor Relations Officer

Northern Star invites all stakeholders to view the presentation prior to the Company's Question & Answer Session on **Friday, 23 July 2021 at 6:30am AWST (8:30am AEST).**

To listen to the Q&A Session, please click on the link below and register your details:

https://webcast.boardroom.media/northern-star-resources-ltd/20210722/NaN60efd96248e7d5001bc65ac8

Please note it is best to log on at least five minutes before the scheduled commencement time to ensure you are registered in time for the start of the call.

A recording of the call will be available on the same link approximately one hour after the conclusion of the webcast.

Authorised for release to ASX by Stuart Tonkin, Managing Director.

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NORTHERN STAR
RESOURCES LIMITED

Business First

Five-Year Strategic Plan

2021 Investor Day

Forward Looking Statements, Reserves and Resources

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Forward Looking Statements

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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 or 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.

ASX Listing Rules Disclosures

The information in this announcement that relates to the Ore Reserves and Mineral Resources, and production targets of Northern Star has been extracted from the ASX release by Northern Star entitled "Resources, Reserves and Exploration Update" dated 3 May 2021 available at www.nsrltd.com and www.asx.com (**Northern Star Announcement**).

Northern Star confirms that it is not aware of any new information or data that materially affects the information included in the Northern Star 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 Northern Star 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 that announcement.

^Statements in this ASX Announcement comparing Northern Star's 31 March 2021 Ore Reserves and Northern Star's 31 March 2021 Mineral Resources to previously announced Ore Reserves and Mineral Resources, are comparisons to the combined production guidance profile of Northern Star post-merger implementation date of 12 February 2021, as disclosed in the Scheme Booklet issued by Saracen Mineral Holdings Ltd dated 10 December 2020 at sections 7.1 to 7.3.

Assumptions made in relation to the Ore Reserves and Mineral Resources underpinning the production targets in that announcement are (in summary):

- Current operational capital and operating cost structures,
- Current mining and metallurgical performance,
- The gold price, exchange rate, dilution allowance and mining recovery rates are as set out in each prior public report referred to in ASX Listing Rule 5.19 disclosures, and
- 5 year gold production profiles are based on 100% current JORC compliant Ore Reserves.

Rounding is applied in this ASX Announcement for the percentage comparisons and for the 31 March 2021 Ore Reserves and Mineral Resources figures.

All currency conversions in this document were converted at a spot conversion rate of AUD/USD of $0.75.

Authorised to release to the ASX by Stuart Tonkin, Managing Director.

Annual Investor Day Agenda

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Agenda	Speaker
Introduction	Michael Chaney AO, Non-Executive Chair
Strategic Overview	Stuart Tonkin, Managing Director
People & Culture	Marianne Dravnieks, Executive Manager - People & Culture
ESG	Hilary Macdonald, General Counsel & Company Secretary
Geology & Exploration	Michael Mulroney, Chief Geological Officer
Kalgoorlie Production Centre	Simon Jessop, Chief Operating Officer - Kalgoorlie Operations
Yandal Production Centre	Luke Creagh, Chief Operating Officer - Yandal & Pogo Operations
Pogo Production Centre	Luke Creagh, Chief Operating Officer - Yandal & Pogo Operations
Finance & Commercial	Morgan Ball, Chief Financial Officer
Markets	Troy Irvin, Chief Investor Relations Officer
Investor Summary	Stuart Tonkin, Managing Director
Interactive Questions & Answers	Recorded webcast can be accessed via the following **LINK**

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NORTHERN STAR
RESOURCES LIMITED

Introduction

Michael Chaney AO
Non-Executive Chair

Indigenous Peoples Statement

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Northern Star would like to acknowledge and pay our respects to Traditional Owner groups whose land we are privileged to work on, and whose input and guidance we seek and value within the operation of our business.

We acknowledge their strong and special physical and cultural connections to their ancestral lands.

- Whadjuk Noongar
- The Wiluna Martu
- Kultju
- Tjiwarl
- Maduwongga
- Marlinyu Ghoorlie
- Tjurabalan
- Walpiri and Yapa
- Puutu Kunti Kurrama and Pinikura
- Jurruru
- Yinhawongka
- Nyalpa

We also acknowledge Doyon Limited, whose traditional lands surrounds our Pogo Operation in Alaska, USA.

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Strategic Overview

Stuart Tonkin
Managing Director

Business first

Strong focus on sustainable shareholder returns

- **Results - Deliver on our promises**
  - Reliable delivery of production and cost guidance
- **Returns - Target superior financial performance**
  - Capital discipline balancing re-investment and returns to Shareholders
  - Active portfolio management, lowering costs
- **Responsibility - Positive legacy from business activity**
  - Sustainable Employee, Environmental, Social and Governance performance
  - Sustainable discovery and mine life extension

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Core Values

SAFETY
It matters and starts with you.

TEAMWORK
Together we can.

ACCOUNTABILITY
The responsibility lies with you.

RESPECT
To get it you must give it.

RESULTS
We deliver on our promises.

STARR

It's what we stand for.

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Safety performance

The health and safety of our people is always our number one priority

- We continue to deliver industry-leading safety performance during a period of significant growth, change and alignment - TRIFR at 5.6 (more than 10% below the industry index)
- We continue to take a risk-based approach in the development of strategic plans; Focusing on education and hazard awareness, whilst empowering our people to be part of the change
- Implementation of HAZIDaR; Recognising and rewarding behaviour - Based on “above the line” thinking using the Hierarchy of Controls for ‘rectification’ of the identified hazard
- Educating our workforce about what key changes to WHS legislation means for each role
- Implementation and integration of Health and Safety Management and OHS reporting systems

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A simple business - Three large-scale production centres

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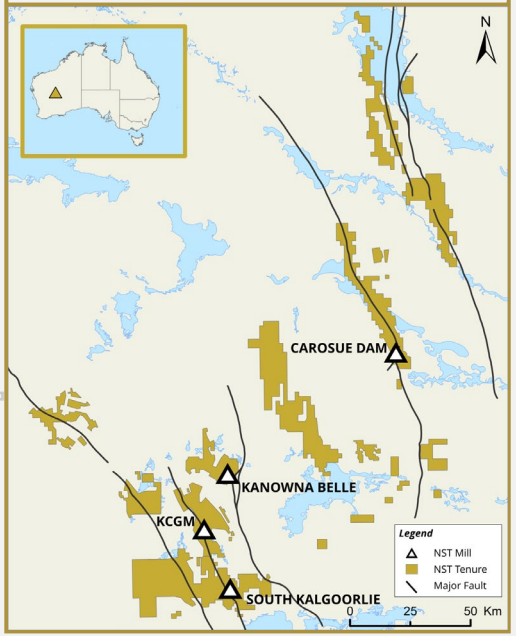
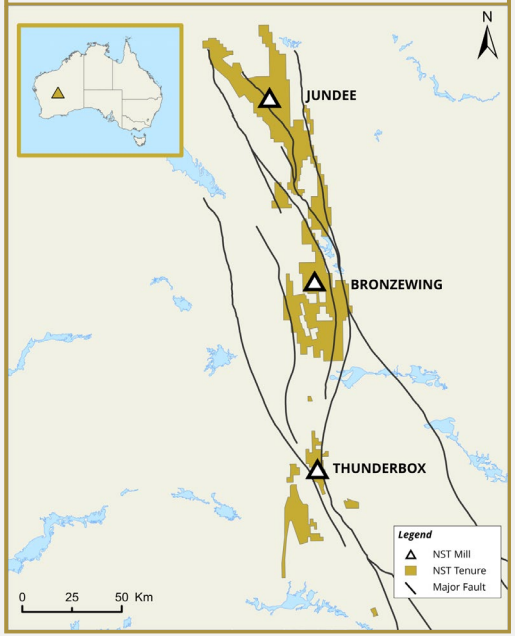
Kalgoorlie to 1.1Mozpa

Reserves: 314Mt @ 1.5g/t for 15.0Moz
Resources: 666Mt @ 1.8g/t for 37.6Moz
Processing capacity: 20.0Mtpa



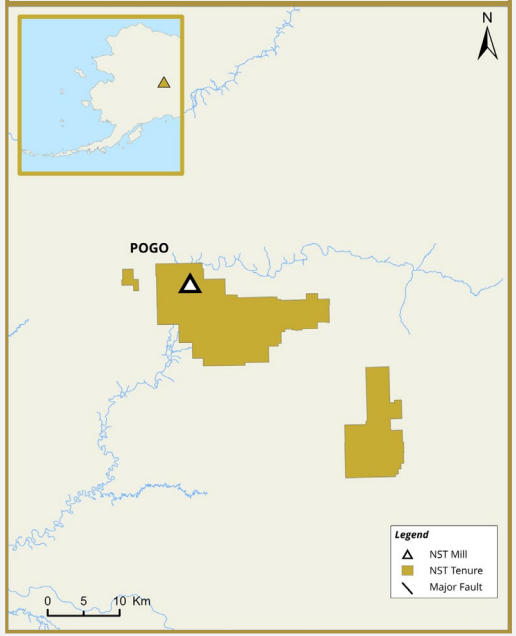
Yandal to 600kozpa

Reserves: 67Mt @ 2.1g/t for 4.5Moz
Resources: 141Mt @ 2.2g/t for 10.1Moz
Processing capacity: 5.5Mtpa



Pogo to 300kozpa

Reserves: 5.9Mt @ 8.0g/t for 1.5Moz
Resources: 23Mt @ 9.4g/t for 6.9Moz
Processing capacity: 1.3Mtpa (expanded)



Robust platform

A position of strength

- FY21 production and cost guidance achieved

	FY21 actual	FY21 guidance	June Q 2021
Gold sales (koz)	1,596	1,540-1,700	☑ 444
AISC (A$/oz)	1,483	1,390-1,520	☑ 1,459

- Strong FY21 exit rate - June quarter 444koz sold @ AISC A$1,459/oz
- Strong balance sheet at 30 June 2021:
  - A$1.14B liquidity including A$338M in undrawn revolving facilities
  - A$803M cash and bullion
  - A$662M corporate bank debt

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Five-year strategic plan-on-a-page

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RESPONSIBLE EESG

SUSTAINABLE NST

Independent Non-Executive Chair

CEO & MD Combined

Merged experience of industry-leading teams (E - Employee)

Progressive Environmental, Social, Governance (ESG)

PROFITABLE GROWTH

SUSTAINABLE ~2Mozpa

3-5 Tier-1 production centres

Kalgoorlie to 1.1Mozpa

Yandal to 600kozpa

Pogo to 300kozpa

Active portfolio management

LOWER COSTS

SUSTAINABLE 1st HALF COSTS

Growth in production

Deliver merger synergies

Active portfolio management

LONG MINE LIFE

SUSTAINABLE +20 YEARS

Target +20Moz Reserve

Target +60Moz Resource

Focused on Tier-1 geology

Track record of low-cost discovery and accretive M&A

PREMIUM VALUATION

SUPERIOR SHAREHOLDER RETURNS

Enhance return on investment

Improve NAV

Attract size investment from a diverse global investor universe

Premium trading multiple

Business first

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RESPONSIBLE EESG

SUSTAINABLE NST

Independent Non-Executive Chair

CEO & MD Combined

Merged experience of industry-leading teams (E - Employee)

Progressive Environmental, Social, Governance (ESG)

- **Michael Chaney AO - Independent Non-Executive Chair,** commenced 1 July 2021
- **Stuart Tonkin - Managing Director,** effective today (NST tenure 5 years CEO / 3 years Chief Operating Officer)
- Merger confidence - Combined experience of aligned, industry-leading management teams
- **Our Core Values drive our culture and leadership**
- **Responsible EESG / positive legacy:**
  - **E**mployee - Job security, growth development opportunities
  - **E**nvironmental - Minimise the environmental footprint
  - **S**ocial - Positive legacy for all our stakeholders
  - **G**overnance - Enhanced governance across the business

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PROFITABLE GROWTH

SUSTAINABLE ~2Mozpa

3-5 Tier-1 production centres

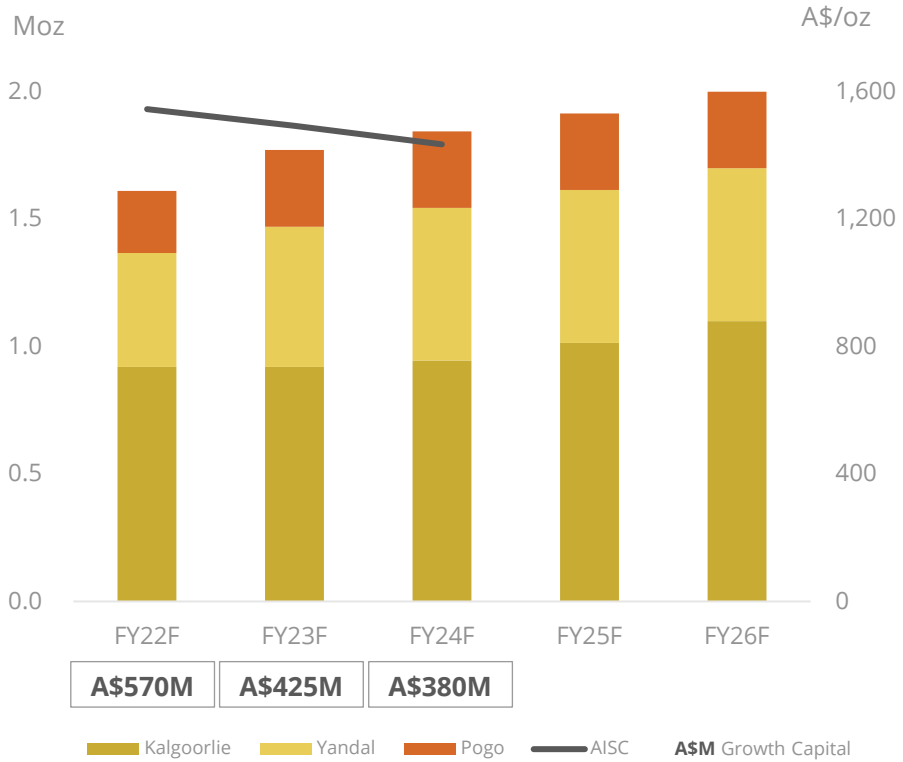
Kalgoorlie to 1.1Mozpa

Yandal to 600kozpa

Pogo to 300kozpa

Active portfolio management

Group production outlook



Profitable production growth:

- Kalgoorlie to 1.1Mozpa
- Yandal to 600kozpa
- Pogo to 300kozpa

Where it counts most:

- KCGM increasing to 650koz in FY26; 700koz in FY28
- **Declining AISC** - As quantity / quality of ounces increases
- **Declining AIC** - As growth capital rolls off

FY22 Group guidance
1.55-1.65Moz at AISC of A$1,475-1,575/oz; growth capital A$570M

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LOWER COSTS

SUSTAINABLE 1st HALF COSTS

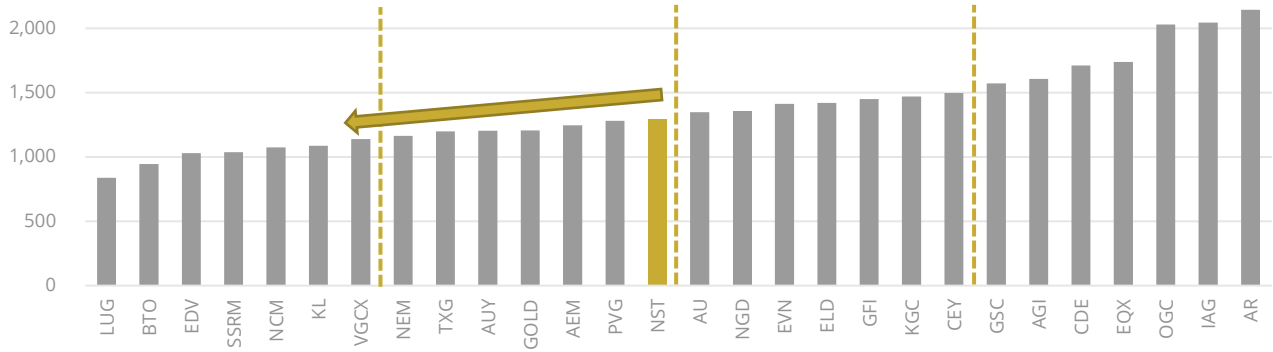
Growth in production

Deliver merger synergies

Active portfolio management

- Industry cost pressure; **unique opportunities to "buck the trend"** to **deliver improved 1st half costs:**
  - Growth in ounces produced - KCGM, Yandal, Pogo
  - Merger synergies - Kalgoorlie, Yandal, Corporate
  - Structural change at KCGM / access higher grade ore
  - Active portfolio management

2021 All-In Cost curve (US$/oz)



NST = FY21A AISC + growth capital (excluding exploration)
Others (producers >200kozpa) = **Sourced from BMO Gold Pages** July 2021, AUD:USD 0.75

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LONG MINE LIFE

SUSTAINABLE +20 YEARS

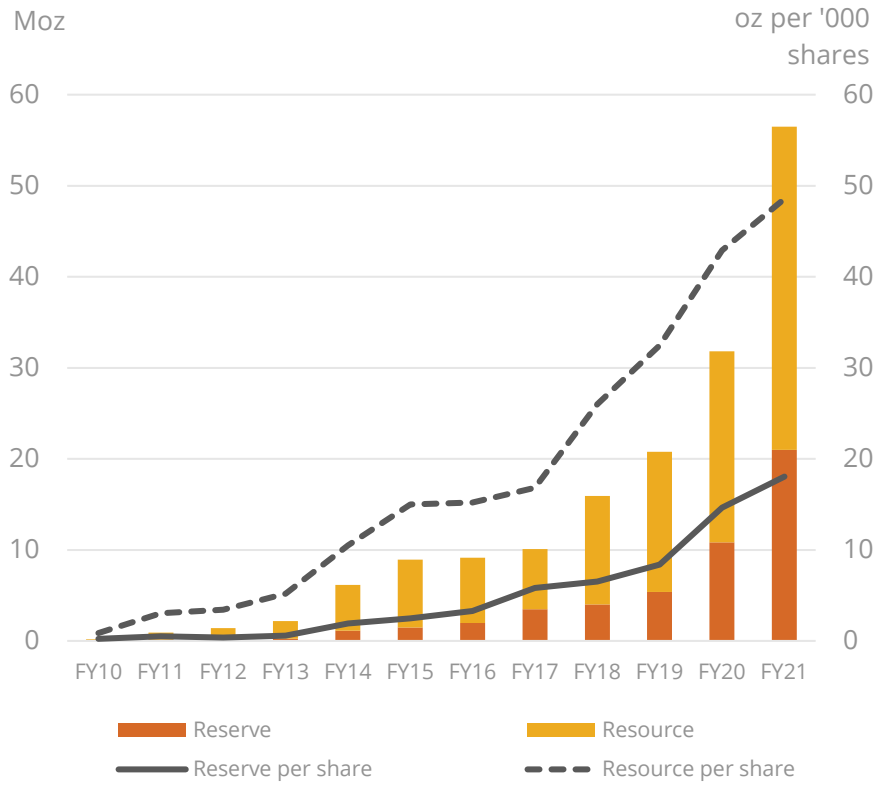
Target +20Moz Reserve

Target +60Moz Resource

Focused on Tier-1 geology

Track record of low-cost discovery and accretive M&A

Long term Resource and Reserve growth



Quality geological systems yield ongoing discovery outcomes:

- Improved quality and increased quantity of ounces per share
- Track record of Resource conversion - Sustainable mine life

Disciplined capital allocation - Exclusively Tier-1 jurisdictions:

- **Find** - Continued investment in exploration (FY22 budget A$140M)
- **Buy** - Accretive M&A

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PREMIUM VALUATION

SUPERIOR SHAREHOLDER RETURNS

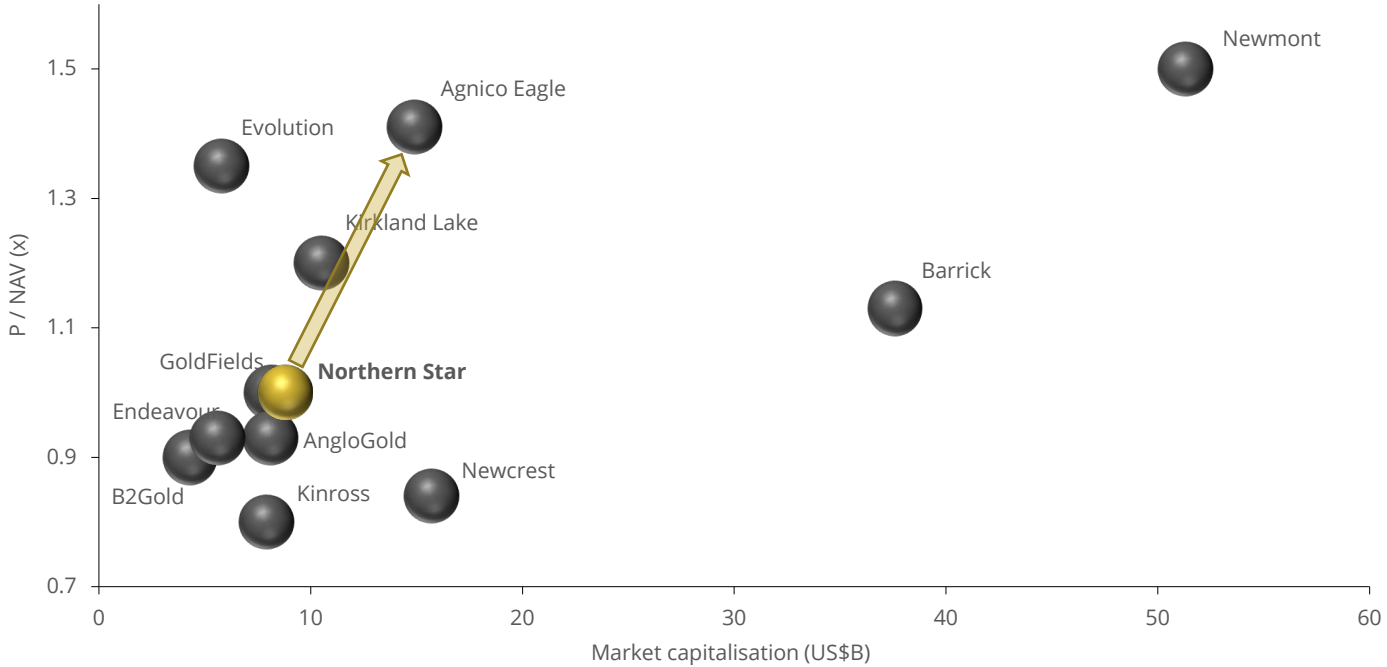
Enhance return on investment

Improve NAV

Attract size investment from a diverse global investor universe

Premium trading multiple

- **Compelling valuation opportunity, significant upside** from **"bucking the trend"** - Profitable production growth where it counts



Source: FactSet 9 July 2021

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People & Culture

Marianne Dravnieks
Executive Manager - People & Culture

Bring together

- Successful merger of experienced, aligned, industry-leading teams
- Integration accelerated by “can-do” culture and supported by internal talent:
  - 5,500 careers (3,000 employees / 2,500 contractors)
- Kalgoorlie Production Centre now under single management:
  - Simplified processes and systems
  - Increased efficiencies and liberation of synergies
  - More effective engagement for employees, suppliers and the community

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Meeting the people challenge

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Tight labour market	**Retain people through increasing individual opportunity through Company growth:** ▪ Build our **own talent** and **develop our people** in key roles ▪ Majority of workforce **residential,** providing stability to careers and communities
Industry competition	**Maintain competitive employee "deal":** ▪ Competitive remuneration plus career development, Company growth and sustainable mine life appeals to our people ▪ Specialised in-house underground skills globally recognised (not competing with bulk commodities)
Future workforce	**Grow, extend and support our talent pool:** ▪ Continue to support graduates, apprentices and trainees in partnership with schools, universities and communities to engage with future mining talent ▪ Culture supports diverse and inclusive workplace which encourages access to underutilised talent

NST - A unique opportunity

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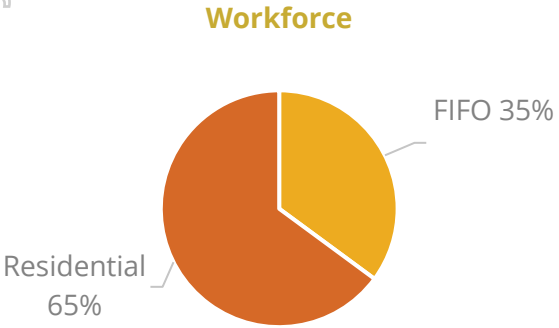

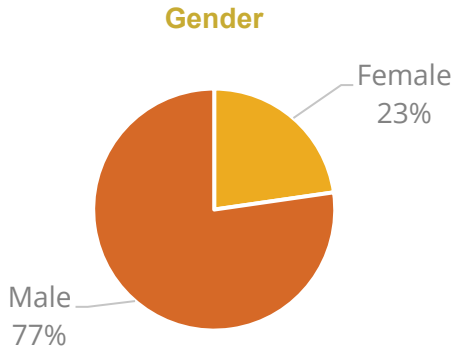

- Our Core Values drive culture and leadership
- Long mine life / long term commitment to our people
- Different from peers / “one-stop-shop” for an opportunity-rich career:
  - Growth business
  - Open Pit / Underground / Corporate
  - Residential / FIFO
  - WA / International
  - Owner Operator (NSMS) / Contractor
- Ongoing commitment to apprentices, trainees and graduates

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RESOURCES LIMITED

ESG

Hilary Macdonald
General Counsel & Company Secretary

Approach to EESG

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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."

Employees
STARR Core Values
Physical and mental wellbeing
Inclusion, diversity, fair processes
Competitive pay and benefits

Environment
Energy use and GHG emissions focus
Water security and efficient use
Hazardous material and waste management
Rehabilitation and closure

Social
Support local economic development
Social and community support
Increase local employment and procurement
Free Prior and Informed Consent principles

Governance
Prudent financial and operational management
Corporate governance and ethics
Risk management framework
Supply chain integrity

Environment

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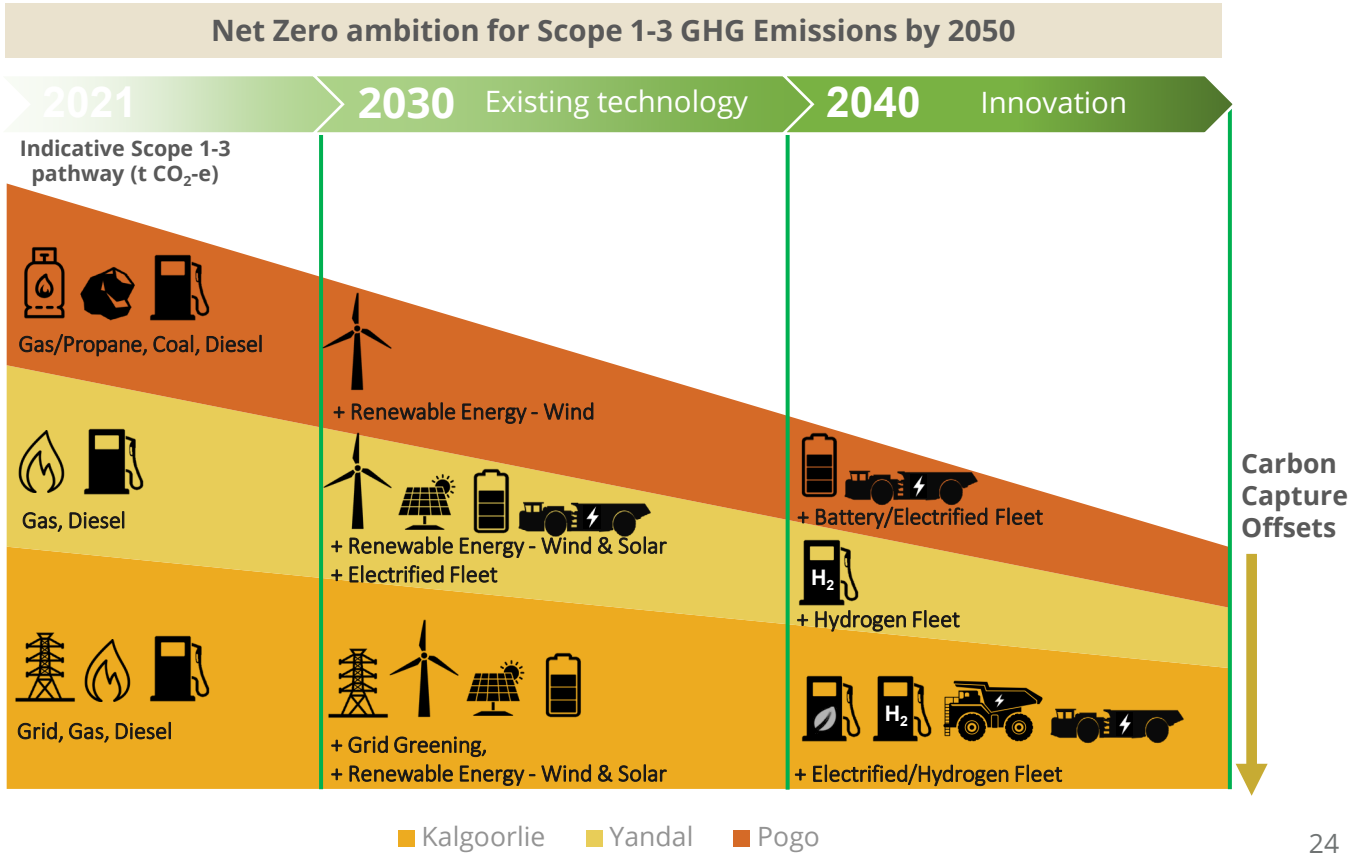
- Detailed planning for Paris-aligned emissions reduction pathway is underway - Disclosure in 2021 Sustainability Report (March 2022 release)
- Potential to reduce operational emissions in absolute terms by 2030 by switching to renewable power and introducing electric fleet (existing technologies)
- Other plans include:
  - Improve operational resilience to physical risk
  - Mapping Scope 3 emissions
  - Further enhanced climate disclosure



Environment

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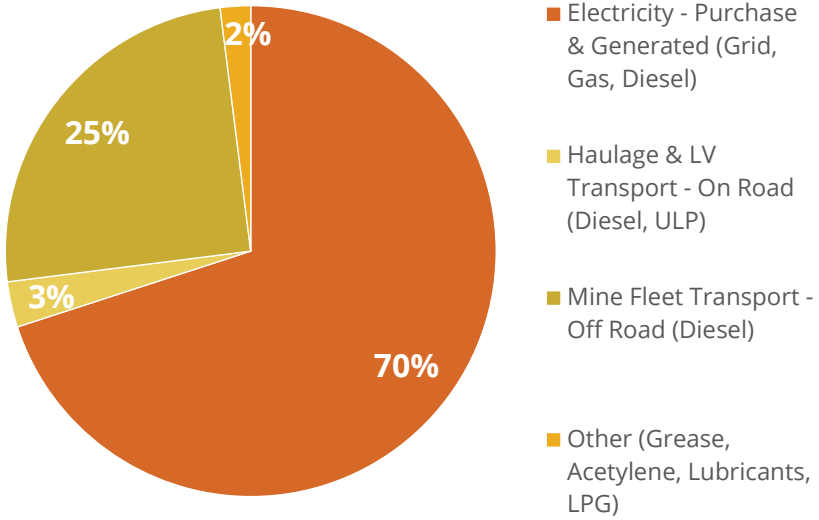
Net Zero ambition for Scope 1-3 GHG emissions by 2050

- Focus on Scope 1 and 2 GHG Emission Reduction by Renewable Energy projects
- Electrification of carbon fuel based engines - Once energy source is “greener”
- Carbon price assumptions to support investment in carbon reduction actions and innovation
- Supporting Scope 3 reduction through a responsible procurement framework
- Residual Carbon Capture and Storage projects to achieve Net Zero
- Water security and water conservation projects
- Continuing alignment with TCFD framework (and SASB Financial Materiality framework)

Northern Star Scope 1 & 2 Emissions by Source (t CO_2-e)



Social

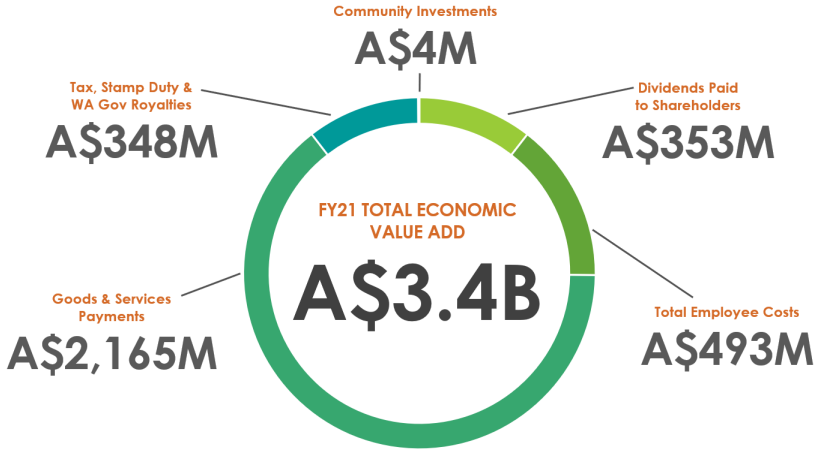
Indigenous Relations

- Building cultural awareness in the workforce with on-country training
- Growing Indigenous employment and training opportunities
- Increasing Indigenous procurement and supply, including Ranger program

Community & Human Rights

- Sponsorships & donations aligned to United Nations Sustainable Development Goals
- Community COVID-19 fund to assist local health, communities and businesses
- Modern Slavery audits conducted, corrective action response-ready, expanded training regime, and Supplier Code of Conduct enforced
- Board adoption of Human Rights Policy; focus on psychosocial harm risks
- Estimated economic value-add A$3.4B FY21 (unaudited)

0 Heritage related infringements or human rights violations detected in our supply chain; Materially adverse Community incidents



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Governance

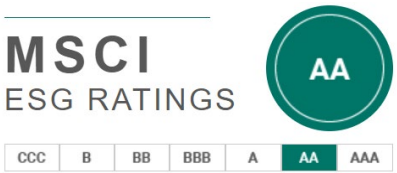
Independent Non-Executive Chair, Michael Chaney AO appointed from 1 July 2021

5 x Sub-Committees: Environmental, Social & Safety (ESS); Remuneration; Audit & Risk; Exploration & Growth and Nomination

Nasdaq evaluated NST Board to be highly functional, responsive and engaged in the annual external Board evaluation

Directors' professional development program including cyber security risks; human capital risks; higher standards of safety diligence and completed phases in TCFD

Annual ESG Roadshows following release of Sustainability Report



35/35 Score
ASX Corporate Governance Council Principles & Recommendations

ACSI assessment:
"Leading" level of ESG reporting, relative to peers

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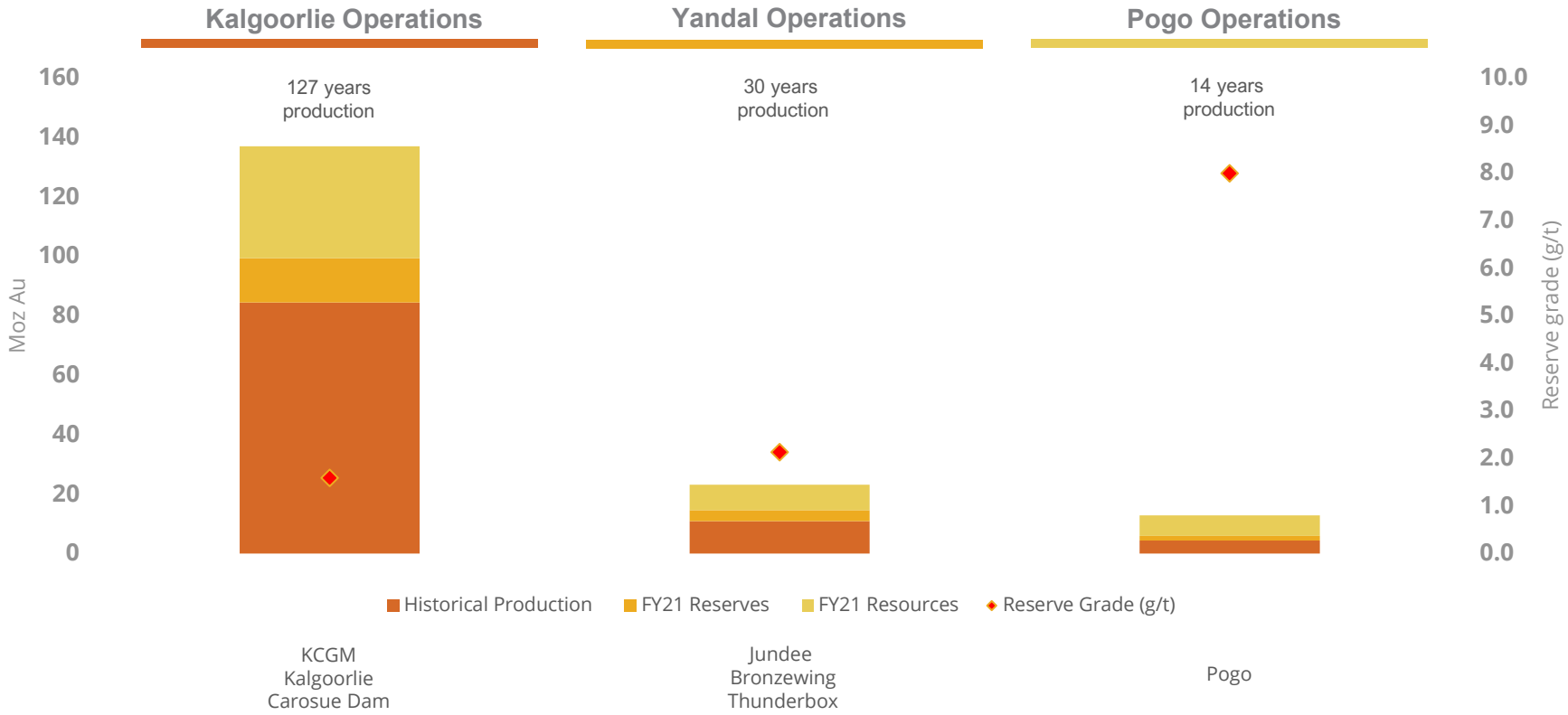
Geology & Exploration

Michael Mulroney
Chief Geological Officer

Geological endowment - A major value driver

Consolidation of world-class gold systems, exclusively in Tier-1 jurisdictions



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Investment in world-class gold systems pays dividends

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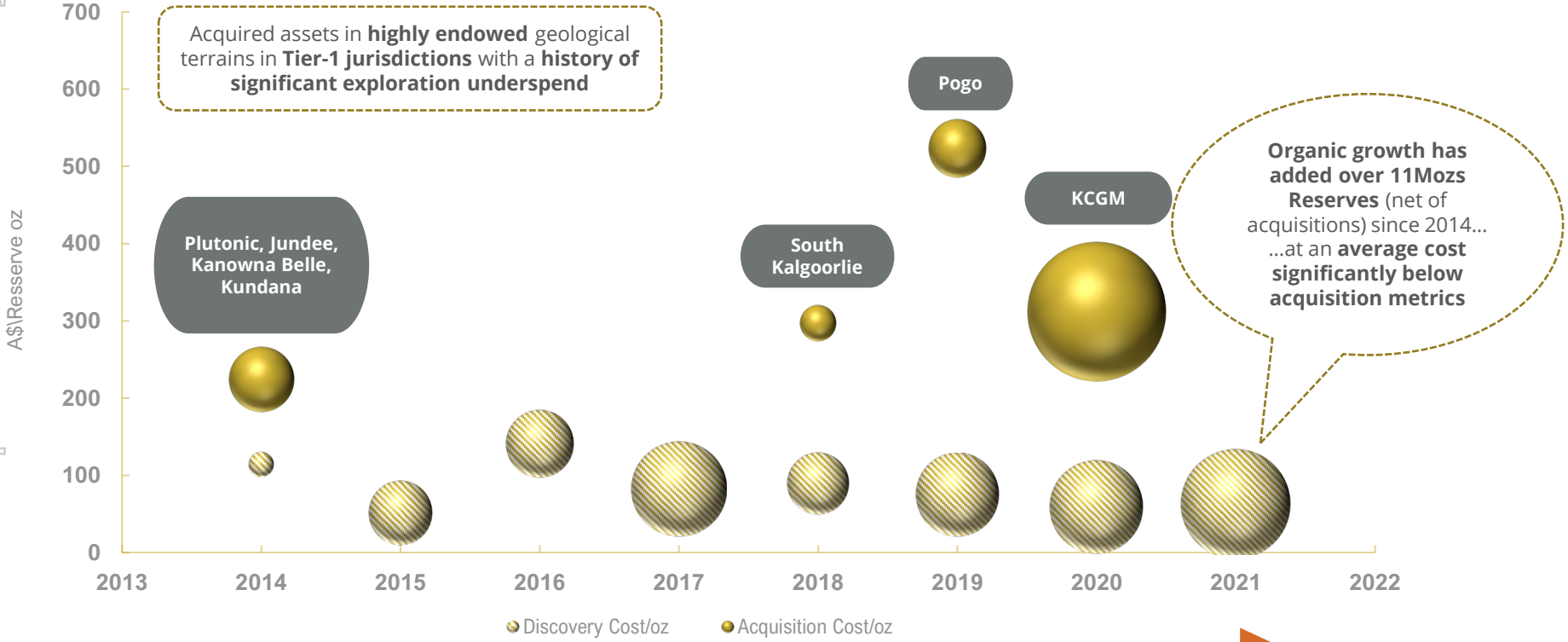


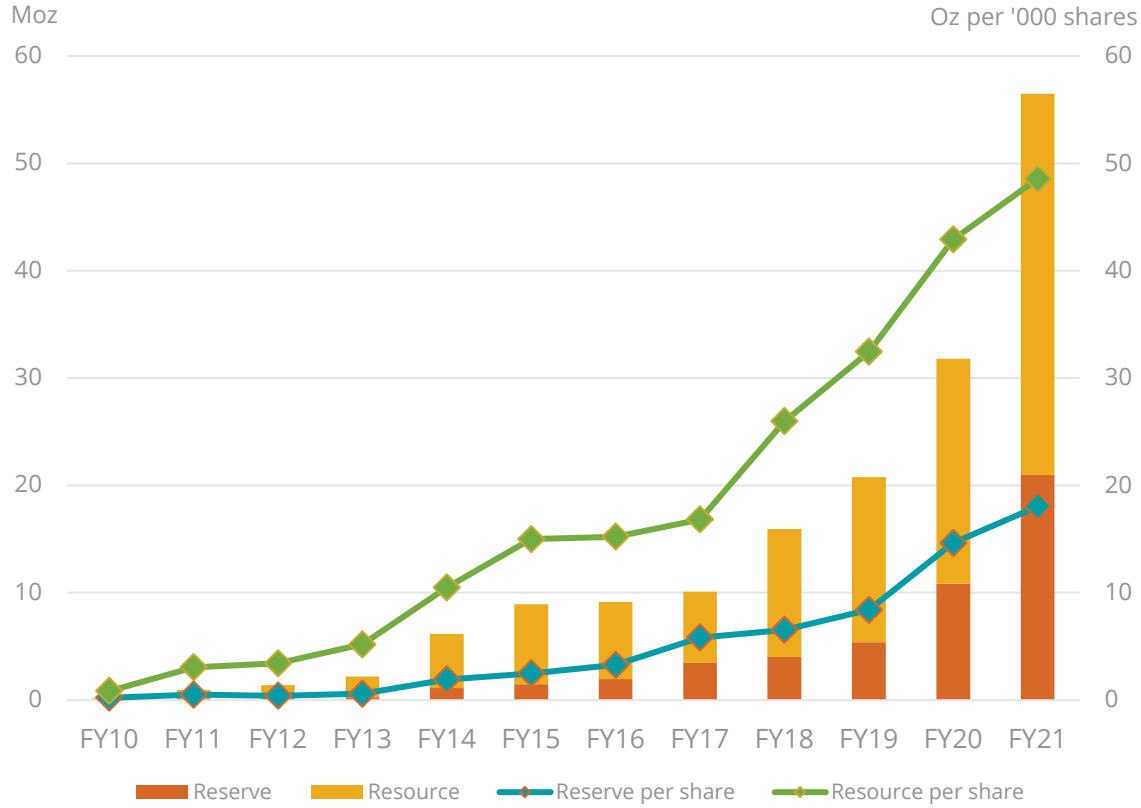
Asset = Acquisition

Sustained exploration investment has generated continued organic Reserve growth – Key value driver

Bubble size = relative ounce profile

Sustained growth in endowment

Reserve and Resource Growth



- Quality geological systems yield significant discovery outcomes:
  - Improved quality of ounces
  - Increased ounces per share
  - Track record of Resource conversion - Long sustainable life

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A dominant player in a Tier-1 Location

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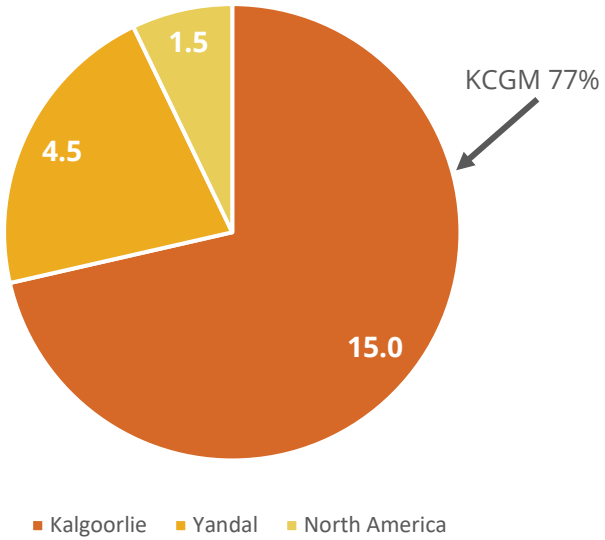
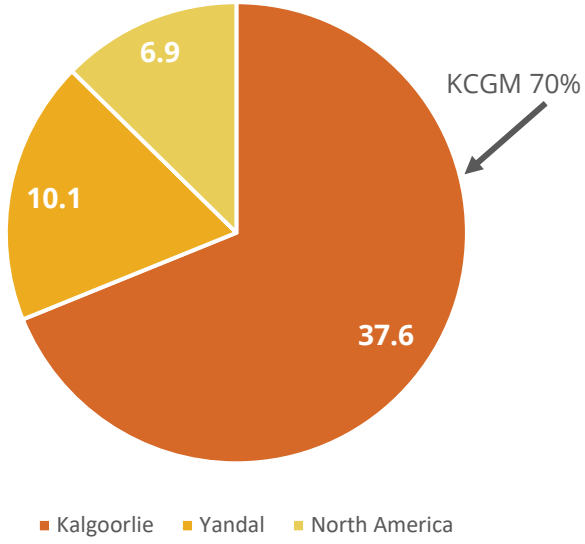
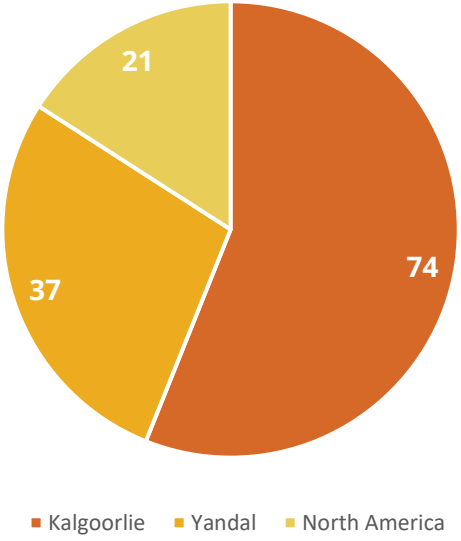
Reserves by production centre (Moz)*



Resources by production centre (Moz)*



FY22 Exploration Budget by production centre (A$M)**



* Resources and Reserves as at 31 March 2021. Note: KCGM 55% of Group Reserves (77% of Kalgoorlie), 47% of Group Resources (70% of Kalgoorlie)
**Exclusive of Corporate and other exploration

Extensive organic growth pipeline

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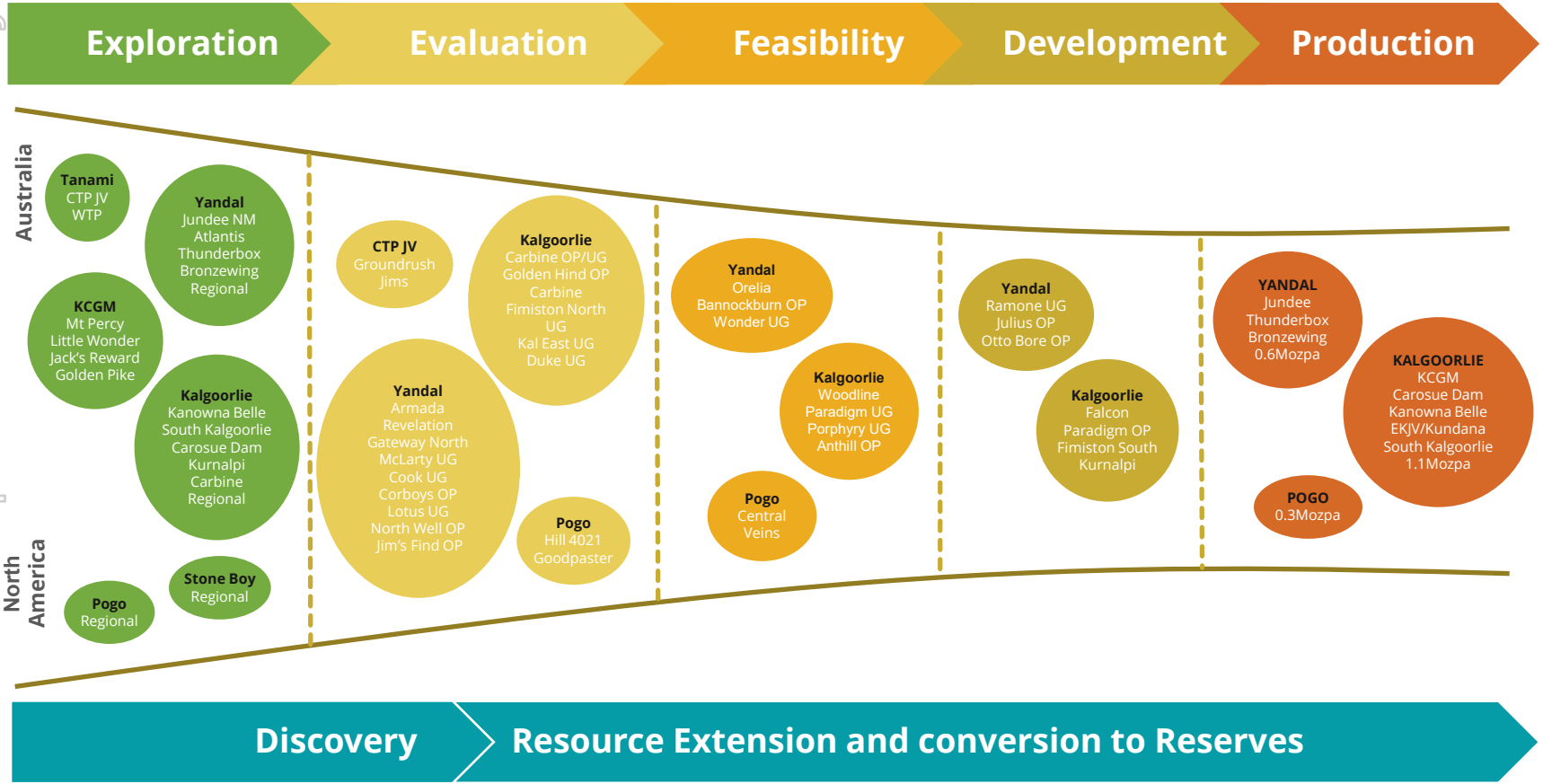

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Kalgoorlie Production Centre

Simon Jessop
Chief Operating Officer

Kalgoorlie - Profitable growth to 1.1Mozpa

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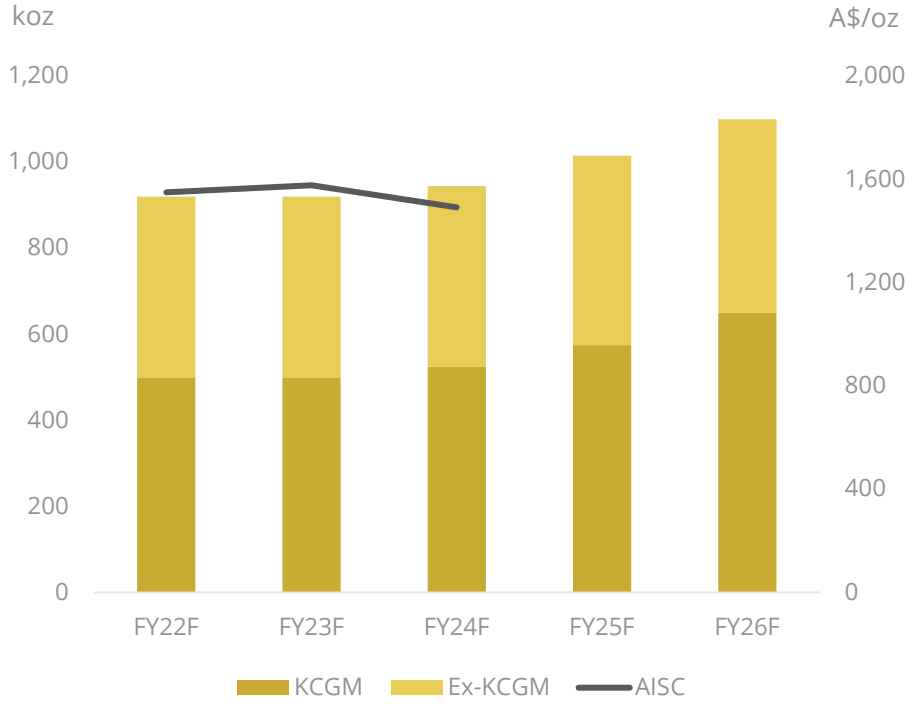
- **Simplify the business**, **divert capital to grow the high margin assets**, where it counts
- **Reduce costs with regional synergies**
- **Enviable optionality**:
  - Open pit and underground mines with significant installed infrastructure
  - Large and growing Reserves and Resources (+8% and +15% respectively over last 9 months, post mining depletion)
- **FY22 guidance** 900-950koz at AISC A$1,500-1,600/oz; growth capital A$230M (predominantly Fimiston South cutback)

Kalgoorlie production outlook



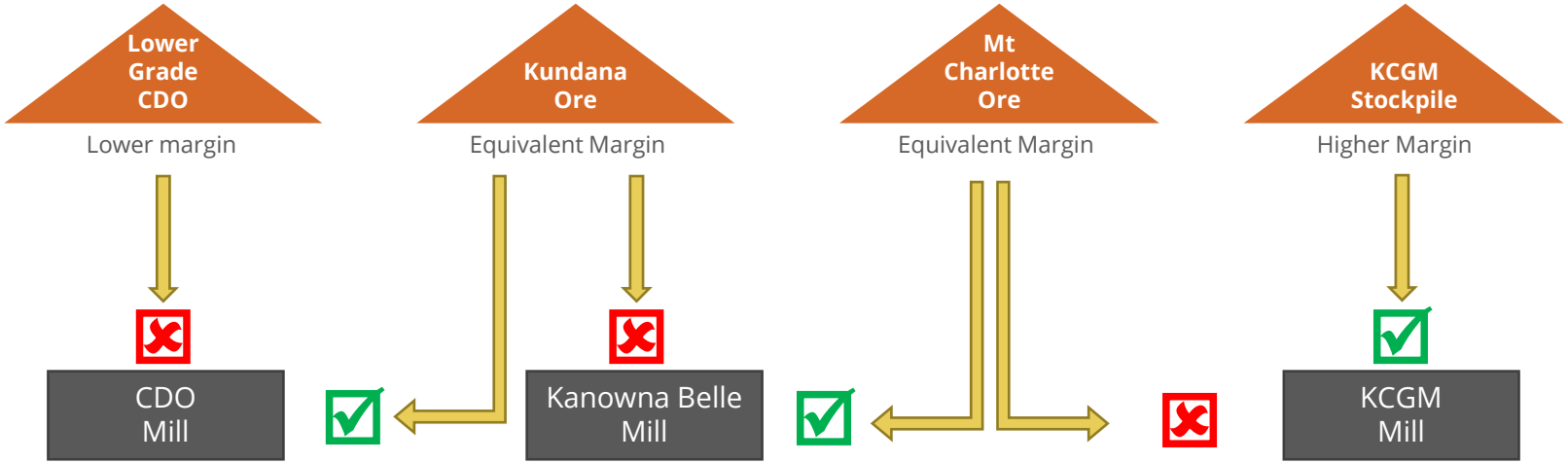
Synergy - Kalgoorlie District Milling

- 20Mt of installed milling capacity
- Replace lower margin Carosue Dam (CDO) ore with higher margin KCGM stockpile ore
- Increases in recovery offset incremental haulage cost
- Builds flexibility into the mine plan
- Total net margin of optimised ore is ~**A$15/t (~A$215/oz)**

Kalgoorlie production centre - Processing optionality

Mill	Throughput (Mtpa)
KCGM	13.0
Kanowna Belle	2.0
Carosue Dam	4.0
South Kalgoorlie	1.0
TOTAL	**20.0**

Treating ore at the processing plant that realises the best margin delivers A$12M-A$15Mpa



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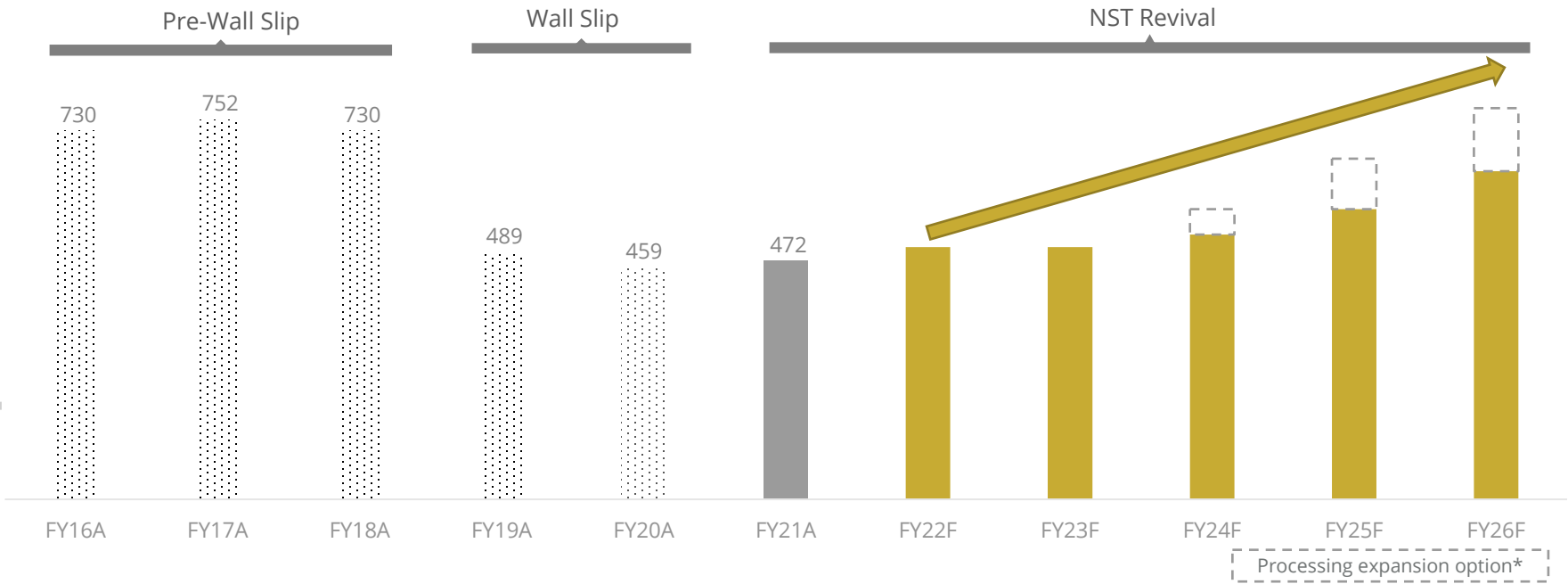
KCGM - Revival

- The asset has historically delivered +700kozpa (under previous ownership, pre-East Wall slip)

KCGM annual gold production (koz)



- Historical production performance supports NST's long term growth plans to **+700koz by FY28**

*Refer to slide 43 "KCGM – Processing optionality"

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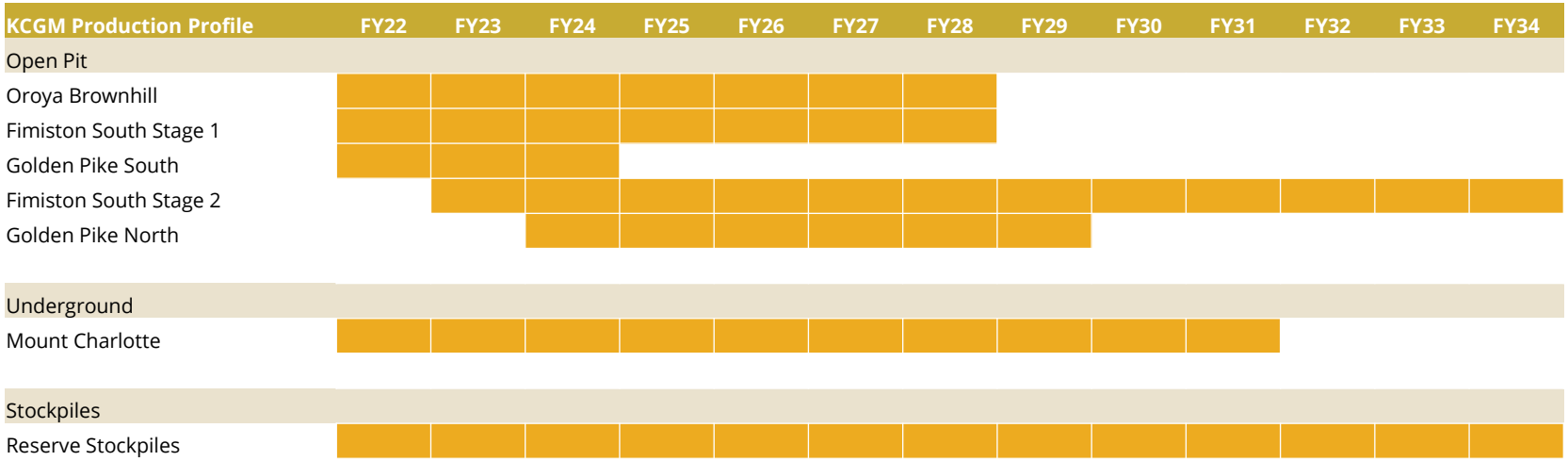
KCGM - Tier-1 Asset in a Tier-1 Location

- Large, long life open pit and underground gold mine
- 11.6Moz Reserves, 26.3Moz Resources, underpins **long mine life**



- **Further growth** via:
  - Resource conversion (Inferred Resources 8.6Moz)
  - Host of strong intersections outside Resources and Reserves
  - 4Moz Inferred Fimiston UG Resource not included in production profile above
  - Focused exploration across a >90Moz gold camp

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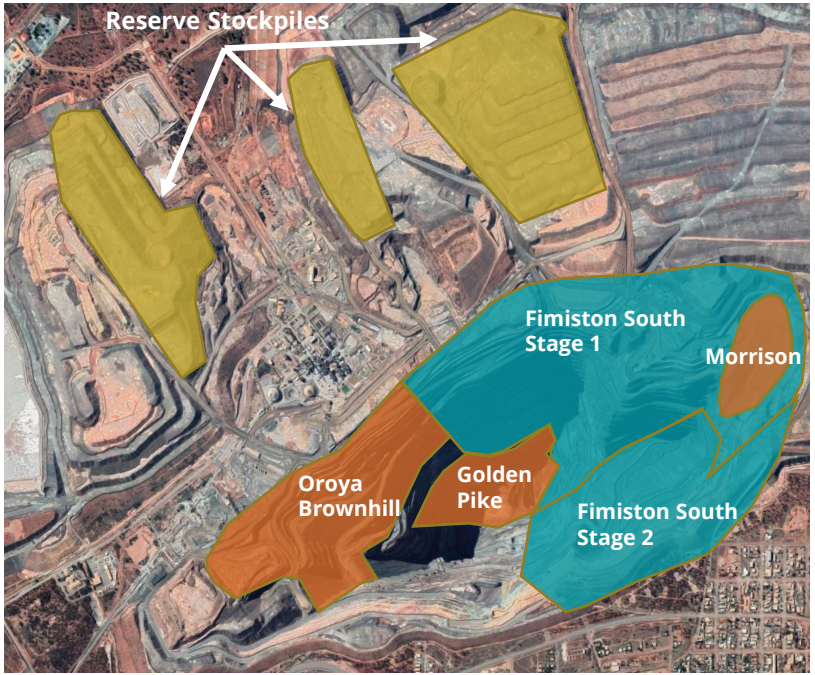
KCGM - Open Pit Mining

Gets better every day

- **All open pit mining - 17 years from 4 areas:**
  - Average strip ratio 10:1 **(7.8Moz Reserves)**
  - Targeting conversion of 2.0Moz Inferred Resource within Reserve shell
  - Strip ratio falls to 7.2:1 including Inferred Resources*
- **Annual total material movement 80-100Mtpa**
- **Largest mining area - Fimiston South:**
  - Average strip ratio 12.8:1 **(5.4Moz Reserves)**
  - Targeting conversion of 1.8Moz Inferred Resources within Reserve shell
  - Strip ratio falls to 8.4:1 including Inferred Resources*

Super Pit cutbacks



*Subject to drilling and conversion to Reserves

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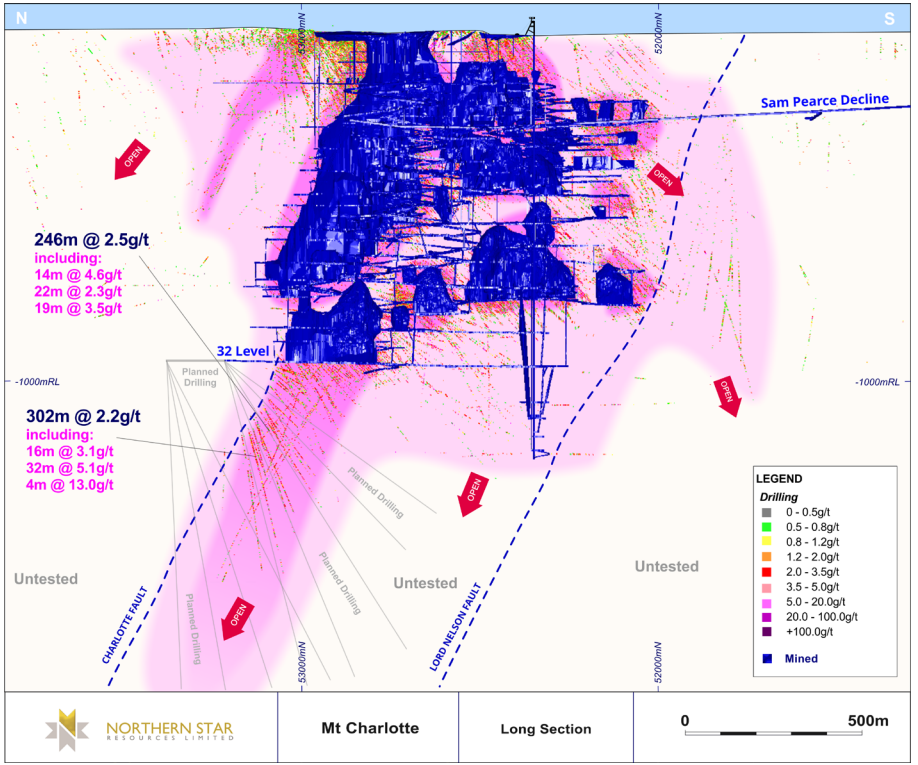
KCGM - Underground mining (Mount Charlotte)

The gift that keeps on giving

- Mount Charlotte - Historic production of >5.5Moz at an average grade of 3.6g/t
- Resources 42Mt @1.8g/t for 2.5Moz v 1.9Moz 9 months earlier^
- Reserves 14Mt @ 2.1g/t for 0.9Moz (36% conversion)
- Endowment range 4,300oz per vertical metre (0-250mbs) to 600oz (1000-1250mbs, constrained by drilling)
- 32 Level is 975m below surface - A significant, long life drill platform
- Mt Charlotte is **the highest-grade ore feed into the KCGM mill – Ore production to increase to >2.5Mtpa by FY25**

Mt Charlotte section



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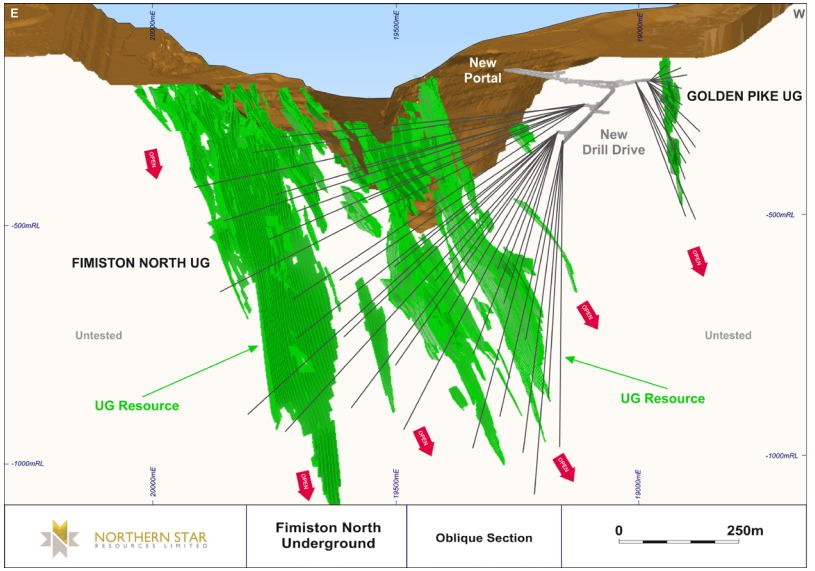
KCGM - Underground mining (Fimiston drill platforms)

Fimiston underground - A brand new chapter

- KCGM offers world class scale:
  - Endowment 45,000 ounces per vertical metre
  - Multiple lodes within large mineralised package; average ~900m width, 5km strike
  - Large underground potential - Underground Resource 50Mt @ 2.5 g/t for **4.0Moz just the start**
  - Multi-year story with drilling to define additional Resources and optimum mining method
- Fimiston Underground commenced:
  - Development of multiple drill platforms
  - Drilling to commence September quarter 2021
  - Grade displacement opportunity in the mill - Increased ounces and margins
  - Fimiston Underground **NOT in current 5-year plan**

Fimiston North West drill platform



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KCGM - Stockpiles the (not-so) hidden levers

Mining costs already sunk

- Large surface stockpiles - 125Mt ore (2.9Moz Reserves)
- Stockpile grades compare well with many peer open pit mines globally - But with **NO cash mining costs**
- **Mining has outperformed Reserves** over the 12 months ended 30 June 2021^; **51% more ore tonnes and 34% more ounces**

	Ore (Mt)	Grade (g/t)	Gold (koz)
Reserve	5.6	1.5	275
Actual mined	8.5	1.4	370
Additional ore	**2.9**	**1.0**	**94**
	51%		34%

- The additional lodes are now being modelled highlighting **slower depletion of the stockpile**
- Opportunity to accelerate cashflow from stockpiles through mill expansion (study underway)

Reserve Stockpiles

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KCGM - Processing optionality

13Mtpa current capacity, expansion studies underway

- As mining increases, the Reserve stockpile value becomes increasingly stranded
- **Evaluating mill expansion options**
  - **NOT in current 5-year plan**
  - Simplified mill layout lowering unit costs
  - Mill grades decrease on increased throughput as stockpile is processed earlier
  - Option studies involve:
    - Simplified grinding circuit, fewer larger mills
    - Increased residence time / recovery opportunities
    - Control system optimisation
- **Market update June Half 2022**

KCGM processing studies

	Current	Option 1	Option 2
Number of mills	**5**	**4**	**3**
Throughput (Mtpa)	13	17	22
Mill grade (g/t)	1.4-1.9	1.7	1.6
Recovery (%)	84%	84%	84%
Production (kozpa)	500-675	750+	850+

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Kalgoorlie - Synergies to lower costs

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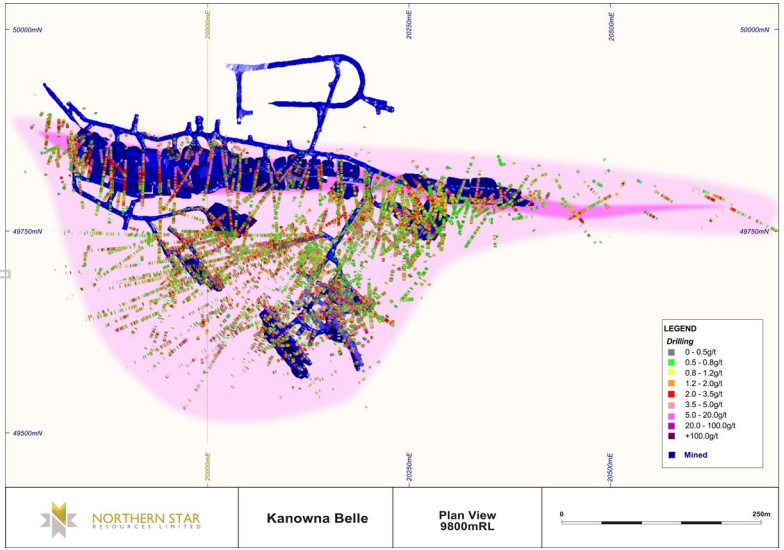
Kanowna Belle (+80kozpa producer)

- 0.6Moz Reserve, 2.5Moz Resource
- Hanging wall prospectivity, open pit and bulk underground mining potential

Kanowna Belle - Bulk opportunity



Carosue Dam (+250kozpa producer)

- 1.8Moz Reserve, 4.3Moz Resource
- Mill expanded - Low cost regional milling solution

South Kalgoorlie (+80kozpa producer)

- 0.3Moz Reserve, 2.1Moz Resource
- Underground extension opportunity
- Regional exploration upside

Kundana (+100kozpa producer)

- 0.5Moz Reserve, 2Moz Resource
- Continued mining RHP & Millennium / Pope John
- New open pit production Paradigm / Carbine

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Yandal Production Centre

Luke Creagh
Chief Operating Officer

Yandal Production Centre

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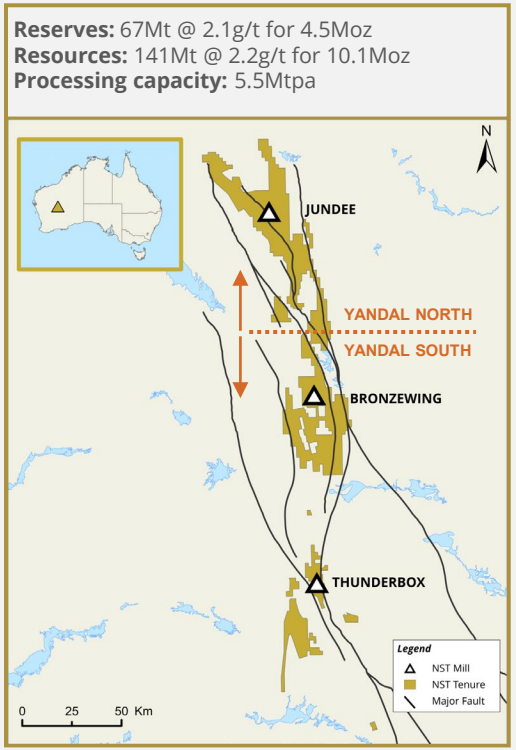
- NST consolidated >270km of continuous strike of Western Australia's prolific Yandal greenstone belt
  - **Yandal North** (Jundee from Corboys North)
    - 3.0Mtpa Jundee mill - Current production ~290kozpa
  - **Yandal South** (Thunderbox (TBO) up to Corboys)
    - 3.0Mtpa TBO mill - Current production ~140kozpa
    - 1.8Mtpa Bronzewing mill - Care and maintenance
- **FY22 guidance 430-450koz at AISC A$1,375-1,475/oz**
- **Substantial value will be delivered by increasing production from ~440kozpa to ~600kozpa through expansion of TBO mill**

Yandal Production Centre: Production target 600kozpa

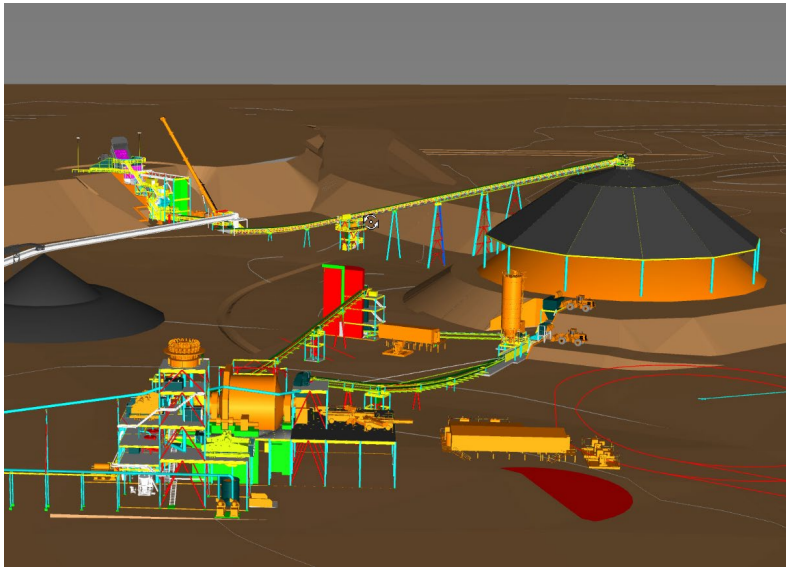


Yandal 600 - Investment drives value

Yandal growth capital of A$270M in FY22

- Options analysed included Jundee expansion, Bronzewing mill re-commission, TBO expansion
- Highest value to increase TBO mill to 6.0Mtpa (A$180M)
  - Reduces TBO processing cost by ~A$5/t (~A$100/oz)
  - Centroid of tonnes is in Yandal South
  - New 18MW mill and classification circuit
  - New leach tanks, elution and gold room upgrades
  - New tailing thickener and tailings pumping
  - Designed for 100% fresh ore
- A$90M - Infrastructure / mine development
- **Unlocks Synergy Value of ~A$220M**
  - Regional processing savings (~A$70M)
  - Orelia closer to TBO reduces haulage costs (~A$100M)
  - Owner-supplied fleet open pit operating model at Orelia (~A$50M)

Thunderbox 6.0Mtpa schematic



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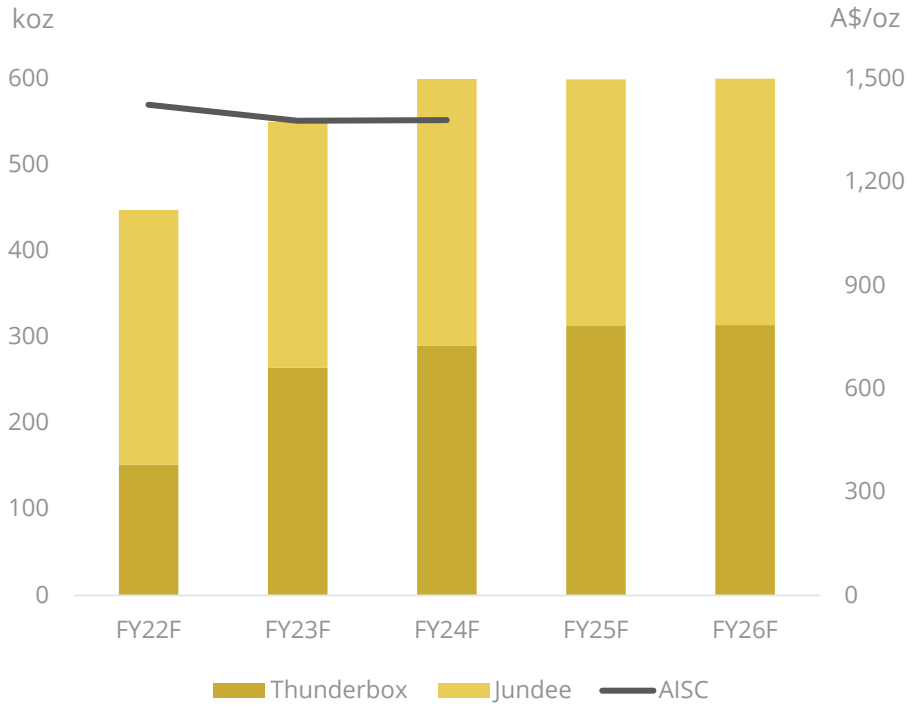
Yandal 600 - Delivering value, growth, strategy

40% increase in production to ~600kozpa

- Increase Thunderbox mill to 6.0Mtpa; Jundee at 3.0Mtpa
- Total Yandal milling capacity **9.0Mtpa**
- **Growth underpinned by 4.5Moz Reserves (8 years)…**
- **…plus >10Moz Resources / track record of Resource conversion**
- **Highly accretive:**
  - Unlocks TBO processing savings by ~A$5/t (~A$100/oz)
  - Regional processing savings of ~A$50/oz
  - Lower cost structure adds value to entire Yandal Resource base

Yandal production outlook



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Pogo Production Centre

Luke Creagh
Chief Operating Officer

Pogo Production Centre

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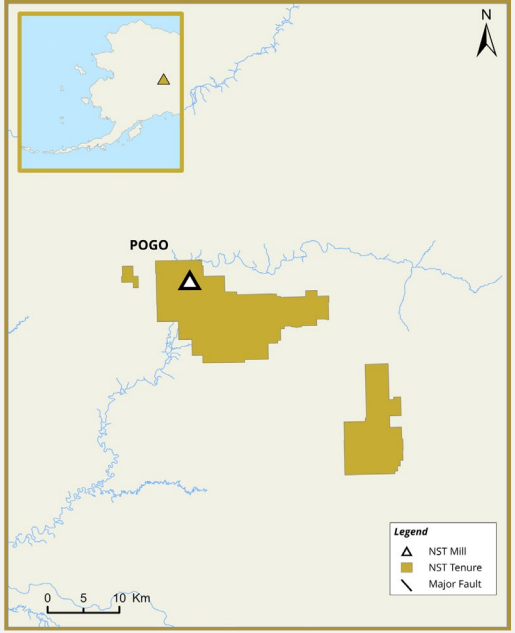
- Pogo Operation is located ~150km south-east of Fairbanks, Alaska
- The vaccine rollout in the USA has seen COVID-19 cases reduced with minimal disruptions forecast in FY22
- High grade operation with large Resource base that is under-explored; considered a camp-scale deposit
- Infrastructure and skills able to be leveraged to unlock the region, operation remains cash-flow positive inclusive of funding growth capital and exploration
- **FY22 guidance 220k-250koz @ US$1,275-1,350/oz AISC**
- **Investment is setting Pogo to produce 300koz in FY23**

Pogo Production Centre:
Production target 300kozpa

Reserves: 5.9Mt @ 8.0g/t for 1.5Moz
Resources: 23Mt @ 9.4g/t for 6.9Moz
Processing capacity: 1.3Mtpa (expanded)



Pogo - FY21 delivered; Continuing to improve

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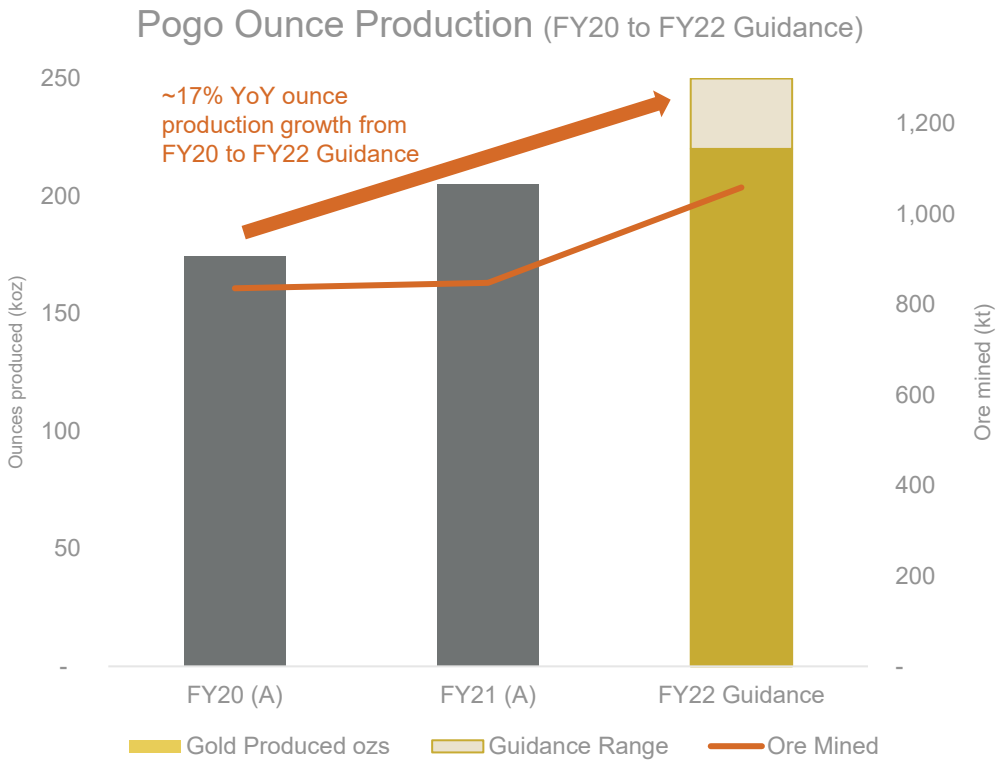
- FY21 production & cost guidance delivered with 204koz sold (~210koz produced) at AISC of US$1,387/oz
- This results was a 17% increase in production from previous year at lower AISC/oz
- Operational improvements continue, with the FY21 June quarter delivering
  - Record quarterly NSMS development advance at 4.3km under NST ownership
  - Record quarterly ore tonnes mined at ~240kt in project history
  - Record quarterly mill throughput at ~240kt in project history
  - Record quarterly ounces produced and sold (~60koz) under NST ownership



Pogo value increasing on the way to 300kozpa

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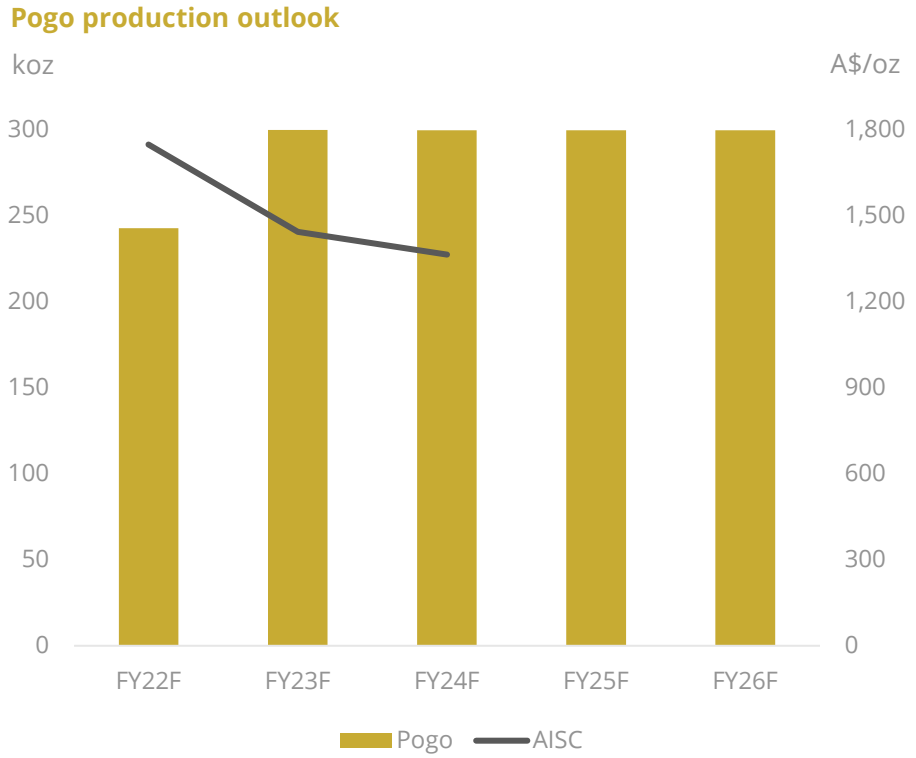
- FY22 represents a ~17% increase in production and 5% decrease in AISC costs
- Growth Capex of ~US$55M
  - Processing upgrade to 1.3Mtpa delivered in September Quarter (current ~1.0Mtpa)
  - UG development & infrastructure to bring on additional mining fronts
  - Set up surface infrastructure for growth
- Costs forecast to reduce year-on-year as operational improvements flow through and more production fronts are accessed
- **The increase in physicals and capital investment is setting Pogo to produce 300koz in FY23**



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Finance & Commercial

Morgan Ball
Chief Financial Officer

Balance sheet - Robust and flexible

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Capital allocation - Disciplined

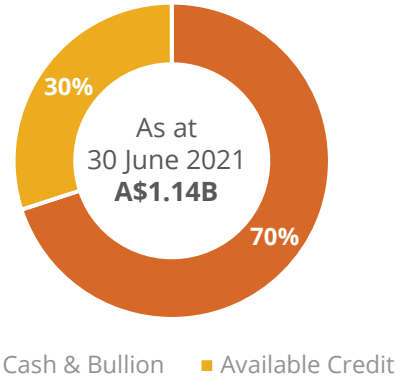
- Re-investment (organic / inorganic)
- Dividends
- Retained earnings

Measure	Target Range	
Leverage Ratio (Net Debt / EBITDA)	Leverage ratio less than 1.5x	☑
Gearing Ratio (Debt / Debt + Equity)	Gearing below 20%	☑
Liquidity	A$1.0–1.5B (~1/3 in cash & bullion)	☑

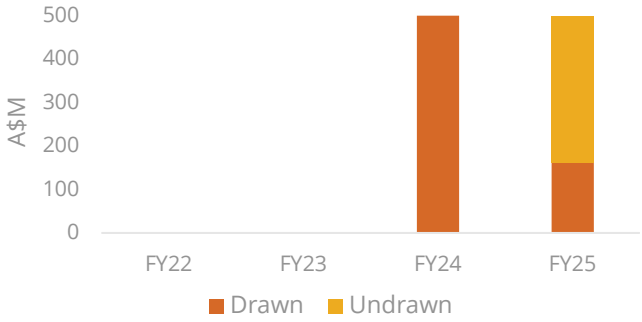
Refinanced debt

- Upsized facility
- Extended maturity profile
- Improved terms

Liquidity Position

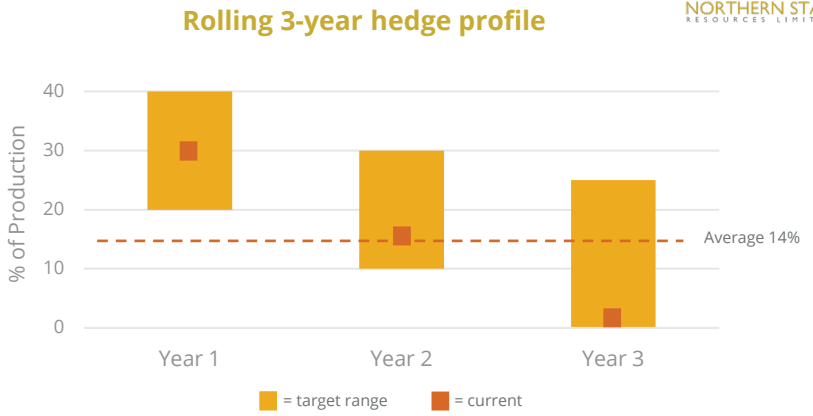


Debt Maturity Profile



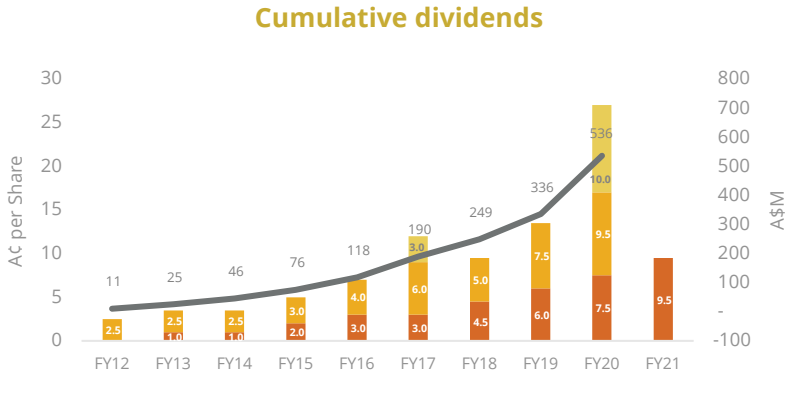
Growth Capital and Hedging

- FY22 budgeted growth capital A$570M including Fimiston South cutback & TBO expansion
- Hedging decisions will support return on growth capital and debt obligations
- Hedge book of 801,570oz @ **A$2,286/oz** at 30 June 2021



Dividend Policy

- Northern Star has a track record of paying **consistent dividends throughout the cycle**
- FY21 final dividend to be advised with statutory accounts in August 2021
- Introduction of Dividend Reinvestment Plan in May 2021



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Merger synergies

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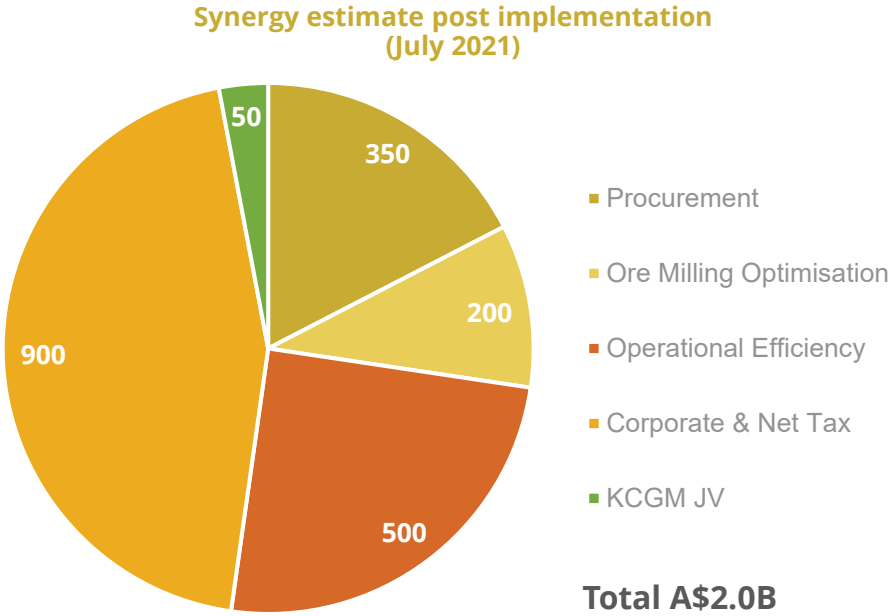
Tracking towards **upper end of pre-merger implementation estimate of A$1.5-2.0B***

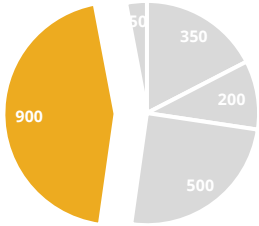
- Bigger than expected wins from operational efficiencies / milling optimisation will apply over life of mines
- Procurement - Began to realise a portion of these from Day 1
- Merger accounting will be reflected in FY21 Accounts - Key input into Corporate and Net Tax savings



Total A$2.0B

*NPV 5% pre-tax, net of stamp duty

Synergy - Corporate & Tax



Corporate

- Consolidated into one Corporate Office
- Consolidation of operational and financial systems ongoing
- Rationalisation of resources
- Reduction in G&A of A$5-10/oz (pre-tax NPV ~A$60M)

Tax

- Merger will result in a reset of Saracen's tax cost base from ~A$600M to ~A$3.8B
- Increased tax cost base will be depreciated over the effective life of each asset
- Income tax deductions can then be claimed, reducing taxable income, and providing a 30% reduction in cash income tax otherwise payable
- The Merger also triggered a Landholder Duty obligation estimated at ~A$225M and expected to be payable in H2 FY22
- Once the additional tax depreciation is offset against the Duty liability, the tax synergies represent pre-tax NPV of ~A$840M
- This equates to a cash benefit of ~A$100Mpa (A$50-60/oz) over the next ~10 years

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Synergy - Procurement

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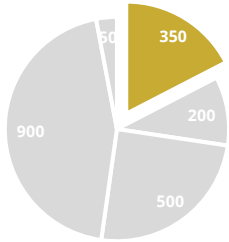
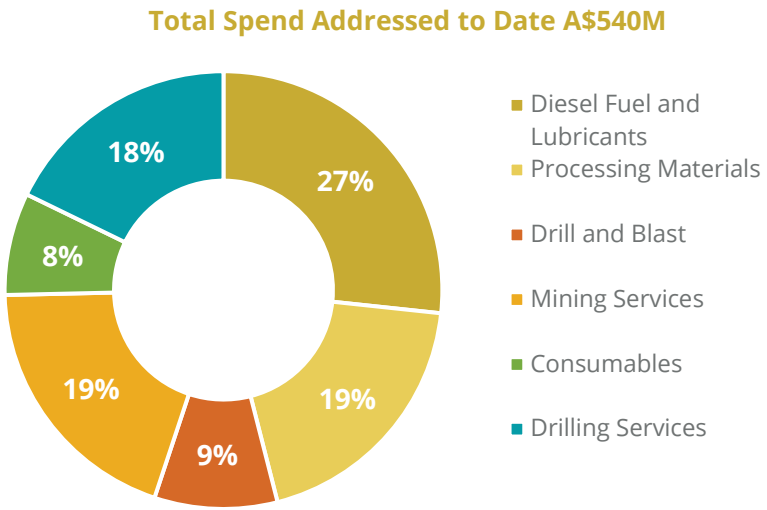
Delivery

- Revised agreements for over 30 different suppliers
- Operating cost savings from revised agreements currently total ~A$30Mpa (final target pre-tax NPV of ~A$350M)
- Driven by increased scale of merged business and increased size/volume of contract
- A$540M of the A$2B procurement opportunity has been addressed
- Average reduction - 6% of spend delivered by leveraging combined buying power and strategic partnerships
- On track to exceed the target of savings for Year 1





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Markets

Troy Irvin
Chief Investor Relations Officer

Global gold leaders

New peer group

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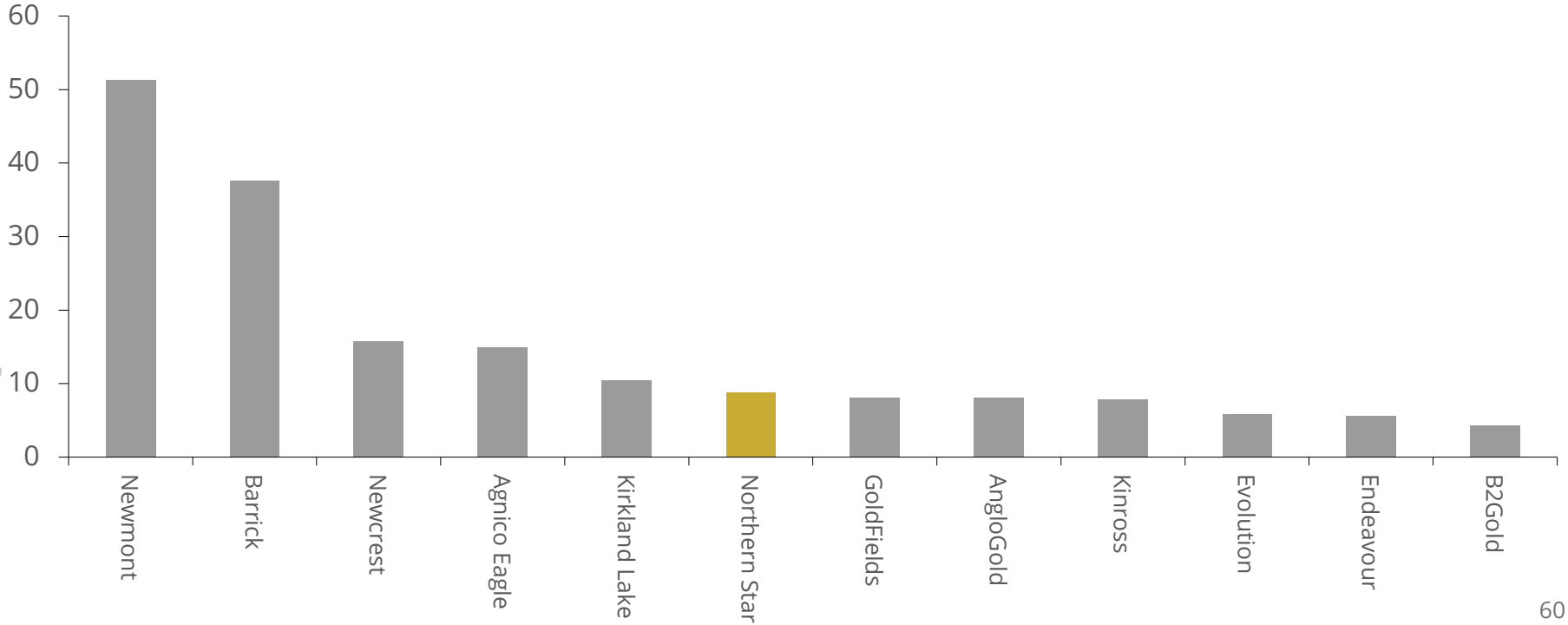
Global Gold Leaders - Market capitalisation (US$B)



Market capitalisation at 9 July 2021

The recipe for outperformance

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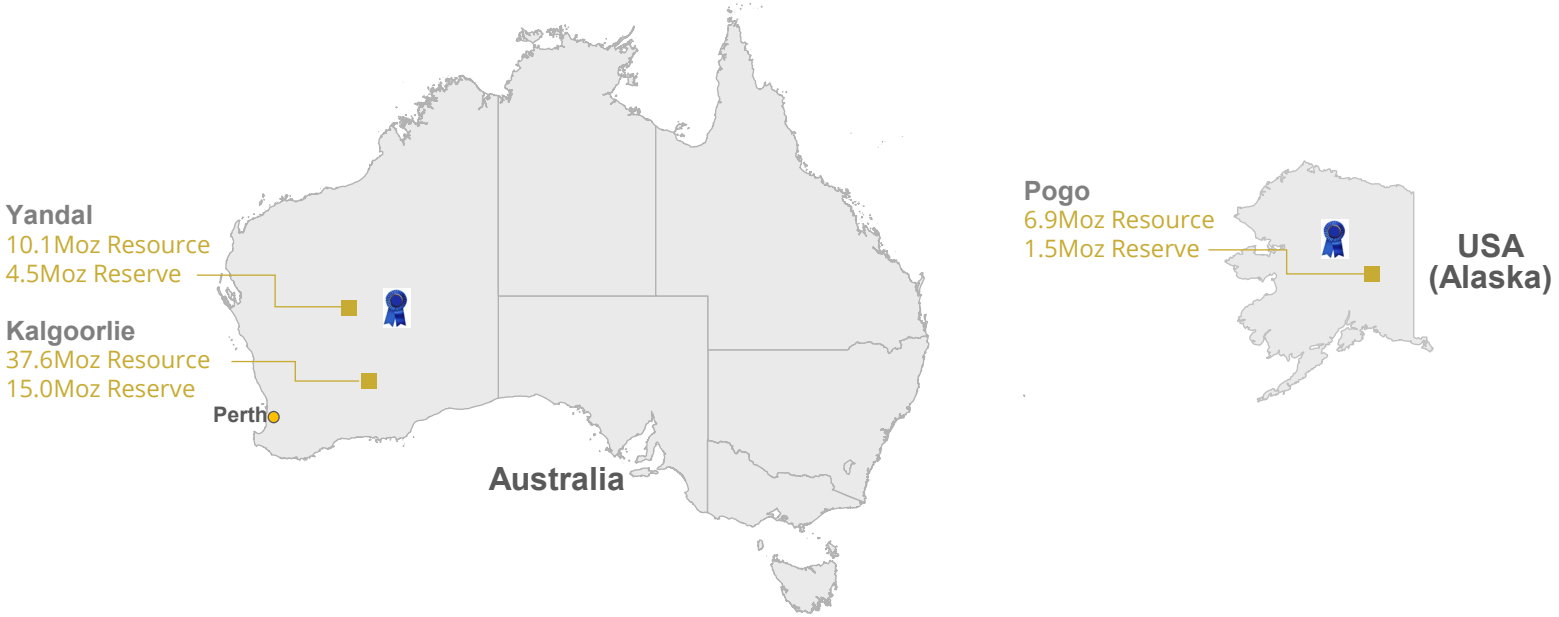
NST:		Gold industry challenges:
Long life, profitable growth	☑	Declining Reserves and production
Consistent delivery v guidance	Opportunity	Variable delivery (operational, financial)
Progressive ESG	☑	Progressive ESG
Exclusively in Tier-1 locations	☑	Increasing jurisdictional risk
Migrating down the cost curve	Opportunity	Increasing costs
Value-accretive M&A	☑	Value destructive M&A
Retain the right people	☑	High turnover

Advantage NST

Unrivalled exposure to Tier-1 locations

We are the only “Global Gold Leader” mining **exclusively in Tier-1 jurisdictions**



= Tier-1 i.e. Top 20 jurisdiction as per Fraser Institute Annual Survey of Mining Companies 2020 (published February 2021)

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Advantage NST

Unrivalled exposure to Reserve and production growth

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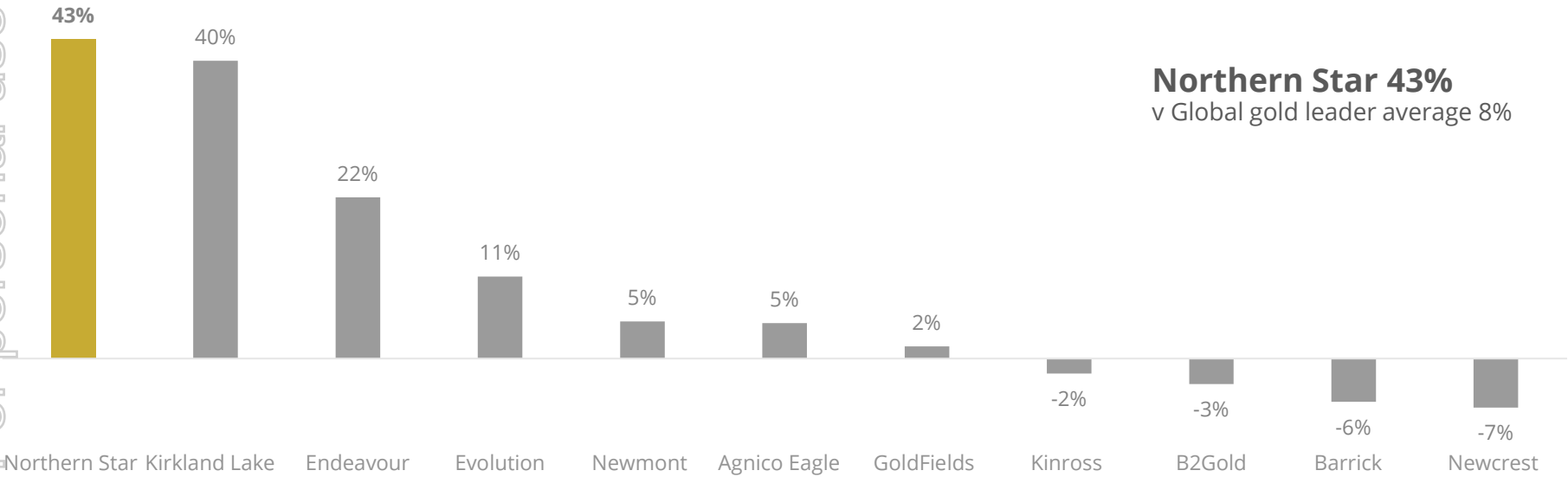
Global Gold Leaders - Reserve Growth (5-year CAGR)



Northern Star 43%
v Global gold leader average 8%

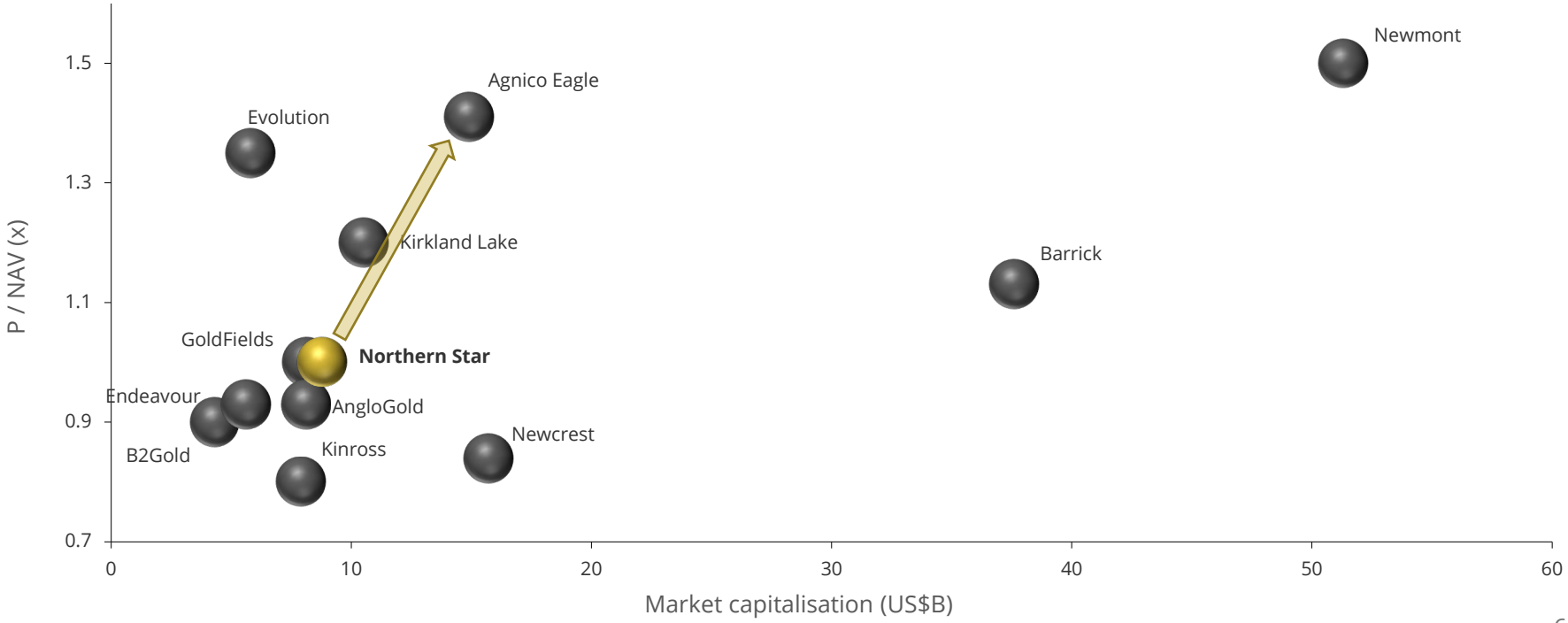
- NST's track record of Reserve growth translates into production growth to ~2Mozpa in FY26
- "Global Gold Leader" peers average flat production over this same time period

Reserve data sourced from Company Reserve and Resource Reports at June 2021, 5-year CAGR FY16 to FY21

Opportunities

Valuation

Bucking the trend



Source: Factset 9 July 2021

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Broad investor appeal

Generalist Funds	Stability, scale, liquidity, long mine life, low jurisdictional risk
Precious Metal Funds	Exposure to immediate cash flow and organic growth / exploration upside
Value	Attractive across a range of valuation metrics (absolute and relative)
Growth	Industry leading production and Reserve growth
Yield	Track record of consistent dividends
ESG	Industry leading safety record, progressive approach to ESG
Indices	GDX, ASX 50/100/200, MSCI Standard Global, MSCI World ESG Leaders
Quant Funds	Alignment of financial performance v consensus

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Investor Summary

Stuart Tonkin
Managing Director

Business development

Active portfolio management

- **Business development focus = Enhance the portfolio**
- **Sustainable production ~2Mozpa from 3-5 production centres**
- Disciplined - Focused on **quality, reward for effort and value per share:**

Filter	
Tier-1 jurisdiction	☑
Geological upside	☑
Operational upside	☑
Scale potential >200ozpa Au eq	☑
FCF accretive	☑
EESG performance	☑

- Bolt-on M&A driven by life-of-mine plans and ability to leverage capital infrastructure – Regional synergies to optimise production and costs
- **Demonstrable track record of M&A**: **All stages (production, development, exploration)**

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Why invest in NST?

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- **Business first** - Leveraging operating / technical skills and disciplined capital management to deliver superior shareholder returns
- **Tier-1 jurisdictions** - Exclusively
- **Capital discipline** - Balance between shareholder returns and re-investment, active portfolio management
- **Profitable growth where it counts** - Simple production centres with scale, lower costs, life and management track record
- **Sustainability in all that we do** - ESG, talent retention, mine life, lower costs

FY22 guidance

1.55-1.65Moz at AISC of A$1,475-1,575/oz; A$570M growth capital

	Gold production (koz)	AISC (A$/oz)	Growth capital (A$M)	Exploration (A$M)
Kalgoorlie	900-950	1,500-1,600	230	
Yandal	430-450	1,375-1,475	270	
Pogo	220-250	1,700-1,800 (US$1,275-1,350/oz)	70 (~US$55M)	
Group*	**1,550-1,650**	**1,475-1,575**	**570**	**140**

- Gold production is weighted towards the second half of FY22, driven by increasing grades at Yandal and increasing mining rates at Pogo; AISC decreases over the 12 month period

*FY22 Group guidance excludes EKJV interests and Kundana assets being divested as per ASX release dated 22 July 2021.
All currency conversion has been calculated using AUD:USD = 0.75

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