



# Overview

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## Our Business & Where We Operate

Northern Star Resources is a global Australian gold producer with projects located in Western Australia and Alaska, both highly prospective and low sovereign risk regions.

Since 2010 the Company has significantly grown production, earnings and cash flows, and Resources and Reserves through operational excellence, organic growth and active investment in exploration.

### Scale of Organisation

**3,587**

Employees<sup>5</sup>

**\$4.13<sup>B</sup>**

Total revenue<sup>6</sup>

**2,374**

Contractors<sup>5</sup>

**1.56<sup>M</sup>**

Ounces of gold sold<sup>7</sup>

**3**

Number of production centres

**55.2%**

Local employees

**\$98.7<sup>M</sup>**

Gold royalties

**\$4.07<sup>B</sup>**

Total Economic Value Add<sup>8</sup>

5. At 30 June 2023.  
 6. Please refer to the Northern Star FY23 Annual Report for GRI 1 and GRI 2 disclosures around operating costs, and financial performance data.  
 7. Refer to note 4(i) to the FY23 Financial Statements in the FY23 Annual Report in relation to downstream sales.  
 8. Please refer to the Consolidated Statement of Cashflows in the Northern Star FY23 Annual Report for GRI 201-1a III.



Dodzi Awuye, Gold Room Technician, Kanowna Belle, Kalgoorlie Production Centre, Western Australia

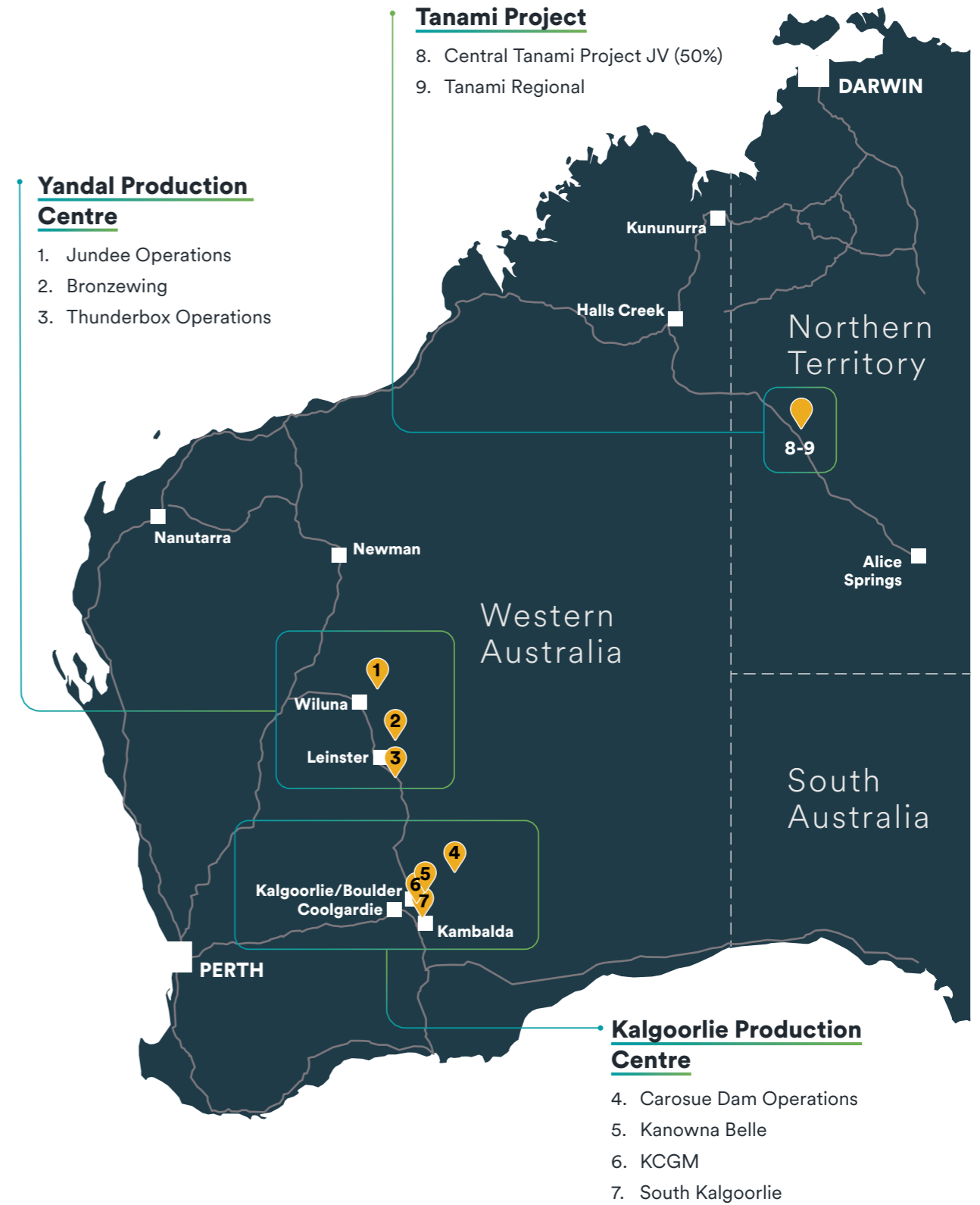
# Where We Operate

We own and operate three high-quality gold production centres: Kalgoorlie, Yandal and Pogo, all located in world class jurisdictions.

Figure 1 North American Operations



Figure 2 Australian Operations



# Our Sustainability Journey

Figure 3 Northern Star's FY23 and FY24+ Planned Sustainability Journey

## Our FY23 Achievements

### Climate change actions:

- Ongoing progress towards our Net Zero ambition by 2050 through implementation of our Decarbonisation Pathway actions
  - Power Purchase Agreement executed at Jundee
  - Board approval for Jundee renewable project
- Continued TCFD alignment and development of our Climate-related Financial Quantification Model

### Water & Biodiversity stewardship actions:

- Freehold land set aside as an offset location for the protection and enhancement of Malleefowl habitat
- Ongoing monitoring of protected butterfly species in the Goldfields Region

### Community & Stakeholder performance actions:

- Ongoing engagement with our communities and stakeholders including but not limited to: Employee Culture Surveys, ESG Focus Groups, Local Voices, participation in Trade and Community Fairs, and education programs
- Establishment of our Indigenous Procurement strategy methodology and processes
- Continued investment in long term sustainable partnerships with community groups and maintained strong focus on our local and regional community support programs
- Continued to engage with Traditional Owners on proposed projects, ongoing heritage protection and survey programs
- Continued implementation of the Williamstown voluntary relocation program & opening of the Williamstown Heritage Project

### Internal & External disclosures:

- External review and update of our Materiality Matrix and completion of our Employee ESG Focus Groups
- Continued increase in the quality and extent of our ESG disclosures, through our annual Sustainability Reports, Performance Data Tables and Company website
- Expanded the scope of Limited Assurance on our FY23 Sustainability Report, and maintained alignment with the Global Reporting Initiative (GRI)
- Continued improvement in our various ESG scores through external ratings agencies and frameworks

## Our Plans for FY24+

### Climate change actions:

- Planned commissioning of our solar array and construction works progressing on our windfarm at our Jundee Operations as part of our planned decarbonisation pathway
- Continue research into alternate technology for surface and underground mining vehicles to reduce emissions
- Expand our renewable programs across our other assets as applicable

### Water & Biodiversity stewardship actions:

- Apply a phased approach to the implementation of the Taskforce on Nature-related Financial Disclosures (TNFD) once formally released during FY24
- Progress further with biodiversity and water stewardship and conservation projects

### Community & Stakeholder performance actions:

- Continue focus on communication and engagement with our key stakeholders
- Further development of our Indigenous procurement strategy, and support for Indigenous businesses within our Operations and communities
- Continue investment in long term sustainable partnerships with community, education and industry groups
- Continue to engage with Traditional Owners on proposed projects, ongoing heritage protection and survey programs
- Continue to support the Williamstown voluntary relocation program

### Internal & External disclosures:

- Continue to expand our engagement within our workforce on ESG matters through internal communication
- Progressively transition to the new ISSB Standards from our current position while maintaining the integrity and quality of our existing disclosures
- Expand the scope of Limited Assurance in future Sustainability Reports, and maintain alignment with the GRI and ISSB
- Continue improvement in our various ESG scores through external ratings agencies and frameworks



Kirby Jefferies, Apprentice – Fixed Plant Electrical, Kanowna Belle, Kalgoorlie Production Centre, Western Australia



### More on our website...

More information on our sustainability journey to date is available on our website at [Sustainability](#)

# Our Sustainability Approach

Northern Star's approach is to create sustainable and profitable value for our shareholders and other stakeholders through ongoing review and improvement of our environmental, social and governance performance. We aim to achieve this by identifying, managing and mitigating risks and impacts from our Operations while delivering superior outcomes for our shareholders, our people, our communities, and our natural environment.

Our approach to sustainability is underpinned by our STARR Core Values and framed by our governance structures and systems. Our STARR Core Values, together with our Code of Conduct and our Group policies, are fundamental to the sustainability of our Operations. They are integral to the working lives of all our employees and Operations, and they define what it means to work at Northern Star. They are at the heart of our culture and the way we do business.

Our commitment to improving our Environment, Social and Governance (ESG) performance is clearly demonstrated

through the business wide ESG targets and KPIs that we set ourselves and through our ESG performance targets forming meaningful proportions of our leadership team's remuneration.

By monitoring and tracking local to global ESG developments and priorities, we ensure that we remain informed and able to proactively respond to our stakeholders and the ESG issues important to them. We do this using a range of approaches including sector, industry and peer benchmarking and gap analyses, stakeholder and investor surveys, and employee ESG focus groups.

We benchmark our ESG performance and levels of assurance against that of our peers to provide guidance for improving our performance and ESG disclosures.

We are committed to transparently reporting our ESG performance and to act on areas identified for improvement.



Nathan Kehoe, Environmental Coordinator inspecting native vegetation, Pogo Operations, Alaska

## Boundary & Scope

This Sustainability Report provides information on Northern Star's sustainability performance across its Operations during the period 1 July 2022 to 30 June 2023.

This report should be read in conjunction with our public disclosures on our Company website at: <https://www.nsrtd.com/sustainability>.

## Restatement of Information

This Report and our FY23 Performance Data Tables contain the following corrections and restatements related to disclosures from our FY22 Sustainability Report:

- Jundee Scope 1 Emissions were overstated by 63 t CO<sub>2</sub>-e in the FY22 Sustainability Report. This error was due to the incorrect use of fuel delivery dockets instead of fuel invoices, and a reconciliation error. Data was resubmitted the Clean Energy Regulator in April 2023 once the issue was identified. The correction of this error has also readjusted the net energy consumption, and air emissions reported for this facility and the Company for FY22.
- KCGM Scope 2 Emissions were overstated by 33,000 t CO<sub>2</sub>-e in the FY22 Sustainability Report. This error was due to discrepancies with the emissions factors applied to energy sources. Data was resubmitted the Clean Energy Regulator in April 2023 once the issue was identified. The correction of this error has also readjusted the net energy consumption, and air emissions reported for this facility and the Company for FY22.
- Electricity generation for Porphyry was incorrectly reported in FY22 and has been removed in this report. The power generated onsite was from a power source that was smaller than the mandated minimum size for reporting in that specific category. Emissions from the generators are still disclosed.

Northern Star's assets included in this Report are listed in Figure 4 below. Refer to the Material subsidiaries Note in the FY23 Financial Statements within the FY23 Annual Report for a list of entities included in Northern Star's financial reporting.

- Total tonnes of material recycled in FY22 was overstated by 21 t as a result of a late adjustment to our General Waste recycled being reduced from 80 t down to 59 t.
- Net total water consumption and freshwater consumption has been restated for Kalgoorlie (and total) for FY21 due to a reconciliation of invoiced volumes through our potable water supply. This increased our FY21 net total water consumption up from 17,757 ML to 18,200 ML and our total freshwater consumption up from 1,666 ML to 2,110 ML.
- Total funds committed to Community Investment and Sponsorships was understated in the FY22 Sustainability Report by \$0.64M due to late inclusion of additional commitments that were pending applicant co-signing of agreements at the date of release of the FY22 Sustainability Report, and there were also several minor increases and adjustments on commitment values. This increases our FY22 funds committed to Community Investment and Sponsorships up from \$5.5M to \$6.14M.
- Revenue for FY22 (refer to Table 1) has been restated from \$3,735M to \$3,806M. Please refer to the FY23 Annual Report for summary of significant accounting policies explaining the change.

Figure 4 Corporate Structure



### Materiality & Disclosure

Northern Star regularly considers and reviews future disclosure opportunities, including reporting frameworks and standards for Company alignment. This ensures that the priorities of our stakeholders are taken into account when we define our material topics and update our approach.

To ensure that we continue to strengthen the quality and breadth of our disclosures, we regularly assess our voluntary reporting against the disclosure topics and gold

industry material topics defined by key voluntary reporting standard and frameworks. This provides an understanding of our stakeholders' primary focus areas.

We then transparently disclose information which allows our stakeholders to assess and compare our sustainability performance.

In this Report we demonstrate our voluntary alignment with the following:

Figure 5 Voluntary Alignments



#### Global Reporting Initiative (GRI) Standards

The GRI Standards enable an organisation to report on their impacts on people, the environment, and the economy in a standardised manner. The aim is to increase an organisation's transparency in reporting and demonstrate its contribution to organisational sustainability. Northern Star has prepared the reported information in accordance with the GRI Universal Standards. GRI Index available on Northern Star's website at [FY23 GRI, SASB and UN SDG Alignment Index](#)



#### Sustainability Accounting Standards Board (SASB)

The SASB Standards are aimed at connecting businesses and investors on the financial impacts of sustainability. Northern Star uses the Mining and Metals Sustainability Accounting Standard, updated in December 2021 to guide its sustainability disclosures.



#### Task Force on Climate-Related Financial Disclosures (TCFD)

The Financial Stability Board created the TCFD to improve and increase reporting of climate-related financial information. The reports produced satisfy stakeholders' requirements for clear, detailed, and quality financial information on the impacts of climate change including potential risks and opportunities. Northern Star has disclosed in alignment with TCFD recommendations since 2019.



#### United Nations Sustainable Development Goals (UN SDGs)

The United Nations members developed 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries in partnership to achieve a more sustainable future. We recognise our impact on, and opportunity to, positively contribute to all 17 SDGs.

Northern Star has been reporting against the UN SDGs in our annual Sustainability Reports since 2018. In FY23 we completed an updated assessment of our alignment with the goals (refer to our Sustainability Reporting website for additional information), which highlighted our priorities for the following ten SDGs where we believe we make the greatest impact:

- SDG 1 – No poverty
- SDG 3 – Good health and wellbeing
- SDG 4 – Quality education
- SDG 5 – Gender equality
- SDG 6 – Clean water and sanitation
- SDG 8 – Decent work and economic growth
- SDG 10 – Reduced inequalities
- SDG 13 – Climate action
- SDG 15 – Life on land
- SDG 17 – Partnerships for the goals

We also participate in, or are included in, the following external ESG performance benchmarking initiatives and assessments conducted by third-party rating agencies:

- CDP (Climate Change and Water Security)
- S&P Global (Dow Jones Sustainability Index)
- Sustainalytics
- V.E Connect (Moody's)
- MSCI
- ISS (Environmental, Social and Governance)
- FTSE4Good

In conjunction with these ratings, we have continued to focus on the quality and availability of our own ESG metrics and to allow transparency in the information we provide to our stakeholders.

We use the outcomes of these assessments to change or improve how we disclose our performance in ESG and consider what further steps we can take which may benefit the business and improve our ESG performance.

Being aligned to and reporting against the SASB, TCFD, CDP and GRI Standards, Northern Star is well placed to report against the International Sustainability Standards Board (ISSB) Standards when they are adopted through the ISSB's consolidation of the SASB, GRI and TCFD reporting requirements.

We expect that following finalisation and release of the voluntary TNFD framework in September 2023, we should be in a more informed position to assess how we can measure and report on our direct impacts on nature as a result of our Operations.

We intend to follow a phased approach as we did with the Task Force on Climate-related Financial Disclosures, and propose in due course to disclose a realistic plan for reporting against the TNFD that is aligned with our Purpose and operational priorities.

The Company's Materiality Matrix was independently reviewed and updated during FY23 to continuously improve our disclosures, strategic action plans, and stakeholder engagement programs and ensure our FY23 Sustainability Report contained the most material topics for our stakeholders.

The materiality assessment incorporated consideration of impacts that are potentially material to our industry according to GRI and SASB; changing regulatory and socioeconomic influences; input from employee surveys and ESG engagement focus group sessions; results from social impact assessments and community feedback; commentary from external reviews, and interviews conducted by an independent third party with key stakeholder engagement resources.

Figure 6 FY23 Materiality Matrix



The Company's material topics for inclusion in this Report are provided in Figure 7 below. These material topics were derived from our materiality assessment update that was undertaken in FY23.

Figure 7 FY23 Material Topics (in alphabetical order)



**Our Stakeholders**

Northern Star is committed to ongoing positive stakeholder collaboration and engagement.

Our corporate governance framework adopted by the Board of Directors includes key policy documents which set out Northern Star's standards for stakeholder engagement.

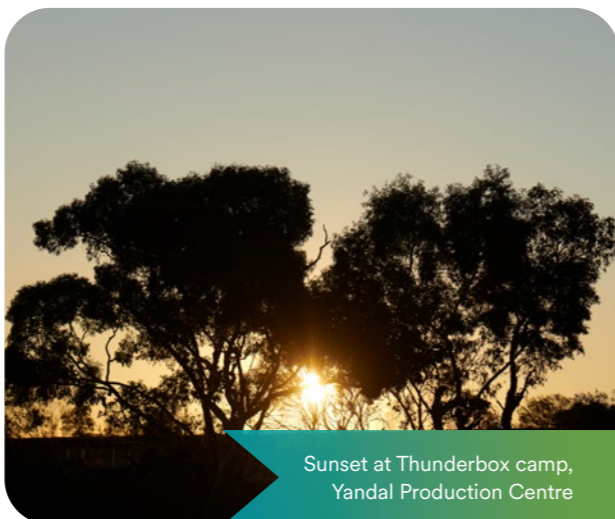
**More on our website...**  
 An overview of our approach to engaging with our core stakeholder groups is provided on our Company website at [Sustainability](#), and further information is provided throughout the Report.

**Sustainability Performance Metrics**

Northern Star regularly monitors its sustainability performance using a suite of internal metrics. Where appropriate, Northern Star has included intensity data per tonne of ore processed to enable comparisons, identify trends in the data over time and realise the true impact on our data as asset acquisitions, mergers and divestments are made.

The integrity of our sustainability performance information and data is checked through a combination of internal and external verification and assurance processes. Our operational and functional leaders are responsible for ensuring the accuracy, completeness and consistency of all information and data they report. Our environmental data is collated, analysed, verified and reported by environmental accounting firm, Greenbase. Greenbase also compiles the Performance Data Tables published on the Northern Star website. All material information and data that is publicly released by Northern Star is verified by our legal team prior to publication.

Northern Star has again sought third party Limited Assurance by Bureau Veritas Australia Pty Ltd of select information and data disclosures against the GRI Standards in this Report. Bureau Veritas' Assurance Statement is provided in Appendix A.



**More on our website...**  
 Additional data can be sourced from the FY23 Performance Data Tables published on the Northern Star website at [FY23 Performance Data Tables](#).

Table 1 Key Sustainability Performance Metrics

Category	Material Risk	Sustainability Metric	FY23	FY22	FY21	
Environment	Biodiversity, GHG Emissions, Climate Change, Waste and Water Management	<b>Net Zero Ambition for Emissions by 2050</b>				
		Total Scope 1 & 2 GHG emissions (t CO <sub>2</sub> -e)	1,202,359	1,163,635	1,133,906	
		Scope 1 & 2 GHG emissions intensity (t CO <sub>2</sub> -e/tonne ore processed)	0.045	0.044	0.044	
		Scope 3 GHG emissions (partial assessment) (t CO <sub>2</sub> -e)	642,935	378,203	-	
		Electricity consumed from renewable sources (GJ) <sup>10</sup>	37,598	29,463	-	
		2030 Emissions Reduction target	35% reduction on FY20 baseline		-	
		<b>Responsible Environmental Stewardship</b>				
		Total regulator fines for environmental (US\$) <sup>9</sup>	600,000	-	-	
		Rehabilitation completed per annum (ha) <sup>9</sup>	66.6	140.3	126.1	
		Proportion of waste recycled/reused - excluding tailings or waste rock (t) <sup>9</sup>	5,938	5,131	5,254	
		Total volume of fresh and other water withdrawn (ML)	52,531	46,574	45,748	
		Total volume of water recycled/reused (ML)	14,039	15,970	13,406	
		Total volume of water discharges (ML)	27,717	27,535	27,991	
		Net volume of fresh and other water consumed (ML)	24,814	19,039	17,757	
		Net water consumption efficiency (ML/tonne ore processed)	0.0009	0.0007	0.0007	
Social	Employment Conditions & Opportunities	<b>Fostering Diversity &amp; Inclusion</b>				
		Our employee workforce (excluding contractors)	3,587	3,409	3,383	
		Indigenous employment in Australia (%)	2.15	2.61	-	
	Training & Development	<b>Talent Management, Skills Development</b>				
		Number of Graduates, Undergraduates, Trainees, Vacation Students & Interns	247	326	138	
		Number of Apprentices (including trade upgrades)	76	73	92	
	Community Support & Engagement	<b>Managing Community Expectations and Demonstrating Contribution</b>				
		Total funds committed to community investment, and sponsorships (A\$M)	6.6	6.1	4.0	
		% Local employment Pogo	59	73	-	
		% Kalgoorlie workforce residential (exc Carosue Dam)	91	90	-	
		<b>Supporting Local and Indigenous Businesses</b>				
		Procurement spend (A\$M):	3,014	2,643	-	
		- Western Australia	2,200	1,972	-	
		- Other Australia	400	298	-	
		- Alaska	167	156	-	
- Other		248	217	-		
- Indigenous Spend		0.43	-	-		
Safety Management & Risk Control		<b>Safety Management &amp; Risk Control</b>				
	Lost Time Injury Frequency Rate <sup>12</sup> : Contractors	0.9	0.6	1.0		
	Lost Time Injury Frequency Rate <sup>12</sup> : Employees	1.0	0.5	0.8		
	Total Reportable Injury Frequency Rate <sup>12</sup> : Contractors	2.95	2.5	6.6		
	Total Reportable Injury Frequency Rate <sup>12</sup> : Employees	3.45	1.5	4.7		
	% close out of hazard identification events reported	99	94	100		
Compliance - Regulatory, Business, Standards	<b>Respecting Communities &amp; Resolving Issues</b>					
	Total grievances and complaints received	-	1	-		
	Proportion of grievances and complaints resolved <sup>11</sup>	1	-	-		
Governance	Governance Structure & Ethical Conduct	<b>Demonstrating Ethical Behaviour</b>				
		Number of material Whistleblower complaints received	10	1	1	
	Number of material Whistleblower complaints investigated	10	1	1		
	Business Continuity & Return on Equity	<b>Economic Contribution</b>				
		Dividends Paid (A\$M)	261	227	353	
Gold sold (Moz)		1.56	1.56	1.60		
Total revenue (A\$M)	4,131	3,806	2,761			
Royalties and taxes paid to governments (A\$M)	99	90	91			

9. Bureau Veritas has not included this data as part of the FY23 limited assurance process.  
 10. Frequency Rate is calculated per 1,000,000 exposure hours  
 11. The original complaint lodged with NST in FY22 is now considered to be resolved, however the relocation program is forecast to be ongoing for the foreseeable future.  
 12. Relates specifically to the CDO solar farm, excludes grid generated power from renewable energy sources.