

Our Approach	3
Boundary and Scope	4
Our Value Chain	5
Our ESR Journey	6
Governance & Compliance	7
Ethical Business Practices	8
Economic Contribution & Value Sharing	8
Anti-Bribery & Anti-Corruption	9
Materiality & Disclosure	9
Voluntary Alignments & Commitments	11
Our Stakeholders	13
Transparency in Disclosure	13
Industry Body Participation	14
Risk Management	15
Internal Audit	16
Performance & Disclosure Benchmarking	17
ESR Approach	19
ESR Targets	20
ESR Performance Metrics	22
Appendix A: GRI14 Minesite Disclosure Table	23
Glossary	27
Contact Information	30

# Environment & Social Responsibility Approach



## Our 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 environment and social responsibility 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 our decision compass and 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.

\$1.8<sup>B</sup>

Cash Earnings

\$5.19<sup>B</sup>

Total Economic Value Add in FY24

\$129.6<sup>M</sup>

FY24 Gold Royalties<sup>1</sup>

1.62<sup>M</sup>

FY24 Ounces of Gold Sold

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.

<sup>1</sup> Includes payments made to Western Australian Government and private royalties.

## Boundary & Scope

The Northern Star FY24 Annual Report (Report) and the additional disclosures in our environment and social responsibility (ESR) disclosure suite, provide information on Northern Star’s sustainability performance across its Operations during the period 1 July 2023 to 30 June 2024.

The Report and our ESR disclosures should be read in conjunction with our public disclosures on our Company website <https://www.nsrld.com/sustainability>. Northern Star’s assets included in our ESR disclosure suite are listed in Figure 1 below.

Figure 1 Organisational Boundaries

Corporate Office, Perth, Western Australia			
Kalgoorlie Production Centre	Yandal Production Centre	Pogo Production Centre	Exploration
Carosue Dam Operations	Bronzewing Operations	Pogo Operations	Central Tanami Project
Kanowna Belle Operations	Jundee Operations		Tanami Regional
KCGM Operations	Thunderbox Operations		
South Kalgoorlie Operations			

4,044

Employees at 30 June 2024

2,975

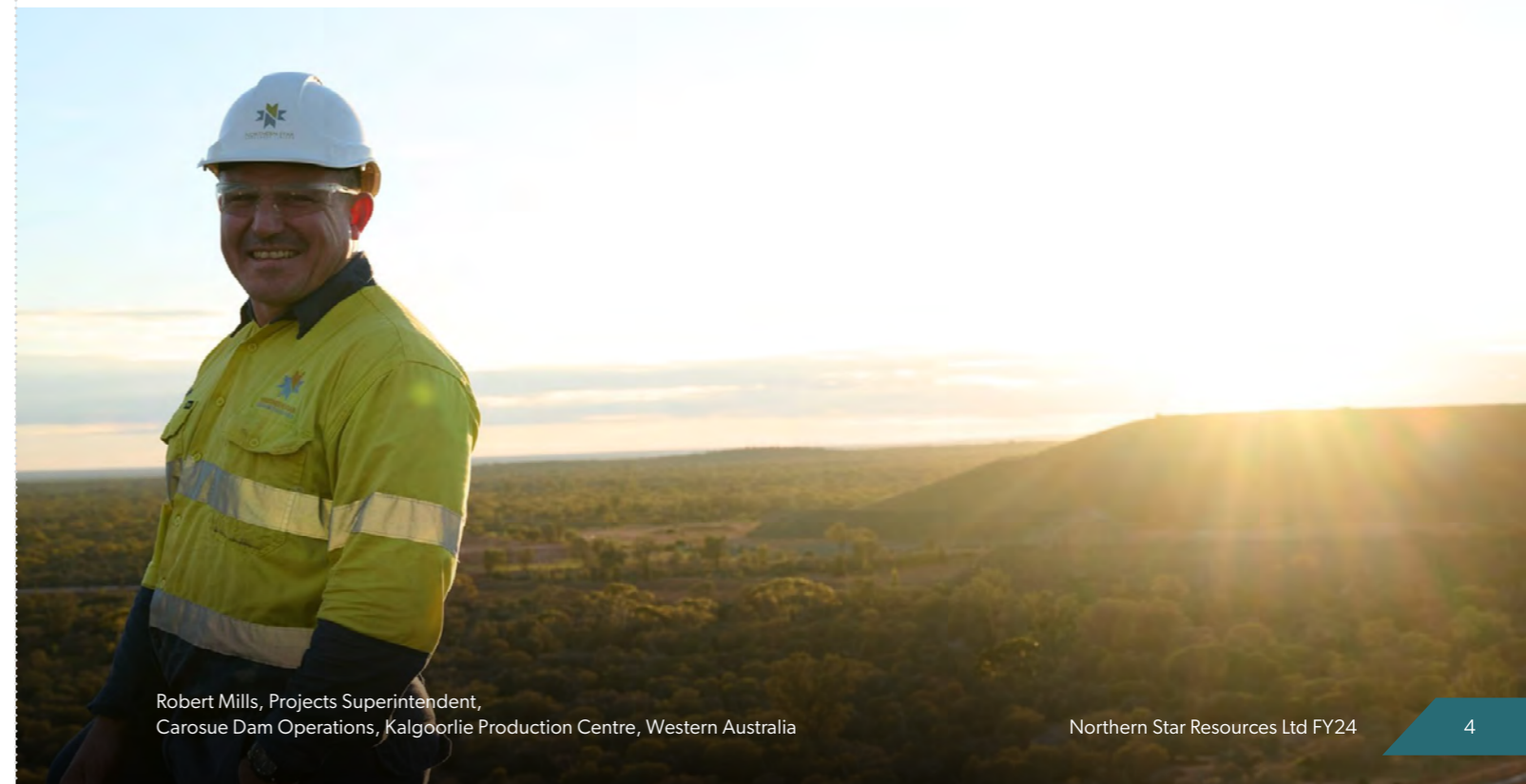
Contractors at 30 June 2024

7,019

Our global workforce at 30 June 2024

3

Production Centres



Robert Mills, Projects Superintendent, Carosue Dam Operations, Kalgoorlie Production Centre, Western Australia

## Our Value Chain

The value chain of a gold mine involves several key stages: exploration, extraction, processing, refining, and distribution. Also recognised in this value chain is the rehabilitation of the land from which the gold ore was initially extracted.

During exploration, geologists and surveyors identify potential gold reserves using advanced techniques and equipment, supported by consumables like drilling materials.

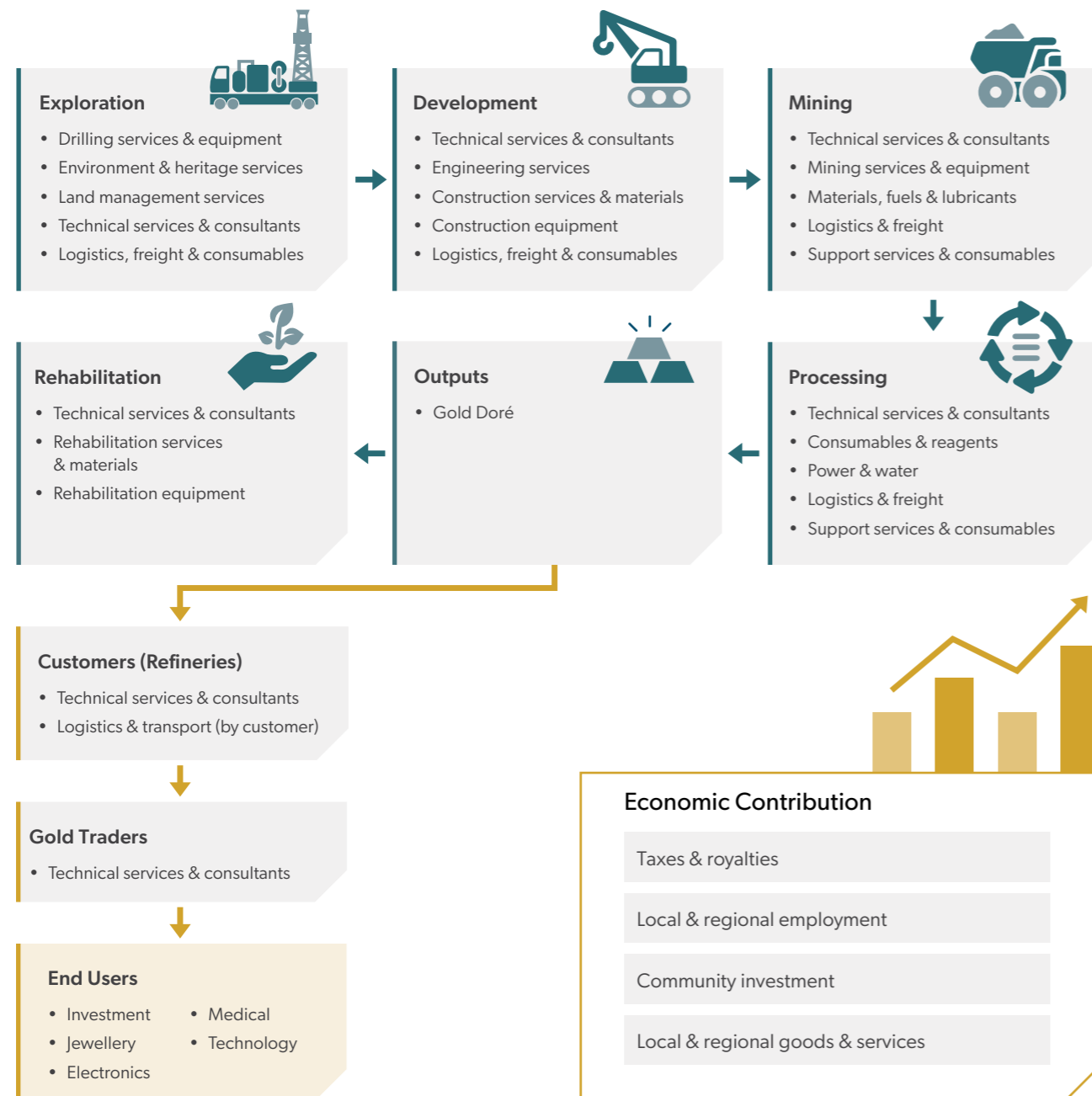
In the extraction phase, heavy machinery and equipment are used to excavate and transport ore, with consumables such as explosives and fuel being crucial.

Processing the ore requires specialised equipment for crushing, grinding, and chemical separation, along with consumables like reagents. Gold doré bars produced onsite are sold to refineries for further processing and on selling.

The refineries use specialised equipment and chemicals to produce refined gold ready for marketing and distribution both domestically and internationally.

We sell all our physical gold to the Perth Mint. Ultimately end users purchase this refined gold for use in various areas including investment, jewellery, medical equipment, technology, and electronics.

**Figure 2** Northern Star's Value Chain



## Our ESR Journey

Northern Star has continued to embrace and progress our environment and social responsibility journey with ongoing focus and commitment to maintaining responsible and sustainable exploration and mining practices.

In FY24 we continued to progress our climate related projects with renewable energy infrastructure installations and implementation of more forward looking modelling; we continued to look at opportunities to improve water recycling at our sites, and turned our attention to the initial phases of TNFD analysis and

implementation; our communities and stakeholders remained a key area of focus for us, with ongoing community investment and engagement activities; work on alignment to the GISTM over time, using a risk-informed approach, continued in our technical services teams; our supply chain considered ESR matters through supplier reviews and our modern slavery mitigation programs; safety and critical controls remain a significant priority for our workforce; and we continued to ensure our ESR disclosures were transparent and informative.

**Figure 3** Our FY24 ESR Journey



## Governance & Compliance

As an Australian Securities Exchange (ASX) listed gold mining company, we are subject to, and conduct our business in accordance with the ASX Listing Rules, and the laws and regulatory requirements of the Australian and US jurisdictions within which we operate.

The Board and Management are committed to the highest standards of corporate governance including 100% alignment with the ASX Corporate Governance Council's 'Corporate Governance Principles and Recommendations'.

Our sustainability framework aims to promote transparency and responsible behaviour. Our principles and processes are periodically reviewed to ensure we maintain the highest standards of corporate governance.

Since the end of FY21, female Board participation has increased 5%, from 33% to 38% of all Directors (at 30 June 2024).

During FY24 the Board had seven Non-Executive Directors and one Executive Director, being the Managing Director & CEO, Stuart Tonkin. The Board supports the view that its Directors having diversity in gender, age, skillset, background, and tenure helps ensure more perspectives contribute to decision-making.

## Ethical Business Practices

Northern Star actively promotes a corporate culture committed to ethical business practices, compliance with the law and exercising integrity in decision making by our people and in our Operations through our STARR Core Values, Code of Conduct and other key core corporate governance policies.

All inductions completed by our workers cover these key documents. Northern Star's policy commitments for responsible business conduct apply to all the Company's activities and business relationships equally.

Employees and other stakeholders who suspect or see unethical, illegal or improper behaviour within the

Company are encouraged to report and are protected under our Whistleblower Policy which provides for a confidential, anonymous, and retaliation-free process for people to report their concerns, with confidence the Board will be made aware of material breaches of the Code of Conduct.

Whistleblower reports are standing items for discussion on all Audit & Risk Committee and Board agendas.

In FY24 Northern Star received and addressed 17 Whistleblower Policy reports, all of which were reported to and discussed by the Audit and Risk Committee and the Board.

## Economic Contribution & Value Sharing

Northern Star continues to be a positive contributor to Australian and Alaskan economies and communities, particularly in the regional areas where we operate through direct and indirect financial support.

Payments for goods and services and employee wages are pivotal for local economies and communities. Money spent locally and regionally initiates a cycle of economic activity, fostering growth and investment in the community. Wages provide our employees with the means to support themselves, stimulating demand for goods and services and sustaining local jobs, and continues to circulate within the community, amplifying the economic impact through a multiplier effect.

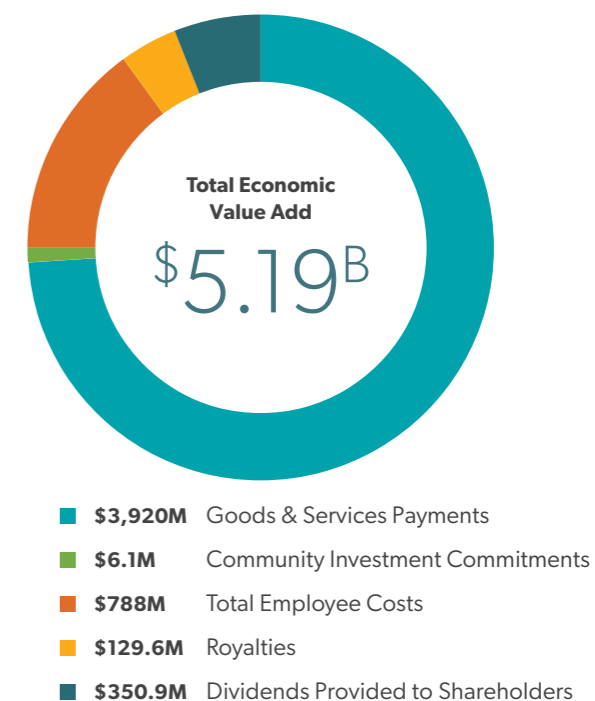
Additionally, Northern Star contributes to the State and national economies in which we operate through payments of royalties and other taxes, which contribute to funds for essential public services.

Northern Star remains committed to maintaining our strong support of our local and regional communities through our long-term partnerships, and support of local and regional community initiatives, local governments, education bodies, non-government organisations and charities.

For instance, two of Northern Star's three production centres are located in Western Australia's Goldfields region. The importance of the Goldfields to our Company cannot be underestimated. Central to our Company's growth objectives in Western Australia is a strong residential workforce in Kalgoorlie-Boulder, supporting local businesses and thriving regional communities. Approximately 83% of

our employees working across the Kalgoorlie Production Centre (excluding the Carosue Dam Operations) live and work in Kalgoorlie-Boulder, Coolgardie, and Kambalda, delivering in aggregate more than \$110 million in annual wages locally. Our Operations also help to drive regional investment and procurement.

Figure 4 FY24 Economic Contribution



Thunderbox Processing Plant, Thunderbox Operations, Yandal Production Centre, Western Australia

## Anti-Bribery & Anti-Corruption

In accordance with Northern Star’s Anti-Bribery and Anti-Corruption Policy, it is the policy of the Company to conduct its business fairly, honestly, transparently, with integrity and in compliance with the law in all jurisdictions where it operates (and in compliance with all legislation having extra-territorial jurisdiction over the Company).

The Policy sets out Northern Star’s committed opposition to bribery and corruption and to ensure all relevant persons

understand their individual responsibilities for compliance in connection with our business and operations. The Policy is supported by internal training programs, our Code of Conduct, and incident reporting and investigation processes for suspected breaches.

Northern Star recognises that maintenance of a robust culture of integrity, transparency and compliance, is critical to our long-term success.

Figure 5 Anti-Bribery & Corruption Status

# 0

- # of all confirmed incidents of corruption in FY24
- # incidents when contracts with business partners were terminated or not renewed due to violations related to corruption
- # public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases
- # of legal actions pending or completed during the reporting period regarding anti-competitive behavior and violations of anti-trust and monopoly legislation in which the organisation has been identified as a participant
- # Main outcomes of completed legal actions, including any decisions or judgments

## Materiality & Disclosure

Northern Star consistently evaluates and explores forthcoming opportunities for disclosure, encompassing reporting frameworks and standards to align with Company objectives. This process prioritises stakeholder input, which allows us to delineate material topics and refining our approach in response.

In our ongoing efforts to enhance the depth and calibre of our disclosures, we systematically gauge our voluntary reporting against key industry material topics as defined by prominent reporting standards and frameworks. This practice affords insight into our stakeholders’ key areas of interest. Subsequently, we transparently share information enabling stakeholders to evaluate and benchmark our sustainability performance.

The Company’s Materiality Matrix (Figure 6) was reviewed and updated during FY24 to continuously improve our disclosures, strategic action plans, and stakeholder engagement programs and ensure our FY24 ESR suite of disclosures contain 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.

The Company’s material topics for inclusion in this disclosure and the FY24 Annual Report are provided in Figure 7. These material topics were derived from our materiality assessment update which was undertaken in FY24.

Figure 6 Northern Star’s Materiality Matrix at 30 June 2024



In FY24 Northern Star has elected to release our environmental and social responsibility disclosures in a suite format, with each disclosure focussing on our approach to each of the material topics below. Each disclosure contains information related to our governance processes around the material topic, as well as key information on compliance with minimum internal or regulator standards and key performance metrics.

The Northern Star FY24 Annual Report, FY24 Corporate Governance Statement, FY24 Modern Slavery Statement and our website disclosures also form part of our overall disclosure.

Figure 7 Material Topics for Disclosure in FY24

Environment	Social & Safety
Environmental Management	People & Culture
Water Security	Safety & Critical Risk Control
Tailings & Waste Management	Community Engagement & Support
Climate Change & GHG Emissions	Supply Chain Management

## Voluntary Alignments & Commitments

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

**Figure 8** 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. Northern Star's FY24 GRI, SASB and UN SDG Alignment Index is available on our Company website.



### 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, 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 UN 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 UN SDGs where we believe we make the greatest impact:

- UN SDG 1 – No poverty
- UN SDG 3 – Good health and wellbeing
- UN SDG 4 – Quality education
- UN SDG 5 – Gender equality
- UN SDG 6 – Clean water and sanitation
- UN SDG 8 – Decent work and economic growth
- UN SDG 10 – Reduced inequalities
- UN SDG 13 – Climate action
- UN SDG 15 – Life on land
- UN 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 global 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 also engage directly with investors and custodians, responding to general and specific questions about ESG practices within our operations.

We use the outcomes of these assessments and engagements 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.

In FY24 we also took our first steps towards adopting the TNFD Recommendations by:

- undertaking benchmarking against our peers;
- conducting a gap analysis against the TNFD required governance disclosures; and
- commencing an analysis of our nature related dependencies, impacts, risks and opportunities at our Yandal Production Centre.

### Our Stakeholders

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

Our corporate governance framework adopted by the Board includes key policy documents which set

out Northern Star’s standards for stakeholder engagement.

Figure 9 Our Stakeholders



### Transparency in Disclosure

Northern Star recognises that trust among stakeholders and investor confidence are nurtured through transparent disclosure practices.

We are dedicated to providing clear and unambiguous information regarding our corporate structure, operations, performance, and governance in our communications. This commitment serves to foster genuine dialogue with our shareholders and stakeholders.

Aligned with Northern Star’s Continuous Disclosure Policy and Shareholder Communication Policy, our public disclosures adhere to principles of integrity, openness, fairness, and accountability.

Northern Star consistently evaluates and enhances our periodic disclosures to uphold these standards in all external communications.

In our pursuit of transparency, we actively engage with proxy advisors and extend invitations to shareholders for questions to our Board and Auditor before our Annual General Meeting.

This opportunity, whether in advance or during the meeting (whether in person or through hybrid meeting technology), underscores our dedication to open communication and accountability.

### Industry Body Participation

In order to maintain a broad understanding of emerging social expectations and issues that relate to our business, we regularly engage with our host communities, investors, Indigenous stakeholders, governments and other relevant third parties.

We are active leaders and members in industry representative bodies, including:

Figure 10 Northern Star’s Industry Body Participation

 <p><a href="#">Chamber of Minerals &amp; Energy (Western Australia)</a></p>	 <p><a href="#">Alaska Miners Association (USA)</a></p>	 <p><a href="#">Association of Mining &amp; Exploration Companies (Australia)</a></p>	 <p><a href="#">Alaska Metal Mines (USA)</a></p>
 <p><a href="#">Chamber of Commerce &amp; Industry (Western Australia)</a></p>	 <p><a href="#">National Mining Association (USA)</a></p>	 <p><a href="#">Committee for Perth (Western Australia)</a></p>	 <p><a href="#">Gold Industry Group</a></p>

## Risk Management

Environment and social responsibility factored prominently in our decision-making, strategic planning, and risk management processes during FY24.

Leveraging our company-wide Risk Management Standard, we continued to identify and assess potential risks, ensuring that these risks receive due consideration from senior management and the Board.

Our process for the identification, analysis, evaluation, and treatment of risk, is in line with ISO 31000:2018

Risk Management - Guidelines. This process provides a consistent and structured approach to understanding, communicating, and managing risk at Northern Star.

The Audit and Risk Committee (ARC) oversees the risk management framework, while the ESS Committee specialises in addressing ESR risks, providing regular updates to the Board.

In FY24, management reviewed climate change related and other

ESR risks, with updates communicated to the ESS Committee. These risks are integrated into the organisation's strategic risk profile.

Northern Star continued the progressive implementation of our new enterprise risk and assurance software across all of our sites, and capturing all recording, monitoring and reporting of outcomes of risk and opportunity management and assurance through the system.

## Internal Audit

Internal audit is undertaken by the Group Audit & Risk (GAR), supported by outsourced internal audit service providers.

The GAR function is governed by an Internal Audit Charter approved by the ARC. The GAR function provides risk-based assurance on whether risk management, internal control and governance processes are appropriately designed and operating at the level expected by the Board.

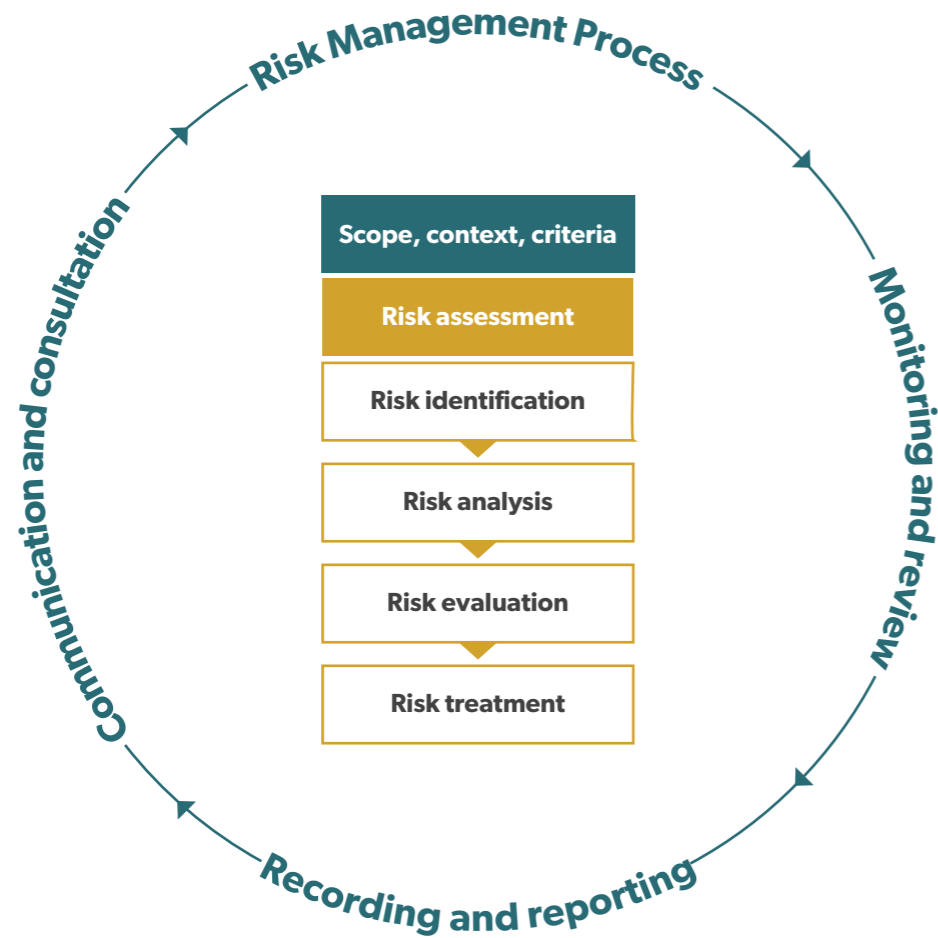
The ARC evaluates the GAR function's staffing levels and scope of work to ensure they are appropriate given the level of assurance required over the organisation's key risks and controls. The ARC approves the annual internal audit plan, reviews internal audit findings and monitors that audit actions have been implemented by management.

The ARC approves the appointment and dismissal of the GAR and assesses

their performance, independence and objectivity. The GAR reports to the ARC, with functional oversight provided by the Chief Financial Officer.

While internal and external audit activities are separate and independent of each other, there is strong collaboration between both audit functions to maximise the effectiveness of assurance activity and minimise duplication of assurance effort and resources.

Figure 11 ISO31000 Risk Management Process



Sean Bloch, Mine Surveyor, Mt Charlotte KCGM Operations, Kalgoorlie Production Centre, Western Australia



## Performance & Disclosure Benchmarking

Annually the ESG Engagement team within Northern Star undertakes a detailed ESG benchmarking comparison of our various performance metrics against a selected group of peer gold mining companies.

The benchmarking compares public ESG performance disclosures in peer Sustainability Reports, performance

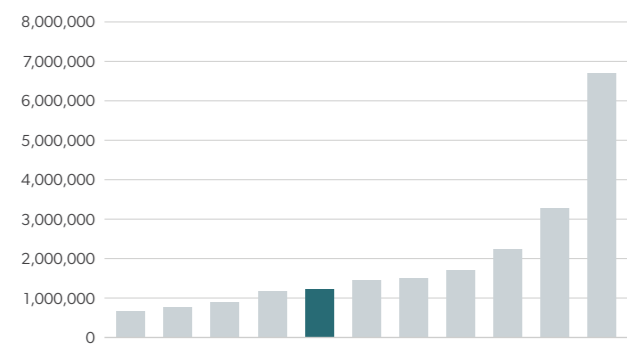
data tables and peer websites. Consideration is also given to analysts or ratings agency information where it is available.

This benchmarking is aimed at providing guidance on areas where we believe Northern Star is demonstrating commensurate or better levels of ESG disclosures or

performance in comparison to our peers, and where we could improve. Below is a selection of some of the key benchmarks completed during our FY24 review.<sup>2</sup>

Northern Star's performance is shown in the dark green colour on the benchmarking charts on this page and page 18.

**Figure 12** Total Scope 1 & Scope 2 GHG Emissions (T CO<sub>2</sub>-e)

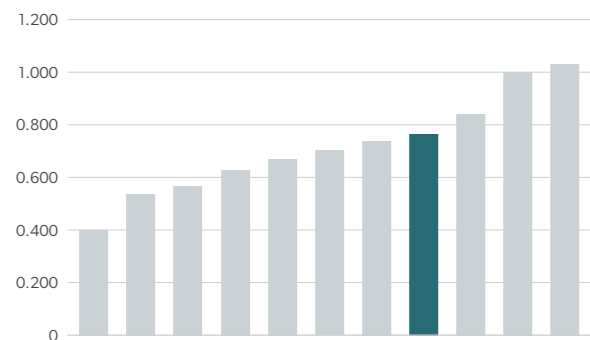


Scope 1 and 2 emissions are significantly influenced throughout our peer group by the nature of each organisations' energy supplies, and also by the nature of the mining and processing techniques applied across their various operations.

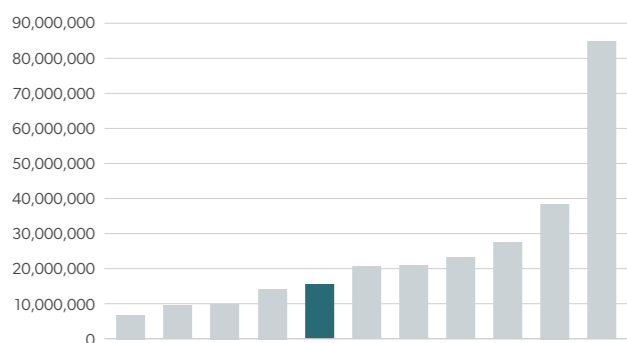
Northern Star's Total Scope 1 and Scope 2 GHG emissions sits approximately in the middle of the peer group, however the tonnes of actual GHG emissions is significantly lower than the peers with the highest GHG emissions.

It's anticipated that the further roll out of renewable energy projects, and "grid greening" will have a positive impact on emissions and emissions intensity for all peer group companies with grid connecting power supplies.

**Figure 13** Scope 1 & 2 Emissions Intensity (T CO<sub>2</sub>-e/oz)



**Figure 14** Energy Consumption (GJ)



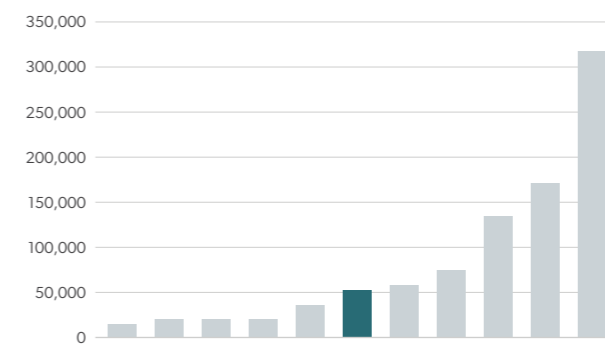
Energy consumption across our peer group is relatively comparable for those operations of similar scale and nature of mining or processing techniques. Organisations undertaking heap leach facilities tend to have a much lower energy intensity per tonne of ore processed, but a much higher intensity per ounce of gold produced. Northern Star does not operate any heap leaching facilities.

<sup>2</sup> Benchmarking is undertaken in November annually, therefore the figures in the charts may slightly vary on current Northern Star or peer disclosures that have been updated since that time.

In addition to these metrics, Northern Star has continued to monitor and benchmark its position relative to its peers and industry best practice in relation to important areas of focus such as:

- Alignment and progress against the TCFD and the TNFD
- Application of Limited and Reasonable Assurance against the GRI
- Psychosocial and physical health and wellbeing initiatives and performance
- Human rights, modern slavery and other relevant supply chain metrics.

**Figure 15** Total Water Withdrawal (ML)

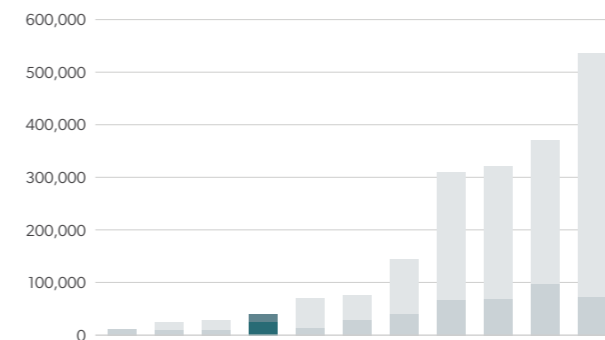


While GRI and ICMM require reporters to disclose their water "consumption" using a set calculation (water withdrawal less any water discharges) this doesn't give an accurate picture of the actual volume of water being "used" in a given year by organisations that are capturing and recycling large amounts of water that are retained in storage dams.

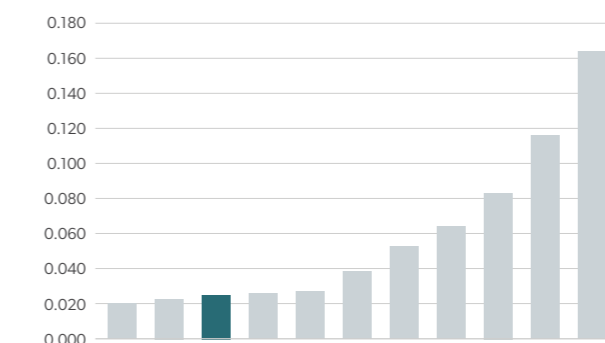
Northern Star monitors total water used as it is more reflective of water no longer available in an ecosystem for other uses.

Our total water use is significantly lower than the majority of our peer group.

**Figure 16** Total Water Used (ML): Water Consumption (Water Withdrawal - Water Discharged) + Water Recycled



**Figure 17** Total Water Used Intensity (ML/oz gold)



Northern Star's total water used per ounce of gold produced is at the lower end of the peer group. This is in part because our Operations do not have large water harvesting or storage facilities (ie. large scale water dams) and we aim to minimise the water stored on our TSF's. This reduces losses through evaporation and aligns with our tailing's facility operational requirements.

## ESR Approach

Integrating ESR is a company wide approach that respects nature, supports and engages our community, and values our workforce.

We aim to minimise our environmental impacts through practices and technological improvements, including renewable energy sources and efficient resource management.

We are committed to responsible land management and minimising and mitigating long term liabilities.

Engaging actively with local communities is central to our approach, building relationships based on trust and shared prosperity. We uphold fair labour standards and are committed to the safety

and well-being of our workforce, fostering a culture of fairness, honesty and respect.

By embedding these principles in our ESR approach, we aim to create sustainable value for our Company, respecting the environment, and our stakeholders.

Figure 18 Our Integrated ESR Approach



Mt Charlotte headframe, KCGM Operations, Kalgoorlie Production Centre, Western Australia

## ESR Targets



Our ESR targets demonstrate the key areas where we are committed to continuous improvement. In FY24, we remained on track with our 10 focus areas. Progress towards our longer-term goals is actively underway.

Further insights into our efforts across these focus areas can be found in the respective sections of our ESR disclosure suite, detailing the ongoing initiatives undertaken by Northern Star.

Table 1 ESR Targets

Focus Area	Category	Targets	Status at 30 June 2024 (on track to meet target)
Biodiversity	Report on progress of phased implementation of the TNFD	Conform by FY26	✓
Community Investment	Economic investments and commitments in host communities and regions per annum	maintain at least \$6M annually	✓
Decarbonisation	Reduce Scope 1 and 2 absolute Emissions relative to 01 July 2020 baseline of 931 kt CO <sub>2</sub> -e	35% by 30 June 2030	✓
Diversity	Female representation (all employees)	maintain at least 23% annually	✓
	Female representation at the Board Level	maintain at least 30% annually	✓
Environment	Material environmental incidents	0 annually	✓
Human Rights	Implement risk mitigation plans for major contracts where suppliers are identified as having a high likelihood of impacting human rights	100%	✓
Indigenous Procurement	Continue to develop sustainable supply contracts with Indigenous businesses	\$20M p/a from FY25	✓
Safety and Health	Fatalities	0 annually	✓
Tailings Management	Disclosures in accordance with the Northern Star's Global Tailings Management Standard	Annually	✓
Water Stewardship	Proportion of water recycled or reused per annum relative to net total water consumption	maintain at least 40% annually	✓
	Establish a baseline year for future water efficiency projects	Determine by FY26	✓



Nick McCormick, Fixed Plant Fitter  
Carosue Dam Operations, Kalgoorlie Production Centre, Western Australia

### ESR Performance Metrics

Category	Material Risk	Sustainability Metric	FY24	FY23	FY22
Environment	Biodiversity, GHG Emissions, Climate Change, Waste & Water Management	<b>Net Zero Ambition for Emissions by 2050</b>			
		Total Scope 1 & 2 GHG emissions (t CO <sub>2</sub> -e)	1,233,730	1,202,401	1,163,635
		Scope 1 & 2 GHG emissions intensity (t CO <sub>2</sub> -e/tonne ore processed)	0.045	0.045	0.044
		Scope 3 GHG emissions (t CO <sub>2</sub> -e)	665,134	629,816	378,203
		Electricity consumed from renewable sources (GJ)	39,313	37,598	29,463
		2030 Emissions Reduction target	35% reduction on FY20 baseline		
		<b>Responsible Environmental Stewardship</b>			
		Cost of regulatory infringements received (\$USD)	-	600,000	-
		Rehabilitation completed per annum (ha)	42.4	66.6	140.3
		Proportion of waste recycled/reused - excluding tailings or waste rock (T)	10,369	5,938	5,131
		Total volume of fresh and other water withdrawn (ML)	49,841	52,531	46,574
		Total volume of water recycled/reused (ML)	12,252	14,039	15,970
		Total volume of water discharges (ML)	28,547	27,717	27,535
		Net volume of fresh and other water consumed (ML)	23,267	24,814	19,039
Net water consumption efficiency (ML/tonne ore processed)	0.0008	0.0009	0.0007		
Social	Employment Conditions & Opportunities	<b>Fostering Diversity &amp; Inclusion</b>			
		Our employee workforce (excluding contractors)	4,044	3,587	3,409
		Indigenous employment in Australia (%)	2.08	2.15	2.61
	Training & Development	Female employment (%)	23.4	23.1	23.1
		<b>Talent Management, Skills Development</b>			
		Graduates, Undergraduates, Trainees, Vacation Students & Interns	307	247	326
	Community Support & Engagement	Number of Apprentices (including trade upgrades)	101	76	73
		Number of employees participated in leadership development training	121	141	90
		<b>Managing Community Expectations &amp; Demonstrating Contribution</b>			
		Total funds committed to community investment, and sponsorships (A\$M)	6.1	6.6	6.1
		% Local employment Pogo	56.8	59	73
		% Kalgoorlie workforce residential (excluding Carosue Dam)	83.1	91	90
		<b>Supporting Local and Indigenous businesses</b>			
		Procurement spend (A\$M):	3,926	3,014	2,643
• Western Australia		2,903	2,200	1,972	
• Other Australia		379	400	298	
• Alaska		178	167	156	
• Other	465	248	217		
• Indigenous Spend (Direct) <sup>3</sup>	9.54	5.2	5.1		
Safety Management & Risk Control	<b>Safety Management &amp; Risk Control</b>				
	Lost Time Injury Frequency Rate: Contractors	0.2	0.9	0.6	
	Lost Time Injury Frequency Rate: Employees	0.8	1.0	0.5	
	Total Reportable Injury Frequency Rate: Contractors	2.7	2.95	2.5	
	Total Reportable Injury Frequency Rate: Employees	2.0	3.45	1.5	
% close out of hazard identification events reported	96	99	94		
Compliance - Regulatory, Business, Standards	<b>Respecting Communities &amp; Resolving Issues</b>				
	Total community complaints received	20	-	1	
	Proportion of community complaints resolved	20	1	-	
Number of sites with Social Impact Assessment Reports	2	2	2		
Governance	Governance Structure & Ethical Conduct	<b>Demonstrating Ethical behaviour</b>			
		Number of material Whistleblower complaints received	17	10	1
	Number of material Whistleblower complaints investigated	17	10	1	
	Business Continuity & Return on Equity	<b>Economic Contribution</b>			
		Dividends Paid (A\$M)	350.9	261	227
		Gold sold (Moz)	1.62	1.56	1.56
		Total revenue (A\$B)	4.9	4.1	3.8
Royalties and taxes paid to governments (A\$M)	129.6	99	90		
Cash Earnings <sup>4</sup> (A\$B)	1.8	1.2	1.1		

<sup>3</sup> Comprises a portion of the total spend that occurred directly and indirectly with Indigenous businesses in FY24. For full details on Total Spend (Direct & Indirect) with Indigenous Businesses refer to the remuneration report within the FY24 Annual Report.

<sup>4</sup> Cash Earnings means Underlying EBITDA less sustaining capital, net interest and corporate tax paid.

Appendix A: Minesite Disclosure Table

GRI 14 Material Topics	Corporate		Yandal Production Centre						Pogo Production Centre		Kalgoorlie Production Centre					
			Jundee Operations		Bronzewing Operations		Thunderbox Operations		Pogo Operations		Carosue Dam Operations		Kalgoorlie Operations		KCGM Operations	
	Country	Australia	Country	Australia	Country	Australia	Country	Australia	Country	Alaska	Country	Australia	Country	Australia	Country	Australia
	Topic Disclosures	Company Level Data	Topic Disclosures	Site Level Data	Topic Disclosures	Site Level Data	Topic Disclosures	Site Level Data	Topic Disclosures	Site Level Data	Topic Disclosures	Site Level Data	Topic Disclosures	Site Level Data	Topic Disclosures	Site Level Data
GHG Emissions	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Air Emissions	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Biodiversity	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Waste	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tailings	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Water & Effluents	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Closure & Rehabilitation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Economic Impacts	Y	Y	Y						Y		Y					
Local Communities	Y	Y	Y						Y		Y					
Rights of Indigenous Peoples	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land & Resource Rights	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Artisanal & Small-Scale Mining	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Security Practices	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Critical Incident Management	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Occupational Health & Safety	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Employment Practices	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Child Labour	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Forced Labour & Modern Slavery	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freedom of Association & Collective Bargaining	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Discrimination & Equal Employment Opportunity	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anti-corruption	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Payments to Governments	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public Policy	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Conflict-affected & High-risk Areas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Sunrise at Carosue Dam Operations, Kalgoorlie Region, Western Australia

## About This Disclosure

Northern Star has reported in accordance with the GRI Standards for the period 1 July 2023 to 30 June 2024. This disclosure supports the Northern Star Annual Report FY24 in relation to environment and social responsibility.

Management has sought independent, third-party assurance by Bureau Veritas of all data relating to GRI core and material disclosures in this disclosure. These disclosures are identified in our GRI, SASB and UN SDG Alignment Index. Where partial assurance is received, or a topic note assured, that information has been included in the Index.

A copy of the assurance statement is provided on Northern Star's website at: [Environment & Social Responsibility \(ESR\) Reporting](#)

This disclosure was reviewed and approved by Northern Star's Board of Directors and published on 22 August 2024. Monetary amounts in this Report are reported in Australian dollars unless otherwise stated.

## Feedback

We welcome feedback and invite readers to send any comments or enquiries about this disclosure to us at [esgperformance@nsr ltd.com](mailto:esgperformance@nsr ltd.com)

## Disclaimer

This disclosure contains forward-looking statements, including statements of current intention and expectation. These forward-looking statements are based on information available at the date of this disclosure.

While these forward-looking statements discuss Northern Star's expectations at the date of this disclosure, they are not guarantees or predictions of future performance, and by their nature, are subject to significant uncertainties, many of which are beyond Northern Star's control. Actual results and developments may differ materially from those expressed in this disclosure

and Northern Star cautions readers against reliance on any forward-looking statements or guidance. There are also limitations with respect to scenario analysis, and it is difficult to predict which, if any, of the scenarios might eventuate. Scenario analysis is not an indication of probable outcomes and relies on assumptions that may or may not prove to be correct or eventuate. Except as required by applicable laws or regulations, Northern Star does not undertake to publicly update or review any forward-looking statements, whether as a result of new information or future events.

## Assumptions

Nil

## FY24 ESR Disclosure Suite

This disclosure, and our supplementary website disclosures, form part of a suite of documents that provide information and updates on Northern Star's FY24 environment and social responsibility disclosures and should be read as a supporting accompaniment to the Northern Star Resources Ltd FY24 Annual Report, FY24 Modern Slavery Statement and FY24 Corporate Governance Statement.

Throughout the ESR Disclosure Suite there are references to supporting information on our website which the reader is encouraged to view. The Northern Star website contains significant additional supporting information including our annual ESR Performance Data Tables, GRI Index and references to our previous disclosures.

# Glossary

**ABN**

Australian Business Number

**ASX**

Australian Securities Exchange, trading as ASX

**ASX Corporate Governance Council Principles and Recommendations**

Principles and Recommendations (4th edition) of the ASX Corporate Governance Council on the corporate governance practices to be adopted by ASX listed entities and which are designed to promote investor confidence and to assist listed entities to meet shareholder expectations

**Au**

The chemical symbol for gold

**Audit & Risk Committee (ARC)**

Audit and Risk Sub-Committee of the Board

**B or bn**

Billion

**Board**

Board of Directors

**CDP**

Carbon Disclosure Project

**CO<sub>2</sub>**

Carbon dioxide

**CO<sub>2</sub>-e**

Carbon dioxide equivalent

**Company**

Northern Star Resources Ltd  
ABN 43 092 832 892

**Contractor(s)**

Externally employed contracted workers engaged by the Company to support Operations

**Corporations Act**

*Corporations Act 2001 (Cth)*

**CME**

The Chamber of Minerals and Energy of Western Australia

**DEMIRS**

Department of Energy, Mines, Industry Regulation and Safety (Western Australian)

**Director**

A director of the Company duly appointed under the Corporations Act

**Doré**

A doré bar is a semi-pure alloy of gold and silver. It is usually created at the site of a mine and then transported to a refinery for further purification.

**employees**

Total number of employees of the Group including permanent, fixed term and part-time. Does not include contractors

**ESG**

Environment, Social & Governance

**ESR**

Environment and Social Responsibility

**ESR Disclosure Suite**

Refers to the nine separate disclosures related to environment and social responsibility information available on the Northern Star Company website. These comprise: ESR Approach at Northern Star, People & Culture at Northern Star, Safety & Critical Risk Control at Northern Star, Community Engagement & Support at Northern Star, Supply Chain Management at Northern Star, Environmental Management at Northern Star, Climate Change at Northern Star, Water Security at Northern Star, and Waste & Tailings Management at Northern Star

**ESR Performance Data Tables**

Detailed spreadsheets containing key environment and social responsibility metrics for Northern Star for FY24 and relevant preceding years available from the Company website

**ESS Committee**

Environmental, Social & Safety sub-Committee of the Board

**FY**

Financial Year ending 30 June

**GAR**

Group Audit and Risk

**GHG**

Greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and nitrogen trifluoride)

**GISTM**

Global Industry Standard on Tailings Management

**GJ**

Gigajoule; one billion joules

**GoldSTARR**

Northern Star's Employee Hub for physical, mental and financial health

**GRI**

Global Reporting Initiative

**Group**

Northern Star Resources Ltd and all of its wholly owned subsidiaries

**ha**

Hectare

**ICMM**

International Council on Mining and Metals

**K or k**

Thousand

**KCGM**

KCGM means Kalgoorlie Consolidated Gold Mines Pty Ltd, a wholly owned subsidiary of the Company, which operates the Super Pit and Mt Charlotte Underground Mines and Fimiston Processing Plant

**kl**

kilolitre; one thousand litres

**KMP**

Key Management Personnel

**KPI**

Key Performance Indicator

**Limited Assurance**

Audit and assurance undertaken by an external auditor on whether the data or statements made in this or related disclosure(s) have been prepared in accordance with GRI

**LTIFR**

Lost Time Injury Frequency Rate; calculated based on the number of lost time injuries occurring in a workplace per 1 million hours worked

**M or m**

Million

**ML**

Mega-litre; one million litres

**MW**

megawatt; one million watts

**Net Zero**

Net Zero refers to achieving a balance between the amount of operational Scope 1 and Scope 2 greenhouse gas Emissions produced and those removed

**Net Zero Ambition**

Net Zero Ambition is our ambition to achieve Net Zero by 2050, as expressed in our Climate Change Policy

**NSMS**

Northern Star Mining Services

**Officer**

An officer of the Company defined under the Corporations Act

**Operations**

mining and mineral processing activities conducted by Northern Star Resources

**Oz**

Ounce

**P&C**

People and Culture

**PEP**

Performance Evaluation Process

**Reasonable Assurance**

Audit and assurance undertaken to a higher level on whether the data or statements in this or related disclosure(s) have been prepared in accordance with GRI

**SASB**

Sustainability Accounting Standards Board

**Scope 1 Emissions**

Emissions released to the atmosphere as a direct result of an activity, or series of activities at a facility level

**Scope 2 Emissions**

Emissions released to the atmosphere from the indirect consumption of an energy commodity

**Scope 3 Emissions**

Indirect greenhouse gas Emissions other than Scope 2 Emissions that are generated in the wider economy. They occur as a consequence of the activities of a facility, but from sources not owned or controlled by that facility's business

**shareholder**

A shareholder of Northern Star Resources Ltd

**stakeholders**

An individual, group or organisation that is impacted by the Company, or has an impact on the Company. Examples of stakeholders are investors, employees, suppliers and local communities

**STARR Core Values**

Northern Star's Core Values of Safety, Teamwork, Accountability, Respect and Results

**T or t**

Tonnes; one thousand kilograms

**TCFD**

The Financial Stability Board's Task Force on Climate-related Financial Disclosures

**TNFD**

The Taskforce on Nature-related Financial Disclosures

**TRIFR**

Total Reportable Injury Frequency Rate; calculated according to the number of reportable work-related injuries or illness for each one million hours worked

**TSF**

Tailings Storage Facility

**UN**

United Nations

**UN SDG(s)**

The United Nations Sustainable Development Goals

**US or USA**

United States of America

**WA**

Western Australia

**WHS**

Work, Health and Safety

**\$**

Australian dollars, unless the context states otherwise. All A\$ to \$US currency conversions used in this ESR Disclosure Suite are at \$0.6556



Ifrah Ali, Geotech and Jane Lenton, Geologist in the field at Twin Peaks, Carosue Dam Operations, Kalgoorlie Production Centre, Western Australia

# Contact Information

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**Media Officer** [mediaofficer@nsr ltd.com](mailto:mediaofficer@nsr ltd.com)

**Compliance** [compliance@nsr ltd.com](mailto:compliance@nsr ltd.com)

**ASX Code** NST

**Share Registry** MUFG Corporate Markets  
(formerly known as Link Market Services)

### Additional Website ESR Disclosures:

Environment & Social Responsibility Approach

People & Culture at Northern Star

Safety & Critical Risk Control at Northern Star

Community Engagement & Support at Northern Star

Supply Chain Management at Northern Star

Environmental Management at Northern Star

Climate Change at Northern Star

Water Security at Northern Star

Waste & Tailings Management at Northern Star

FY24 Performance Data Tables

FY24 GRI, SASB and UN SDG Alignment Index

FY24 Tailings Disclosure Report

FY24 Biodiversity Values

**Cover Image:** Western Australian Goldfields native vegetation at sunset, Kalgoorlie Operations, Kalgoorlie Production Centre, Western Australia