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

Outperformed the Industry safety statistics three years running.

#### CY2020 LTIFR\(^1\)

1.13

#### CY2020 TRIFR\(^1\)

4.71

---

### Environmental Snapshot

- **Total water use intensity:** (Per ounce)
  - **7%**

---

### Our Business

- **Gold sold up**
  - 20% from CY2019 to 982,180oz

- **Our corporate governance** aligns to 34/35 of the ASX Corporate Governance Council Principles and Recommendations.

- Continued increases to our Reserves and Resources.

- Increased dividends paid to Shareholders as our Business grows.

### Climate Change

- Adoption of the TCFD Recommendations
- Climate-change risk assessment
- Scenario Analysis
- Target setting action plan
- Implementation of the target setting action plan

### Our People

- **4,181**
  - Our workforce: employees and contractors (2,895 excl KCGM)

- **Female participation in our workforce**
  - 21.6%

- **Female participation on our Board:** Above global best practice guidelines

### Culture Survey

- Completion of our 3rd Culture Survey in two years – with increased participation to 92%
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Rehabilitation is a key focus
Owen Oakley oversees the placement of topsoil during rehabilitation works at Jundee, Yandal Operations.
Dear Shareholders and Stakeholders,

We are pleased to provide our Sustainability Report for CY2020.

With a reporting period which has been, as we well know, unique in the scale of challenges and disruptions it presented, it is preparedness and responsiveness that sets the better performers apart. Despite the highly fluid nature of the last 12 months, Northern Star’s response to the situation was exemplary and something every employee, Shareholder and Stakeholder should be immensely proud of. As each challenge emerged, Northern Star not only demonstrated outstanding responsiveness but, in many instances led the industry during CY2020.

During CY2020 we implemented an extensive COVID-19 response strategy as detailed in our FY2020 Annual Report, to ensure our people and communities remained safe. It is with great respect and gratitude that we acknowledge the efforts of our people at the Pogo mine in Alaska. Many have personally experienced the impacts of the pandemic, yet their focus and effort did not stray. On behalf of the Board, we offer our deepest thanks.

Our people ultimately determine our results. This was highlighted within our third culture survey, where 93% or respondents agreed that “when I’m at work I give it my all”. It was especially pleasing to see more women enter the sector, as our female participation rate increased to 21.6% of our total workforce. While we still have more work to do, it is a positive sign that we are providing an attractive, safe and opportunity-rich platform for so many women to start and grow their careers.

We demonstrated continued high performance against our environmental commitments, with no materially adverse environmental incidents occurring under Northern Star ownership or operation of joint ventures at any of our assets. Our strategic response to the challenges of climate change continued to progress, with the completion of our second stage of alignment with the Taskforce of Climate-related Financial Disclosures completed. This work saw senior management complete scientifically validated scenario analysis on the business, and identify a target setting strategy that will ultimately lead to the setting of climate targets that can be both realistically achieved and generate a meaningful positive impact on our planet.

Given the uncertainties faced in many regional communities over the last 12 months, it was clear that extra support was going to be needed to overcome some of the challenges felt. In response, we approved an extraordinary A$10M community COVID-19 fund to provide financial assistance to key areas of need. To date, this fund has supported a range of causes. This includes over A$1.9M of medical personal protective equipment for frontline health workers in Alaska and A$8M for the successful development of a mobile COVID-19 testing system that can be rapidly deployed to remote and regional areas and support for further research into the development of other COVID-19 countermeasures.

This year also highlighted the need to maintain open engagement and positive relations with Indigenous peoples and Traditional Owners. We welcome the review of the Western Australia Heritage Act (2018) and are confident stronger protection for Aboriginal heritage can be provided alongside a clear process and pathway for project approvals.

Northern Star does not intend to draw on approvals granted under Section 18 of the Act to progress any of its operations and we commit to upholding a Free, Prior and Informed Consent approach to engagement of Indigenous peoples wherever we operate. We take this opportunity to acknowledge all those Traditional Owners whose land we are privileged to work on and whose input we actively seek and value within the day-to-day operation of our business.

Our economic contribution to society continues to grow to new levels in line with our expanding business. This year we generated over A$28 billion through community investment, goods and services payments, Shareholder dividends, corporate tax, and government royalties. Local procurement, something we acknowledge as critical for regional communities also continues to rise with A$64M and US$4M spent on goods and services within Australian and Alaskan local communities, respectively.

The true outcome of all this work is a business that is committed to ensuring all our Stakeholders, be they financial or otherwise, realise meaningful benefits from our business activity. It is exciting to see the progress we have made over the last 12 months; despite the ongoing challenges we continue to face.

The business is in brilliant health and we will continue to uphold our sustainability vision, creating shared value outcomes for our Stakeholders and superior financial returns for our Shareholders.

On February 12th, 2021 we will implement the merger of equals with Saracen Mineral Holdings Limited to create the only large-cap gold mining company with 100% production in Tier-1 locations. The merger will see significant geographical, operational and strategic synergies realised in our joint portfolio of high-quality assets. The merged entity will be a long-life global gold producer with over 19Moz of Reserves and 49Moz of Resources across the portfolio.

Four of our existing Non-Executive Directors will transition onto the Board of the merged entity, with Peter O’Connor stepping down as Non-Executive Director effective 12th February. Peter has been a fundamental part of Northern Star’s success over the past eight and a half years, providing a wealth of knowledge and experience in the fund management and private equity industries through his roles as a member of the ESS Committee, Nomination Committee and Remuneration Committee. We thank Peter for his guidance and support over the years.

On behalf of our fellow directors, thank you for taking the time to read our CY2020 Sustainability Report.

Mary Hackett
ESS Chair

Bill Beaumont
Executive Chair
Materiality & Disclosure

Northern Star is committed to our Sustainability Vision.

We understand that to gain and maintain Stakeholder trust, maintaining and improving on our past performance in responsible environmental and social business practices is important, and so too is transparent disclosure of that performance. We also recognise that expectations in relation to that disclosure change from time to time as different environmental and social business practices gain more prominence and focus amongst our Stakeholders.

CY2020 has been a year of particular significance in responsible social business practices, in addition to the increasing focus and expectations on our environmental business practices.

This Sustainability Report provides information on Northern Star’s environmental and social business practices at its wholly owned operations in Western Australia, the Northern Territory of Australia and Alaska, USA to 31 December 2020.

KCGM Disclosures

On 3 January 2020, Northern Star acquired a 50% joint venture interest in the Kalgoorlie Consolidated Gold Mines (KCGM) joint venture operations, which includes the renowned “Super Pit” in the Goldfields region of Western Australia. All KCGM metrics disclosed in this Report are scaled to Northern Star’s 50% joint venture interest, unless otherwise stated. In our CY2021 Sustainability Report, as a result of the implementation of Northern Star’s merger with KCGM joint venture partner Saracen Mineral Holdings Limited on 12 February 2021, Northern Star’s sustainability disclosures will incorporate 100% KCGM operations as well as Saracen’s operations.

SASB

In our CY2018 Sustainability Report we made a commitment to expand our sustainability disclosures.

In this Report, we report for the first time in accordance with the Sustainability Accounting Standards Board (SASB) Metals & Mining Sustainability Accounting Standard (SASB Standard).

An assessment was completed using the SASB Standard as a guiding framework to identify sustainability issues material to our business. Our full assessment against the SASB Standard sustainability disclosure topics and accounting metrics can be found in Appendix A.

In this Report we disclose our performance in the following areas:

- Greenhouse Gas Emissions
- Energy Management
- Water Management
- Waste & Hazardous Materials Management
- Biodiversity Impacts
- Security, Human Rights & Rights of Indigenous Peoples
- Community Relations
- Labour Relations
- Workforce Health & Safety
- Business Ethics & Transparency

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- Security, Human Rights & Rights of Indigenous Peoples
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- Labour Relations
- Workforce Health & Safety
- Business Ethics & Transparency

Where appropriate, we report data within these material areas per ounce of gold sold to enable comparisons of trending data across time periods where acquisitions skew total figures. Gold sold is used as the most suitable production intensity metric as it represents a verified metric of the final saleable product produced by Northern Star.

CY2020 has been a year of particular significance in responsible social business practices, in addition to the increasing focus and expectations on our environmental business practices.

TCFD

In this Report we continue our disclosures aligned with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD).

Refer to the Climate Change section on pages 56-67 for more detail, with supplementary information provided in Appendices B and C.

United Nations Sustainable Development Goals

In this Report we continue to disclose the impact of our business on the United Nations (UN) Sustainable Development Goals (SDGs). The 17 SDGs were developed by all UN Member States with an aim to achieve a more sustainable future for all by 2030, by ending poverty, protecting the planet and ensuring all people enjoy peace and prosperity.

We believe we can make the greatest impact on the SDGs by focussing our efforts on the SDGs which are most aligned to our business, namely:

3 – Good Health & Wellbeing
4 – Quality Education
8 – Decent Work & Economic Growth
15 – Life on Land

Other Reporting Frameworks

We intend to continue building on our sustainability disclosures in future Sustainability Reports, through a focus on sustainability priorities which are relevant to the business, our investors and other Stakeholders; better quality data; comparative data, and we will disclose targets and their pathways to mitigate our footprint on the environment.

Additional reporting frameworks will continue to be considered, based on our operations and their impact on environments, people and communities, taking into account the priorities of our stakeholders.

Pastoral land, Jundee, Yandal Operations.
Northern Star’s Journey

Planned for 2021
From 12 February Northern Star is implementing the proposed merger of equals with Saracen Mineral Holdings Limited. As part of this implementation, Northern Star is evaluating, updating and setting Northern Star’s environmental, social responsibility and governance strategy for the merged entity. This will incorporate Northern Star’s target setting action plan, disclosed in this Report.

2018
Purchase of the Pogo Gold Mine in Alaska
Board level ESG & Safety Committee established (now the Environmental, Social & Safety Committee)
First disclosure of climate change related risk
Alignment with the United Nations’ Sustainable Development Goals (SDGs)

2017
Release of the Inaugural Sustainability Report
Inaugural participation in the Dow Jones / RobecoSAM sustainability survey

2014
Purchase of the Kanowna Belle, Kundana and Jundee Gold Mines

2019
First ESG Investor Roadshow
Voluntary Modern Slavery Statement released
Adoption of the TCFD recommendations
Takeover of Echo Resources Ltd, resulting in change of control of the Bronzewing Project

2020
Purchase of 50% of KCGM joint venture Operations
SASB materiality framework applied in our disclosures in this Report
Completion of Stage 2 TCFD Project

2010
Purchase of the Paulsens Gold Mine
Where We Operate

Our portfolio of mining operations includes Tier-1 mines in Tier-1 jurisdictions.

An increased focus on environment, social and governance risk and performance has guided Northern Star’s business plan for inorganic growth in highly prospective and low sovereign risk regions known as Tier-1 jurisdictions.

The Fraser Institute compiles an Investment Attractiveness Index through consideration of the geological attractiveness of regions and the effects of government policy on attitudes toward exploration investment.

We operate in jurisdictions ranked top four in terms of attractiveness for mining investment, where Tier-1 geological resources are complemented by open and engaging Governments with stable policies.

The Fraser Institute’s Investment Attractiveness Index (as at February 2020)

Most attractive jurisdictions for mining investment:
1. Western Australia
2. Finland
3. Nevada
4. Alaska
5. Portugal

In January 2020 Northern Star completed the acquisition of a 50% interest in the KCGM Operations, gaining Saracen Mineral Holdings Limited as a joint venture partner. We also unified ~170km of continuous tenure to consolidate our Jundee and newly acquired Bronzewing Project under the now renamed Yandal Operations.

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Fig 1 Northern Star Tier 1 mining operations in Tier 1 locations

Fig 2 Northern Star mine sites and our nearest communities

Northern Star Resources Sustainability Report 2020
“Our STARR Core Values are the decision compass guiding Northern Star’s operations.”

Stuart Tonkin
Chief Executive Officer
Continued Safety Performance

“Our investment in our people and commitment to industry leading safety performance will always be our number one priority.”

Melissa Collins, Group Manager – Health & Safety

Safety leadership and risk management are fundamental aspects of our operations, having a pivotal role in our decision making. Deploying Active Field Leadership means our supervisors and leaders are actively engaged with employees throughout our operations, focussed on improvements to the safe system of work we deliver to our workers. Leading by example and safety shares at safety and pre-shift meetings maintain the constant focus on safety. “Strive for Five” meetings conducted for every shift facilitate clear discussion about safety for each shift.

Our Safety Representative programs continue to support and train our emerging safety leaders in improving our safety management system. The annual CEO meetings with Health and Safety Representative at each site result in frank, open discussion and interaction with the highest level of management on safety issues. Continuous improvement in our risk management assessment, incident investigation training and internal reporting contributes to our quality, consistent approach to managing risk and reporting on incidents and near misses within the operations.

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Outperformed the Industry safety statistics three years running.

<table>
<thead>
<tr>
<th>Year</th>
<th>LTIFR ⁴</th>
<th>TRIFR ⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY2020</td>
<td>1.13</td>
<td>4.71</td>
</tr>
</tbody>
</table>

⁴ Number of recordable injuries per million hours worked. Calculated on a 12 month rolling average.

CY2019 Industry means the DMIRS Safety Performance in the Western Australian Mineral Industry – Accident and Injury Statistics 2018-19 Metalliferous total

Early, effective response is key to our safety performance

Jordan Iese, ESSO at Emergency Response Training, Kanowna Belle
Progress report on our 3 Year Plan

In CY2018 we committed to a 3 year plan, framing continuous improvement in safety within our operations:

Year 1 Develop
...the right guidance material so that all sites have improved tools to identify and control hazards and manage risk efficiently. (Achieved in FY2018)

Year 2 Consolidate
...ensure the safety procedures and processes are implemented correctly and are adding value across the Company. (Achieved in FY2019)

Year 3 Improve
...identify areas for improvement and implement those changes. (Achieved in FY2020)

Examples of improvements we implemented in our safe system of work during CY2020 include:

Safety Leadership
- Increased supervision across our underground operations particularly at the end of shift and during night shift
- Remodelled prestart meetings to ensure clear, consistent messaging from the leaders
- Information sessions on how decision making is directly influenced by numerous factors especially human behaviour and how leaders can manage this
- Updated tools used for task planning to further engage workforce and address hazards
- Workshop conducted with teams to identify ‘5 Starts & 5 Stops’ and the commitment to those
- Assigned ‘group’ trainers to specific areas to provide an increase in experience and support to the overall workforce and especially those frontline employees
- Increase in site trainers to decrease timeframes for overall training requirements
- Updated our green starter program to include mentoring with Health and Safety representatives on site
- ICAM mentoring to improve the outcomes following any investigations
- Modified job pathway for entry level roles such as Offshore/Nipper

Safety
- Conduct trials of new equipment and PPE
- Focus on improving risk management tools in particular Hazard Identification and Job Hazard Analysis training
- Ensure the correct work/rest cycle is being followed to improve fatigue management and focus on fatigue management training
- Rewarding individuals for hazard identification and rectification
- Ensuring support for team leaders to cross train in the work area
- Assign ‘group’ trainers to specific areas to provide training, share resources, knowledge, facilities, and where practicable, equipment. This continued investment in resources ensured that we were positively positioned to source much needed N95 masks, ear loop disposable masks and gowns for the state of Alaska. This medical equipment was distributed throughout the region to assist the state in managing their COVID-19 response and public health challenges, including to our Pogo Operation’s nearby community of Fairbanks.

Our Emergency Response programs contributed to the capabilities of our teams across all operations with an increased focus on building support, career opportunities and progression of our members to emergency services safety officers. A sound understanding of the chain of command during emergency situations, communication, expectations of the officers during a major event, managing resource requirements and personnel, maintaining site capabilities, interactions with government agencies and plans for recovery.

Mental Health

Throughout CY2020 Northern Star continued the wider implementation of the Mental Health First Aid program which has provided our Mental Health First Aiders with the tools and ability to recognise colleagues who may need, or benefit from, professional help and guide them towards seeking it. Northern Star recognises that for our people to be at their best and working at their safest, we need supervisors, managers and leaders to be able to respond early and quickly to mental health challenges in our workforce.

We are increasing our Mental Health First Aid trainer capacity, so that a second accredited trainer will be embedded in the business from mid-2021 to continue the trajectory of trained Mental Health First Aiders in the workplace. The 2-day Mental Health First Aid course will in 2021 become:
- a role requirement for most Northern Star managers; and
- a recommendation for all Northern Star supervisors, in Australia and Alaska.

For employees who have not yet completed the Mental Health First Aid course, or simply as a refresher for those who have, we have developed an hour long Mental Health for Managers online training course which will become a role requirement for all Northern Star supervisors. The interactive nature of the training and the clear guidance on what and how to reach out to fellow workers in the workplace who may be showing signs of mental health issues, provides a practical and important learning resource for employees.

Our Fitness for Work Standard now includes a simple decision tree to assist managers where poor mental health may present in the workplace, to address the risks presented by poor mental health in the workplace, such as fatigue, increased irritability, decreased frustration tolerance, low resilience when encountering challenges at home and at work, poor concentration, physical health impacts such as headaches and palpitations, changes in sleep patterns and sleep deficit, lowered motivation and decreased energy and productivity. These can all contribute to impaired safety in the workplace for the worker experiencing these symptoms and for other workers. This safety imperative is a driver within Northern Star to ensure good mental health prevails in the workplace, and where we can assist our stakeholders, in the communities in which we operate. The challenges of COVID-19 have added to the mental health risk in our workplace; in the People Performance section we explain the steps we have taken to provide additional support including online, face to face and telephone support and resources to improve workforce wellbeing levels.

As a result, Northern Star is well placed to respond to government audits designed to increase and promote the level of mental health understanding and support in the mining industry in Western Australia.
“Protecting lives and livelihoods was and remains our priority in the response to the pandemic, for our employees, contractors and the communities in which we operate.”

Stuart Tonkin, Chief Executive Officer
Safety Performance

### CY2020 COVID-19 Response Highlights

#### Safety
Protecting lives and livelihoods was and remains our priority in the response to the pandemic, for our employees, contractors, and the communities in which we operate. Workers were asked to change the way they worked, travelled and how they interacted professionally and socially. Workers’ families were asked to adapt to changing rosters in order to reduce the risks of virus transmission during roster changeovers. Many workers spent extended times on site apart from their families, and many others spent extended times at home with their families working remotely from sites and offices to reduce the risk of virus transmission to enable Northern Star’s operations to continue, and for the benefit of society generally in suppressing transmission of the virus to vulnerable groups.

#### Teamwork
The COVID-19 response and business continuity team assimilated information daily about the virus from multiple sources in Australia and the USA, assessed the risks to continuity in our operations, and engaged with governments and Stakeholders to collaborate in the protection and advancement of our workers’ health and job security during this unprecedented time of global uncertainty. Decision making and communication to the workforce in a compressed timeframe was rapid and effective, with regular revision as the business continuity team’s understanding and knowledge about the virus, its transmission and control of transmission grew. The COVID-19 response and business continuity team assimilated information daily about the virus from multiple sources in Australia and the USA, assessed the risks to continuity in our operations, and engaged with governments and Stakeholders to collaborate in the protection and advancement of our workers’ health and job security during this unprecedented time of global uncertainty. Decision making and communication to the workforce in a compressed timeframe was rapid and effective, with regular revision as the business continuity team’s understanding and knowledge about the virus, its transmission and control of transmission grew.

#### Results
We initiated what changes to the workplace were prudent and necessary to protect lives and livelihoods, to continue our operations to keep jobs open, but at the same time we did not lose sight of what effective recovery from the public health crisis would look like. Our prudent financial management in the end resulted in payment of a special dividend in addition to delivering on our dividend policy of 6% of revenue. We continued our year-on-year operational performance and growth in Resources and Reserves, disciplined mergers and acquisitions, and generated significant increases in mine life visibility. Northern Star has generated some of the highest returns on capital on the ASX over the past 10 years. Our increased Resources and Reserves and low capital expenditure required to deliver annual production growth will enable us to maintain these superior returns into the future, notwithstanding the potential distractions and disruptions presented by the COVID-19 global pandemic.

#### Health and Wellness
Northern Star's proven ability to preserve, protect, and manage the overall physical and mental safety, health, and wellbeing of our people was crucial to our response during the COVID-19 global pandemic. This year has highlighted the agility and flexibility of our people, in being able to respond quickly and effectively to the necessities of social distancing in the workplace, COVID-19 screening and testing regimes, and remote work. The resilience of our people in enduring long lasting changes to the way we live, travel, and work, and the strength in the collaboration and teamwork we have developed with our contractors and support services, are the enduring legacy of Northern Star’s highly effective early response to the pandemic.

In keeping with our STARR Core Values, the teams remained focused on ensuring the health and wellness of all personnel and leveraged our existing business partnerships to:

- rapidly implement social distancing, screening, and testing protocols with the objective of ensuring that no workers contracted the virus travelling to, or while at, work on our sites;
- ensure any workers who contracted the virus received the best possible health care and their close contacts were monitored and tested; and
- protect the rest of the workforce and local communities by implementing appropriate isolation practices where required.

Some key features of these protocols used from time to time during CY2020 are:

- testing all workers prior to arrival at Australian sites and where possible, at Pogo;
- testing of all personnel that develop COVID-19 like symptoms;
- effective social distancing practiced in all areas with increased flights to facilitate reduced numbers on flights and buses;
- chartered flights replaced the use of public scheduled flights, including between Pogo and Australia;
- elevated hygiene practices maintained;
- clear, regular, and concise communications;
- modifications to rosters to reduce roster changeover numbers;
- health screening and testing on a weekly and then quarterly basis, including corporate office; and
- utilisation of Government resources for travel and contract tracing.

We would like to acknowledge the assistance we received from two key business partners in our COVID-19 response; Red Earth Health Solutions and OccuMed.

The external Red Earth Health Solutions team occupational health nurses provided an invaluable resource in health screening over extended periods for our Australian workers at various screening locations and airports prior to arrival at site.

The support and direction from the external occupational physicians at OccuMed enabled our business continuity team and the occupational health and safety team to maintain their agility and operate proactively as COVID-19 risks and responses evolved throughout the pandemic.

Our workers, business partners and Stakeholders demonstrated outstanding teamwork throughout the pandemic, in acceptance of and implementing the changes to how we work and travel to work.

Shawn Clausen, Lead Assay Technician, Pogo Operations

Socially-distanced Managers meeting as part of our COVID-19 response measures, Pogo Operations.
**Case Study: Leveraging internal values and business partnerships**

Each year Northern Star hosts its annual STARR Awards, celebrating those personnel who have demonstrated our STARR Core Values of Safety, Teamwork, Accountability, Respect and Results and presenting them with an award for their ongoing commitment to our business.

One of this year’s awards went to an OHS Administrator who joined the Northern Star team, and mining, for the first time in CY2020.

The employee was recognised for her efforts in the coordination of health testing and ground support processes for our fly-in fly-out workforce within Australia during the peak of COVID-19 restrictions. The support she provided to our personnel, transitioning through airports as part of their jobs, ensured they were updated and informed about changing travel processes in response to the pandemic and that required health testing was conducted with minimal disruption or concern.

This work was supported by our ongoing relationship with OccuMED, a consultancy-based risk management service provider. Developing value and strength within our business partnerships remains a key driver for Northern Star; the relationship that we have built with OccuMED is no exception. OccuMED were integral in the provision of up-to-date health briefs, short to longer term contingency plans, formulation of policies and procedures along with the review and implementation of proactive preventative plans enabling our OHS teams to maintain industry leading pandemic management plans. Their 24/7 on-call support ensured we were able to implement decisions based on the most up to date and current medical advice, allowing the ongoing operation of our sites without risk to personnel.

The employee was recognised (with a STARR award) for her efforts in the coordination of health testing and ground support processes for our fly-in fly-out workforce within Australia during the peak of COVID-19 restrictions.

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**Sustainable Development Goals**

**Safety Performance**

Our alignment with the UN Sustainable Development Goals through our Safety Performance.

- **3.2** By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

**Supporting Children’s medical research**

Through our ongoing support of the Perth Children’s Hospital Foundation and Telethon Kids Institute we can give back to our Western Australian community with over A$2M invested in research programs targeting children’s health since 2011. In CY2020 we assisted Perth Children’s Hospital Foundation to kick-start the second phase of their SAFE-T study - a world-first interdisciplinary research program to improve the safety and care of children requiring tonsillectomies.

**Increasing employee awareness of Modern Slavery risks**

In CY2020 we continued to educate key personnel within our organisation on the risks of Modern Slavery within our supply chains. Northern Star is committed to ensuring the elimination of Modern Slavery, a key human rights risk to vulnerable people across the globe. Departments trained to date include Procurement, Social Responsibility, External Relations, Legal and Site based General Managers. We plan to expand training to other disciplines and new starters throughout CY2021.

**State of Alaska public health assistance**

During the initial phases of the COVID-19 response in the United States, the State of Alaska identified a shortfall in personal protective equipment (PPE) for managing the risk to its health care workers. Northern Star was able to leverage its procurement and logistics expertise to fly 100,000 N95 masks, 400,000 ear loop disposable masks and 12,425 gowns to assist the State of Alaska public health challenges.
As a results-focused business we have significantly increased our ‘pulse checks’ of people and performance, using analytics to drive the customised strategies necessary for multiple sites in different jurisdictions. The increased capture and adoption of analytics has allowed Northern Star to make better informed decisions around our people management strategies based on measurable data. We have developed a number of dashboards to assist Managers and Executives across the business in responding to employee concerns, managing retention, and identifying high talent employees. Our dashboards visually summarise the data, including real time tracking of employees’ onboarding experiences throughout their first year with the Company, reviewing overall job satisfaction of site and occupational groups and ensuring key leadership roles receive the support and development required for their roles.

Northern Star believe our performance is related to how quickly we can assess data points and engage in a fast-feedback framework. The information is available to senior managers within the business to ensure we are able to respond to employee concerns or topics of interest in a timely manner. These dashboards also allow the quantification of differentiating employee needs, performance, turnover and experiences according to whether they work in mining services or elsewhere, are FIFO or Residential, or are based in North America or Australia.

**Employee Wellness**

During the height of the protective measures during lockdown, we also launched GoldSTARR – a wellbeing hub where employees could continue to do exercise classes virtually, participate in mindfulness exercises, complete meditations, and get help with sleep, diet and injury. GoldSTARR also enabled co-workers to give each other recognition shout-outs with the Social Recognition wall, and book online consultations with counsellors, exercise physiologists, and leadership coaches.

A workforce of 4,181 will at times face personal challenges. Northern Star were delighted to be announced as Winners in the AMMA Australian Resources & Energy Group Mental Health Category in October this year. The award recognised our Mental Health First Aid, GoldSTARR and digital psychology services in addition to our sustainable and contemporised contribution to community mental health in the areas in which we live and work.

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**People: key to our success**

“A well and sustainable workforce and community has never been a more critical part of our success than it was in CY2020.”

Peta Slocombe, Executive Manager Capability & Culture

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**Employees Snapshot**

- **2,892**: Our workforce: direct employees & contractors (excluding KCGM).
- **62**: Female participation in our workforce.
- **102**: Current Graduates, Vacation Students, Trainees & Interns (across Australia and Pogo).
- **62**: Current Apprentices (including Trade Upgrades).

**Our STARR Core Values underpin our people focused culture**

Nick Poznick, Project Resource Geologist at Kanowna Belle Coreyard.

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“In selecting the winner of our Excellence Awards (mental health category), the judges could not go past Northern Star’s diverse, inclusive, strategic and industry-leading approach to the wellbeing of their people.”

Executive Director, AMMA
Our Workforce

During CY2020 Northern Star’s workforce continued to grow across our Australian and North American operations, in addition to the expanded employee base resulting from the acquisition of 60% of the KCGM Operations. Our workforce is made up of 1,941 Northern Star employees and 951 contractors as of 31 December 2020, taking our total workforce (excluding KCGM) to 2,892. This represents growth of over 8% compared to this time last year. Including KCGM’s workforce of 859 employees and 430 contractors, our overall workforce reached 4,181 team members as of 31 December 2020.

Table 1: Our Workforce

<table>
<thead>
<tr>
<th>Workforce</th>
<th>Northern Star</th>
<th>KCGM (100%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>1,941</td>
<td>659</td>
<td>2,600</td>
</tr>
<tr>
<td>Contractors</td>
<td>951</td>
<td>430</td>
<td>1,381</td>
</tr>
<tr>
<td>Total</td>
<td>2,892</td>
<td>1,289</td>
<td>4,181</td>
</tr>
</tbody>
</table>

The Company remains committed to local employment and the support of local communities. Employees in our Kalgoorlie Operations (including KCGM) are comprised of an 86% residential workforce (78% excluding KCGM / 96% KCGM only) with 93% of employees in our Kalgoorlie Operations (including KCGM) are comprised of an 86% residential workforce (78% excluding KCGM / 96% KCGM only) with 93% of our American employees are covered by collective bargaining agreements.

Pogo Operations also made up of US employees from Alaska (59%) and other US States (34%). None of our American employees are covered by collective bargaining agreements.

Figure 2: Our age demographics (exclusive of KCGM)

Figure 3: Local Employment

Figure 4: Key culture survey responses

Culture

At the heart of high performing teams, as well as being a key factor in attraction and retention, is a strong organisational culture. Northern Star measures its STARR Core Values, employee engagement levels and employee experience in an annual culture survey which identifies strengths and key focus areas for the year ahead. Our third culture survey saw our highest participation rate with 82% of our workforce responding. We saw improved responses across Core Values and our engagement scores, including:

- Commitment: “When I’m at work I give it my all” 93%
- Engagement: “I feel engaged in my work” 91%
- Support: “My manager cares about my wellbeing” 75%

Figure 5: Key female participation rates (excluding KCGM)

Diversity and Inclusion

Gender diversity remains a constant focus for Northern Star. We understand that continually developing our policies and procedures is vital to ensuring the sustainability of our business and progress of our community. Some of our diversity initiatives include:

- Reviewing and developing paid primary and secondary carer’s leave policies
- Conducting pay parity reviews throughout the year
- Exploring flexible work arrangement options for employees to better support family responsibilities

Female participation rates at Northern Star and KCGM have increased to 21.6% of the workforce. This ratio will change following the Saracen merger, taking into account the Saracen workforce and 100% of the KCGM workforce. The CY2021 Sustainability Report will include more information about the combined group strategies to increase female participation in the workplace such as further development of flexible working practices to encourage retention.

Northern Star again submitted its Workplace Gender Equality Agency (WGEA) report for 2019-2020, along with 4,942 other businesses, covering over 4 million employees in Australia. The WGEA gender scorecard reported that while the representation of women declines with seniority, the representation of women across all manager categories has grown consistently since 2013-2014.

Disability Employment Program

In September our Kalgoorlie Operations devised a strategy to explore other facets of workplace diversity, to improve employee retention, and educate and build awareness around disability employment in particular. The team has established relationships with local disability service providers to co-develop a disability employment plan. From January 2021, we are further developing employment relationships, and commencing interviewing potential candidates. It is expected that this program will help to educate and break through prejudice linked to disabilities, incite change by being recognised for our commitment to diversity internally, strengthen morale and productivity through a more committed and diverse workplace and increase community involvement.
Developing Our People

Northern Star have identified core capabilities required across the business in order to continue to build and retain a sustainable workforce. In October we launched MyDevelopment, a customised hub encompassing e-learning, access to internal and external development opportunities, a manager approval process, and links to an employee’s performance development plans. MyDevelopment makes learning more accessible to our employees than ever before at Northern Star.

Combined with a fully digital platform tracking employee performance, career development goals, role satisfaction and manager ratings, employees have been able to increase their development. This data driven approach also applies fast feedback to the business on new employee experiences and exiting employee feedback.

Recognising that managing change, increasing collaboration required for innovation, and motivating a diverse workforce require highly developed interpersonal skills, our Emerging Leaders workshop has been completed by 91 leaders with a focus on coaching skills and heightened emotional intelligence.

MyDevelopment makes learning more accessible to our employees than ever before at Northern Star.

Skills of the Future

Northern Star continues to be committed to the training and development of professionals and tradespeople within our Company. We are proud to celebrate 6 years of operating our Graduate and Vacation Student programs. Across the business we have onboarded more than 300 new professionals and we plan to grow these intakes through CY2021.

Apprentices

Our dedication to developing skilled tradespeople across our operations continued in CY2020 with a total of 62 apprentices (including Trade Upgrades) engaged in the business as of 31 December 2020. Our apprenticeship program incorporates 7 disciplines:

- Apprentice - Auto Electrician
- Apprentice - Boilermaker
- Apprentice - Communications
- Apprentice - Electrical
- Apprentice - Fitter - HD
- Apprentice - Fitter - LV
- Apprentice - Mechanical

Recruitment for our CY2021 intake is currently underway and we expect to engage an additional 13 apprentices.

Figure 7 Apprentices as of 31 December 2020

Graduates

Our two-year graduate program has been running for seven recruitment intakes across our Australian Operations, incorporating five mining related disciplines to date:

- Graduate Mine Engineer
- Graduate Geologist
- Graduate Metallurgist
- Graduate Surveyor
- Graduate Geotechnical Engineer

The program has proven effective in engaging and retaining talented young professionals within our business. As at 31 December 2020, 49 graduate students are currently placed in our Australian operations. The program was extended to our Pogo Operations in Alaska, with students completing their first year through CY2020. A total of 14 students are currently undertaking the graduate program in Alaska.

In CY2021 we are adding an Environmental discipline to the recruitment process and will see our first two Environmental Graduates join the business at our Kalgoorlie and Yandal Operations.

Vacation Students

Our Australian vacation work experience and Alaskan intern programs are designed to provide a hands-on experience that allows students an opportunity to gain insight into employment within the mining industry and develop the skills required for their disciplines. The program also provides ongoing casual employment opportunities for further vacation work, and early acceptance into our graduate program.

As at 31 December 2020, we have 37 students across our Australian Operations and 1 intern at our Pogo Operations.

“Since joining as a Graduate in 2016 I have gained experience in daily operation and project roles across 5 different operating plants, covering both free milling and refractory gold. The Graduate program offered me significant opportunities in both technical and personal development.”

Jonathon Clare, Project Metallurgist (Graduate Metallurgist 2015/2016 intake)
“Northern Star continues to be committed to the training and development of all our people within our Company.”

Luke Creagh, Chief Operating Officer
Case Study: Flexible Work Arrangements - Operational Roles

Northern Star is continually focussed on exploring flexible working arrangements to support our workforce and increase diversity across the business.

Implementing flexible working arrangements for operational staff employed in shift work has generally been perceived as more challenging than those for office-based personnel. With a workforce comprising a large proportion of operationally based shift-workers, shifting this mentality within the mining industry remains a focus for Northern Star, as a vital piece in our retention of talent to support our high performing teams.

During CY2020 and in the midst of COVID-19 restrictions, Rebekah Smiles, Senior Metallurgist at our Kalgoorlie Operations, proactively developed flexible working arrangements for a site-based leadership role, motivated by her family's change in circumstances as they welcomed their daughter to the world, motivating a desire for improved workplace flexibility. With support from Northern Star, Rebekah transitioned to a part-time leadership role which also incorporated working from home optionality, in which she is excelling - working strategically with the processing teams to maximise value across our Kalgoorlie Operations. Rebekah demonstrated valuable leadership and team skills in developing the part-time role and the flexible working arrangements. Rebekah's success is testimony to the value of flexible working arrangements to both Northern Star and its employees.

People Performance

Our alignment with the UN Sustainable Development Goals through our People Performance.

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

Supporting our community during COVID-19

With over half of our employees living locally in our areas of operation, ensuring they have access to adequate services and business within the local community is a priority for Northern Star. COVID-19 presented numerous challenges for the regions we operate in, including local businesses, not-for-profits, and government bodies. The Board approved the establishment of a $10 million fund to assist with COVID-specific donation and sponsorships to help these communities. One example is our partnership with the Kalgoorlie-Boulder Chamber of Commerce and Industry in developing supportive grants to financially assist local businesses within the Goldfields region of Western Australia.

5.1 End all forms of discrimination against all women and girls everywhere

Exposure to the mining industry for young women

Supporting initiatives that enhances the skills, confidence and capabilities of young women is critical to supporting gender parity in the communities in which we operate. Three initiatives we supported in CY2020 include the Focus on Mining Camp, Shooting Stars and Goldfields Girl programs. The Focus on Mining Camp takes a group of female high school students from across Western Australia to the Goldfields for an in-depth look around the Curtin Kalgoorlie university campus and nearby mine sites. Shooting Stars is an organisation we support through the Gold Industry Group’s sponsorship of Netball WA. It is an educational program centred around netball, to encourage greater school engagement amongst young Aboriginal girls and women. Goldfields Girl provides a series of workshops focused on employment, goal setting, community development, mental health and wellbeing to young Aboriginal and Torres Strait Islander women in Kalgoorlie to increase confidence, resilience, and their capacity to become young leaders within their communities.

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Supporting vendors with disability employment programs

At our Pogo Mine we source our core trays/boxes through Career Industries, an organisation devoted to enriching the lives of people with disabilities. Career Industries’ integrated workforce ensures adults with disabilities are provided with the opportunity for meaningful employment alongside more abled individuals in a safe, structured setting.
Sustained environmental performance

“We are proud of our track record of conducting operations with zero incidents resulting in material harm to the environment.”

Karina Tedesco, Principal Environmental Advisor

Northern Star is committed to protecting the environment and continued to perform well in CY2020. No materially adverse environmental incidents occurred under Northern Star ownership at any of our assets.

Environmental management at Northern Star is governed by the Company’s Environmental Policy and associated Global Standards. All our Operations are guided by the minimum requirements set out in the Global Standards, with site specific management plans and procedures developed where appropriate. Northern Star’s suppliers are required to adhere to the requirements of the Environmental Policy.

Continual improvement to our business’ environmental management systems begins with regularly reviewing processes and procedures at each of our Operations. Annual audits and gap analyses against our Global Standards is a key process for identifying best practice management techniques to implement across our business.

Environmental Snapshot

Number of materially adverse environmental incidents: 0

Number of regulator fines for environmental incident/non-compliance*: 0

Value (A$) of regulator fines for environmental incident/non-compliance*: 0

Continual improvement to our business’ environmental management systems begins with regularly reviewing processes and procedures at each of our Operations.
Greenhouse Gas Emissions

As the Company continues to grow through acquisitions and increased throughputs, our greenhouse gas (GHG) emissions consequently increase. In CY2020 the Company formulated a target setting strategy as part of its ongoing TCFD alignment; details can be found in the Climate Change section on pages 66-67.

Scope 1 and Scope 2 GHG emissions are calculated based on the Australian Government methodology required by the National Greenhouse and Energy Reporting (NGER) Scheme. We capture our Alaskan emissions using this same process to ensure consistency across our emissions reporting.

The emissions disclosed in this report are based on CY2020 data and differ from those reported to the Australian Government via the financial year period NGER report.

Our Scope 1 emissions are associated with electricity generation and mining fleet use across our Operations while our Scope 2 emissions are from purchased electricity for our Pogo, KCGM and Kalgoorlie Operations.

Both Scope 1 and Scope 2 emissions have increased in CY2020 due to the KCGM acquisition and expanded Yandal project. The greenhouse gas intensity also increased this year largely due to the inclusion of KCGM’s open pit operation. When compared with underground mining methods, open pit operations require larger quantities of material be moved to extract ore.

The primary source of Scope 1 emissions is electricity generation at some of our mine sites, generated by reciprocating engine gas power plant or diesel generator support. Our Yandal Operations remain the largest emitter of Scope 1 emissions, as our only operating mine and processing centre to produce 100% of their required electricity onsite.

Our Jundee Operations, which accounts for 39% of our Scope 1 GHG emissions, is covered by the Australian Government’s Safeguard Mechanism. The Safeguard Mechanism sets an emissions baseline for Australian emitters who generate more than 100,000 tonnes of CO2-e each year.

Our largest contributor to Scope 2 emissions is our Kalgoorlie Operations as the processing mills and mines are powered primarily from State grid electricity.

In CY2020 the Company completed an emissions target setting strategy as part of its ongoing TCFD alignment.

Table 2 Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1 GHG Emissions (t CO2-e)</td>
<td>313,264</td>
<td>229,005</td>
<td>209,455</td>
</tr>
<tr>
<td>Scope 2 GHG Emissions (t CO2-e)</td>
<td>380,083</td>
<td>241,901</td>
<td>160,988</td>
</tr>
</tbody>
</table>

Table 3 Greenhouse Gas Intensity (t CO2-e per ounce gold sold)

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Scope 1 &amp; 2 GHG Emissions (t CO2-e / oz)</td>
<td>0.71</td>
<td>0.58</td>
<td>0.56</td>
</tr>
</tbody>
</table>

Table 4 Scope 1 GHG emissions by project (t CO2-e)

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kal Ops</td>
<td>80,576</td>
<td>82,578</td>
<td>90,552</td>
</tr>
<tr>
<td>KCGM</td>
<td>70,566</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paulsens</td>
<td>2,045</td>
<td>1,641</td>
<td>3,102</td>
</tr>
<tr>
<td>Pogo</td>
<td>35,178</td>
<td>29,520</td>
<td>10,432</td>
</tr>
<tr>
<td>Tanami</td>
<td>1,475</td>
<td>2,000</td>
<td>774</td>
</tr>
<tr>
<td>Yandal</td>
<td>124,104</td>
<td>113,260</td>
<td>103,882</td>
</tr>
</tbody>
</table>

Figure 8 Scope 2 GHG emissions by project centre (t CO2-e)
Energy Use and Production

Energy production and consumption at all our Operations is calculated based on the Australian Government methodology required by the National Greenhouse and Energy Reporting (NGER) Scheme. The data disclosed in this report is based on CY2020 data and differs from that reported to the Australian Government due to a differing reporting period.

Energy production includes electricity produced at our sites only, while energy consumption includes all energy consumed from site produced electricity, grid purchased electricity, and fuels burnt such as diesel in vehicles and heating oil in furnaces.

Table 6 Energy Use & Production

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy produced per ounce (GJ/oz)</td>
<td>0.80</td>
<td>0.83</td>
<td>1.09</td>
</tr>
<tr>
<td>Energy consumed per ounce (GJ/oz)</td>
<td>7.81</td>
<td>6.74</td>
<td>7.52</td>
</tr>
</tbody>
</table>

The gas-fired power plant at Jundee is our primary source of energy production, producing 625,709GJ of electrical energy in CY2020. 18.92% of our electricity consumed as a business was supplied from the main electricity grids within each state.

Our Pogo Operations, KCGM and Kalgoorlie Operations are powered by State grids where electricity is generated from a mixture of natural gas, renewables, diesel and coal.

Table 6 Energy consumption by project (GJ)

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kal Ops</td>
<td>2,008,165</td>
<td>2,039,067</td>
<td>2,148,481</td>
</tr>
<tr>
<td>KCGM</td>
<td>1,747,254</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Paulsens</td>
<td>37,288</td>
<td>31,584</td>
<td>59,524</td>
</tr>
<tr>
<td>Pogo</td>
<td>1,001,777</td>
<td>896,872</td>
<td>289,457</td>
</tr>
<tr>
<td>Tanami</td>
<td>14,168</td>
<td>12,530</td>
<td>11,017</td>
</tr>
<tr>
<td>Yandal</td>
<td>2,861,890</td>
<td>2,483,673</td>
<td>2,419,858</td>
</tr>
</tbody>
</table>

Pastoral station, Junee, Yandal Operations.

Table 8 Water Consumption

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total water consumption (ML)</td>
<td>34,249</td>
<td>30,756</td>
<td>17,327</td>
</tr>
<tr>
<td>Total water consumption efficiency (ML use/ounce Au)</td>
<td>34.87</td>
<td>37.69</td>
<td>26.36</td>
</tr>
<tr>
<td>Fresh water consumption (ML)</td>
<td>25,435</td>
<td>24,824</td>
<td>7,627</td>
</tr>
<tr>
<td>Net fresh water consumption (ML)</td>
<td>1,382</td>
<td>504.17</td>
<td>560</td>
</tr>
<tr>
<td>Net fresh water use efficiency (ML use/ounce Au)</td>
<td>0.001407</td>
<td>0.000620</td>
<td>0.000853</td>
</tr>
</tbody>
</table>

Figure 9 CY2020 Total water movement per location (ML)

Table 9 Net freshwater consumption per project (ML)

<table>
<thead>
<tr>
<th></th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kal Ops</td>
<td>171</td>
<td>203</td>
<td>205</td>
</tr>
<tr>
<td>KCGM</td>
<td>896</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paulsens</td>
<td>64</td>
<td>46</td>
<td>96</td>
</tr>
<tr>
<td>Pogo</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tanami</td>
<td>15</td>
<td>49</td>
<td>56</td>
</tr>
<tr>
<td>Yandal</td>
<td>201</td>
<td>206</td>
<td>203</td>
</tr>
</tbody>
</table>
Waste Management

Our Waste Management Global Standard provides guidance on the expectations with regards to minimising and managing waste at our operations. In CY2020 we sustained our waste management processes of prioritising avoidance and recycling practices over waste disposal to landfill. Our Operations encompass broad recycling programs that we aim to continually improve through the identification of additional recycling opportunities.

Key recycling initiatives across our Operations target scrap metal, vehicle batteries, waste oils and greases, and domestic recyclables including paper, cardboard and aluminium. In CY2020 our Junee Operations undertook a HDPE pipe recycling program, where scrap pieces of pipe were chipped for reuse. Figure 9 outlines our key recycled materials. Increases in CY2019 reflect endeavours at our Junee site to look for opportunities to recycle materials as well as the inclusion of KCGM recycling efforts.

In some cases, waste is unable to be recycled such as putrescible or inert wastes. Disposal of these types of general wastes occur at our onsite licenced landfill facilities or they are transported offsite to the local council-managed refuse facility.

Key recycled materials

<table>
<thead>
<tr>
<th>Material</th>
<th>CY2020</th>
<th>CY2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrap metals (vehicular)</td>
<td>2,635 tonnes</td>
<td>1,479 tonnes</td>
</tr>
<tr>
<td>Batteries (vehicular)</td>
<td>21.5 tonnes</td>
<td>21.6 tonnes</td>
</tr>
<tr>
<td>Printer ink &amp; toner cartridges</td>
<td>52 kg</td>
<td>30 kg</td>
</tr>
<tr>
<td>Waste oil</td>
<td>795 L</td>
<td>740 L</td>
</tr>
<tr>
<td>Co-mingled recycling (paper, card, plastics, aluminium)</td>
<td>85.5 tonnes</td>
<td>87.5 tonnes</td>
</tr>
<tr>
<td>Tyres</td>
<td>294</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Hazardous Materials Management

Several hazardous materials are associated with our Operations as a result of mineral processing and mining practices. Those common to all our Operations include hydrocarbons such as oil, grease, and lubricants, tailings materials containing cyanide, and recyclables such as vehicular batteries. Additional hazardous materials associated with some of our Operations include metal and gaseous wastes from processing and elution processes, including arsenic, and sulphur dioxide.

Cyanide is used in gold processing and must be managed to minimise risks to human health and the environment.

Northern Star manages these risks in accordance with our Cyanide Management Standard. This Standard outlines the requirements for the supply, transportation, unloading and storage of cyanide as well as operational considerations. We use the International Cyanide Management Code (ICMC) as a benchmark upon which to manage the risks associated with the use of cyanide and all sites have conducted a gap analysis against the ICMC to identify areas where improvements can be made. Suppliers and transporters of cyanide to our operations are required to be signatories to the ICMC. We continue to keep abreast of the advancements in non-cyanide gold extraction processing.

Arsenopyrite is a common mineral associated with gold ore bodies. This arsenopyrite along with other sulphides trap gold within the mineral particle. To allow the gold to be extracted at the Kanowna Belle processing plant, the arsenic in the ore is volatilised at temperature and captured as arsenic trioxide. The average rate of arsenic trioxide generated is approximately 125kg per day with an average purity of 5-6%.

In CY2019, Northern Star entered into an agreement with an external specialist contractor to transport arsenic trioxide to their new base at their underground mining facility, which is an open kaolin mine and complementary near-surface geological waste repository located near Kalgoorlie. The first shipment was successfully transported in November 2020. To date, approximately 460 tonnes of arsenic trioxide has been received by the facility for safe disposal.

Tailings Management

Tailings are a waste product common to the mining and mineral processing sector, resulting from the processing of ore to retrieve valuable minerals, in Northern Star’s case, gold. Tailings from the gold processing circuits consist of a mixture of very fine solids and water, known as slurry. At our Australian Operations, this tailings slurry is piped to Paddock style tailing storage facilities (TSF) or in-pit TSFs. Paddock TSFs consist of constructed embankments to form a dam in which tailings are discharged, while in-pit TSFs utilise disused open pit mines for the same purpose.

Our Pogo Operations manages a Dry Stack Tailings Facility (DSTF) which receives tailings material that has been filtered to remove most of the moisture content.

Tailings features currently active under Northern Star’s management include:

- Paddock-style tailings storage facilities - 10
- In-pit tailings facilities - 3
- Dry stack tailings facilities – 1

We consider all our active tailings facilities to be low risk on a global scale due to the location of wet tailings facilities within arid or semi-arid regions with low annual rainfall. There are an additional 46 tailings facilities that are not currently in use across our operational centres and exploration projects, 19 of which have been rehabilitated. Details can be found in Appendix E.

In CY2020, we produced 13,285,499 tonnes of tailings material. 923,388 tonnes (7%) of total tailings did not contain cyanide. Our total tailings produced includes:

- 304,491 tonnes (<3%) tailings from ore processed via third party toll treatment and deposited at third party tailings facilities and 37,399 tonnes (<1%) tailings from third party ore processed at our Kalgoorlie Operations under tail treatment arrangements.
- The amount of ore we processed via third-party mills decreased in CY2020.

The Tailings Management Standard ensures our tailings storage facilities are managed through all phases of their life cycle in compliance with the Company’s Environmental Policy. Third party engineers audit our facilities to ensure their geotechnical stability.

We constantly assess the methods by which we are auditing our facilities to improve our tailings risk management. The Church of England's tailings disclosure request, initially completed in CY2019, has been reviewed and updated and is appended to this Report in Appendix E. The recent update incorporates tailings facilities inherited through our Yandal and KCGM acquisitions and reflects the most up to date volume and audit details.


In CY2021, we will conduct a compliance analysis against this voluntary standard and disclose the key findings in our CY2021 Sustainability Report.

<table>
<thead>
<tr>
<th>Tailings Production (Tonnes)</th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalgoorlie Operations</td>
<td>3,246,079</td>
<td>3,246,079</td>
<td>3,246,079</td>
</tr>
<tr>
<td>KCGM</td>
<td>6,460,419</td>
<td>6,460,419</td>
<td>6,460,419</td>
</tr>
<tr>
<td>Pogo</td>
<td>1,040,876</td>
<td>1,040,876</td>
<td>1,040,876</td>
</tr>
<tr>
<td>Yandal</td>
<td>2,512,567</td>
<td>2,512,567</td>
<td>2,512,567</td>
</tr>
</tbody>
</table>

Wherever possible, we aim to reuse tailings material as paste fill to assist our underground mining operations. The paste used in this process is a mix of tailings sourced from the mill and cement. During CY2020 12% of tailings material was reused at our Kalgoorlie Operations and 14.4% of tailings was reused at our Pogo Operations. Due to the mining method and geological conditions at our Junee Operations, paste is not currently required for use underground.
Waste Rock Production

Waste rock is the material mined during our Operations that does not include gold-containing ore. Waste rock generated from mining activities at our Operations is stored in waste rock landforms, backfilled underground or stored in sterile pits. Backfilling waste rock is preferred, where mine planning permits, as it reduces safety risks associated with open surface and underground voids, minimises surface waste rock landform creation, and reduces the visual impact of mine landforms to the surrounding environment.

Total waste rock production this year increased on our CY2019 volumes due to the addition of KCGM data, which incorporates a large open pit operation. Due to the nature of open pit mining, it generally produces larger quantities of overburden, or waste rock, than underground mining methods. In CY2020 1,771,814 tonnes of waste rock mined was backfilled into open pits or completed stopes. This is an increase on the total amount of waste rock backfilled in CY2019, largely due to increasing ability to incorporate backfilling into the mine plan due to suitability of underground stopes for backfilling, access to sterilised disused pits or areas of pits, and the location of mining relative to suitable pits or stopes.

Table 11 Waste rock production (tonnes)

<table>
<thead>
<tr>
<th>Waste rock production (tonnes)</th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste rock production (tonnes)</td>
<td>23,583,885</td>
<td>6,923,224</td>
<td>2,796,480</td>
</tr>
</tbody>
</table>

Kalgoorlie Ops | 978,889 | 112,322 |
KCGM | 613,477 |
Pogo | 879,992 |
Yandal | 2,419,957 |

Key
- Surface disposal
- Backfilled

Environmental Performance

Northern Star appreciates our responsibility to protect the biodiversity values at all our Operations, many of which are in remote environments. We also appreciate the opportunity presented by operating in these locations as our presence provides access for biodiversity research in areas otherwise inaccessible or very difficult to access.

We manage the biodiversity onsite via the Biodiversity Management Global Standard and operational level management plans and procedures. Biodiversity Plans are developed at our Operations to manage the risks associated with flora and fauna specific to the regional environments. Management Plans incorporate the requirements of State and Federal legislation in addition to our internal minimum requirements.

The success of our management practices are enhanced through partnerships and engaging with Indigenous Ranger expertise. The skill sets and knowledge that Indigenous Peoples possess assist our site-based employees in developing the necessary skills to identify and manage key flora and fauna species.

Pre-clearance flora and fauna surveys are completed at our Operations as determined by a risk assessment process. Greenfields areas generally require third-party desktop reviews and subsequent field surveys, whilst near-mine disturbance is captured under our site-based Disturbance Permit processes. None of our Operations will be materially impacted by interactions with critical species.

Biodiversity Statement

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Reclamation and Closure Preparedness

All of our Operations globally have regulator approved Closure and Reclamation Plans with related financial assurance. Detailed planning and responsible estimation and reporting of the cost of mine closure at our Operations has always been a priority, and we ensure adequate capital is available for these works when required.

Progressive reclamation and closure works are becoming an increasing focus for Northern Star, with the introduction of a dedicated progressive rehabilitation fund in our annual budgets. Several projects were identified for completion during CY2020 but were not completed due to the COVID-19 pandemic, as our Environment Staff transitioned to working from home and contractors were restricted from entering sites. It is anticipated that these projects will continue in CY2021 at those sites where COVID-19 related restrictions on staff and contractor movements are no longer in place.

In CY2020 we rehabilitated over 61 hectares of land, a significant drop on previous years resulting from the COVID-19 restrictions described above. We continue to complete rehabilitation on legacy exploration disturbance inherited through our acquisitions in the Goldfields and Yandal areas.

Table 12 Rehabilitation completed

<table>
<thead>
<tr>
<th>Rehabilitation completed (ha)</th>
<th>CY2020</th>
<th>CY2019</th>
<th>CY2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;61</td>
<td>&gt;350</td>
<td>&gt;400</td>
</tr>
</tbody>
</table>
Case Study: Waterwise Business

In CY2020 Northern Star’s Kanowna Belle Operation was acknowledged as a 2020 Gold Waterwise Business by the Water Corporation, the principal supplier of water throughout Western Australia.

In CY2020 Northern Star’s Kanowna Belle Operation was acknowledged as a 2020 Gold Waterwise Business by the Water Corporation, the principal supplier of water throughout Western Australia. The award recognised Kanowna Belle’s 11.43% decrease in water use from 2018 to 2019. Significant water-recycling processes are incorporated into the design and operation of the processing plant as this is where a significant proportion of the site’s total water is used. Daily water use monitoring has been key to ensuring valuable freshwater is used to full capacity and recycled wherever possible. Storage dams are all equipped with floating liners/covers to prevent evaporation and leak detection systems enable real time response if required.

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

Indigenous Desert Alliance

Northern Star is proud to have extended its support for the Indigenous Desert Alliance (IDA) into its 6th consecutive year. The Australian Desert is one of the largest and most environmentally and culturally connected areas on the planet. Our support for the IDA correlates with our recognition of the vital role local Indigenous groups play in managing Australian Desert country. The IDA is committed to supporting Indigenous land managers and rangers working on desert country through various initiatives including the annual IDA Conference, the largest annual gathering of Aboriginal Rangers in Australia.

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.

Supporting research into mining pit lakes

Jundee and Kanowna Belle partnered and participated in a pit lake study initiated by ChemCentre and involves CSIRO and Minerals Research Institute of Western Australia (MRIWA). They aim to build a database of mining pit lakes across Western Australia to assist in understanding how the water bodies behave over time. The project is expected to run for three years with the final report made available to public for use in predicting the behaviour of pit lakes during closure.

14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.

Monitoring fish health in Alaskan rivers

Each year, Pogo employees collect juvenile Chinook salmon fry from the Goodpaster River, a tributary of the Yukon River Drainage in Alaska, to monitor changes in fish health over time. Eighteen years of data collection, beginning in 2002 prior to active gold production, confirm that upstream and downstream results from the fish analyses have continued together on a close trend, indicating no impact on metals accumulation due to the presence of the Pogo Mine. In addition, we have partnered with organisations such as Bering Sea Fisherman’s Association and the Alaska Department of Fish and Game to perform additional research on the fish populations of the Goodpaster River.
Increasing our alignment with TCFD recommendations

“We continue to increase our understanding of the climate-related risks at Northern Star through our TCFD work with Energetics.”

Ryan Gurner, Chief Financial Officer

Strengthening our alignment with TCFD recommendations

Climate change has the potential to transform the planet, the way we live and the way we conduct business. Northern Star is committed to understanding how both the physical impacts of climate change and the transition to a low carbon economy might affect our business, integrating these factors into our strategic planning, and ultimately reducing the impact. We are also committed to increasing our disclosure of climate relevant information to help our investors and other Stakeholders understand our approach and the potential impact of climate change on our business. We are therefore working to meet the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD).

This reporting is informed by our analysis of the climate risk and opportunities faced by the business. These are considered quarterly by the Board through its quarterly ESS Committee meetings, the Audit & Risk Committee’s review of the Company wide risk register, and the Board’s review of the two physical climate risks on the corporate risk register.

Northern Star’s Social Responsibility & External Relations Manager has climate-related responsibilities which include assessing and/or managing climate-related issues and reports to the Executive Chair as well as to the ESS Committee at ESS Committee meetings.

TCFD alignment is a journey we commenced in 2018 when climate-related risks first appeared on our risk registers. A total of 28 transitional and physical risks were identified in CY2019 as having the potential to impact Northern Star by 2030, using Northern Star’s corporate risk register assessment criteria and the Intergovernmental Panel on Climate Change’s (IPCC) high emissions scenario RCP8.5 model. Of those 28 inherent risks, two were considered material enough to be classified as high inherent risks (groundwater scarcity for Australian operations, and flooding for Australian and Alaskan operations).

We aspire to disclose the financial impact of climate-related change on Northern Star and its business strategy, and to disclose how resilient that strategy is, so that investors and other Stakeholders are well informed about how Northern Star is positioning itself in relation to climate-related risks and opportunities.

Update on CY2019 commitments

Continuing our TCFD journey in assessing and mitigating climate-related risks, in the CY2019 Sustainability Report we said that in CY2020 we would:

- **Risk Management** - identify current mitigating practices and controls, and assess the residual risk rating after applying those mitigating practices, to arrive at a residual risk rating. The residual risk rating for the two high inherent risks is disclosed in Table 13. Refer to Appendix C – Climate-related risks for the full list of climate-related risks.
- **Risk Management** - identify potential next steps to further mitigate, to improve the residual risk rating over time. That information is set out in our climate change related risk register, summarised in Appendix C – Climate-related risks, and will be subject to 6-monthly reviews by the Audit & Risk Committee and ESS Committee.
- **Strategy** - consider the opportunities arising from climate change to our business. That information is set out on page 67.
- **Strategy** - develop scenario analysis and disclose scenario descriptions and high-level impacts. That information is set out in on pages 62-66 with supporting information provided in Appendix B – Climate Change Scenario Analysis Details.
- **Metrics and Targets** - Establish metrics and targets used to assess and manage relevant climate-related risks and opportunities. We have developed metrics to track our performance in climate-related areas over time and identify opportunities to further improve data collection. These metrics will form the basis for setting meaningful climate-related targets. We have developed a staged action plan towards setting and disclosing climate-related targets. Information on our progress in this area is on page 67.
Figure 13 Our phased alignment with TCFD recommendations – progress in CY2020

The below sets out our key achievements of CY2020, our short term plans and our medium term aspirations for further progress.

A note on useful climate-related information

Northern Star recognises that increasingly the demand for consistency and comparability in climate-related information reporting places an emphasis on the quality and effectiveness of the information.

We aim to disclose climate-related information in an effective way, so the information is:

- relevant and useful for financial decision making;
- specific and complete;
- clear, balanced and understandable;
- consistent over time;
- comparable;
- reliable, verifiable and objective; and
- timely in its release.

Northern Star ranks the following climate-related information in order of usefulness for decision making:

- how climate-related factors affect Northern Star’s operations, on a geographical basis;
- key metrics using operational data for the past financial year, and observing trends over successive financial years;
- scope 1 greenhouse gas emissions for the past financial year, and understanding trends over successive financial years;
- climate-related targets related to the Scope 1 GHG emissions, and their time periods;
- climate-related targets related to the Scope 2 GHG emissions, their time periods;
- Scope 2 GHG emissions for the past financial year, and understanding trends over successive financial years;
- climate-related targets related to the scope 2 GHG emissions, and their time periods;
- Climate-related targets related to the TCFD recommended metrics and their time periods;
- Board consideration of climate-related issues in capital expenditure, divestments and acquisitions, and support for measurable Key Performance Indicators to achieve progress in meeting climate-related targets.

Northern Star’s priority is to recognise and measure the impact of climate change on our operations, according to geographical location. This is the most useful, decision-relevant, information for our Board and management to know in assessing climate-related risks and opportunities for Northern Star. It is also threshold climate-related information for investors in Northern Star, in relation to investment decisions.
Climate-related scenario analysis

Northern Star’s business may be affected by both the physical impacts of climate change and the transition to a low carbon economy with the most significant effects likely to play out over the medium to long term.

Both physical and transitional risk are affected by a wide range of factors – including public policy, technology, and market change - that are hard to forecast accurately. Scenarios help Northern Star consider how these variables may plausibly impact the company’s operations over time.

Climate-related scenarios allow Northern Star to explore and develop an understanding of how the physical and transitional risks and opportunities of climate change might plausibly impact Northern Star’s operations over time.

During CY2020, to build our capacity in relation to climate-related strategy, we conducted scenario workshops together with our consultants Energetics, requiring and enabling critical strategic thinking and the testing of business as usual assumptions underpinning Northern Star’s business strategy. In this report, our progression on the TCFD journey is evidenced by the disclosure of scenario analysis information and disclosing plausible ways in which climate-related factors could affect our operations on a geographical basis. We disclose the potential high-level impacts on these operations, and we confirm our medium term aspiration to consider the benefits of quantitative modelling of key climate risks to estimate financial impacts on our operations.

Scenario analysis is a strategic planning and risk management tool which allowed Northern Star during CY2020 to:

- assess the potential financial effect of climate-related change on Northern Star’s operations;
- test whether our business strategy is flexible and adequately accommodates these climate-related risks and opportunities; and
- test how resilient that strategy is, and where necessary identify options for increasing our strategic and business resiliency to plausible climate-related risks and opportunities, by making adjustments to strategic and financial plans, under a given set of assumptions, according to a range of plausible but challenging hypothetical future constructs.

Key is to use the scenario analysis to improve critical strategic thinking – to test whether current business as usual assumptions are the correct assumptions on which to base a business strategy which is resilient to climate-related change. By resilient, we mean whether our business strategy is able to tolerate disruptions or adapt to changes or uncertainties in the business environment that might affect Northern Star’s performance, and to remain effective under most situations and conditions.

By commencing this scenario analysis work during CY2020, there is time to develop and improve on that capability, to ensure Northern Star may better identify and disclose how its strategy may need to change and develop in order to accommodate potential climate-related risks and opportunities. Our future TCFD disclosures will include how we adjust and develop our strategy in response to the climate-related scenario analysis results.

Increasing our understanding and action

Kirstie McKay at our Corporate office, Subiaco, Western Australia

“We are proud of what we are doing at Northern Star to make a sustainable future possible for our employees, Stakeholders and the communities in which we operate.”

Kirstie McKay, Senior Sustainability Advisor
Energetics. The outcomes of the workshops and follow other senior management who were previously methodological approach is provided in Appendix B. emissions levels and socioeconomic conditions of three scenarios concerning future likely global workshops to define criteria for the development as well as internal priorities established through Northern Star drew on TCFD recommendations Scenario selection In line with the Paris Agreement to reduce greenhouse gas emissions and accelerate the transition to a lower carbon economy (“holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels”), consistent with the TCFD Recommendations and in order to provide comparable information, Northern Star has used a 2°C scenario (a pathway and an emissions trajectory consistent with limiting the average global temperature increase to a temperature range around 2°C above pre-industrial levels with a certain probability). The 2°C scenario was selected as it has greater data availability than the 1.5°C scenario. Two other scenarios most relevant to Northern Star have also been used; a 2-3°C scenario and a >4°C scenario. These scenarios were selected to be included as they were commonly used by our peers, which increases the comparability of results for our external Stakeholders. These two scenarios illuminate our future exposure to climate-related physical and transitional risks and opportunities in relation to gold production and demand for gold up to 2050. The temperature scenarios were rounded out with the inclusion of Shared Socio-Economic Pathways (SSP) to develop three robust scenarios of the future that could be used to understand the resilience of our operations and business strategy, to 2030 and 2050. The 2°C scenario was combined with SSP as it has a narrative that aligns most closely to a low emissions trajectory. The >4°C scenario was combined with SSP as it is the only possible option for this temperature scenario. Finally, the 2-3°C scenario was combined with SSP as it provided divergence in economic growth and ensured we were testing our business with three distinct scenarios. Scenarios and their impacts Northern Star drew on TCFD recommendations as well as internal priorities established through workshops to define criteria for the development of three scenarios concerning future likely global emissions levels and socio-economic conditions (Table 15). More information about data sources and methodological approach is provided in Appendix II. Executives including the CEO, CFO and COO and other senior management who were previously involved in the multi-disciplinary workshops in CY2019 to validate physical and transitional risks, reconvened twice during CY2020 in workshops facilitated by Energetics. The outcomes of the workshops and follow up meetings were consensus on the quantity and choice of scenarios, and an agreed prediction of how Northern Star’s operations would be likely to respond to each scenario. There was discussion of how our strategy could adapt in response to each scenario. Options were grouped into “no regret” options (which could be beneficial under all three scenarios) and “watch and wait” options (that would be more relevant to some but not all three scenarios). This strategy development remains a work in progress. In addition, throughout CY2020 the ESS Committee of the Board discussed climate risk outlook in Australia and trends in regulator, investor, and financier expectations, following direct engagement with our investors and proxy advisors. Table 15 Key scenario parameters TCFD Criteria Northern Star’s Criteria • Provide diversity of potential future climate states • Include a scenario that tests resilience to international trade challenges • Be relevant to Northern Star operations and the gold sector • Explore relevant transition and physical climate-related risks and opportunities • Be relevant to Northern Star operations and the gold sector • Represent plausible outcomes • Data underpinning scenarios to come from credible sources • Include challenging futures that significantly diverge from business as usual • Align with industry best practice • Include a low emissions scenario (2°C or less) • Demonstrate leadership Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Northern Star’s alternative climate change scenarios Scenario selection In line with the Paris Agreement to reduce greenhouse gas emissions and accelerate the transition to a lower carbon economy (“holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels”), consistent with the TCFD Recommendations and in order to provide comparable information, Northern Star has used a 2°C scenario (a pathway and an emissions trajectory consistent with limiting the average global temperature increase to a temperature range around 2°C above pre-industrial levels with a certain probability). 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What the scenarios each mean for Northern Star and its business strategy

In Scenario 1, the Proactive Effort scenario, Northern Star’s underground mining expertise may be more valued, due to its lower environmental impacts. Our Tier 1 assets and continued work on transparent climate-related disclosure and action may enhance our reputation as a sustainable gold miner. However, as we recognise, our current lack of emissions reduction targets and plans consistent with Paris Agreement goals would detract from this. Northern Star has developed a target-setting strategy, for more details see page 63.

The Proactive Effort scenario would involve the most challenging transition period compared to the other two scenarios. However, it is the scenario which is most aligned with Northern Star’s Sustainability Vision and is likely to be most advantageous for both our business and the planet.

In Scenario 2, the Passive Response scenario, our existing focus on increasing and maintaining performance of the existing fleet and machinery positions us well for cost minimisation, while our gold processing plant expansion strategy places us at an advantage in underground mining.

The physical impacts of climate change are of higher concern under scenarios 2 and 3, either due to our potentially limited ability to adapt due to higher overall costs (Passive Response) or through increasing uncertainty linked with global ability to manage growing impacts and safety concerns related to operating at higher temperatures (Regressive Action).

All scenarios would require some adaptation to the physical impacts of climate change. However, the burden and cost of adaptation would be greatest in Scenario 3, the Regressive Action scenario, to 2050, and beyond.

Opportunities to enhance Northern Star’s resilience were identified, including “no regrets options”, representing actions that are beneficial across all scenarios, and “watch and wait options”, which are actions that are advantageous under only one or two scenarios. These opportunities will be considered in greater detail during 2021 as part of assessing the outcomes of the scenario analysis with a view to adapting and developing our strategy in relation to climate change.

In Scenario 3, the Regressive Action scenario, there is potential for higher consolidation in the mining sector as demand grows, expansion is easier, and globalisation is high. Northern Star has increasing opportunity to capitalise on our distinctive expertise in underground mining.

The physical impacts of climate change are of higher concern under scenarios 2 and 3, either due to our potentially limited ability to adapt due to higher overall costs (Passive Response) or through increasing uncertainty linked with global ability to manage growing impacts and safety concerns related to operating at higher temperatures (Regressive Action).

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Metrics and Targets

Based on the climate-related risks identified in CY2019, we developed a set of metrics which will be monitored over time to understand how climate-related risks and other operational risks are changing and how our performance is tracking. To determine the most relevant metrics to monitor, we referred to the SASB Standard’s Materiality Map for Mining and Metals. Historical datasets are being collated and a range of climate-related performance metrics generated, to track Northern Star’s performance in climate-related areas over time.

The metrics Northern Star are monitoring so far comprise scope 1 and scope 2 emissions (absolute emissions and per ounce of gold produced), dust, tailings recycling intensity, number of heat-related illnesses, and total costs incurred due to extreme climate related events.

Northern Star understands the imperative for all industries to contribute to global decarbonisation. In CY2020 we conducted a benchmarking exercise against industry peers with an emphasis on gold mining assets and emissions-intensive companies, to set a baseline reference point for Northern Star’s actions in relation to setting climate-related targets.

This has informed the development of a staged action plan for setting and achieving emissions reduction and other appropriate climate targets.

Our staged action plan will ensure the targets set by Northern Star are well defined, credible, and achievable. It recognises that the merger with Saracen will change the company’s footprint and reflects the time required to assess the merged entity’s environmental footprint, taking into account mine plans and operational requirements.

As part of the process, we will consider options such as energy efficiency, renewable energy, fuel switching, supply chain engagement and offsets. Consideration will be given to appropriate frameworks, like the Science Based Targets Initiative, to build highly credible emissions reduction trajectory that includes long term goals and interim targets where appropriate.

Opportunities

Understanding the potential effects climate change may have on our business allows Northern Star to identify opportunities as well as potential risks. Through the scenario analysis work completed in CY2020 we were able to understand the aspects of our business that provide us with the greatest opportunity to respond to climate change in a positive and proactive way.

We are taking actions to address the risks and leverage potential opportunities in three key focus areas:

1. Understanding our energy mix and altering this mix where available. Potential options include the implementation of renewable energy opportunities like modular, transportable power hybrids for short-life operations.
2. Leveraging energy efficiencies across our Business such as the existing practice of regularly changing out operational fleet.
3. Water usage and recycling opportunities for our Australian assets, including the installation of a thickener at Jundee, Yandal Operations.

In CY2020 we developed a staged action plan towards setting and achieving climate-related targets for reducing greenhouse gas emissions.

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Opportunities

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3. Water usage and recycling opportunities for our Australian assets, including the installation of a thickener at Jundee, Yandal Operations.
Governance is an important foundation for our business

“Good governance fosters sustainability, creates credible, authentic values and helps Northern Star achieve those values. Northern Star also realises long-term benefits from good governance, including reducing risks, attracting new investors and shareholders and increased stakeholder confidence.”

Hilary Macdonald, General Counsel & Company Secretary

Corporate Governance

Our STARR Core Values of Safety, Teamwork, Accountability, Respect and Results are the foundation on which we conduct our business and underpin our commitment to upholding a corporate governance framework, policies and practices of the highest standard. Strategic planning, accountability, ethical business practices, effective risk management, well-managed legal and regulatory compliance, and transparency to our Stakeholders are all elements of our governance commitment.

As reported in our FY2020 Corporate Governance Statement available here: https://www.nsrltd.com/about/corporate-governance/, Northern Star elected to achieve early alignment with the new fourth edition of the ASX Corporate Governance Council Principles and Recommendations (Recommendations). Throughout CY2020, the Company’s corporate governance practices were in line with all Recommendations, except Recommendation 2.5.

The majority of the Board, being five of the six Directors, are Non-Executive Directors and considered independent in accordance with the Company’s Policy on Assessing the Independence of Directors, in line with the Recommendations. Two of the six Directors (33%) are female and Board tenure ranges from 18 months to 13 years.

The performance and skillset of the Board is reviewed by the Lead Independent Director in conjunction with the Chair each year. The Non-Executive Directors formally meet at least four times a year without management present, to promote free and frank discussion, including appraisal of the Executive Chair’s performance and the effectiveness of the Chief Executive Officer and Executive Chair roles.

The Board oversees Northern Star’s sustainability objectives. The Board’s Audit & Risk Committee, and Environmental, Social & Safety (ESS) Committee, also have responsibility to assist with governance and risk management oversight, as follows:

• The Audit & Risk Committee oversees the internal financial control systems and risk management systems and assessments, and makes recommendations to the Board. The Committee has four members, all Non-Executive Directors, one of whom has relevant financial qualifications and experience.

• The ESS Committee assists the Board to implement our Sustainability Vision, providing deeper oversight in relation to workplace health and safety, diversity, environmental risk management, community and social responsibility, business ethics and commercial innovation. The ESS Committee has three members, two independent Non-Executive Directors and the Executive Chair, and is chaired by a Non-Executive Director with demonstrable, relevant experience - currently Mary Hackett, all of whom have considerable financial literacy, including the Lead Independent Director with a chartered accountancy background.

Good governance fosters sustainability, creates credible, authentic values and helps Northern Star achieve those values. Northern Star also realises long-term benefits from good governance, including reducing risks, attracting new investors and shareholders and increased stakeholder confidence.

Hilary Macdonald, General Counsel & Company Secretary

Corporate Governance

That the chair of the board of a listed entity should be an independent director, and not the chief executive officer of the entity. Although Northern Star has an Executive Chair, Mr Beament does not also act as CEO. In addition, our Lead Independent Director acts as Chair of the Board in the Executive Chair’s absence or where the Executive Chair is unable to act due to his lack of independence.

John Fitzgerald, Lead Independent Director

Northern Star Resources Sustainability Report 2020
In addition, the Remuneration Committee considers appropriate levers to motivate behaviours, when setting Key Performance Indicators in the remuneration framework. Risk management features in the annual short term incentive performance measures for leaders. For instance, the FY21 remuneration framework provides target and stretch targets for reduction in the Total Recordable Injury Frequency Rate, seeking to continue Northern Star’s trend in outperforming the industry average for the last three years. To reinforce governance standards, the Board retains discretion to not award STI (or long term incentive) performance rights or cash incentives, regardless of KPIs being met, and has in the past exercised this discretion downwards to recognise a serious failing in safety. In addition under the terms of the Company’s performance rights plans, the Board retains discretion to exercise clawback or malus (enabling cancellation of unvested performance rights or retrieval of proceeds of sale of vested, sold shares within 2 years of issue) having regard to governance concerns such as material financial misstatements, and significant legal, regulatory or policy non-compliance. To date no clawback or malus has been exercised but these Board tools are important for stakeholders to gain confidence that consequences can flow from lapses in governance.

The Board of Directors are ultimately accountable for Northern Star’s positive corporate culture and governance practices, including ensuring compliance with the Company’s Code of Conduct, policies and procedures, and the legislative and regulatory framework in which we operate. The Board are committed to maintaining a sound understanding of corporate governance requirements, emerging trends and stakeholder expectations, and regularly review our principles and processes to ensure we observe and maintain best practice in this space.

Risk Mitigation and Management

The Company acknowledges that there is risk associated with all business activity and that maintaining a strong culture, backed by strong risk management processes, is essential to effective and robust management of risk. We also understand that Stakeholders value greater transparency in the disclosure of risks and how they are managed.

The Board’s risk appetite is embodied in the Company’s risk registers which are maintained and regularly reviewed across all Operations in the business. The regular discussion and identification of inherent risks, the rating of their possible consequences and impact on the business; and the current and planned mitigation actions is monitored on a quarterly basis through a risk register review process overseen by the Audit & Risk Committee, the results of which are regularly reported to the Board. The Audit & Risk Committee is also supported by our internal audit function which assists the Board in fulfilling its responsibilities regarding compliance and risk management.

Our vision is to continue to build a safe, quality mining and exploration company, focused on creating value for our Shareholders, complying with all laws and company policies and providing a moral compass for the way Northern Star does business. These policies are provided to all new employees and contractors.

The Code of Conduct sets out our objectives of:
- identifying risk management as a fundamental aspect of the Company’s decision-making processes;
- seeking to empower all levels of the business to assess and manage risks;
- ensuring material risks are identified, objectively assessed and where appropriate risk mitigation actions are effected to reduce residual risk;
- reviewing risk registers on a quarterly basis, which are reported to and assessed by the Audit & Risk Committee; and
- the establishment of crisis management systems across the business.

For a summary of the Company’s environmental, social and safety risks to which the Company has a material exposure as at 30 June 2020, disclosed in accordance with Recommendation 7.4 of the ASX Corporate Governance Council Principles & Recommendations, see the Risk Management section of our FY2020 Annual Report published on our website: www.nsrltd.com/investor-media/reports/annual-report/

Ethical Business Practices

Northern Star is committed to upholding lawful, moral and ethical practices in our business operations and in our dealings with suppliers, Stakeholders and the local communities in which we operate. We have zero production in countries that have the 20 lowest rankings in Transparency International’s Corruption Perception Index (CPI).

Our STARR Core Values, Code of Conduct, Anti-Bribery and Anti-Corruption Policy and associated policies hold our Directors, management and employees accountable to exercise integrity in their decisions and behaviour, act ethically in the best interests of our Stakeholders, comply with all laws and company policies and provide a moral compass for the way Northern Star does business. These policies are provided to all new employees and contractors.

Transparency in disclosure

Being transparent in relation to governance and risk is fundamental to building and maintaining Stakeholder trust and investor confidence. This underpins the substance of our disclosures.

In addition to the rigorous applied to its continuous disclosure practices, Northern Star regularly reviews and enhances its periodic disclosures to ensure openness, fairness and accountability in our external communications.

As in previous years, we invited Shareholders to submit questions to our Board and Auditors in advance of our Annual General Meeting and welcomed further questions from the floor.

We also pursue regular meetings with proxy advisors. These practices provide opportunities for deeper clarity, insight and transparency on our business operations and governance practices, for the benefit of all Shareholders and Stakeholders.

We continue to voluntarily publish the Company’s annual Tax Corporate Governance Statements as part of our commitment to transparency. Our voluntary reporting under the Australian Voluntary Tax Transparency Code is located on the Northern Star website, under Corporate Governance (www.nsrltd.com/about/corporate-governance/).

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The Code of Conduct sets out our objectives of:
- increasing Shareholder value within an appropriate ethical framework; and
- complying with the Company’s governance framework of controls and accountability, with transparency and integrity.

Our Anti-Bribery and Anti-Corruption Policy covers all aspects of our business. We encourage employees and other Stakeholders to report known or suspected breaches of the Code of Conduct and any other unethical, illegal or improper behaviour. Our Whistleblower Policy provides for a confidential, anonymous and retaliation-free process for people to report their concerns. Whistleblower notifications, Code of Conduct concerns and potential conflict of interest discussions are standing items on all Board agendas.

We condemn all human rights abuses, including modern slavery practices in all its forms. We recognise our role in protecting the human rights of all people involved in, or impacted by, our business practices and take meaningful steps to identify and address our modern slavery risks. For further information, see the Modern Slavery section of this Report and our FY2020 Modern Slavery Statement available on our website.

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In CY2020 the Executive Chair undertook an annual performance evaluation of each Non-Executive Director. Additionally, in CY2020, the Board undertook a comprehensive evaluation conducted by external governance specialists at Nasdaq Corporate Solutions with the objective of:

- providing the Board an unbiased and improved understanding of its functioning and performance;
- highlighting areas of strength and opportunities for improvement;
- encouraging positive relationships among Directors; and
- improve overall Board performance and effectiveness.

The evaluation delivered an actionable report of aggregated and anonymous individual responses and comments. Notwithstanding Nasdaq concluding the Northern Star Board is highly functional and responsive, we have seized on the opportunities raised in the Nasdaq report to further improve Board effectiveness. For example, in response to Director continuing professional development being identified as an area for improvement, in CY2020 we delivered Board training sessions facilitated by subject matter experts on topics aligned to our strategic plan and risk management framework.

In CY2020 we delivered Board training sessions facilitated by subject matter experts on topics aligned to our strategic plan and risk management framework, including:

- cybersecurity, presented by information security experts from PwC;
- succession planning, presented by the Company's Executive Manager – Capability & Culture; and
- (in early CY2021) the new Work Health & Safety (WHS) legislation in Western Australia, expected to come into operation in 2021.
Our Stakeholders matter

“Acknowledging Stakeholders’ interests, considering their views and responding both respectfully and meaningfully is critical to the performance of our business.”

Dr Guy Singleton, Social Responsibility & External Relations Manager

Northern Star acknowledges that our business can have cultural and physical impacts in and around the areas we operate. We define our key Stakeholders as those individuals and collectives that have an interest in what we do, or have (or should have) influence over what we do, or those who are potentially able to feel the impacts of our business.

All Northern Star Operations are required to identify their key Stakeholders and the issues that are material to them, a requirement of our Stakeholder Mapping and Engagement Global Standard. As well as being best practice, this Company-wide requirement is critically important for minority groups, such as Indigenous Peoples, whose voice may be underrepresented or in need of culturally-specific methods of engagement.

Our approach to providing financial and in-kind support to our Stakeholders and communities is aligned primarily to the United Nations’ SDGs. These 17 goals set by the UN cover a wide range of targets and objectives that form a “shared blueprint for peace and prosperity for people and the planet, now and into the future” (United Nations, https://sdgs.un.org/goals). These goals, and the targets that sit behind them provide us with guidance for implementing our Sustainability Vision, which seeks to “Deliver 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”.

We ensure all operational areas have grievance mechanisms that allow Stakeholders to raise what they consider to be serious concerns and have their issues considered and responded to in a respectful and timely manner. No complaints were recorded during CY2020.

Our Board is informed and engaged on matters of stakeholder engagement via the ESS Sub-Committee. Chaired by Non-Executive Director Mary Hackett, membership includes Executive Chair Bill Beaumont and Non-Executive Director Peter O’Connor, with a standing invitation to Chief Executive Officer Stuart Tonkin.

Senior members of the leadership team are regularly invited to brief the committee on material topics, including Group Manager Health and Safety, Melissa Collins, and Social Responsibility and External Relations Manager, Dr Guy Singleton.

We are confident in our ability to continue to deliver strong social performance by realising our sustainability vision. This is only achieved by acknowledging our impacts as a business, identifying our key Stakeholders, committing to open and respectful engagement, and creating shared value for society.

Social Snapshot

>¥$ 439M

spent on procurement within our local communities

0

heritage incidents or complaints

240%

increase in community investment on CY2019

“Ultimately, Stakeholders must see a benefit for having us operate in and around their communities, and those benefits need to significantly outweigh any negatives.”

Mary Hackett - Non-Executive Director & ESS Chair
Goldfields Rangers preparing seedlings for use in regeneration programs, Kalgoorlie, Australia

Indigenous Peoples Statement

Our Philosophy:

Without question, Indigenous Peoples are key Stakeholders of our business. We recognise the rights and values of Indigenous Peoples and Traditional Owners and respect their cultural values and differences. Our ongoing responsible and respectful engagement of Indigenous Peoples is paramount to the success of the business and aligns with our Respect STARR Core Value.

We believe that an approach to indigenous relations focused solely on a narrow interpretation of legal rights is insufficient.

Table 16 Encroachment on Indigenous Land (excluding KCGM)

<table>
<thead>
<tr>
<th>Region</th>
<th>% encroachment of tenement area on Indigenous Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalgoorlie Operations</td>
<td>88.9</td>
</tr>
<tr>
<td>Yandal Operations</td>
<td>71.7</td>
</tr>
<tr>
<td>Pogo</td>
<td>0</td>
</tr>
</tbody>
</table>

Agreement Making

Since the early 1990s, agreement making between resource companies and Indigenous Peoples has been seen as an appropriate means of defining the terms by which each party will meet the behavioural expectations of the other and ensure deliverables are specified and accountable. In Australia, agreement making between resource companies and Indigenous peoples is driven by a mix of legal requirements, good faith negotiations and mutual respect.

The process is widespread, commonplace, and considered to be best practice. An extension of agreement making is the basis on which companies undertake an agreement negotiation process, with frameworks such as Free Prior Informed Consent (FPIC) considered a valuable process and standard to adopt. Organisations such as the International Council of Mining and Metals (ICMM) and the United Nations encourage companies to adopt such practices within their negotiation process. The United Nations defines FPIC as:

- Prior: consent sought sufficiently in advance of any authorisation or commencement of activities.
- Informed: the nature of the engagement and type of engagement that should be provided prior to seeking consent.
- Consent: the collective decision made by the rights-holders and reached through the customary decision-making process of the affected Indigenous Peoples or communities. (http://www.fao.org/3/a-i6190e.pdf)

Northern Star commits to agreement making with Indigenous Peoples where and when deemed appropriate, and as a voluntary requirement when working in Australia where a defined group of Traditional Owners exists. We also commit to upholding FPIC principles within our agreement making processes, as defined above by the United Nations.

Our Pogo Operations are located on 100% State of Alaska land. We maintain positive engagements with Doyon Limited as a neighbouring Stakeholder group.

Heritage Management

How companies interact with Indigenous heritage and those who place value on it is a rapidly increasing area of interest to our Stakeholders and Shareholders. The destruction of the Puutu Kunti Kurrama Peoples’ Juukan Gorge sites has brought into question the appropriateness of some legal frameworks for interacting with heritage, especially the Section 18 Provision of the Western Australian Heritage Act 1972. In Western Australia, the Heritage Act 1972 (WA) is currently under review, with a draft Aboriginal Cultural Heritage Bill to be considered by the WA state parliament in 2021.

Northern Star welcomes the review of the Heritage Act 1972 (WA). We have actively participated in the consultation of the draft Aboriginal Cultural Heritage Bill via the Chamber of Minerals and Energy, and the Association of Mining and Exploration Companies. We are confident in the ability of the Western Australian government to address the needs of both industry and Aboriginal Stakeholders to ensure the revised legislation affords improved protection measures for Aboriginal heritage while providing industry with a clear process and pathway for project approvals.

In CY2020, we completed a Company-wide audit of our historical Section 18 approvals issued by the Western Australian Government under the Heritage Act 1972 (WA) for all our Western Australian tenure. The findings of this audit were communicated to the Chief Executive Officer and relevant project leaders and used to confirm we have no material business risks associated with our existing and historical Section 18 approvals.

The audit indicated that we do have current Section 18 Notices, however we do not intend to rely on them to progress any of our operations. The CEO has directed that fresh consultation must occur in all cases before any reliance is made on those Notices.

We do not currently have any section 18 applications.

Northern Star has a flexible approach in terms of project planning and development. This enables us to minimise our impact on heritage areas and we do so only with the agreement of the relevant Aboriginal groups, following FPIC practices.

Figure 15 CY2020 Heritage incidents

Number of heritage incidents

Number of heritage-related infringements

Cost of heritage-related infringements (A$)
Partnering with Indigenous Peoples to facilitate knowledge sharing

Ray Carbine maintaining pastoral leases as part of the Martu Ranger group, Jundee, Yandal Operations.

“The Martu Rangers play an important role in our Environmental and Land Management team at Junee, assisting with key compliance and pastoral management.”

William Moore, Senior ESR Advisor, Junee, Yandal Operations
Fee for service Ranger Program

Acknowledging Difference
Recognising the need to offer meaningful employment opportunities for Indigenous peoples, Northern Star has been running highly successful Aboriginal Ranger programs since 2014. This innovative employment model was developed by necessity, after reflecting on the limited success of prior attempts to employ and retain Aboriginal peoples from surrounding remote communities at our Jundee Operations.

Both Northern Star and previous mine owners noted that whilst attracting employment interest from the local Martu Traditional Owners was relatively successful, the medium to long term retention of these employees was not. At the time, the realities of working on a mine site did not align with the wants and needs of most Martu employees, resulting in limited long-term interest. Martu were however, proactively providing land management services to their communities on traditional lands. In some instances, this also extended to co-management partnerships with government agencies with environmental management authority.

This sparked an idea between the Jundee team and staff at Central Desert Native Title Services, who were then representing the Wiluna Native Title Claim Group (now the Tarlpa Matuwa Piarku Aboriginal Corporation), that perhaps the Martu Rangers could provide commercial environmental management services to the Jundee mine, as part of the mine’s environmental compliance requirements. This would provide Martu with economic benefit through professional employment, while allowing them to meet cultural obligations of managing country.

The initial trial of the program was deemed a success by all parties and not only remains in place at Jundee to this day, but has also been expanded to all Northern Star Australian sites where there has been interest from local Aboriginal groups. Rangers undertake a range of environmental management duties including water quality monitoring, biodiversity management, exploration rehabilitation and materials recycling.

Key Elements
A key factor of this program’s success is the engagement approach. Noting that most groups have a large pool of Rangers, the mine site draws a portion of these rangers to work for a block per month. This allows for Rangers to undertake other work and meet cultural obligations with the mine needs being continuously met. This was a key downside of previous employment models that typically engaged Aboriginal people as unskilled and in need of training, for what were typically considered entry level positions. This reframe provides participants with greater sense of pride in their employment.

Another success element identified was that the program engaged Aboriginal people as experts or in possession of tangible knowledge and skills that they could offer to the mine. This was in stark contrast of previous employment models that typically engaged Aboriginal people as unskilled and in need of training, for what were typically considered entry level positions. This change provides participants with greater sense of pride in their employment.

Project Expansion
Noting the success of the Jundee Ranger program and other expanded initiatives across WA and the NT, Northern Star linked into a range of third-party studies to help validate the program’s success so it could be adopted by other Aboriginal groups and businesses. A collaborative study between the Australian Federal Government and Social Ventures Australia in 2016 concluded that such programs could deliver a social return on investment of 2.3:1, (meaning for every dollar spent on rangers, $2.30 of value is generated) affirming that it was an effective and meaningful means for Northern Star to direct community support.

The report also concluded that ranger programs facilitated mutual benefit and synergies between Indigenous Protected Areas and resource companies. Equally, in 2016 the Australian Cooperative Research Centre NintiOne identified a strong positive correlation between the interplay of Aboriginal Ranger employment and determinants of health, education, empowerment, and well-being.

Most recently in 2020, the University of Queensland’s Centre for Social Responsibility in Mining observed that programs such as Jundee’s increased understanding of priorities for managing land that breakdown barriers and promote opportunities. These programs also promote a platform for mining companies and Indigenous landowners to collaboratively address rehabilitation issues, closure criteria and relinquishment, among a raft of other noteworthy conclusions (report forthcoming in 2021).

Lasting Impact
The long-term function and widespread adoption of this model is a testament of its value to both Northern Star and the numerous Aboriginal participants. There is no clearer example of Northern Star delivering on its Sustainability Vision. This program is something we are all incredibly proud of and look to continue to develop, expand and evolve it to greater success into the future.
Economic Return to Society

Our economic return to society is consistently a material issue for many Stakeholder groups. We understand it is important for us to be able to transparently quantify how our business contributes to the local, state, and national economies in which we operate, to enable Stakeholders to evaluate the collective benefits from our Business. In CY2020, we generated over A$2.03B in payments through government royalties, taxes, employee wages, procurement of goods and services, interests and dividends, and donations.

Community Investment

In CY2020, we significantly increased our commitment of direct financial community investment by 633%, from CY2019, to over A$113M across a wide range of initiatives that align with our Community Investment Framework and the United Nations’ SDGs. These are presented in Appendix D – UN SDG Alignment.

Unique to this reporting period, our Board approved an extraordinary COVID-19 relief fund of A$10M to respond to the projected health and economic impacts of the pandemic on our local communities. A community needs analysis saw us target health related issues in the first instance, which included the single largest donation of medical personal protective equipment to the State of Alaska and the development of a world-first mobile COVID-19 testing laboratory in Western Australia. To date, A$3.4M has been spent, with A$6.6M remaining to respond to the evolving situation as there is a transition from health to broader social and economic impacts.

In addition, Northern Star did not receive any funding or monetary support, through initiatives such as the Australian Government’s JobKeeper Fund, from any Government.

Northern Star is a member of the Gold Industry Group (GIG), see www.goldindustrygroup.com.au. The GIG works to drive education and community initiatives that cultivate understanding and awareness of gold’s value to the social fabric of communities and economies.

Our CEO, Stuart Tonkin, is a GIG Director alongside a number of other gold industry leaders. By supporting GIG we are able to combine our individual funding resources into a collective gold sector budget and support projects at a scale otherwise unobtainable to the sector. This serves to generate much greater positive impact within communities and allows the gold sector to reinforce its societal value far beyond what individual companies can achieve in isolation.

A good example of this in practice is the GIG sponsorship of Netball WA and the West Coast Fever. Through member company funds, the GIG has committed a A$5M partnership to Netball WA and the West Coast Fever to support the growth of, provide more opportunities for and ensure the sustainability of netball across the State as the first Principal Partner of Netball WA, Elite Partner of West Coast Fever and Premier Partner of Shooting Stars. Netball is one of the largest sports by participation within Western Australia, and the deal is one of the largest in Australian female sporting history.

Figure 16

Northern Star did not receive any funding or monetary COVID-19 support from any Government.

Total Economic Value Add

A$2.03B

Corporate tax & WA gov royalties
A$113M

Dividends paid to shareholders
A$200M

Total employee costs
A$411

Community Investment
A$5M

Goods and services payments
A$1.301B

Figure 17

Goldfields
A$368M
(42% of our total spend at our Kalgoorlie Operations and KCGM)
A$220M
(44%) excl KCGM

Fairbanks, Delta Junction & North Pole
US$49M
(23% of total spend at our Pogo Operation)

Total Local Procurement
A$439M
25% of total spend across the Business. (A$292M (21%) excl KCGM)

Supporting local businesses through the purchasing of goods and services provides a significant benefit to regional businesses within the areas we operate. We consistently take into account this positive impact when evaluating procurement opportunities to ensure we maximise benefits and opportunities of our local supply chain. Our primary local procurement areas are the Goldfields Region of Western Australia, and the Fairbanks/Delta Junction region of Alaska, USA.
Case Study: Fighting COVID-19 – Labs Without Walls Partnership

“The mobile coronavirus laboratory developed in association with Lab Without Walls and funded by Northern Star Resources has put WA in a good place to respond to any regional surge in COVID-19 activity”.

Dr TJJ Inglis, Medical Microbiologist, UWA and PathWest

During the initial stages of the COVID-19 outbreak, the Australian resources sector was afforded the great privilege of being given government and community support to continue operating. Aside from implementing change management practice to ensure our activity did not pose any virus-related risks, it was clear we needed to use our resources to help defend against the wider impacts of the virus. Considering this and as part of our A$10M COVID-19 relief fund, we donated A$1M to Labs Without Walls, a Western Australian-based medical not-for-profit.

Labs Without Walls was established by Professor Tim Inglis, a medical microbiologist at the PathWest Laboratory Medicine WA and Head of Pathology and Laboratory Medicine at the University of Western Australia. Our funding has directly led to the development of a pioneering, highly mobile, molecular diagnostic testing platform to rapidly deploy into remote regions to control COVID-19 clusters. Test results can now be generated by this mobile system within approximately two hours of screening in remote settings. This aspect is critical to successfully controlling a COVID-19 outbreak in a regional setting. The platform has gained Therapeutic Goods Administration (TGA) approval, a Commonwealth Government agency which regulates medical devices and ensures that Australian standards of quality, safety and efficacy are met. In December 2020, the platform was deployed into a regional setting in response to a COVID-19 cluster, and it performed as required allowing the situation to be contained. Because of this partnership, Western Australia remains the only jurisdiction with a mobile COVID-19 laboratory on standby.

"The mobile coronavirus laboratory developed in association with Lab Without Walls and funded by Northern Star Resources has put WA in a good place to respond to any regional surge in COVID-19 activity".

Dr TJJ Inglis, Medical Microbiologist, UWA and PathWest

Social Performance

Our alignment with the UN Sustainable Development Goals through our Social Performance.

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Preventing hunger during COVID

During lockdowns imposed in Western Australia and Alaska vulnerable people, such as the elderly, had restricted access to basic needs, including meals. Through our support of multiple organisations such as Foodbank WA and the Fairbanks Senior Centre we were able to assist in provided meals to these vulnerable people. Our accommodation village in Coolgardie, WA, developed its own food distribution service to provide aid to the elderly community members throughout 2020.

4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

Supporting education programs across Alaska

Young minds are Alaska's greatest resource and Alaska Resource Education (ARE) works to spark an interest in resources and fuel their passion through education. ARE provides statewide educational opportunities to students and teachers and distributes primary education curriculum that meets Alaska State Science Standards. Through our ongoing support, ARE inspire future engineers, scientists, operators and regulators. In CY2020 ARE taught 4,966 students and 291 teachers in over 75 communities throughout the state.

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

Supporting Indigenous business

In CY2020 Northern Star, in collaboration with Saracen Minerals and KCGM, formed a partnership with the Wirrpanda Foundation to support quarterly Regional pop-up Wirra Hubs. The Wirra Hub is an Indigenous Business and Employment Hub based in the Perth metropolitan area to help Indigenous Australians establish sustainable businesses and work with existing businesses to become more competitive. The regional pop-up hubs provide businesses in Kalgoorlie-Boulder access to coaches and mentors who can assist with building capacity, fostering networking, facilitating tender briefings and workshops, and identifying opportunities. The Wirra Hub will also work with other companies to identify potential synergies and partnerships for the Indigenous businesses.
Modern Slavery

Recognising our role in advancing the human rights of all people.

Northern Star acknowledges human rights as a legitimate set of moral principles of which every human being is inherently entitled to regardless of their personal, social, economic, cultural or geographic circumstances. We recognise our role in advancing the human rights of all people involved in, or impacted by, our business practices.

Modern slavery encompasses human rights violations including human trafficking, slavery and slavery-like practices such as forced labour, debt bondage and discriminatory employment practices. Northern Star acknowledges that modern slavery in its supply chain is a business risk that requires action to identify and mitigate. Northern Star welcomed the Australian Government’s introduction of the Modern Slavery Act 2018 (Cth) (Act).

Simultaneous with the release of this Report, Northern Star publishes its first mandatory modern slavery statement under the Act, covering the report period 1 July 2019 to 30 June 2020 (as required) (Modern Slavery Statement). This Statement sets out in detail:

- Northern Star’s operations and supply chains;
- modern slavery risks identified in our operations and supply chains;
- actions taken to 30 June 2020 to assess and address those risks; and
- the effectiveness of such actions.

A copy of our FY2020 Modern Slavery Statement is available on our website https://www.nsrltd.com/about/corporate-governance. Since 30 June 2020, the Company has undertaken the following further actions with a view to furthering our understanding of, and addressing, the modern slavery risks to which our supply chain and operations are exposed:

- the CEO emailed all suppliers (including KCGM):
  - attaching our Supplier Code of Conduct, which includes a commitment to undertake modern slavery due diligence; and
  - requesting participation in our 2020 modern slavery supplier survey
- Northern Star conducted ‘deep dive’ reviews of ~50 suppliers whose previous survey responses raised the risk flags, requesting:
  - their CEO, Board and procurement department review our Supplier Code of Conduct; and
  - their procurement department and senior management complete training focused on identifying and managing modern slavery risks.
- Identified a specialist resource to undertake comprehensive due diligence checks to identify any human rights, financial crime and other risk flags on current and prospective/potential suppliers.
- Conducted a second survey of all of suppliers (this time including KCGM) using the modern slavery supplier self-assessment questionnaire developed by a mining industry group in collaboration with Walk Free Foundation (SAQ). Some insights from this survey appear overpage.

On United Nations Human Rights Day, the CEO emailed all employees a short statement regarding Northern Star’s commitment to the elimination of modern slavery and advancing human rights for all people, together with a short film promoting employee awareness of modern slavery.

Recognising our role in advancing the human rights of all people.

Northern Star and its joint venture partner, Saracen Mineral Holdings Limited, adopted a KCGM Supplier Code of Conduct including a voluntary Modern Slavery Statement.

The above actions, and further progress in the second half of FY2021, will be comprehensively disclosed in our next Modern Slavery Statement to be released in late 2021.

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20 According to the estimated prevalence of modern slavery victims per 1,000 people by country from Walk Free Foundation’s 2018 Global Slavery Index (GSI).
21 Industries that are understood to present a significant risk of slavery and human trafficking according to ‘Strengthening Protections Against Trafficking in Persons in Federal and Corporate Supply Chains’, White, January 2016. Note: Suppliers may operate one or more industries.
22 Other high risk industries include: fishing, forestry, healthcare, hospitality, cleaning and textiles.
Appendix A: SASB Materiality Assessment
## SASB Materiality Assessment

### Northern Star’s assessment of the SASB Metals & Mining Sustainability Accounting Standard

<table>
<thead>
<tr>
<th>Disclosure Topic</th>
<th>Accounting Metric</th>
<th>Category</th>
<th>Unit of Measure</th>
<th>Northern Star Assessment</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Greenhouse Gas Emissions</strong></td>
<td>Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations</td>
<td>Quantitative</td>
<td>Metric tons (t)</td>
<td>Environmental Performance: Greenhouse Gas Emissions, pages 46-47</td>
<td>Scope 1 emissions are calculated based on the methodology required by the Australian Government under the National Greenhouse and Energy Reporting (NGER) Act for all Operations. NGER methodology includes 6 of the 7 gases identified in the accounting metric: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Nitrogen trifluoride (NF₃) is not included in the NGER methodology as there does not appear to be significant use in Australia. Northern Star’s Scope 1 emissions figures do not include HFCs as the NGER legislation and methodology exclude mining from the requirement to report HFC emissions. Northern Star’s Scope 1 emissions figures do not include PFCs as these are a by-product of aluminium production or used in electronics, neither of which are applicable to our business. Northern Star’s Jundee Operations are covered by an emissions limiting program: the Australian Government’s Safeguard Mechanism.</td>
</tr>
<tr>
<td><strong>Air Quality</strong></td>
<td>Air emissions of the following pollutants: (1) CO₂, (2) NOx, (3) particulate matter (PM₁₀), (4) mercury (Hg), (5) lead (Pb), and (7) volatile organic compounds (VOCs)</td>
<td>Quantitative</td>
<td>Metric tons (t)</td>
<td>Not included in this Report</td>
<td>Air emissions are reported through to the National Pollutant Inventory (NPI) for our Australian Operations. Air emissions are reported via the Tosic Release Inventory (TRI) and in accordance with permit requirements for our Pogo Operation. Air emission data is not included in this Report as the methods of calculating emissions differ between regions. Air emission data will be collected in a consistent manner across our regions and reported in the CY2021 Sustainability Report.</td>
</tr>
<tr>
<td><strong>Energy Management</strong></td>
<td>[1] Total energy consumed, (2) percentage grid electricity, (3) percentage renewable</td>
<td>Quantitative</td>
<td>Gigajoules (GJ), Percentage (%)</td>
<td>Environmental Performance: Energy Use and Production, page 48</td>
<td>Energy consumed is calculated based on the methodology required by the Australian Government under the National Greenhouse and Energy Reporting (NGER) Act for all Operations. Percentage of renewable energy consumed has not been reported as it cannot be accurately calculated due to a mixture of renewables, coal and gas energy provided from the Australian grid at our Kalgoorlie Operations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disclosure Topic</th>
<th>Accounting Metric</th>
<th>Category</th>
<th>Unit of Measure</th>
<th>Northern Star Assessment</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Management</strong></td>
<td>[1] Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress</td>
<td>Quantitative</td>
<td>Thousand cubic meters (m³), Percentage (%)</td>
<td>Environmental Performance: Water Management, page 49</td>
<td>Number of incidents of non-compliance associated with water quality permits, standards, and regulations occurred that resulted in a fine or regulatory order.</td>
</tr>
<tr>
<td><strong>Waste &amp; Hazardous Materials Management</strong></td>
<td>Total weight of tailings waste, percentage recycled</td>
<td>Quantitative</td>
<td>Metric tons (t)</td>
<td>Environmental Performance: Tailings Management, page 51</td>
<td>Recycled tailings at our Pogo and Kalgoorlie Operations are used to create paste for use in our underground operations. All other wastes at our operations are generated in both our mining and mineral processing operations. All of the waste figures reported on page 50 include volumes of waste generated from mineral processing and mining. We have not discriminated against business areas when capturing the data.</td>
</tr>
<tr>
<td><strong>Waste &amp; Hazardous Materials Management</strong></td>
<td>Total weight of mineral processing waste, percentage recycled</td>
<td>Quantitative</td>
<td>Percentage (%)</td>
<td>Environmental Performance: Hazardous Materials Management, page 50</td>
<td>Arsenic trioxide and tailings production are created solely from our mineral processing. All other wastes at our operations are generated in both our mining and mineral processing operations. All of the waste figures reported on page 50 include volumes of waste generated from mineral processing and mining. We have not discriminated against business areas when capturing the data.</td>
</tr>
<tr>
<td><strong>Waste &amp; Hazardous Materials Management</strong></td>
<td>Number of tailings impoundments, broken down by MHUSA hazard potential</td>
<td>Quantitative</td>
<td>Number</td>
<td>Appendix E – Tailings Impoundments</td>
<td>Detailed information on our tailings impoundments has been in line with the industry standard developed by the Church of England Pension fund. Hazard potential for our Alaskan facility has been assessed using Title 11 of the Alaska Administrative Code (AAC) 33.217, set by the Alaska Dam Safety Program (ADSP). Hazard potential for our Australian facilities have been assessed using Department of Mines, Industry Regulation and Safety (DMIRS) Code of Practice – Tailings Storage Facilities in Western Australia.</td>
</tr>
<tr>
<td>Disclosure Topic</td>
<td>Accounting Metric</td>
<td>Category</td>
<td>Unit of Measure</td>
<td>Northern Star Assessment</td>
<td>Notes</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>Biodiversity Impacts</strong></td>
<td>Description of environmental management policies and practices for active sites</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>Environmental Performance: Biodiversity Statement, page 52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation</td>
<td>Quantitative Percentage (%)</td>
<td>Not included in this Report</td>
<td>The process for tracking acid rock drainage potential is being standardised with the intent to disclose in CY2021.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of (1) proved and (2) probable reserves in or near areas of conflict</td>
<td>Quantitative Percentage (%)</td>
<td>Not included in this Report</td>
<td>The process for tracking reserves and resources in these areas is being standardised across the business with the intent to disclose in CY2021.</td>
<td></td>
</tr>
<tr>
<td><strong>Security, Human Rights &amp; Rights of Indigenous Peoples</strong></td>
<td>Percentage of (1) proved and (2) probable reserves in or near indigenous land</td>
<td>Quantitative Percentage (%)</td>
<td>Not included in this Report</td>
<td>The process for tracking reserves and resources in or near areas of conflict is being standardised across the business with the intent to disclose in CY2021.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of (1) proved and (2) probable reserves in or near indigenous land</td>
<td>Quantitative Percentage (%)</td>
<td>Social Performance: Table 16, page 80</td>
<td>The process for tracking reserves and resources in or near indigenous land is being standardised across the business with the intent to disclose in CY2021.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict</td>
<td>Quantitative n/a</td>
<td>Social Performance: Indigenous Peoples' Statement, page 80</td>
<td>The percentage of our tenement area on indigenous land has been disclosed in this Report.</td>
<td></td>
</tr>
<tr>
<td><strong>Community Relations</strong></td>
<td>Discussion of process to manage risks and opportunities associated with community rights and interests</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>Social Performance: Our Stakeholders Matter, page 78</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number and duration of non-technical delays</td>
<td>Quantitative Number, Days</td>
<td>Social Performance: Our Stakeholders Matter, page 78</td>
<td>There were no strikes or lockouts at any of our Operations throughout CY2020.</td>
<td></td>
</tr>
<tr>
<td><strong>Labor Relations</strong></td>
<td>Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees</td>
<td>Quantitative Percentage (%)</td>
<td>People Performance: Our Workforce, page 34</td>
<td>This figure relates to our American employees only.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number and duration of strikes and lockouts</td>
<td>Quantitative Number, Days</td>
<td>Appendix A – This appendix</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Workforce Health &amp; Safety</strong></td>
<td>(1) MSHA all-occurrence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees</td>
<td>Quantitative rate</td>
<td>Safety Performance: Safety Snapshot, page 20</td>
<td>The LTIFR and TRIFR are calculated according to the Western Australian Government’s Department of Mines, Industry Regulation, and Safety guidelines. Additional disclosures in this area are considered for the CY2021 Sustainability Report.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) MSHA all-occurrence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees</td>
<td>Quantitative rate</td>
<td>Safety Performance: Safety Snapshot, page 20</td>
<td>The LTIFR and TRIFR are calculated according to the Western Australian Government’s Department of Mines, Industry Regulation, and Safety guidelines. Additional disclosures in this area are considered for the CY2021 Sustainability Report.</td>
<td></td>
</tr>
<tr>
<td><strong>Business Ethics &amp; Transparency</strong></td>
<td>Description of the management system for prevention of corruption and bribery throughout the value chain</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>Governance, Ethics &amp; Transparency: Ethical Business Practices, page 73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production in countries that have the 20 lowest rankings in Transparency International’s Corruption Perception Index</td>
<td>Quantitative Metric: (i) corporate</td>
<td>Governance, Ethics &amp; Transparency: Ethical Business Practices, page 73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix B: Climate Change Scenario Analysis Details
Development of the scenarios: methodological approach and data sources

The three scenarios used by Northern Star, developed in conjunction with Energetics, were anchored by global greenhouse gas emissions levels (Representative Concentration Pathways (RCPs)), which provide emissions constraints and physical outcomes, and Shared Socio-Economic Pathways (SSPs), which provide social and economic context for climate-related actions. The use and choice of RCP-SSP combinations drew on international research undertaken for the forthcoming IPCC 6th Assessment Report23. Additional data was drawn from sector-specific research and expertise, and from Northern Star’s internal operations and insights. Figure 21 summarises the contribution made by each of these inputs and Table 17 outlines some key parameters stemming from the chosen IPCC pathways.

Figure 21: Information sources used to construct Northern Star’s climate-driven scenarios28

Table 17: Key scenario parameters

<table>
<thead>
<tr>
<th>Reference point</th>
<th>Representative concentration pathway</th>
<th>Socio-economic pathway</th>
<th>Objective</th>
<th>Australia temperature increase (2050)</th>
<th>Australia GDP (2050)</th>
<th>Projected Australian population (2050)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP 2.6</td>
<td>SSP 1</td>
<td>SSP 1</td>
<td>Proactive effort</td>
<td>-1°C</td>
<td>-6 trillion</td>
<td>36.6 million</td>
</tr>
<tr>
<td>RCP 4.5</td>
<td>SSP 3</td>
<td>SSP 3</td>
<td>Passive response</td>
<td>-1.5°C</td>
<td>-2.8 trillion</td>
<td>28.5 million</td>
</tr>
<tr>
<td>RCP 8.5</td>
<td>SSP 5</td>
<td>SSP 5</td>
<td>Regressive action</td>
<td>-2°C</td>
<td>-8.8 trillion</td>
<td>44.2 million</td>
</tr>
</tbody>
</table>

Table 17. Key scenario parameters

Scenario Narratives

Scenario 1: Proactive Effort: <2ºC

Environmental degradation and accumulating impacts from climate-related events lead to increased environmental awareness and concern. An increased focus on managing climate change risk and capturing opportunity influences investors, business, governments, and public opinion. This drives more sustainable policy, practices, and investments, both in terms of environmental and social outcomes. As the world embraces the scale of the transformation required, large investments are made into research and development, facilitating innovation, and helping to commercialise low emissions technology more rapidly. Consumption patterns shift as the population becomes less materialistic and may impact the retail demand for gold. Gold’s role as a portfolio diversifier and hedge in times of uncertainty remains, with greater appeal for growth. However, there would be increased opportunities for sustainable gold for environmental and medical technologies.

There is a strong focus on reducing emissions, minimising environmental footprints, and improving rehabilitation practices in the mining sector. Investors become increasingly selective, backing companies with clear and transparent pathways towards decarbonisation and increasing engagement with the outliers. There may be consolidation of mining sector companies in these conditions, as newer and smaller entrants find it more difficult to compete in the face of relatively stable gold demand and high public and investor expectations.

Scenario 2: Passive Response: 2-3ºC

Financial crises in major economies reinforce and spread distrust in globalisation. Protectionist and national security issues slowly take priority over environmental protection. Demand for local goods increases, putting upward pressure on inflation. In the longer term, more stringent regulation comes into play, including climate policy, to safeguard national resources. The mining sector becomes affected by decreased globalisation and policy which aims to protect upstream supply chains and retain a greater share of returns in Australia.

In this anaemic economic environment, there may be greater turnover of existing gold assets as holders liquidate their investment to cash as economic conditions become more challenging. Shunted per capita wealth may reduce retail demand for newly produced gold and, as technology investment is reduced, the potential and breadth of gold applications may be lower in this scenario. However, global population growth is high (particularly in Asia), becoming the main driver of jewellery and technology demand. Additionally, in an environment of greater uncertainty and with inflationary pressures, gold is likely to be increasingly sought for hedging purposes. Central banks may diversify their monetary reserves, accumulating gold. Overall, these diverging pressures may contribute to a larger range of gold prices as volatility increases.

In addition to growing regulatory red tape and climate impacts, there is a widespread push for producers to lower costs and hedge output. Lower tendency to extend life of mine to minimise the risk exposure due to gold price volatility. Increased geopolitical tensions may increase international shipping costs. Companies are evaluated on their contribution to local GDP and their compliance with regulation.

Scenario 3: Regressive Action: >4ºC

Connections across a greater portion of the population in developed and emerging economies through the digital revolution increasingly facilitate access to education and enable discovery of gold. In this highly globalised society, investments in health and education are favoured to support human capital and drive innovation and economic growth. With equality and comfort pursued at all costs and no environmental focus, there is a global exploitation of fossil fuel resources and a widespread adoption of resource and energy intensive lifestyles. Regulation is minimised so as not to shackle progress.

The retail market and technology applications become increasing sources of gold demand, particularly as the global population and economic growth thrive. With increases in wealth and with inflationary pressures present in the economy, there may be an increase in demand for gold as a store of value. While the gold price may be relatively lower in this scenario, it may be more stable due to global integration and focus on growth.

In this free-for-all world, large companies take over and maximise new developments. The burden of adaptation and safety measures is increasing, with implications for existing mining companies’ reputation, while also presenting barriers to entry for new market entrants. A focus is placed on automation and digitisation to enhance safety and convenience and compete with peers.
### Scenario 1: Proactive effort

**Energy mix and use**
- Rapid electrification of energy systems, including in the transport sector.

**Technology**
- Innovation focuses on renewable energy and environmental technologies. Digitalisation of mining enables process optimisation.

**Environmental protection**
- Stakeholder pressure drives a gradual shift toward improving environmental conditions, beyond impact mitigation.

**Policy**
- Policy mandates deep decarbonisation, impacting asset values and operational costs. New developments need to be designed for net zero emissions.

**Mining company characteristics**
- Successful companies invest in sustainability innovation and resource efficiency to meet ambitious emission reduction targets.

### Scenario 2: Passive response

**Energy mix and use**
- Fossil fuel dependency persists, although Australia increasingly focuses on harnessing local sources of energy, including renewables.

**Technology**

**Environmental protection**
- Resources are extracted at lowest cost, resulting in environmental degradation. Climate policy is limited or delayed.

**Policy**
- Countries become increasingly nationalistic and policy prioritises domestic interests and concerns ahead of the global commons.

**Mining company characteristics**
- Volatile conditions keep average life of mine shorter. Physical climate impacts impose greater production costs.

### Scenario 3: Regressive action

**Energy mix and use**
- Exploitation of fossil fuel resources continues and growth enables widespread adoption of resource- and energy-intensive lifestyles.

**Technology**
- Innovation and automation prioritise production, convenience and safety.

**Environmental protection**
- Environmental problems are managed rather than mitigated. Control measures become more extreme over time, and may include geo-engineering.

**Policy**
- Policy supports human capital development and economic growth. Institutional barriers are gradually removed and regulation minimised.

**Mining company characteristics**
- Leading companies capitalise on innovation. Costs of adaptation and high safety standards gradually rise, leading to industry consolidation.

### Table 18: Summary of impacts on key supply and demand factors for gold as a commodity, by scenario

<table>
<thead>
<tr>
<th>Mining</th>
<th>Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand profile</strong></td>
<td><strong>Recycled gold</strong></td>
</tr>
<tr>
<td>Applications for gold in medicine and environmental technologies grow. There may be emerging demand from retail buyers of gold products for sustainably mined gold with reduced demand for gold per capita, due in part to repair and reuse of electronic products.</td>
<td>Electronic waste is increasingly repurposed as part of circular economy practices. This does not noticeably impact key gold producers.</td>
</tr>
<tr>
<td>Gold is sought for hedging purposes. As physical climate impacts increase and livelihoods are affected, gold demand in Asia may begin to stall.</td>
<td>There may be greater turnover of existing gold assets as holders liquidate their investment to such as economic conditions become more challenging.</td>
</tr>
<tr>
<td>High demand for gold as a store of value and status signifier, and for use in hi-tech consumer applications.</td>
<td>Recycled gold is only likely to grow in demand if technology improvements do not deliver enough newly-mined gold.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Price volatility</strong></th>
<th><strong>Labour retention</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Investors</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investors prefer companies with credible pathways towards decarbonisation.</td>
</tr>
</tbody>
</table>
Appendix C: Climate-related residual risks
Climate related residual risks

Climate change related risks, their inherent risk ratings with business as usual controls, key mitigating controls and the resulting residual risk ratings are shared in Table 2

Table 19 High, medium and low inherent risk ratings

<table>
<thead>
<tr>
<th>Risk Rating</th>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
</table>
| High        | 1        | - High inherent risks are generally considered unacceptable
- The implementation of mitigating strategies to be actively pursued
- Notification to, and approval to conduct or continue activity required from, Executive management prior to commencement or continuation when first identified or assessed as high risk
- A risk owner is appointed to ensure mitigation strategies are pursued and progress reported at least quarterly to the Audit and Risk Committee |
| Medium      | 2        | - Where appropriate, further risk mitigation strategies should be considered and applied as practicable.
- A risk owner is appointed to ensure that all aspects relating to the risk and its mitigation are managed |
| Low         | 3        | - Where appropriate, further risk mitigation strategies should be considered as part of the process of continuous improvement
- A risk owner is appointed to ensure all aspects relating to the risk and its mitigation are managed |

Table 20 Climate change related risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Site affected</th>
<th>Description</th>
<th>Inherent risk rating</th>
<th>Key control measures</th>
<th>Residual risk rating</th>
<th>Planned action</th>
</tr>
</thead>
</table>
| Groundwater scarcity | Australia | Decreased average total annual rainfall causes drier surface conditions and underground aquifers to be replenished slowly | High | - Third party reviews of usage and aquifer health
- Recycled water use with underground and processing
- Decent water from tailings facilities for reuse in all our operating process plants | Medium | Thickener installation at our Jundee Operations |
| Cyclones | Australia | Increased severity of cyclones and alteration of cyclone tracks, leading to broadening of risk region | Medium | - Severe Weather and Cyclone Management Plans in place.
- Scenario analysis completed as per TCFD recommendations | Medium | Introduce pre-cyclone season audit strategy for high-risk areas |
| Hotter average conditions for workers and equipment | Australia | Rising average temperatures causing a hotter environment for site workers, equipment, and controls | Medium | - Working in Adverse Temperatures procedures and guidelines in place.
- Well maintained ventilation at underground operations
- Hydration testing completed at our Yandaly, Paulsens and Tanami Operations
- Air-conditioned vehicle cabs at all operations | Medium | Extend hydration testing to high-risk functions at our Kalgoorlie Operations during Summer |
| Bushfires | Australia and Alaska | More high-risk conditions (e.g. hot weather, dry vegetation, high winds) increases bushfire frequency and severity | Medium | - Asset protection burns conducted at high risk operations.
- Emergency Response Teams at all operating sites | Medium | Expand asset protection burning across relevant company areas. Complete a company-wide fire risk assessment |
| Climate change policy evolution | Australia and Alaska | The climate change policy landscape is evolving quickly influenced by the Paris Agreement. A change in Federal government in Australia or the US has the potential to increase compliance obligations | Medium | - Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers | Medium |
| Emissions reduction or offset requirements for new developments or expansions | Australia | There are precedents for offsetting greenhouse gas emissions from significant new or expanding development proposals in Western Australia | Medium | - Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers | Medium | Investigate carbon abatement project feasibility on Company-owned pastoral leases |
## Appendix C: Climate related residual risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Site affected</th>
<th>Description</th>
<th>Inherent risk rating</th>
<th>Key control measures</th>
<th>Residual risk rating</th>
<th>Planned action</th>
</tr>
</thead>
</table>
| Removal of fossil fuel subsidies and rebates                         | Australia and Alaska| There is mounting global pressure to remove fossil fuel subsidies. In Australia, a major focus is on the fuel tax credit. The US Congress recently introduced legislation to reform and repeal fossil fuel subsidies, although this legislation has not been passed by the Senate. | Medium               | • Regular replacement of old mobile equipment to increase diesel efficiency per tonne moved.  
  • Constantly monitoring and assessing renewable energy pricing and OEM fleet opportunities | Medium               |  |
| Increased penetration of renewable energy                            | Australia and Alaska| As renewable energy becomes increasingly cost competitive with fossil fuels, electricity grid operators are planning for the increased penetration of variable generation | Medium               | • Contracts with gas suppliers and electricity providers  
  • Regular replacement of old mobile equipment | Low                  | Investigate renewable energy options for new projects |
| Government mandated carbon charges                                   | Australia and Alaska| Increased cost due to potential future tax or trading schemes                                      | Medium               | • Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers | Low                  |  |
| Loss of community confidence                                         | Australia and Alaska| As communities become increasingly concerned about climate change, stakeholders may question the impacts on Northern Star’s operations | Medium               | • Regular stakeholder engagement  
  • Annual Sustainability Report  
  • Annual ESG Roadshows with key Company representatives  
  • Board Environment, Social & Safety Committee  
  • Climate change risk assessment process | Low                  | Meet TCFD recommendations |
| Increased dust generation                                             | Australia          | Higher average temperatures and decreased total rainfall will create drier soil, generating more dust from transport and mining activities | Medium               | • Stockpile dome installed at Kanowna Belle  
  • Polymer application to high-risk care and maintenance landforms | Medium               | Continued progressive rehabilitation of completed landforms  
  Consider polymer use at other high-risk locations |
| Need for capital investment in low emissions technology               | Australia and Alaska| To reduce emissions, companies will need to invest in low emissions technologies and renewable energy systems | Medium               | • Capital replacement schedule geared towards replacement rather than rebuilds to get exposure to latest technology (e.g. Tier 4 engines in mining equipment) | Low                  | Monitor developments in mining fleet electrification |
| Insufficient abatement from the electricity sector                   | Australia and Alaska| Low emissions reduction in the electricity sector increases the decarbonisation required by other industries to meet state and federal emissions targets | Medium               | • Current relationships and contracts with major energy suppliers | Low                  |  |
| Stricter environmental management and protection                      | Australia and Alaska| Stricter management and new regulations may be implemented to preserve biodiversity, and new areas may be classed as environmentally sensitive | Low                  | • Biodiversity Management Global Standard  
  • Site-specific Biodiversity Management Plans  
  • Regular biodiversity monitoring at key locations e.g. fish monitoring at Pogo | Low                  | Develop partnerships with scientific organisations studying key species in Alaska and Australia |
| Engineering challenges for integrating renewable energy into mine sites | Australia and Alaska| Transitioning the power supply to renewable energy requires significant expertise and planning to avoid design flaws and shortcomings | Low                  | • Utilise vendor expertise to evaluate renewable power scenarios | Low                  |  |
| Stakeholder expectations                                             | Australia and Alaska| Stakeholders are becoming increasingly concerned about climate change, putting pressure on companies to take greater climate action | Low                  | • Annual ESG Roadshows  
  • ESS Committee | Low                  | Update Sustainability Strategy |
| Changing animal range, migration and hibernation patterns            | Alaska             | Warmer temperatures have been linked to changes in bear hibernation and the grading routes of their prey, which would increase presence of bears around the Alaskan site | Low                  | • Biodiversity Management Global Standard  
  • Site specific Biodiversity Management Plans  
  • Regular biodiversity monitoring at key locations e.g. fish monitoring at Pogo | Low                  | Develop partnerships with scientific organisations studying key species in Alaska and Australia |

### Key control measures for risk management:
- **Advocacy group**: membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers.
- **Annual ESG Roadshows**: with key Company representatives.
- **Board Environment, Social & Safety Committee**:.
- **Climate change risk assessment process**.
- **Utilise vendor expertise to evaluate renewable power scenarios**.
- **Annual ESG Roadshows**.
- **ESS Committee**.
- **Biodiversity Management Global Standard**.
- **Site-specific Biodiversity Management Plans**.
- **Regular biodiversity monitoring at key locations e.g. fish monitoring at Pogo**.
<table>
<thead>
<tr>
<th>Risk</th>
<th>Site affected</th>
<th>Description</th>
<th>Inherent risk rating</th>
<th>Key control measures</th>
<th>Residual risk rating</th>
<th>Planned action</th>
</tr>
</thead>
</table>
| Shareholder divestment | Australia and Alaska | Shareholders may change their investment decisions for not demonstrating action on climate change generally | Low | • Annual ESG Roadshows  
• ESS Committee | Low | Update Sustainability Strategy |
| Higher storm surges | Australia and Alaska | Storm surges are worsened by sea level rise | Low | • Alternate suppliers identified for critical stock items | Low |
| Scope 3 reporting may become a requirement | Australia and Alaska | Scope 3 emissions reporting may become a more common requirement and possibly a consideration for project approvals | Low | • Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers | Low |
| Rejection of development applications due to high emissions intensity | Australia and Alaska | Emissions intensity of new proposals may be benchmarked against best practice operations and less ambitious projects may be rejected | Low | • Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers | Low |
| Supply issues from wider interconnected electricity network | Australia and Alaska | Risk of interruptions to electricity supply and power quality issues due to, for example, closure of ageing coal fired power stations and increasing penetration of renewable generation sources | Low | • Utilise vendor expertise to evaluate renewable power scenarios | Low |
| Electricity and natural gas price volatility | Australia | While there is currently a domestic gas reservation policy, any threats to this policy combined with increased demand for LNG globally could expose WA electricity and natural gas users to higher and more volatile prices | Low | • Utilise vendor expertise to evaluate renewable power scenarios  
• Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers  
• Quarterly reviews of costs and annual budgets | Low |

### Changes to the Safeguard Mechanism
- **Australia**
  - Potential for Australia’s Safeguard Mechanism policy to be expanded to cover additional sites beyond Jundee, through the lowering of emission thresholds. Existing baselines may need to be lowered
  - • Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers

### Uncertainty around renewable incentive schemes
- **Australia**
  - Electricity purchased from the grid, and from other non-renewable power stations which meet certain conditions, attract a charge on every MWh of electricity consumed under Australia’s Renewable Energy Target (RET) scheme. While the scheme is coming to an end, there is the possibility for a new or expanded and extended scheme under a change in government
  - • Advocacy group membership including Chamber of Minerals and Energy – Western Australia and the Council of Alaskan Producers

### Cost of climate change risks built into insurance premiums
- **Australia and Alaska**
  - Physical assets insured for extreme weather events may face higher insurance premiums as regional frequency of these events increase
  - • Utilise vendor expertise to evaluate renewable power scenarios  
• Quarterly reviews of costs and annual budgets
Appendix D: UN SDG Alignment
### Sustainable Development Goal 1
#### No Poverty
End poverty in all its forms everywhere.

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.90 a day</td>
<td>Propportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)</td>
</tr>
<tr>
<td>1.2</td>
<td>By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</td>
<td>Proportion of population living below the national poverty line, by sex and age</td>
</tr>
<tr>
<td>1.3</td>
<td>Implement nationally-appropriate social protection systems and measures for all, including floors, and by 2030 ensure sustained coverage of the poor and the vulnerable</td>
<td>Proportion of population covered by social protection floors, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, women, child and the vulnerable</td>
</tr>
<tr>
<td>1.4</td>
<td>By 2030, ensure that all men and women, in particular the poor and vulnerable, have equal rights to economic resources, including inheritance, natural resources and financial services, including microfinance</td>
<td>Number of deaths, missing persons and persons affected by disaster per 100,000 people</td>
</tr>
<tr>
<td>1.5</td>
<td>By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</td>
<td>Number of deaths, missing persons and persons affected by disaster per 100,000 people</td>
</tr>
<tr>
<td>1.6</td>
<td>Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate resources for the least developed countries, in particular land-locked developing countries, to implement programmes and policies to end poverty in all its dimensions</td>
<td>Number of countries with national and local disaster risk reduction strategies</td>
</tr>
<tr>
<td>1.7</td>
<td>Create a policy framework at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions</td>
<td>Proportion of government recurrent and capital spending to sectors that disproportionately benefit the poor and vulnerable groups</td>
</tr>
</tbody>
</table>

### Sustainable Development Goal 2
#### Zero Hunger
End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>By 2030, end hunger and achieve access by all, in particular the poor and people in vulnerable situations, to nutritionally-adequate food and autonomous and sufficient food all year round</td>
<td>Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)</td>
</tr>
<tr>
<td>2.2</td>
<td>By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular the poor and people in vulnerable situations, including women, indigenous peoples, family farmers, pastoralists and fishers, including through research and extension services, technology development and access to knowledge sharing and market information, including on food security and access to land and other productive resources</td>
<td>Prevalence of stunting (height for age &lt;-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age</td>
</tr>
<tr>
<td>2.3</td>
<td>By 2025, achieve a global target of halving, by 2025, the number of men, women and children suffering from malnutrition, including stunting and wasting, and achieve universal access to safe, nutritious and sufficient food all year round</td>
<td>Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)</td>
</tr>
</tbody>
</table>
## Sustainable Development Goal 3
### Good Health & Well-being

Ensure healthy lives and promote well-being for all at all ages.

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>By 2050, reduce the global maternal mortality rate to less than 15 per 100,000 live births</td>
<td>3.1.1 Maternal mortality ratio</td>
</tr>
<tr>
<td>3.2</td>
<td>By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries working to reduce neonatal mortality to at least 12 per 1,000 live births and under-5 mortality to at least 20 per 1,000 live births</td>
<td>3.2.1 Neonatal mortality rate</td>
</tr>
<tr>
<td>3.3</td>
<td>By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</td>
<td>3.3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and region</td>
</tr>
</tbody>
</table>

### Appendix D: UN SDG Alignment

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.1</td>
<td>Mortality rate attributed to cardiovascular diseases, cancer, diabetes, or chronic respiratory disease</td>
<td>Ongoing support of the Northern Star Children’s Training Foundation which provide support for families living with children with chronic diseases. Support for multiple health and wellness out for programs and programs which the community to which we operate.</td>
</tr>
<tr>
<td>3.4.2</td>
<td>Suicide mortality rate</td>
<td>Donation to Lifeline during COVID pandemic to assist in providing support to record number of people seeking help. Partnership with Lifespan for the provision of free psychological support persons for permanent employees and families. Accredited Mental Health First Aid Training provided to employees across our operations. Provision of free Mental Health First Aid Training to the community in Kalgoorlie-Boulder.</td>
</tr>
<tr>
<td>3.5.1</td>
<td>Coverage of treatment interventions (pharmacological, psycho-social and rehabilitative and aftercare services) for substance use disorders</td>
<td>Sponsor of the Silent Film Festival Australia – Regional round, providing drug awareness presentations believed to high school students across regional Western Australia. Current change of staff where we operate in close proximity to nearby communities to prevent access and awareness of harmful use. Zero tolerance to illicit substances at our operations. 80% of staff who are in our operations. 80% of staff who have been trained on substance use and treatment.</td>
</tr>
<tr>
<td>3.5.2</td>
<td>Harmful use of alcohol, defined according to the national standard as alcohol per capita consumption (legal age in years and 10 litres within a calendar year in those of legal age)</td>
<td>Sponsor of the Silent Film Festival Australia – Regional round, providing drug awareness presentations believed to high school students across regional Western Australia. Current change of staff where we operate in close proximity to nearby communities to prevent access and awareness of harmful use. Zero tolerance to illicit substances at our operations. 80% of staff who are in our operations. 80% of staff who have been trained on substance use and treatment.</td>
</tr>
<tr>
<td>3.6</td>
<td>By 2030, take action to prevent sexual violence and reduce all forms of violence against all women and girls in all circumstances</td>
<td>Zero tolerance to illicit substances at our operations. 80% of staff who are in our operations. 80% of staff who have been trained on substance use and treatment. Traffic Management Plans implemented and effectively executed through compliance reporting.</td>
</tr>
</tbody>
</table>

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Northern Star Resources Sustainability Report 2020

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Northern Star Resources Sustainability Report 2020
Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Target | Indicators | 2020 Alignment
--- | --- | ---
4.1 By 2030, ensure that all girls and boys complete secondary education and achieve adequate levels of literacy and numeracy, including through technical and vocational education and training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.

4.1.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex
4.1.2 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex
4.1.3 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

4.2 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university, and ensure equal access for all women and men in non-formal education and training in the region.

4.2.1 Proportion of children and young people (a) in grades 1/2 on the end of primary, and (b) mathematics, by sex
4.2.2 Percentage of population in a given age group achieving at least the minimum proficiency level in (i) reading and (ii) mathematics, by sex

4.3 By 2030, substantially increase the supply of qualified teachers, including teachers and educational leaders, for developing countries, especially least developed countries and countries affected by conflict, to ensure a minimum organisational teacher training and professional development.

4.3.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

4.4 By 2030, substantially increase the number of men and women who have achieved at least a secondary education, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

4.5 By 2030, substantially increase the number of men and women who have achieved at least a secondary education, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

4.5.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill

4.6 By 2030, ensure that all girls and boys have access to and full benefit from quality early childhood development, care and education leading to improved local educational outcomes.

4.6.1 Percentage of population in a given age group achieving at least the minimum proficiency level in functional (a) literacy and (b) numeracy skills, by sex

4.7 By 2030, ensure that all girls and boys, in particular vulnerable and marginalized, achieve literacy and numeracy skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies; (b) curricula; (c) teacher education and (d) student assessment

Appendix D: UN SDG Alignment

4.B Build and upgrade education facilities that are safe, non-violent, inclusive and effective learning environments for all.

4.B.1 Share of official development assistance flows for scholarships for students in particular least developed countries, small island developing States and countries affected by conflict

4.C.1 Proportion of teachers in (a) primary, (b) lower secondary, and (c) upper secondary education who have received at least the minimum organised teacher training in the region.

Appendix D: UN SDG Alignment
### Gender Equality

**Achieve gender equality and empower all women and girls.**

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>End all forms of discrimination against all women and girls everywhere</td>
<td>Support of the Girls Focus on Mining Camp. A 9-day tour for the Goldfields girls. High school girls receive information and education about the mining industry and encourages the various career pathways for females in this industry. WA Football Development Commission. Major sponsor to the inaugural junior and youth girls football team this year.</td>
</tr>
<tr>
<td>5.2</td>
<td>Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other forms of exploitation</td>
<td>Ongoing support of the Goldfields Women’s Health Care Centre in Kalgoorlie, which provides access to safety and medical treatment for women. Support of local health professionals to regional communities.</td>
</tr>
<tr>
<td>5.3</td>
<td>Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</td>
<td>Support of the Girls Focus on Mining Camp. A 9-day tour for the Goldfields girls. High school girls receive information and education about the mining industry and encourages the various career pathways for females in this industry. WA Football Development Commission. Major sponsor to the inaugural junior and youth girls football team this year.</td>
</tr>
<tr>
<td>5.4</td>
<td>Achieve gender equality and the empowerment of all women and girls</td>
<td>Support of the Girls Focus on Mining Camp. A 9-day tour for the Goldfields girls. High school girls receive information and education about the mining industry and encourages the various career pathways for females in this industry. WA Football Development Commission. Major sponsor to the inaugural junior and youth girls football team this year.</td>
</tr>
</tbody>
</table>

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### Clean Water & Sanitation

**Ensure availability and sustainable management of water and sanitation for all.**

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>By 2030, achieve universal and equitable access to safe and affordable drinking water for all</td>
<td>Proportion of population using safely managed drinking water services. Managed wastewater treatment facilities are installed at all operations with scheduled maintenance completed by suitably qualified personnel.</td>
</tr>
<tr>
<td>6.2</td>
<td>By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations</td>
<td>Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water. The Off-River Treatment Works at Jundee ensures any water discharged back into the Goodpaster River is of the same water quality as the Greatwater fuel. This prevents impact to the Goodwater fuel from mine operations.</td>
</tr>
<tr>
<td>6.3</td>
<td>By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</td>
<td>Proportion of wastewater safely treated. Proportion of bodies of water with good water quality. By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and management in freshwater systems. By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and management in freshwater systems. The Off-River Treatment Works at Jundee ensures any water discharged back into the Goodpaster River is of the same water quality as the Greatwater fuel. This prevents impact to the Goodwater fuel from mine operations.</td>
</tr>
<tr>
<td>6.4</td>
<td>By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and management in freshwater systems. By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and management in freshwater systems.</td>
<td>Change in water-use efficiency overtime. Proportion of wastewater safely treated. Proportion of wastewater safely treated.</td>
</tr>
</tbody>
</table>
### Sustainable Development Goal 7

**Affordable and Clean Energy**

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Proportion of population with access to electricity</td>
<td>Proportion of population with primary reliance on clean fuels and technology</td>
</tr>
<tr>
<td>7.3</td>
<td>Energy intensity measured in terms of primary energy and GDP</td>
<td>7.3.1 Renewable energy share in the total final energy consumption</td>
</tr>
<tr>
<td>7.8</td>
<td>Investments in energy efficiency as a percentage of GDP</td>
<td>7.8.1 Mobilized amount of United States dollars per year starting in 2020 accountable towards the $100 billion commitment</td>
</tr>
</tbody>
</table>

**By 2030, ensure universal access to affordable, reliable and modern energy services for all.**

**By 2030, increase substantially the share of renewable energy in the global energy mix.**

**By 2030, double the global rate of improvement in energy efficiency.**

### Sustainable Development Goal 8

**Decent Work & Economic Growth**

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1.1</td>
<td>Annual growth rate of real GDP per capita</td>
<td>Economic value add of A$1.44 billion through government taxes, royalties, employee wages and procurement to the regions in which we operate</td>
</tr>
<tr>
<td>8.2.1</td>
<td>Annual growth rate of real GDP per employed person</td>
<td>Increased presence of Original Equipment Manufacturers in local trades development and innovation on equipment to increase energy efficiency with an upward economic index</td>
</tr>
<tr>
<td>8.3.1</td>
<td>Proportion of informal employment in non-agriculture employment, by sex</td>
<td>Developed regional contractor one is high agricultural areas. Support for local small businesses in the Goldfields Region of Western Australia during COVID with the provision of advertising grants</td>
</tr>
<tr>
<td>8.4.1</td>
<td>Material footprint, material footprint per capita, and material footprint per GDP</td>
<td>Support the Southern Deserts Matuna Ranger Focus (Indigenous Desert Alliance) where discussions are held on the regional opportunities for Ranger Programs. Major sponsor of the Student Meets Industry Night in Kalgoorlie, providing a networking opportunity for students at the Western Australian School of Mines</td>
</tr>
<tr>
<td>8.5.1</td>
<td>Average hourly earnings of female and male employees, by occupation, age and persons with disabilities</td>
<td>Investment in multiple organisations providing business growth, sourcing and networking opportunities in our areas of operation</td>
</tr>
</tbody>
</table>

**By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.**

**Invest in education, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of non-agriculture and medium-sized enterprises, including through access to financial services.**

**Achieve higher levels of economic productivity through diversification, technological upgrading and innovations, including through a focus on high-value added and labour-intensive sectors.**
### Sustainable Development Goal 8

**Decent Work & Economic Growth**

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.4</td>
<td>Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrant workers, and those in precarious employment</td>
<td></td>
</tr>
<tr>
<td>8.5.1</td>
<td>Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status</td>
<td></td>
</tr>
<tr>
<td>8.5.2</td>
<td>Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status</td>
<td></td>
</tr>
<tr>
<td>8.6</td>
<td>By 2020, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products</td>
<td></td>
</tr>
<tr>
<td>8.6.1</td>
<td>Tourism direct GDP as a proportion of total GDP and in growth rate</td>
<td></td>
</tr>
<tr>
<td>8.6.2</td>
<td>Number of jobs in tourism industries as a proportion of total jobs and growth rate of jobs, by sex</td>
<td></td>
</tr>
<tr>
<td>8.7</td>
<td>Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all</td>
<td></td>
</tr>
<tr>
<td>8.7.1</td>
<td>Number of commercial bank branches and automated teller machines (ATMs) per 100,000 adults</td>
<td></td>
</tr>
<tr>
<td>8.7.2</td>
<td>Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider</td>
<td></td>
</tr>
<tr>
<td>8.8</td>
<td>By 2030, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization</td>
<td></td>
</tr>
<tr>
<td>8.8.1</td>
<td>Total government spending in social protection and employment programmes as a proportion of the national budgets and GDP</td>
<td></td>
</tr>
</tbody>
</table>

### Sustainable Development Goal 9

**Industry, Innovation & Infrastructure**

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td>Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</td>
<td></td>
</tr>
<tr>
<td>9.1.1</td>
<td>Proportion of the rural population who live within 5 km of an all-season road</td>
<td></td>
</tr>
<tr>
<td>9.1.2</td>
<td>Proportion and freight volumes, by mode of transport</td>
<td></td>
</tr>
<tr>
<td>9.2</td>
<td>Promote inclusive and sustainable industrialisation and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries</td>
<td></td>
</tr>
<tr>
<td>9.2.1</td>
<td>Manufacturing value added as a proportion of GDP and per capita</td>
<td></td>
</tr>
<tr>
<td>9.2.2</td>
<td>Manufacturing employment as a proportion of total employment</td>
<td></td>
</tr>
<tr>
<td>9.3</td>
<td>Increase access of small-scale industrial and other enterprises, in particular in developing countries, by building and extending a conducive policy environment for, inter alia, industrial diversification and value addition to commodities, by promoting human well-being, with a focus on affordable and equitable access for all</td>
<td></td>
</tr>
<tr>
<td>9.3.1</td>
<td>Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status</td>
<td></td>
</tr>
<tr>
<td>9.4</td>
<td>By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</td>
<td></td>
</tr>
<tr>
<td>9.4.1</td>
<td>CO₂ emission per unit of value added</td>
<td></td>
</tr>
<tr>
<td>9.4.2</td>
<td>CO₂ emission per unit of value added</td>
<td></td>
</tr>
<tr>
<td>9.5</td>
<td>Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</td>
<td></td>
</tr>
<tr>
<td>9.5.1</td>
<td>Research and development expenditure as a proportion of GDP</td>
<td></td>
</tr>
<tr>
<td>9.5.2</td>
<td>Researchers in full-time equivalent per million inhabitants</td>
<td></td>
</tr>
<tr>
<td>9.6</td>
<td>Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States</td>
<td></td>
</tr>
<tr>
<td>9.6.1</td>
<td>Total official international support (official development assistance plus other official flows) to infrastructure</td>
<td></td>
</tr>
<tr>
<td>9.7</td>
<td>Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value added to commodities</td>
<td></td>
</tr>
<tr>
<td>9.7.1</td>
<td>Proportion of medium and high-tech industry value added in total value added</td>
<td></td>
</tr>
<tr>
<td>9.8</td>
<td>Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020</td>
<td></td>
</tr>
<tr>
<td>9.8.1</td>
<td>Proportion of population covered by a mobile network, by technology</td>
<td></td>
</tr>
<tr>
<td>9.8.2</td>
<td>Prevalence of mobile signal towers at remote extreme providing phone signal to neighboring communities and facilities</td>
<td></td>
</tr>
</tbody>
</table>
Sustainable Development Goal 10

Reduced Inequalities

Reduced inequality within and among countries

Target | Indicators | 2020 Alignment
--- | --- | ---
10.1 | By 2030, progressively achieve and sustain income-growth of the bottom 40 per cent of the population at a rate higher than the national average | 10.1.1 Growth rate of household expenditure or income per capita among the bottom 40 per cent of the population and the total population

10.2 | By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status | 10.2.1 Proportion of people living below 50 per cent of median income, by age, sex and persons with disabilities

10.3 | Ensure equal opportunity and reduce inequalities of outcomes (including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard) | 10.3.1 Proportion of the population reporting having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law

10.4 | Adopt policies, especially fiscal, wage and social protection policies and, progressively, achieve greater equality | 10.4.1 Labour share of GDP, comprising wages and social protection transfers

10.5 | Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations | 10.5.1 Financial soundness indicators

10.6 | Ensure enhanced representation and voice for developing countries in decision-making in global international economic policies and action in this regard | 10.6.1 Proportion of members and voting rights of developing countries in international organizations

10.7 | Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies | 10.7.1 Registered cost borne by employees as a proportion of annual income earned in country of destination

10.8 | Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements | 10.8.1 Proportion of tariff lines applied to imports from least developed countries and developing countries with zero tariff

10.9 | Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes | 10.9.1 Total resource flows for development, by recipient and donor countries and type of flow (e.g. official development assistance, foreign direct investment and other flows)

10.C | By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent | 10.C.1 Resilience costs as a proportion of the annual remittances

Sustainable Development Goal 11

Sustainable Cities & Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

Target | Indicators | 2020 Alignment
--- | --- | ---
11.1 | By 2030, ensure access for all of adequate, safe and affordable housing and basic services and upgrade slums | 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing

11.2 | By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons | 11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities

11.3 | By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries | 11.3.1 Ratio of local government expenditure to population growth rate

11.4 | Strengthen efforts to protect and safeguard the world’s cultural and natural heritage | 11.4.1 Total expenditure (public and private per capita) spent in the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designated), level of government (national, regional, local), the purpose of expenditure (investment and operation) and type of private funding (donations from private non-profit sector and sponsorship)

11.5 | By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations | 11.5.1 Number of deaths, missing persons and persons affected by disaster per 100,000 people

11.6 | By 2030, provide access to safe, affordable, accessible and sustainable drinking water and sanitation for all | 11.6.1 Proportion of urban solid waste managed effectively and with adequate final discharge out of total urban solid waste generated, by cities

11.7 | By 2030, reduce the adverse impact of climate-related environmental impacts of cities, including by paying special attention to an equitable and communal and other waste management | 11.7.1 Annual mean levels of fine particulate matter (e.g. PM10 and PM2.5) in cities showing significant increase in air pollution

11.8 | By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities | 11.8.1 Proportion of urban and rural areas with physical or sexual harassment, by age, sex, disability status and place of occurrence, in the previous 12 months

11.9 | Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning | 11.9.1 Proportion of population living in cities that implement urban and regional development plans integrating priorities for infrastructure and resource needs, by size of city

Northern Star Resources Sustainability Report 2020
### Appendix D: UN SDG Alignment

#### Sustainable Development Goal 11 (continued)

**Sustainable Cities & Communities**

Make cities and human settlements inclusive, safe, resilient and sustainable

**Target**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11.B</strong></td>
<td>By 2030, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusive, resource-efficient, and climate-resilient development at all levels.</td>
</tr>
<tr>
<td><strong>11.C</strong></td>
<td>Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials</td>
</tr>
</tbody>
</table>

#### Sustainable Development Goal 12

**Responsible Consumption & Production**

Ensure sustainable consumption and production patterns

**Target**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12.1</strong></td>
<td>Implement the ‘ sesame framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capital flows of developing countries.</td>
</tr>
<tr>
<td><strong>12.2</strong></td>
<td>By 2030, achieve the sustainable management and efficient use of natural resources</td>
</tr>
<tr>
<td><strong>12.3</strong></td>
<td>By 2030, halve per capita global waste at the retail and consumer levels and reduce per capita losses along production and supply chains, including post-harvest losses</td>
</tr>
<tr>
<td><strong>12.4</strong></td>
<td>By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and substantially reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</td>
</tr>
<tr>
<td><strong>12.5</strong></td>
<td>By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</td>
</tr>
<tr>
<td><strong>12.6</strong></td>
<td>Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle</td>
</tr>
<tr>
<td><strong>12.7</strong></td>
<td>Promote public procurement practices that are sustainable, in accordance with national policies and priorities</td>
</tr>
<tr>
<td><strong>12.8</strong></td>
<td>By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature</td>
</tr>
<tr>
<td><strong>12.A</strong></td>
<td>Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production</td>
</tr>
<tr>
<td><strong>12.B</strong></td>
<td>Develop and implement tools to monitor sustainable and improved supplies for sustainable tourism that creates jobs and promotes local culture and products</td>
</tr>
<tr>
<td><strong>12.C</strong></td>
<td>Reduce inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by extending tax incentives for efficient use of energy and impose a moderate, where they exist, tax on fossil fuels and waste to reflect their environmental impacts, taking fully into account the specific needs and circumstances of developing countries and maximizing the possible adverse impacts on the development and capabilities of developing countries.</td>
</tr>
</tbody>
</table>

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Northern Star Resources Sustainability Report 2020
### Climate Action

**Target**

Target urgent action to combat climate change and its impacts*

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1.1</td>
<td>Number of deaths, missing persons and persons affected by disaster and displacement per 100,000 people</td>
<td></td>
</tr>
<tr>
<td>13.1.2</td>
<td>Number of countries with a national and local disaster risk reduction strategy</td>
<td></td>
</tr>
<tr>
<td>13.1.3</td>
<td>Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national risk reduction strategies</td>
<td></td>
</tr>
<tr>
<td>13.2.1</td>
<td>Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy which increases their adaptability to the adverse impacts of climate change and fosters climate resilience and low greenhouse gas emission development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contributions, national communications, national update report or other)</td>
<td></td>
</tr>
<tr>
<td>13.3.1</td>
<td>Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula</td>
<td></td>
</tr>
<tr>
<td>13.3.2</td>
<td>Number of countries that have communicated the strengthening of institutional, systemic and individual capacity building for improved climate change-related planning and management, including focusing on women, youth and local and marginalized communities</td>
<td></td>
</tr>
<tr>
<td>13.7.1</td>
<td>Number of offshore vessels and small-scale fisheries in countries in the context of responsible fisheries and management, including focusing on women, youth and local and marginalized communities</td>
<td></td>
</tr>
</tbody>
</table>

**Northern Star Resources Sustainability Report 2020**

### Life Below Water

**Target**

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1.1</td>
<td>Index of coastal multification and floating plastic debris density</td>
<td></td>
</tr>
<tr>
<td>14.2.1</td>
<td>Proportion of national marine ecological zones managed using ecosystem-based approaches</td>
<td></td>
</tr>
<tr>
<td>14.3.1</td>
<td>Average marine acidity (pH) measured at agreed scale of representation sampling stations</td>
<td></td>
</tr>
<tr>
<td>14.4.1</td>
<td>Proportion of fish stocks within ecologically sustainable limits</td>
<td></td>
</tr>
<tr>
<td>14.5.1</td>
<td>Coverage of protected areas in relation to marine area</td>
<td></td>
</tr>
<tr>
<td>14.6.1</td>
<td>Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing</td>
<td></td>
</tr>
<tr>
<td>14.7.1</td>
<td>Sustainable fisheries as a percentage of GDP in small island developing States, least developed countries and all countries</td>
<td></td>
</tr>
<tr>
<td>14.8.1</td>
<td>Number of best available scientific information</td>
<td></td>
</tr>
<tr>
<td>14.9.1</td>
<td>Ongoing scientific monitoring of fish species in the Goodpaster River at Pogo Mine, Alaska.</td>
<td></td>
</tr>
</tbody>
</table>

**Northern Star Resources Sustainability Report 2020**
### Sustainable Development Goal 15
**Life on Land**

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

#### Target 15.1
By 2020, protect at least 17% of terrestrial and marine areas, in accordance with internationally accepted guidelines.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1.1</td>
<td>Forest area as a proportion of total land area</td>
</tr>
<tr>
<td>15.1.2</td>
<td>Proportion of protected and managed forest areas protected, by ecosystem type</td>
</tr>
<tr>
<td>15.1.3</td>
<td>Proportion of land that is degrading over total land area</td>
</tr>
<tr>
<td>15.1.4</td>
<td>Coverage by protected areas of important sites for nature biodiversity</td>
</tr>
<tr>
<td>15.1.5</td>
<td>Take urgent and significant action to reduce the degradation and loss of all types of forests, halt deforestation and forest degradation by 2020, protect and prevent the introduction of forest-borne diseases</td>
</tr>
<tr>
<td>15.1.6</td>
<td>Enhance global support for efforts to combat poaching and trafficking of all types of species, including for conservation and reforestation incentives to developing countries to advance such management, in accordance with internationally accepted guidelines</td>
</tr>
<tr>
<td>15.1.7</td>
<td>Mobilize and significantly increase financial resources from all sources to combat poaching and trafficking of all types of species, including for conservation and reforestation incentives to developing countries to advance such management, in accordance with internationally accepted guidelines</td>
</tr>
</tbody>
</table>

#### Target 16.1
Significantly reduce all forms of violence and related death rates everywhere

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.1.1</td>
<td>Proportion of homicides of all persons per 100,000 population, by sex and age</td>
</tr>
<tr>
<td>16.1.2</td>
<td>Conflict-related deaths per 100,000 population, by sex, age and cause</td>
</tr>
<tr>
<td>16.1.3</td>
<td>Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months</td>
</tr>
<tr>
<td>16.1.4</td>
<td>Proportion of population that feel safe walking alone around the area they live</td>
</tr>
</tbody>
</table>

#### Target 15.2
By 2020, undertake activities to prevent poaching and trafficking of all types of species, including for conservation and reforestation incentives to developing countries to advance such management, in accordance with internationally accepted guidelines

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.2.1</td>
<td>Proportion of children aged 15–19 years who experienced any physical violence and/or psychological or sexual violence by caregivers, by sex and age</td>
</tr>
<tr>
<td>15.2.2</td>
<td>Number of victims of trafficking per 100,000 population, by sex, age and form of exploitation</td>
</tr>
</tbody>
</table>

#### Target 15.3
End abuse, exploitation, trafficking and all forms of violence against and torture of children

<table>
<thead>
<tr>
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<td>16.2.1</td>
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<tr>
<td>16.2.2</td>
<td>Number of victims of trafficking per 100,000 population, by sex, age and form of exploitation</td>
</tr>
</tbody>
</table>

#### Target 15.4
Significantly reduce the impact of invasive alien species on land ecosystems and control or eradicate the priority invasive alien species

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.4.1</td>
<td>Proportion of invaded or threatened species of flora and fauna and address both demand and supply of illegal wildlife products</td>
</tr>
<tr>
<td>15.4.2</td>
<td>Proportion of seized, found or surrendered arms whose illicit origin or illegal use was established by a competent authority</td>
</tr>
</tbody>
</table>

#### Target 15.5
Take urgent and significant action to reduce the degradation and loss of all types of forests, halt deforestation and forest degradation by 2020, protect and prevent the introduction of forest-borne diseases

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.5.1</td>
<td>Proportion of forest area as a proportion of total land area</td>
</tr>
<tr>
<td>15.5.2</td>
<td>Forest area as a proportion of total land area</td>
</tr>
</tbody>
</table>

#### Target 15.6
By 2020, significantly reduce illicit financial and arm’s flows, strengthen the recovery and return of stolen assets and control all forms of organised crime

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.6.1</td>
<td>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</td>
</tr>
<tr>
<td>16.6.2</td>
<td>Proportion of victims of violence in the previous 12 months</td>
</tr>
</tbody>
</table>

#### Target 15.7
Ensure the conservation, restoration and sustainable use of all types of forests, halt deforestation and forest degradation by 2020, protect and prevent the introduction of forest-borne diseases

<table>
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<th>2020 Alignment</th>
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</thead>
<tbody>
<tr>
<td>15.7.1</td>
<td>Proportion of invaded or threatened species of flora and fauna and address both demand and supply of illegal wildlife products</td>
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<tr>
<td>15.7.2</td>
<td>Proportion of seized, found or surrendered arms whose illicit origin or illegal use was established by a competent authority</td>
</tr>
</tbody>
</table>

#### Target 16.3
Promote the rule of law at the national and international levels and ensure equal access to justice for all

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.3.1</td>
<td>Proportion of victims of violence in the previous 12 months who reported their exploitation to competent authorities or other officially recognized conflict resolution mechanisms</td>
</tr>
<tr>
<td>16.3.2</td>
<td>Unscreened detainees as a proportion of total prison population</td>
</tr>
</tbody>
</table>

#### Target 15.8
By 2020, introduce mechanisms to prevent the introduction and significantly reduce the impact of invasive alien species, including for conservation and reforestation incentives to developing countries to advance such management, in accordance with internationally accepted guidelines

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.8.1</td>
<td>Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species</td>
</tr>
<tr>
<td>15.8.2</td>
<td>Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species</td>
</tr>
</tbody>
</table>

#### Target 16.4
By 2020, significantly reduce illicit financial and arm’s flows, strengthen the recovery and return of stolen assets and control all forms of organised crime

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.4.1</td>
<td>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</td>
</tr>
<tr>
<td>16.4.2</td>
<td>Proportion of victims of violence in the previous 12 months</td>
</tr>
</tbody>
</table>

#### Target 15.9
By 2020, integrate ecosystem and biodiversity values into national and local planning, development priorities, poverty reduction strategies and accounts

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.9.1</td>
<td>Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species</td>
</tr>
</tbody>
</table>

#### Target 16.5
Substantially reduce corruption and bribery in all their forms

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.5.1</td>
<td>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</td>
</tr>
</tbody>
</table>

#### Target 16.6
Develop effective, accountable and transparent institutions at all levels

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.6.1</td>
<td>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</td>
</tr>
<tr>
<td>16.6.2</td>
<td>Proportion of the population satisfied with their last experience of public service delivery</td>
</tr>
</tbody>
</table>

#### Target 15.10
By 2020, significantly reduce illicit financial and arm’s flows, strengthen the recovery and return of stolen assets and control all forms of organised crime

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.10.1</td>
<td>Proportion of population that feel safe walking alone around the area they live</td>
</tr>
</tbody>
</table>

#### Target 16.7
Ensure remuneration, inclusivity, participation and representation of decision-making at all levels

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.7.1</td>
<td>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</td>
</tr>
</tbody>
</table>

#### Target 15.11
By 2020, significantly reduce illicit financial and arm’s flows, strengthen the recovery and return of stolen assets and control all forms of organised crime

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.11.1</td>
<td>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</td>
</tr>
</tbody>
</table>

#### Target 16.8
Promote and enforce non-discriminatory laws and policies for sustainable development

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.8.1</td>
<td>Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law</td>
</tr>
</tbody>
</table>

### Northern Star Resources Sustainability Report 2020
## Sustainable Development Goal 17

### Partnerships for the Goals

**Strengthen the means of implementation and revitalize the global partnership for sustainable development**

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.1</td>
<td>Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</td>
<td>Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</td>
</tr>
<tr>
<td>17.2</td>
<td>Developed countries to implement fully their official development assistance commitments, including the commitments by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries</td>
<td>Developed countries to implement fully their official development assistance commitments, including the commitments by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries</td>
</tr>
<tr>
<td>17.3</td>
<td>Mobilize additional financial resources for developing countries from multiple sources</td>
<td>Mobilize additional financial resources for developing countries from multiple sources</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.4</td>
<td>Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress</td>
<td>Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress</td>
</tr>
<tr>
<td>17.5</td>
<td>Adopt and implement investment promotion regimes for least developed countries</td>
<td>Adopt and implement investment promotion regimes for least developed countries</td>
</tr>
<tr>
<td><strong>Capacity-Building</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.6</td>
<td>Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</td>
<td>Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</td>
</tr>
<tr>
<td>17.7</td>
<td>Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</td>
<td>Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</td>
</tr>
<tr>
<td>17.8</td>
<td>Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2020 and enhance the use of existing technology, in particular information and communications technology</td>
<td>Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2020 and enhance the use of existing technology, in particular information and communications technology</td>
</tr>
</tbody>
</table>

### Systemic Issues

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.9</td>
<td>Enhance capacity-building in developing countries to support the achievement of the sustainable development goals, including through North-South, South-South and triangular cooperation</td>
<td>Enhance capacity-building in developing countries to support the achievement of the sustainable development goals, including through North-South, South-South and triangular cooperation</td>
</tr>
<tr>
<td>17.10</td>
<td>Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</td>
<td>Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</td>
</tr>
<tr>
<td>17.11</td>
<td>Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries’ share of global exports by 2020</td>
<td>Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries’ share of global exports by 2020</td>
</tr>
<tr>
<td>17.12</td>
<td>Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access</td>
<td>Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access</td>
</tr>
</tbody>
</table>

### Systemic Issues

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.13</td>
<td>Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</td>
<td>Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism</td>
</tr>
<tr>
<td>17.14</td>
<td>Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</td>
<td>Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</td>
</tr>
<tr>
<td>17.15</td>
<td>Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2020 and enhance the use of existing technology, in particular information and communications technology</td>
<td>Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2020 and enhance the use of existing technology, in particular information and communications technology</td>
</tr>
<tr>
<td>17.16</td>
<td>Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries</td>
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</tr>
<tr>
<td>17.17</td>
<td>“Encourage and promote effective public, private-public and civil society partnerships, building on the experience and resources of partnerships Data, monitoring and accountability “</td>
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</tr>
<tr>
<td>17.18</td>
<td>By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</td>
<td>By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</td>
</tr>
<tr>
<td>17.19</td>
<td>By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries</td>
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</tr>
</tbody>
</table>

### Systemic Issues

<table>
<thead>
<tr>
<th>Target</th>
<th>Indicators</th>
<th>2020 Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.20</td>
<td>Proportion of countries that [a] have conducted at least one population and housing census in the last 10 years; and [b] have at least 75 per cent birth registration and 80 per cent death registration</td>
<td>Proportion of countries that [a] have conducted at least one population and housing census in the last 10 years; and [b] have at least 75 per cent birth registration and 80 per cent death registration</td>
</tr>
</tbody>
</table>

---

Northern Star Resources Sustainability Report 2020

Appendix D: UN SDG Alignment
Appendix E: Tailings Disclosure
### Tailing Storage Management Summary Information

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Tailing Facility Name</th>
<th>Location (Latitude/Longitude)</th>
<th>Ownership (as at December 2020)</th>
<th>Status</th>
<th>Date of Initial Operation</th>
<th>EIA Date</th>
<th>Current Maximum Height (m)</th>
<th>Current Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Planned Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Most recent independent engineering report (Y/N)</th>
<th>Do you have full and complete relevant engineering records to support design, construction, operation, maintenance and rehabilitation? (Y/N)</th>
<th>Has this facility, or any portion thereof, been certified or validated as stable by an independent engineer and if so, when was it certified as stable by the same or a different firm? (Y/N)</th>
<th>Has there been a review of the current risk assessment and any changes? If yes, what did the assessment take place?</th>
<th>Has this facility, or any portion thereof, been inspected or certified as stable by an independent engineer or third party? If yes, when was it certified as stable?</th>
<th>Have you, or do you intend to, inspect your tailings facilities against the impact of more regular extreme weather events in the next two years? (Y/N)</th>
<th>Comments or questions related to your experience or expertise?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>Tanami Site 1</td>
<td>Latitude: -19.981 Longitude: 129.694</td>
<td>JV - 40% Closed and operated</td>
<td>Active</td>
<td>2004</td>
<td>Yes</td>
<td>10,000,000</td>
<td>10,000,000</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Site 2</td>
<td>Dingo Site 2</td>
<td>Latitude: -19.962 Longitude: 120.574</td>
<td>JV - 40% Closed and operated</td>
<td>Active</td>
<td>1999</td>
<td>Yes</td>
<td>12,200,000</td>
<td>13,400,000</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Site 3</td>
<td>TSF1 Site 3</td>
<td>Latitude: -27.385 Longitude: 120.946</td>
<td>JV - 40% Closed and operated</td>
<td>Active</td>
<td>1995</td>
<td>Yes</td>
<td>8,700,000</td>
<td>8,700,000</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
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### Central Tails Task Project

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Tailing Facility Name</th>
<th>Location (Latitude/Longitude)</th>
<th>Ownership (as at December 2020)</th>
<th>Status</th>
<th>Date of Initial Operation</th>
<th>EIA Date</th>
<th>Current Maximum Height (m)</th>
<th>Current Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Planned Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Most recent independent engineering report (Y/N)</th>
<th>Do you have full and complete relevant engineering records to support design, construction, operation, maintenance and rehabilitation? (Y/N)</th>
<th>Has this facility, or any portion thereof, been certified or validated as stable by an independent engineer and if so, when was it certified as stable by the same or a different firm? (Y/N)</th>
<th>Has there been a review of the current risk assessment and any changes? If yes, what did the assessment take place?</th>
<th>Has this facility, or any portion thereof, been inspected or certified as stable by an independent engineer or third party? If yes, when was it certified as stable?</th>
<th>Have you, or do you intend to, inspect your tailings facilities against the impact of more regular extreme weather events in the next two years? (Y/N)</th>
<th>Comments or questions related to your experience or expertise?</th>
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<tbody>
<tr>
<td>Site 4</td>
<td>Dice Site 4</td>
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<td>JV - 40% Closed and operated</td>
<td>Active</td>
<td>2004</td>
<td>Yes</td>
<td>8,700,000</td>
<td>8,700,000</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
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### Barnawarrah

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<th>Tailing Facility Name</th>
<th>Location (Latitude/Longitude)</th>
<th>Ownership (as at December 2020)</th>
<th>Status</th>
<th>Date of Initial Operation</th>
<th>EIA Date</th>
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<th>Comments or questions related to your experience or expertise?</th>
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<tbody>
<tr>
<td>Site 5</td>
<td>TFS1 Site 5</td>
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<td>JV - 40% Closed and operated</td>
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<td>2004</td>
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<td>8,700,000</td>
<td>8,700,000</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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### Western Region

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<tr>
<th>Site Name</th>
<th>Tailing Facility Name</th>
<th>Location (Latitude/Longitude)</th>
<th>Ownership (as at December 2020)</th>
<th>Status</th>
<th>Date of Initial Operation</th>
<th>EIA Date</th>
<th>Current Maximum Height (m)</th>
<th>Current Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Planned Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Most recent independent engineering report (Y/N)</th>
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<th>Comments or questions related to your experience or expertise?</th>
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<tbody>
<tr>
<td>Site 6</td>
<td>TFS2 Site 6</td>
<td>Latitude: -19.968 Longitude: 129.728</td>
<td>JV - 40% Closed and operated</td>
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<td>2004</td>
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<td>8,700,000</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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### Northern Region

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Tailing Facility Name</th>
<th>Location (Latitude/Longitude)</th>
<th>Ownership (as at December 2020)</th>
<th>Status</th>
<th>Date of Initial Operation</th>
<th>EIA Date</th>
<th>Current Maximum Height (m)</th>
<th>Current Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Planned Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
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<th>Comments or questions related to your experience or expertise?</th>
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<tbody>
<tr>
<td>Site 7</td>
<td>TFS3 Site 7</td>
<td>Latitude: -19.964 Longitude: 129.730</td>
<td>JV - 40% Closed and operated</td>
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<td>2004</td>
<td>Yes</td>
<td>8,700,000</td>
<td>8,700,000</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</table>

### Other

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Tailing Facility Name</th>
<th>Location (Latitude/Longitude)</th>
<th>Ownership (as at December 2020)</th>
<th>Status</th>
<th>Date of Initial Operation</th>
<th>EIA Date</th>
<th>Current Maximum Height (m)</th>
<th>Current Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Planned Tailing Storage Impoundment Volume (m³ as at December 2020)</th>
<th>Most recent independent engineering report (Y/N)</th>
<th>Do you have full and complete relevant engineering records to support design, construction, operation, maintenance and rehabilitation? (Y/N)</th>
<th>Has this facility, or any portion thereof, been certified or validated as stable by an independent engineer and if so, when was it certified as stable by the same or a different firm? (Y/N)</th>
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<th>Have you, or do you intend to, inspect your tailings facilities against the impact of more regular extreme weather events in the next two years? (Y/N)</th>
<th>Comments or questions related to your experience or expertise?</th>
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<tr>
<td>Site 8</td>
<td>TFS4 Site 8</td>
<td>Latitude: -19.970 Longitude: 129.732</td>
<td>JV - 40% Closed and operated</td>
<td>Active</td>
<td>2004</td>
<td>Yes</td>
<td>8,700,000</td>
<td>8,700,000</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</table>

### Appendix: Tailings Disclosure

- **Appendix E: Tailings Disclosure**
  - **Table E.1: Tailings Disclosure**
    - **Tailing Storage Management Summary Information**
      - **Table E.1:**
        - **Central Tails Task Project**
        - **Northern Region**
        - **Other**
### Tailings Storage Management Summary Information (continued)

| Site | Name | Location (long, lat) | Ownership (as of December 2020) | 6. Status | 7. Date of Operation | 9. Current Tailings Storage Impoundment Volume (m³ as of December 2020) | 11. Most Recent Independent Expert Review (Yes/No) | 13. What is your forward capping strategy for this facility (Yes/No)? | 14. What guidelines do you follow for the capping design of this facility (Yes/No)? | 15. Who is your forward capping design expert? (Yes/No) | 16. Have any adverse downstream consequences of this facility (Yes/No)? | 17. What is your current monitoring design (Yes/No)? | 18. In what timeframe are you planning to close this facility (Yes/No)? | 19. What is the expected closure date (Yes/No)? | 20. Any other relevant issues and supporting documentation. |
|------|------|---------------------|---------------------------------|----------|---------------------|--------------------------------------------------|-----------------------------------------------|--------------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| **Kundana** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | December 2012 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 2 | Latitude: -30.710 Longitude: 121.488 | Owned and operated | Inactive | January 2002 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| Red Hill in Pit | Latitude: -30.593 Longitude: 121.220 | Owned and operated | Inactive | August 1993 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| Collie TSP | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | August 1993 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| Walden in Pit | Latitude: -30.593 Longitude: 121.220 | Owned and operated | Closed | January 2007 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| **Mt. Percy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Active | April 2020 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 2 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Active | April 2020 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 3 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Active | April 2020 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| **Fimiston** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 1960s | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 2 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 1985 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 3 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 1989 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| **Fimiston II** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2002 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 2 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2019 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| **Gidji II** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2002 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 2 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2019 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| **Fimiston II** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2020 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| **Red Hill In-Pit** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSF Cell 1 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2002 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |
| TSF Cell 2 | Latitude: -30.706 Longitude: 121.488 | Owned and operated | Inactive | 2020 | Yes | 179,000,000 | No | No | No | No | No | No | No | No | No | No |

### Notes
- Q6: tailings is being reclaimed for a different purpose.
- Q7: reclaimed for a purpose.
- Q8: reclaimed for a purpose.
- Q9: estimated volume.
- Q10: estimated volume.
- Q11: estimated volume.
- Q12: estimated volume.
- Q13: estimated volume.
- Q14: estimated volume.
- Q15: estimated volume.
- Q16: estimated volume.
- Q17: estimated volume.
- Q18: estimated volume.
- Q19: estimated volume.
- Q20: estimated volume.
<table>
<thead>
<tr>
<th>Site Code</th>
<th>Site Name</th>
<th>Location (Long/lat)</th>
<th>Ownership (as December 2020)</th>
<th>Status</th>
<th>Date of Final Operation</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Planned Tailings Storage Volume (m³)</th>
<th>Most Recent Independent Review Date</th>
<th>Most Recent Independent Review Results (Yes/No)</th>
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<tbody>
<tr>
<td>TSP</td>
<td>TSP</td>
<td>Latitudes: -12.750, 30.200</td>
<td>Owned and operated</td>
<td>Yea March 2011</td>
<td>2.910,000 3.568,000</td>
<td>Yes</td>
<td>Category 2</td>
<td></td>
<td></td>
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<tr>
<td>TSP</td>
<td>TSP</td>
<td>Latitudes: -12.750, 30.200</td>
<td>Owned and operated</td>
<td>Yea March 2011</td>
<td>2.910,000 3.568,000</td>
<td>Yes</td>
<td>Category 2</td>
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<tr>
<td>Jubilee TSP</td>
<td>Jubilee TSP</td>
<td>Latitudes: -31.020, 121.613</td>
<td>Owned and operated</td>
<td>Yea October 2004</td>
<td>2.020,000 2.020,000</td>
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<td>Category 2</td>
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<td>Jubilee TSP</td>
<td>Jubilee TSP</td>
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<td>Kambalda</td>
<td>Kambalda</td>
<td>Latitudes: -31.018, 121.610</td>
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Appendix F: Modern Slavery Survey
Modern Slavery Supplier Survey

In November to December 2020, Northern Star conducted a second survey of all its suppliers, including KCGM suppliers, using the modern slavery supplier assessment questionnaire developed by a mining industry group in collaboration with Walk Free Foundation (SAQ). The SAQ was chosen in favour of reissuing the previous modern slavery supplier survey questions developed by Northern Star in 2016-2019. We consider the SAQ is likely to be adopted by numerous resources companies operating in Western Australia in particular. We hope that issuing this standard form questionnaire will reduce the burden on suppliers asked to respond to such survey requests.

A benefit of using the SAQ was an improved survey response rate from our suppliers.

The only departure from the SAQ made by Northern Star was to request suppliers list the countries in which they have operations, and industries in which they operate, in order to interpret these responses against the 2018 Global Slavery Index data on the prevalence of modern slavery victims by country, and by industry.

A copy of the SAQ questions as adjusted by Northern Star appears below.

Self-Assessment Questionnaire

Working together to identify and understand the risks of modern slavery, including in operations and supply chains, is a critical step toward addressing world-wide modern slavery and related practices.

Modern Slavery Laws

The introduction of the UK Modern Slavery Act in 2015, and more recently the Australian Modern Slavery Act 2018 (Cth) (Modern Slavery Laws), require businesses to do more to address risks of modern slavery. The Modern Slavery Laws require large organisations to lodge annual statement[s] which explain what businesses are doing to assess and address risks of modern slavery in operations and supply chains. The Modern Slavery Laws are designed to (amongst other things) increase business awareness of modern slavery risks and improve transparency across global supply chains.

In addition, the UN Guiding Principles on Business and Human Rights outline that businesses have a responsibility to respect human rights, which includes acting to prevent, mitigate and where appropriate remedy modern slavery within operations and supply chains.

Purpose of the SAQ

This self-assessment questionnaire (“SAQ”) is designed to:

- support the identification of modern slavery risks;
- foster collaborative efforts between suppliers and organisations to address these risks;
- improve transparency; and
- identify areas for further due diligence.

This SAQ was developed through extensive consultation between resources, mining and energy industry organisations. Addressing modern slavery risks is a business-critical issue, as not only is it the right thing to do, it will also improve the integrity and quality of business operations and supply chains.

How to complete the SAQ

Please answer all questions to the best of your own knowledge, having made reasonable enquiries if the answer is not within your own knowledge. Completing this SAQ honestly and transparently will allow us to work together to address identified risk factors in the supply chain.

1. Your details
   - Name
   - Email Address
   - Phone Number
   - Company address

2. Your position / role

3. Organisation number (ABN/ACN or foreign equivalent e.g. EIN)

4. Industries in which your organisation operates (please select all that apply)
   - Agriculture
   - Construction
   - Electronics / electrical products manufacturing
   - Extractives / milling / basic metal production
   - Fishing / aquaculture
   - Forestry
   - Healthcare
   - Hospitality
   - Housekeeping / facilities operation
   - Textile / apparel manufacturing
   - Transportation / warehousing
   - None applicable

5. Countries in which your organisation operates (as at 31 October 2020)

6. Worker information (as at 31 October 2020)
   - Total number of permanent employees
   - Total number of labour hire / contract workers

7. Auditing history

Provide the date and details of any responsible sourcing audits or certifications (including social, ethical and environmental) conducted, and locations they relate to.

8. Certification schemes

Provide the details of any responsible sourcing third-party certification schemes including SMETA, ETI or other, relevant inspections including the dates of certifications.

Modern Slavery Risk Factor Self-Assessment

NOTE FOR REPRESENTATIVES COMPLETING SAQ: Please answer every question and describe reasons for your answers, together with referencing any relevant additional information. You can attach supplementary annexures as appropriate. If you need assistance or clarification, please contact your procurement representative.

1. Does your organisation have policies and processes to identify, investigate and remedy the risk and any instances of modern slavery within your organisation?
   - Yes
   - No
   - Please describe
2. Do you provide training to your employees on modern slavery risk?  
   - Yes  - No  - Comments

3. Does your organisation conduct due diligence for modern slavery risks on your suppliers?  
   - Yes  - No  - Comments

4. Does your organisation require your suppliers to conduct due diligence for modern slavery risks on their suppliers?  
   - Yes  - No  - Comments

5. What action does your organisation take if modern slavery practices are suspected?  
   - Please describe

6. Does your organisation comply with the United Nations ILO Conventions that prohibit the worst forms of child labour, hazardous child labour and minimum age for work?  
   - Yes  - No  - Comments

7. Does your organisation undertake checks to ensure child labour is not being used within your organisation or by your suppliers?  
   - Yes  - No  - Please describe

8. Does your organisation have a policy or process that prohibits modern slavery including all forms of forced labour, bonded labour and human trafficking in its operations and in those of its suppliers?  
   - Yes  - No  - Please describe

9. Are any original identity relate documents of workers (e.g. passports, birth certificates, national identity cards) retained?  
   - Yes  - No  - Comments

10. Are workers required to lodge any ‘security deposits’ (this could include financial or personal property) or pay any recruitment fees?  
    - Yes  - No  - Comments

11. Does your organisation deduct wages, impose monetary fines, and/or withhold pay or pay entitlements of workers? This includes fines for misconduct and poor production.  
    - Yes  - No  - Comments

12. Are all workers provided with a written contract in a language they understand, where terms of employment including wage rates and hours of work are clear?  
    - Yes  - No  - Comments

13. Where accommodation is provided to workers (for example, dormitories, hostels or other forms of shared accommodation), are regular checks conducted to ensure that the living conditions are adequate and meet legal requirements (for example, fire safety, space, temperature, lighting, sanitary facilities, privacy, ventilation)?  
    - Yes  - No  - Not applicable  - Please describe

14. Where accommodation is provided to workers, are workers free to leave at will?  
    - Yes  - No  - Not applicable  - Please describe

15. Are workers free to Lawfully resign their employment without restriction or penalty?  
    - Yes  - No  - Comments

16. Are workers paid their legal pay entitlements, on time and provided with pay slips clearly showing how wages have been calculated and details of any deductions?  
    - Yes  - No  - Comments

17. Do workers have mechanisms to anonymously raise concerns related to Labour conditions or workplace grievances and access appropriate remedy?  
    - Yes  - No  - Comments

18. If yes, please describe how these mechanisms are monitored and remedy is provided?

Declaration by person submitting SAQ

The SAQ is required to be signed by a duly authorised representative of the organisation. It is preferable that this be a senior level employee, such as director, general manager or executive.