



# Our Sustainability Story 2021



Our Sustainability Story is comprised of two sections: a summary; followed by the full Sustainability Report – detailed disclosures.

## We are St Barbara

A growing gold company with a global outlook. We're here to create value in everything we do for our people, our communities and our shareholders.

As we strive towards our vision to be a brilliant, global mining company that grows sustainably and creates enduring, positive impacts, we are guided every day by our five commitments and values-led culture. At St Barbara, doing the right thing genuinely matters to all of us.

### Our commitments



**Safety Always**



**Empowered People, Diverse Teams**



**Stronger Communities**



**Respecting the Environment**



**Growing Sustainably**

### Our values

Our values guide us in our decision-making every day.

We act with honesty and integrity

We treat people with respect

We value working together

We deliver to promise

We strive to do better

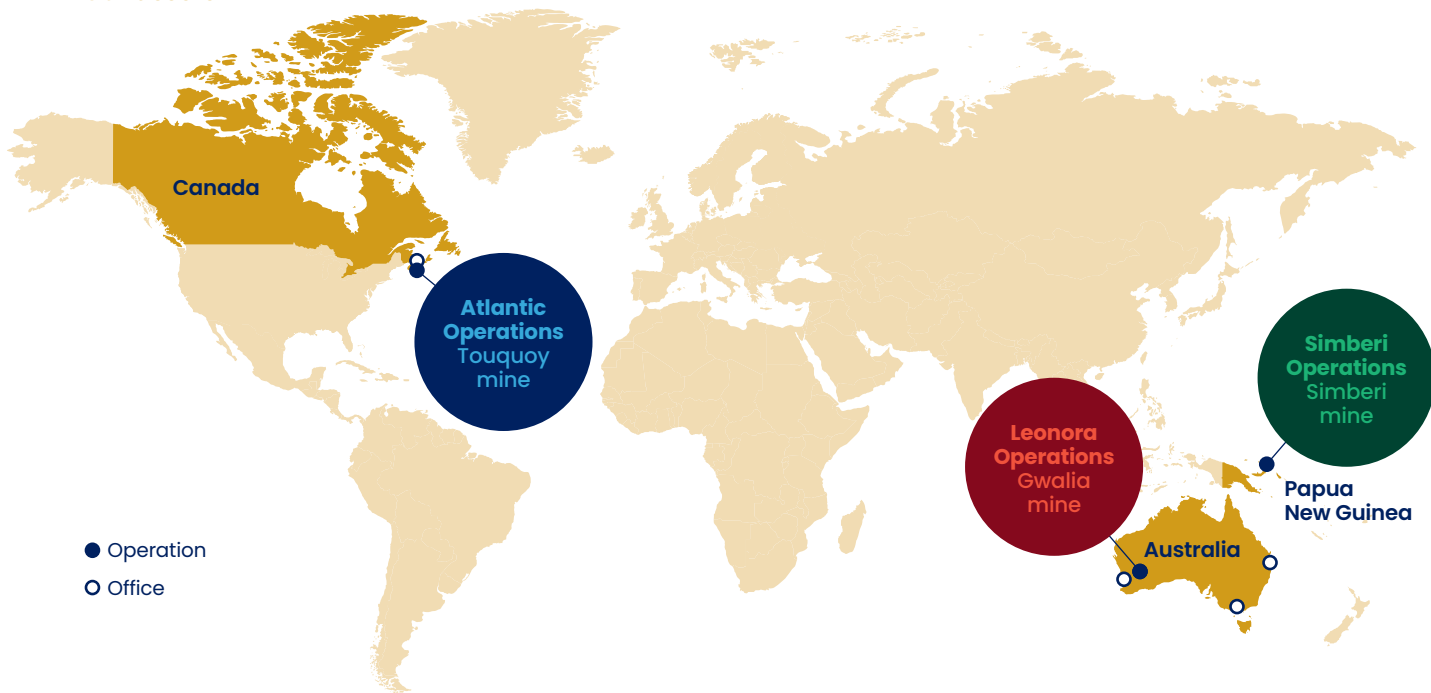
### Our Sustainability Story: Contents

Summary		Sustainability Report – detailed disclosures	
Our company	1	About our report	15
Letter from Managing Director and CEO	2	Our business and value chain	16
Our sustainability framework	5	Our sustainability approach	18
Safety Always	6	Safety Always	21
Empowered People, Diverse Teams	7	Empowered People, Diverse Teams	27
Stronger Communities	8	Stronger Communities	33
Respecting the Environment	9	Respecting the Environment	45
Growing Sustainably	10	Growing Sustainably	57
Case studies	11	Performance data	59
		Appendices	67

# Our company

We are an Australian based, ASX 200 company with gold mining operations in Australia, Canada and Papua New Guinea. Our assets include our Leonora Operations in Western Australia, our Atlantic Operations in Nova Scotia, Canada and our Simberi Operations in New Ireland Province, Papua New Guinea.

## Our assets



**Atlantic Operations**

Open pit mine

---

FY21 Production

**101** koz

---

Three additional open pits planned in Moose River Corridor

---

Atlantic Province Plan: prospective tenements

**Leonora Operations**

Underground mine

---

FY21 Production

**153** koz

---

Mine plan to FY31

---

Leonora Province Plan: prospective tenements

**Simberi Operations**

Open pit mine

---

FY21 Production

**74** koz

---

Mine plan to FY23, sulphide project well advanced a further 11 years of mine life

---

Prospective tenements

At 30 June 2021, St Barbara had almost 6.2 million ounces of mineral resources, including ore reserves of 101 million ounces of contained gold.

We also hold extensive landholding with granted tenements and tenement applications in all three countries in which we operate.

Our approach to exploration activity is coordinated globally. All activity is conducted near to and surrounding each of our existing operations, with the aim of both extending life of mine and providing future growth opportunities.

# Letter from Managing Director and CEO

---

At St Barbara, doing the right thing matters to us. We are a growing gold company with a global outlook and Growing Sustainably is one of our five commitments. These commitments keep us facing in the same direction and our values guide our decision making every day across our global operations. Together they help us to build a strong culture and deliver on our promises.



I'm pleased to introduce to you our 2021 Sustainability Story, the second since I joined the Company. Throughout a busy and demanding year, we have remained focused on our sustainability agenda with the introduction of a new Sustainability Framework reflecting this. This framework supports our vision and business strategy and unites the elements that drive good environmental, social and governance (ESG) performance.

I was pleased to recently launch our new brand identity – Brilliance Matters – which has so aptly shone a light on our progress, while crystallising who we are and where we're going as a brilliant gold mining company. That direction and new brand narrative is illuminating both this report and our accompanying Annual Report.

In this introduction, I'll touch on some of the main points of our sustainability performance over the year, through the lens of our Company commitments. These are then brought to life in this initial summary section of the report.

## Safety Always matters most

The loss of one of our Papua New Guinean employees in a mine truck accident at Simberi Operations in May was a tragedy felt profoundly by so many – the employee's family, colleagues, the community of Simberi and the wider St Barbara family. For my part, it's an event that shook me deeply. As we navigated the process, I was heartened by the way our people responded rapidly and thoroughly to the investigations that followed. We will learn from this and do all we can to prevent such an event occurring again.

I'm therefore encouraged by how the ensuing recommendations are being addressed, including the review of our critical risks and controls. The accident was a stark reminder of the risks mining poses and why Safety Always is central to our decision-making and behaviour, every day, across our workforce and activities.

Our recordable injuries rose by four in FY21 compared to FY20, with most of our total recordable injuries related to contractors. We are working with our contractors to strengthen our contractor management processes.

Safety is our priority and our CARE safety behaviours (Control, Action, Respect and Engage) are central to our safety culture and leadership development. CARE and our safety management protocols have helped us continue to successfully manage the threat of COVID-19 to our sites and local communities. Simberi admirably adapted its site procedures and facilities after cases escalated in PNG, and, like our other operations, they also shared expertise and resources to aid the community's defense against the virus.

Sadly, two of our Papua New Guinean employees passed away with a positive COVID-19 diagnosis and underlying health conditions. This was a tragic reflection of the vulnerability of our people and local communities to severe impacts from the disease, and why we remain committed to overcoming the virus.

## Making progress against our business commitments

Led by our vision to be a brilliant global mining company that grows sustainably and creates enduring positive impacts, our leadership team has set in place a new three-step strategy to unlock business value: delivering the Building Brilliance transformational efficiency program across our operations and extending the mine life of Simberi oxides and Touquoy mine; executing brownfield expansion projects at all three operations; and continuing to grow through acquisitions and exploration.

United in our direction, we can see our path to Growing Sustainably as a company.

Within our ongoing focus on our most material sustainability topics, this year's report includes new content. I encourage you to read the full report for insights into our new CARE safety culture, details about our community and social responsibility strategy, what we are doing to address modern slavery and human rights and, importantly, our progressive reporting to the Sustainability Accounting Standards Board's Metals and Mining Standard.

I'm pleased that these additional disclosures build solidly on our alignment with the Global Reporting Initiative standards, the Minerals Council of Australia's (MCA) Enduring Value sustainability framework, the UN Global Compact, UN Sustainable Development Goals, and the Extractive Industries Transparency Initiative.

During the year we also adopted two additional and important initiatives. The first is the MCA's new Towards Sustainable Mining operational-level ESG performance framework. As an active MCA member we have commenced work to implement the requirements by 2025, a process which will continue to lift our sustainability performance and reporting (see page 12).

The second is the UN Women's Empowerment Principles. These offer guidance to business on how to promote gender equality and women's empowerment in the workplace. They are grounded in the recognition that businesses have a stake in, and a responsibility to strive for, gender equality and women's empowerment.

### Empowered People, Diverse Teams

St Barbara remains a minerals industry leader when it comes to inclusion and diversity, shining the way with our gender diversity achievements. We believe diversity makes for dynamic and sustainable business, driving equity, enhancing our culture, and our employee engagement.

We've updated our Diversity and Inclusion Policy and are establishing an executive Inclusion and Diversity Council charged with setting the overall strategy for inclusion and gender safety across the Group.

We have zero tolerance for any form of harassment including sexual harassment, discrimination, bullying and behaviours that aren't aligned to

our values and Code of Conduct. As an Employer of Choice we're committed to calling out such behaviours, and to reporting annually on our diversity and inclusion performance.

We received the WGEA Employer of Choice for Gender Equality citation for a seventh consecutive year, still the only mining company to be recognised in this way. I'm also proud to continue in my role as a WGEA Pay Equity Ambassador.

We were also one of only 10 Australian companies to be included in the 2021 Bloomberg Gender Equality Index, among 380 companies across 11 sectors worldwide.

As we continue to expand the gender diversity of our workforce, I'm pleased that the proportion of women at Atlantic is now 23%, and in Australia it's 28%. We're aiming for 30%. At Simberi, women represent 16% of employees and we're targeting 18%.

Committed to constant progress in our diversity metrics, we have a particular focus on our attraction and retention of First Nations people. We've enhanced our approach towards building a culturally inclusive, equity-focused business; one our people already have pride in.

### Stronger Communities

Our purpose and commitments make clear that our culture of CARE extends to the communities that host us. During the year, we enhanced our Community and Social Responsibility function and established a new strategy, which reflects our prioritisation of the integral relationships we have with our communities.

We've enhanced our focus on community wellbeing, youth and education, and psychological health. During Simberi's efforts to help combat community transmission of COVID-19, our support included counselling services, on-island assistance, and the best available medical expertise; all helping protect the community and care for our people. In Nova Scotia, our Atlantic Operations worked to support the elderly and youth in the early stages of the pandemic, with an ongoing focus across the entire community and our workforce.

We are operating on ancestral lands of First Nations people and acknowledge their unique cultural heritage, beliefs and connection to these lands, waters and communities. We also recognise the importance of protecting and preserving cultural, spiritual and

## Our sustainability settings and approach are absolutely central to our daily strides toward brilliance and success.

educational practices. We treat all people with respect and aim to build mutually beneficial relationships with the First Nations people.

It's with pride that we continue to support Indigenous youth in Leonora. In Nova Scotia we are openly consulting the First Nations people as we seek to expand our operations. At Simberi, we continue our long-term, collaborative community development and support programs, including supporting COVID-19 management. In each case, we are committed to the priorities of our communities and to enhancing their independence and prosperity. We're mindful that building strong relationships takes time, and we're committed to building trust in this way.

### Respecting the Environment

We are committed to running our business sustainably and responsibly every day and managing our environmental footprint over the life of our mining activity.

At Atlantic Operations, we've put tested controls in place to avoid run-off from roadways; engaging with the provincial regulators. At Simberi Operations, we're currently replacing the deep-sea tailings pipeline; working together with the PNG Conservation, Environment and Protection Authority.

St Barbara is committed to being carbon neutral by 2050<sup>1</sup>. As we expand our activities we are working innovatively to achieve our targets and commitments. We're up to that challenge – and we want to be brilliant at meeting it.

We're looking closely at low-carbon pathways to reducing our carbon emissions intensity. Atlantic Operations is assessing renewable power sources, batteries and low-footprint expansion projects in the context of proposed adjacent mining projects. Leonora Operations is using innovative solutions to reduce emissions, such as absorption chillers run on waste mine heat, and a smart mine layout and waste rock paste fill to reduce truck mileage and emissions.

1. For scope 1 and 2 CO<sub>2</sub>-equivalent (CO<sub>2</sub>-e) emissions.

## Letter from the Managing Director and CEO

Leonora Operations has also incorporated some great initiatives into Building Brilliance with a rethink of waste materials delivering environmental solutions and cost improvements. Meanwhile, at Simberi Operations we are growing and planting thousands of red mangrove seedlings to restore local coastal mangrove forests. The same team is growing new coral reefs in marine nurseries made from recycled mine materials. You can read more about these initiatives and other stories in this report.

### Growing sustainably through our vision

Our commitment to Growing Sustainably means we're committed to growing responsibly, where it makes sense and where we can add the most value for our people, our communities and our shareholders.

Through our three-step strategy we're exploring growth opportunities across all three of our operations that will sustain and enhance production and continue to deliver socio-economic benefits to the communities where we operate.

Already over the last year we've announced advances in our Simberi sulphides project, Touquoy optimisation and Leonora Province Plan, as we create a pathway to establishing three mines with greater than 10 years of operating life. Our financial performance reflected the challenges of the past year. As we look to FY22, we are focused on continuing to realise the benefits of Building Brilliance which unlocked A\$41 million in our business during the past year. We remain focused on our aspiration of A\$150 million cash contribution each year through

a combination of improved productivity, reduced operating costs and lower sustaining capital.

Our leadership team is clear on our strategy and the future direction for St Barbara. Our vision is to be a brilliant global mining company that grows sustainably and creates enduring positive impacts. Our new brand signals this change and growth.

Thank you for your interest in our story as we create a brilliant future for St Barbara.



**Craig Jetson**  
Managing Director and CEO

### Case study

#### Safety Always Matters, everyday

Our 'Safety Always Matters' campaign across St Barbara encouraged our people to speak up about safety as our first commitment, and to share their stories of why Safety Always matters.

Our approach to safety centres on our CARE behaviours, which was launched in FY21. CARE stands for: the controls we use to identify risk and reduce exposure to harm; the actions we must take to plan our work, manage change and report progress; the respect we show each other and the care we take in our inspections and investigations and; how we engage our people with visual leadership and via regular safety meetings and forums.

Everyone at St Barbara must work safely and feel comfortable to speak up about safety. Through campaigns such as Safety Always Matters and our CARE safety culture program, we empower people to do that. Having the right conversations

at the right moment can make all the difference and ensures we have the strongest controls in place.

The focused campaign included a series of videos explaining our 16 Critical Risk Control Standards, leading team conversations around these controls and hosting safety awareness and training events.

Andrew Taylor, GM Atlantic Operations reiterated the priority in his submission on why safety matters to him: "Nothing is so important that we need to do it right now in an unsafe manner; we can always take the time to stop and plan to do it safely. Without safety we will not have production; production always follows safety."



In FY21, we developed a sustainability framework to capture our commitment to sustainable practices and our approach.

## Our sustainability framework

The framework supports St Barbara’s purpose, vision and business strategy which collectively focus on value creation for our stakeholders.

Environmental, social and corporate governance are central to our framework. We measure and report on our environmental, social, and economic performance, we govern our business via approved charters, policies and standards, and our code of conduct ensures we do the right thing – always.

### Our purpose

We’re here to create value in everything we do, for our people, our communities and our shareholders.

### Our vision

To be a brilliant, global mining company that grows sustainably and creates enduring positive impacts.

#### Our values

Our values guide us in our decision-making every day.

- We act with honesty and integrity**
- We treat people with respect**
- We value working together**
- We deliver to promise**
- We strive to do better**

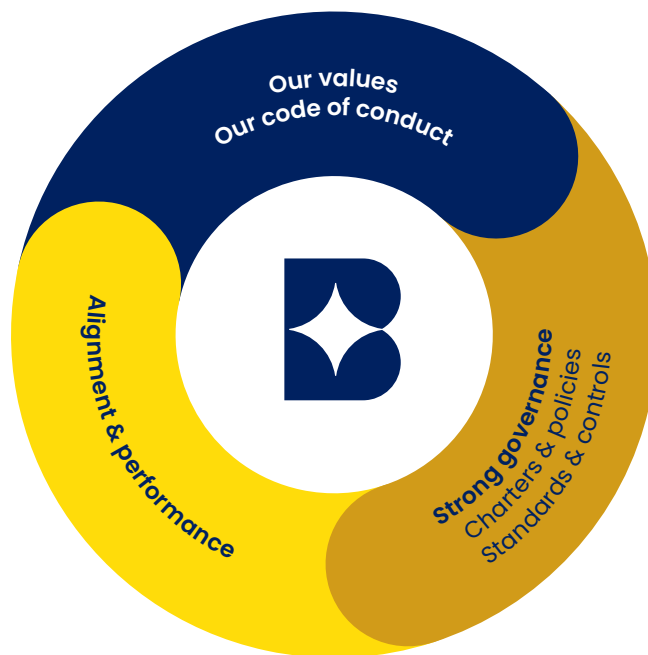
#### Our code of conduct

Sets out our purpose and vision, outlines how we work together, and sets expectations for our behaviour.

It explains the importance of our five values and commitments as we operate our business and care for and interact with each other, our suppliers, communities and third parties.

#### Alignment & performance

We optimise our alignment and performance to our governance settings, industry standards, and internal commitments, targets and goals. We regularly report our performance to our stakeholders.



#### Strong governance

A cascading set of charters, policies, standards, and controls ensures appropriate governance. Endorsed by the Board, these lay out our Group-wide requirements and expectations and explain what we must do in practice. This approach is supported at an operational level with local procedures specific to risks and our business in those areas.

### Our commitments

Our approach to sustainability is guided by our five Group-wide commitments



**Safety Always**



**Empowered People Diverse Teams**



**Stronger Communities**



**Respecting the Environment**



**Growing Sustainably**

# Safety Always

Zero harm is always our target. Zero harm to all people as we responsibly operate our assets to their full potential. This focus on safety guides everything we do.



How our sustainability initiatives map to the United Nations Sustainable Development Goals



## 2021 highlights

TRIFR

# 3.9

(FY20 – 3.0) – 30% increase

Contractor safety management program initiated

Focus on improving critical risk controls, safety leadership and CARE behaviours framework

At St Barbara, across our global operations, our focus is to always run our business with safety at the heart of every decision we make. Keeping our people safe incorporates respecting everyone's right to both physical and psychological safety. We believe that everyone deserves to be safe at work and feel safe about coming to work because they are respected, protected and accepted. There is nothing more important than our people going home safe, well and happy.

### Doubling down on safety – critical controls and CARE

Tragically, on 21 May 2021, a fatal mine accident occurred at our Simberi Operations. This loss of one of our people was felt deeply across the entire Company. We worked to support the individual's family, our employees, and the community as an independent investigation was conducted. We have welcomed the opportunity to implement the recommended corrective and preventative actions, while we double down on safety at Simberi Operations and right across St Barbara.

Our TRIFR was 3.9 for the year, compared to 3.0 in FY20, due to four contractor-related injuries. We are continuing to build a strong culture of safety by sharpening our focus on our Critical Risk Control Standards

and Safety Always leadership. This is supported by the ongoing CARE safety behaviours program launched during the year, along with our Safety Leadership program, which is designed to empower every employee to be a safety leader. Our CARE framework forms part of the Ability to Execute (A2E) training that is offered to everyone at St Barbara. A2E Trainers and Champions lead this training at each site.

### Protecting St Barbara and our communities from COVID-19

As the COVID-19 pandemic evolves, St Barbara's management protocols continue to protect our people and our business; as we also work to support our local communities in their response to the effects of the pandemic. Our teams' efforts have been outstanding, particularly at Simberi Operations, where, with rising virus cases across PNG, additional control measures and restrictions were implemented.

As we support our people and their families during these challenging times, both at work and in our local communities, we are providing Group-wide CARE packages, coaching, training and resource programs.

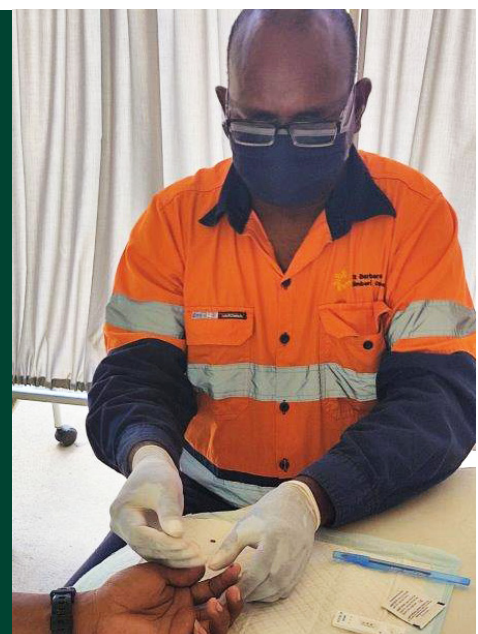
## Case study

### Rapid diagnostic COVID test kits help New Ireland

As part of our response to COVID-19 in New Ireland Province, PNG, our Simberi Operations made donations to a number of organisations on the front line.

Simberi's General Manager delivered 1,000 Rapid Diagnostic Test (RDT) kits to the New Ireland Provincial Health Authority to help their efforts in combatting the virus. The RDT kits are small, portable, and provide a result within only 15 minutes.

The kits are also one of the tools used by Simberi Operations to keep the people of the Simberi Island community safe. On-site quarantine, daily workforce screening (including temperature checks and thermal image scanning as part of security checks) are other measures our Simberi Operations has in place to help protect our people.





# Empowered People, Diverse Teams

We are an employer of choice committed to inclusion and diversity. We provide a caring work environment where our talented people feel safe and are empowered to fulfil their potential.



How our sustainability initiatives map to the United Nations Sustainable Development Goals



## 2021 highlights

**7th**  
year-on-year WGEA  
Employer of Choice

Included in 2021  
Bloomberg GEI

Our people strategy is focused on enabling our competitive differentiator of 'best teams on the ground' to support our vision to be a brilliant global mining company. We are finding the best talent and supporting our leaders to build teams committed to continually learning, growing and succeeding together.

With women making up 28% of our workforce in Australia, and this representation also growing at our Atlantic and Simberi operations, we are continuing to deliver on our gender diversity commitment. Our overall commitment to continuing to foster and evolve our diverse culture at St Barbara is steadfast and ongoing.

In FY21, we launched our organisational effectiveness strategy focused on five business critical drivers of employee engagement. We have been working to create a feeling of belonging for our people – employees and contractors alike – helping our leaders to be more effective, and providing more opportunities to achieve career objectives. Indeed, over the last year, at our Leonora and Simberi operations, there were many instances where our people took opportunities to step up and advance their careers. We have also introduced a new communications strategy and channels to better engage with our people as we respect work-life balance and foster wellbeing. Our aim is to move up both our employee engagement and Organisational Health Index scores.

### Supporting people's wellbeing and engagement

The COVID-19 pandemic has meant longer separation from family for some of our people, and for others, extended time working remotely. These changed work modes can be particularly challenging for those working in remote communities. We are acutely aware of the impact on people's psychological health, and continue to run our range of practical care packages and health education webinars. Recognising the challenge of quarantine, which has predominantly affected our Simberi workforce, we extended counselling support to everyone in quarantine using PNG-based counsellors proficient in Pidjin English. This service continues into FY22 with positive feedback on the support provided. Our sites also proudly support R-U-OK? Day, and Mental Health week.

At St Barbara, we continue to champion the elimination of sexual harassment in the mining industry. We do not tolerate any form of harassment, bias or discrimination. As an Employer of Choice, we will and do call out behaviours that contradict our values.

Our Domestic and Family Violence Policy outlines our support to impacted employees, as we continue to build and maintain a workplace and culture that supports health and wellbeing.

### Leading the way in gender diversity

We have underlined our commitment to industry leadership in gender diversity initiatives. As the only Australian mining company to be recognised as an Employer of Choice for Gender Equality by the Workplace Gender Equality Agency (WGEA), we were cited for a seventh consecutive year. Our Managing Director and CEO, Craig Jetson, continues the legacy as a WGEA Pay Equity Ambassador.

St Barbara was also included in the 2021 Bloomberg Gender Equality Index (GEI), as one of only 10 Australian companies, within a total of 380 across 11 sectors worldwide. We also became a signatory to the UN Women's Empowerment Principles.

### Other key gender diversity highlights for FY21

- Continued to exceed the percentage of women on ASX 200 Boards with 33% representation.
- Reduced our Australian operation's overall gender pay gap to a new low of 7.65%.
- No gender pay gaps in like-for-like roles across the St Barbara Group.
- Progressive updates to the St Barbara parental leave policy, with the removal of eligibility criteria.
- Increased flexibility in taking leave, and an increase in secondary carer leave entitlements from two to three weeks.
- Established programs to increase women and First Nation employees at Atlantic Operations.

As we move into FY22, we are focused on extending the progress we've made with gender equality to building a more culturally diverse team, with greater First Nation representation. We already have objectives in place and are doubling down on our efforts to reach these.

Read our case studies on pages 11 and 13.

# Stronger Communities

We strive to help our communities thrive, grow and prosper. We build meaningful relationships, investing time and energy to ensure local communities are enriched by being our neighbours.



How our sustainability initiatives map to the United Nations Sustainable Development Goals



## 2021 highlights

### New community and social responsibility strategy

### Supporting local communities through COVID-19

Women in PNG workforce rose to

# 16%

Community investment at operations of approximately A\$2.4 million

We're focused on building trusted relationships and being actively involved in the community. In doing so, we can truly understand community priorities, respect traditional cultures and work together to achieve better outcomes for all.

We honour and value the relationships we have established with our communities. In working with them, we acknowledge there are always new discussions to be had and lessons to learn as community priorities evolve. This two-way communication fosters mutual understanding and allows us to work respectfully as we create more employment, business enterprise and education opportunities in our communities.

In FY21, we released our Modern Slavery Statement and also conducted a comprehensive community baseline assessment to ensure we have the structure, systems and support in place for excellence in social responsibility. We are actively extending our CARE framework to our communities as we proudly employ local people, engage local businesses, foster education and encourage better health and wellbeing.

### Insider in our province

St Barbara's strategy is being delivered in three uplifts, focused on Building Brilliance and brownfield

expansion projects in the near term. This involves expansion projects at our Simberi and Atlantic operations and developing the surrounding province at Leonora. In each province, we invite and welcome community input to these plans. While methods of consultation have changed due to COVID-19, we have been successful in obtaining community input to the Simberi sulphide project, our plans for Beaver Dam and our ongoing operations at Touquoy Mine in Nova Scotia and our Leonora Province Plan (see page 11). In doing so, we respect the cultural and environmental values of all people and seek to consult with a view to listening and learning.

### Development through multi-benefit projects

Our projects stand to extend the life of our mines by around 10 years and will provide extended socio-economic benefits. We remain committed to minimising any potential negative environmental or social impacts and intend to maximise social and environmental development opportunities.

Read our case studies on pages 11 to 13.

## Case study

### Supporting education opportunities for Indigenous youth

Leonora Operations' sponsorship of the Leonora Shooting Stars program (girls netball, education and skills development) and Kalgoorlie Clontarf Academy programs (boys football, education and skills development) helps Indigenous youth from local communities continue their education and achieve their goals.

Our support of Shooting Stars has helped increase Indigenous girls' school attendance rates – by 24% above the average school attendance in 2018, by 19% in 2019, and by 11% in 2020 – despite some impact from COVID-19.

But the benefits have moved beyond the original aim of increasing school attendance to fostering relationships that give us a deeper understanding of the local community.

Through our partnership with Shooting Stars, we became aware of three Indigenous sisters from Leonora who needed support to accept partial scholarship positions at St Hilda's Anglican School in Perth. Using our own flight service to Leonora, we have been able to help the girls travel home over their years of attendance at St Hilda's, while providing items essential for them to participate fully in school life. This will ensure they can take advantage of their scholarship opportunities, while still retaining their all-important connection with their family, culture, and community.



# Respecting the Environment

We are committed to caring for the environment. We think differently to find solutions to actively manage and neutralise our impact; because we care about the environment and our planet.



How our sustainability initiatives map to the United Nations Sustainable Development Goals



## 2021 highlights

First disclosure of scope 3 emissions

Adoption of 'Towards Sustainable Mining' principles

As we operate our assets with excellence and grow sustainably, we honour our environmental obligations and aspire to exceed our stakeholders' expectations.

### Medium-term carbon reduction goals

In 2020 we announced our intention to be a carbon neutral business by 2050, and to improve our production emissions efficiency (gold ounces/CO<sub>2</sub> t) by 18.6% (on 2013 levels) by 2030<sup>1</sup>.

As St Barbara's transformation and growth strategy moves forward, and mining goes deeper at Gwalia mine and the grade of our ore changes, there is upward pressure on our emissions. Meeting our medium-term emissions reduction aspiration, while also unlocking business value, requires innovation.

We are working with external experts on low-emission energy technology options that play to our strengths. We are studying renewable energy and efficiency options, including those scalable for our Leonora Province Plan.

In Nova Scotia, our studies include the permitting obligations of future mines and must take into account the trajectory of carbon taxes. In FY21, Atlantic Operations continued to investigate wind and electric hydrogen-powered vehicle options, while running on-site solar power including vehicle charging.

Simberi's expert marine environmental team is supporting the mine's long-running efforts to build the strength and economic independence of the Simberi Island community. One project involves growing and planting thousands of red mangrove seedlings to restore local coastal mangrove forests. These are relied on by the community for their timber and food, but are degrading due to changing ocean conditions, such as rising sea levels.

We're also supporting the growth of new coral reefs in marine 'nurseries' made from recycled mine materials. These developing reefs and mangroves recruit new fish around Simberi. Recently, underwater devices were installed offshore in community fishing zones where they attract larger species that can be sustainably caught for food and sale.

Leonora Operations utilises absorption chillers that cool the underground mine from waste heat captured from the gas-powered electricity power plant. This saves 5,000 tonnes of CO<sub>2</sub>-e compared with conventional refrigeration.

Across our operations we rehabilitate disturbed land and manage waste and effluent according to best practices. Where impacts occur, we provide offsets to a higher standard of biodiversity values. We also prepare for closure in accordance with government requirements, including for forward provisioning of funding for closure.

### Working with integrity to unlock value

As we transform our business and advance our expansion projects and proposed mines, we are committed to the highest standards of environmental and social management. This is reflected in the Environmental Impact Statements (EIS) we have submitted, and our engagement with regulators and stakeholders whose trust we have earned.

Our implementation of the 'Towards Sustainable Mining' sustainability framework for operational-level management will strengthen our performance (see page 12).

Read our case studies on pages 11 to 13.

1. Scope 1 and 2 CO<sub>2</sub>-e emissions only for both 2050 and 2030 targets.

# Growing Sustainably

Growing our business sustainably, where it makes sense and with strong governance practices, means we can add value for everyone: our shareholders, our people and our communities.



How our sustainability initiatives map to the United Nations Sustainable Development Goals



## 2021 highlights

Full year gold production of

**327,662 ounces**  
and AISC of A\$1,616 per ounce

Full year cash flow of

**\$227 million**  
from operating activities

Maintained a total fully franked dividend of

**6 cents**  
per share for the 2021 financial year

## Guided by our ethics and governance

In FY21, the Board endorsed a new strategy with five strategic priorities. These priorities are: operate safely and sustainably; empowered people and diverse teams; operate assets with excellence; disciplined project management and execution; and deliberate and value-accretive growth.

Our strategy is underpinned by a robust corporate governance framework and strong ethics. We continue to maintain 100% compliance with the Australian Securities Exchange (ASX) 'Corporate Governance Principles and Recommendations'.

The Board also endorsed St Barbara's inaugural Modern Slavery Statement, with training conducted across the Company for all employees. The Supplier Code of Conduct was also updated.

## Building Brilliance in three strategic uplifts

We are on track with our three-phase Building Brilliance uplift strategy. This strategy: supports our pathway to establishing three mines with greater than 10 years of operating life; is lowering our cost profile; and will enable us to deliver superior value for all stakeholders and leave a legacy we are proud of.

The first uplift over 18 months (2020-2022) involves delivering our Building Brilliance program to reduce operational costs, while increasing mining throughput and mine life. The focus is extending the life of Simberi mine's oxides, and extending the life of Touquoy mine via near-mine exploration and mine plan optimisation.

The second uplift, out to 2023, targets delivery of the Simberi sulphide and Atlantic Operations expansion projects, along with the development of the Leonora province to increase the production of the Gwalia mill.

Uplift three aims to grow St Barbara through acquisitions and exploration. We'll seek to both acquire assets with a scalable production outlook and capture portfolio synergies. This phase anticipates investments in prospective joint ventures and exploration opportunities, with the potential to develop into future operations.

## Project announcements extend operations past 10 years

In May, we announced advancement of the Simberi Sulphide Project to a feasibility study, after pre-feasibility work showed we could extend mine life at Simberi to 2035 and produce 1.8 million ounces of gold during that time. In June we announced<sup>1</sup> details of the Leonora Province Plan which aims to develop the surrounding province to grow production and fill the mill with St Barbara mined ore. We have added 2.0 million ounces of gold mineral resources to our Leonora Province. This incorporates the recent work done in the province to recognise the potential of the Gwalia Open Pit and Harbour Lights as well as the increase this year from Gwalia Deeps.

In Nova Scotia, having integrated Atlantic Operations and improved the performance of the Touquoy plant, we are progressing EIS submissions and plans for our two proposed mines at Beaver Dam and Fifteen Mile Stream.

With these projects developing, St Barbara has a pathway to establishing at least three mines with greater than 10 years' sustainable operating life.

1. Refer to our market announcement on 21 June 2021 on our website.

## Diversity Matters to us

Being an Australian Workplace Gender Equality Agency Employer of choice and leading the mining industry on diversity initiatives is part of us delivering on our Empowered people, Diverse teams commitment.

Each year we continue to challenge ourselves to keep driving change as an industry leader in this space, because the work we're doing is making a difference for our people, our business and the industry.

In February we updated our Diversity and Inclusion Policy to better reflect our broader commitment in this area, as we work towards achieving our near-term goals and targets.

Diversity matters to us every day of the year, but we took March as an opportunity to reflect and really celebrate our commitment by sharing our stories and showcasing them.

We received such a strong response when we asked our people for 'Why Diversity Matters to Me' stories as part of our inaugural 'Diversity Matters month'. Through these stories, we celebrated our commitment to being diverse and, in so doing, encouraged inclusive thinking on all forms of diversity and welcomed our people's perspectives on why diversity and inclusion matters to them.

Hearing our people's lived experiences helps to breathe life into the work we do and inspires all of us to keep delivering against our diversity and inclusion goals as we live our culture of care, acceptance and inclusion.

### Diversity Matters

“

Diversity matters to me at St Barbara because my contribution is valued. Thanks to our commitment to Empowered people, Diverse teams, I'm able to share my message and make a difference.

Judith Marner, Communications and External Affairs Officer, Simberi Operations”



### Diversity Matters

“

I've been readily accepted and welcomed for who I am.

Cameron O'Neil, Reliability Engineer, Atlantic Operations”



## Leonora's Province Plan adds sparkle to mine life

Released in June, our Leonora Province Plan details how we intend to develop the surrounding province to grow production and fill the mill with St Barbara-mined ore.

We added 1.4 million ounces of gold and then a further 0.6 million ounces of gold from Gwalia Deeps (before depletion) in August 2021 to the existing 5.0 million ounces of gold.

The announcement is a central part of our strategy to grow production sustainably, lower our cost profile and deliver superior returns to our shareholders via three uplifts. The Leonora Province Plan falls into Uplift 2, which is about executing on brownfield expansions across each of our operations.

Resource development and extensional drilling has commenced, and our additional Resources inventory supports a mill Expansion Study. The Gwalia intermediates deposits, part of the current Gwalia orebody, have been incorporated in the Leonora Life-of-Mine Plan. As we progress the Plan, we will fill the mill in FY22 with third-party ore sources we have secured near Leonora.

With aspirations to add a further 1.1 Moz of gold from Gwalia and the Jasper Region, we are next progressing studies to convert this material into Ore Reserves and bring it into the Life-of-Mine Plan.

To realise this goal, we will commence a pre-feasibility study for Leonora's Tower Hill and Harbour Lights deposits. In parallel, ongoing drilling campaigns at Jasper Region and within the Gwalia mine will aim to identify further mineral resources and convert to ore reserves to fill the pipeline for the Leonora Processing Plant.



## Case study

### Sweet success with Tabar's first chocolate bars

We strive to help our communities thrive, grow and prosper. Under Simberi Mine Services, a community business coordination and governance company, we've been working with Tabar locals for several years to help them establish their own commercial ventures.

These include mariculture (seafood), inland fisheries, market gardens, a poultry farm, a pizzeria, a bakery, and a thriving cocoa farming business.

St Barbara reintroduced cocoa farming upon purchasing Simberi mine in 2012. Planting began in 2017 and 50 hectares now grow on Simberi and nearby Big Tabar Island.

In 2020 we worked with about 120 family farmers to help them produce their first-ever chocolate bars, thereby supporting the community cocoa enterprise.

Tabar Islands Chocolate is now made from 75% cocoa sourced entirely from the local enterprise. It is produced in partnership with Paradise Foods in Port Moresby, who will sell the chocolate.

St Barbara's community relations team provides technical and agricultural advice through all stages of the delicate process of cocoa planting and production.

Our vision is that one day cocoa shipments will be made every couple of weeks. This will help build a sustainable future for Tabar locals, economically empowering them for a life beyond mining.



## Case study

### Adopting the 'Towards Sustainable Mining' framework

St Barbara has been an active member of the Minerals Council of Australia (MCA) for more than 14 years. In February 2021, recognising the community's evolving expectations of the Australian mining industry's environmental, social and governance (ESG) performance, the MCA Board agreed to adopt the Canadian Towards Sustainable Mining (TSM) ESG performance system.

Like other MCA members, St Barbara is adopting TSM to demonstrate our commitment to ESG performance at a facility level, with full application by 2025. We have commenced planning to implement the system at each of our operations.

TSM was established by the Mining Association of Canada and is in place in eight countries. MCA's adoption of the system builds on existing member commitments in Enduring Value, the MCA's Australian minerals sustainable development framework. Enduring Value's ten principles and commitments align to those of the International Council on Mining & Metals, as well as other key sustainability guidance, such as the UN Global Compact, of which we are a member.

TSM's set of tools and indicators reflect good practice in environmental and social performance. They help drive overall improvement via a consistent approach to assessing, demonstrating, and communicating site-level performance in a transparent and accountable way. This builds community confidence and trust.



## Case study

## Helping historic mine tailings remediation

A five-year strategic partnership and financial investment between St Barbara's Atlantic Operations and Dr Linda Campbell at Saint Mary's University in Halifax, will help advance world-leading research on historic mine tailing remediation, with potential local and global benefits to wetland areas.

Dr. Campbell is a fellow at the Dynamic Environment & Ecosystem Health Research group, which carries out research and assessment of both aquatic and contaminated ecosystems across Canada and the world. Her team is working on the remediation of historic mine tailings sites by using microbes and other proven expertise from previous studies. Their new strategy is designed to be low cost and support the natural recovery of wetlands and shallow-water environments.

Dr. Campbell's research can also benefit communities both close to home, and abroad, that rely on healthy ecosystems.

At Atlantic Operations, respecting the environment means operating at the highest environmental standards and assisting in the remediation of historical mine sites that existed long before today's environmental regulations.



## Case study

## Building a brilliantly diverse team

In FY21, the number of women in our Australian operations hit a record 28%, while we reduced the overall gender pay gap in Australia to 7.65%, reaching a long-standing goal.

The number of women in leadership roles has also increased with 33% representation on the Executive Leadership Team and 30% of the Extended Leadership Group.

In November 2020, Val Madsen, Executive General Manager People, Health, Safety, Environment and Community, was recognised as one of the 'Top 100 Global Inspirational Women in Mining'.

Joining colleagues Meryl Jones (President Americas) and Sara Prendergast (Head of Finance and Procurement), both recognised in 2018, Val rounds out an outstanding trifecta demonstrating the depth and strength of women in leadership at St Barbara.

With a record of more than 1,100 nominees from 60 countries, the Top 100 Global Inspirational Women in Mining (WIM) awards showcase the range of female talent within the mining industry. Founded in 2006, the WIM industry group advocates for women in mining, provides thought leadership to all, and celebrates female success stories globally.



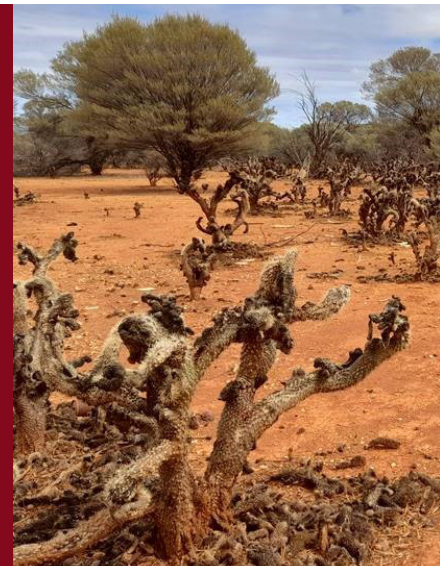
## Case study

## Sharing resources to beat an invasive cactus

Prickly Pear – otherwise known as Opuntoid Cacti – is a weed of national significance in Australia that has proliferated through much of Western Australia's Goldfields region since its introduction in the late 1800s. The cacti degrades the environmental values in the areas it inhabits, and poses a serious risk to livestock health.

Since 2019, Leonora Operations has partnered with the Shire of Leonora to eradicate the invasive cactus. Over FY21 we expanded our efforts, sharing resources and data to manage cacti across multiple land-use areas, and financially supporting local eradication grants.

Leonora's ongoing involvement in cacti eradication will help to improve the environment and land-use values for the Shire beyond the areas managed by St Barbara.



# Sustainability Report – detailed disclosures

## Contents

<b>About our report</b>	<b>15</b>	<b>Respecting the Environment</b>	<b>45</b>
Disclaimer – forward statements and targets	15	Environmental management	45
<b>Our business and value chain</b>	<b>16</b>	Reporting	45
Group structure	16	Waste management	47
FY21 key metrics	17	Tailings	47
Our value chain	17	Waste rock	50
<b>Our sustainability approach</b>	<b>18</b>	Cyanide and arsenic management	50
Our governance of sustainability	18	Other categories of waste	51
Applying our sustainability approach	18	Landfill waste	51
Our Sustainability Framework	18	Hazardous waste	51
Relevant polices and standards – ESG areas of focus	19	Oil waste	51
Managing risk	19	Water management	51
External sustainability performance frameworks and standards	20	Land and biodiversity management	52
Understanding and responding to our stakeholders	20	Climate change	52
Key progress on sustainability initiatives	20	Climate risk strategy and governance	52
<b>Safety Always</b>	<b>21</b>	Scope 3 emissions	53
HSEC Management System	21	Risk and opportunity detail	53
Critical Risk Control Standards	22	Regulatory impacts	54
Health and hygiene management	23	Operational emissions	55
CARE framework and initiatives	23	Fleet economy	56
COVID-19 management	24	Air quality – GHG emissions other than CO <sub>2</sub> and other air pollutants	56
Safety performance	25	Targets	56
Safety risk management and emergency preparedness	26	Carbon Disclosure Project (CDP) information	56
<b>Empowered People, Diverse Teams</b>	<b>27</b>	<b>Growing Sustainably</b>	<b>57</b>
People strategy	27	Governance	57
Talent management	28	Economic performance and business growth	58
Leadership	28	Sustainable supply chain	58
Employee engagement	28	<b>Performance data</b>	<b>59</b>
Organisational effectiveness	28	<b>Appendices</b>	<b>67</b>
Mental health and wellbeing	29	Material issues and boundaries	67
Employee performance	29	Alignment to international sustainability performance initiatives	68
Diversity and inclusion	30	ESG ratings and indices	68
Diversity performance	31	Global Reporting Initiative (GRI) Standards	69
<b>Stronger Communities</b>	<b>33</b>	UNSDGs enhanced alignment and reporting table	76
Community and Social Responsibility strategy	34	Alignment to Sustainability Accounting Standards Board (SASB) – Metals and Mining Standard	77
Environmental and social risk management	34	UN Global Compact – Communication on progress	79
Responding to concerns	34	<b>Glossary</b>	<b>80</b>
Local employment and local supply	34	<b>Corporate directory</b>	<b>IBC</b>
COVID-19	35		
Community programs and initiatives (by operation)	35		
Human rights, modern slavery and indigenous rights	43		
Community investment	44		



## About our report



Leonora Operations.

This report presents the environmental, social, and governance (ESG) or sustainability performance of St Barbara Limited and its controlled activities and entities (the Group or Company), including exploration, or provides the reference to where this information is presented in the Group's corresponding:

- Annual Report;
- Corporate Governance Statement; or
- website [www.stbarbara.com.au](http://www.stbarbara.com.au).

This Sustainability Report is for the financial year ended 30 June 2021. Financial figures are in Australian dollars unless otherwise stated.

St Barbara has used the Global Reporting Initiative (GRI) standards to guide its core sustainability disclosures. The report's content is based around St Barbara's assessment and determination of the Group's material sustainability issues (topics) – both the potential risks and opportunities – that could most impact the business and substantively influence the assessments and decisions of its stakeholders (refer also to page 67). This 2021 report contains increased disclosures including, where applicable, progress to the

Group's targets (in our Performance Data as well as report discussion) and commitments. Additional content in the report aligns the Group's disclosures to other external reporting frameworks, ratings, or indices (see page 19).

There have been no material restatements of data from previous reporting years.

This report is prepared for all stakeholders with an interest in the mining industry and/or sustainability performance of corporations. We welcome feedback and invite readers to send any comments or enquiries about this report to us at [info@stbarbara.com.au](mailto:info@stbarbara.com.au).

The Sustainability Report has been authorised for release by a resolution of the Board of Directors.

A handwritten signature in black ink, appearing to read 'C. Jetson'.

**Craig Jetson**  
Managing Director and CEO

17 September 2021

### Disclaimer – forward statements and targets

This report has been prepared by St Barbara Limited (the Company). The material contained in this report is for information purposes only. This release is not an offer or invitation for subscription or purchase of, or a recommendation in relation to, securities in the Company and neither this release, nor anything contained in it, shall form the basis of any contract or commitment.

This report contains forward-looking statements that are subject to risk factors associated with exploring for developing, mining, processing, and the sale of gold. Forward-looking statements include those containing such words as anticipate, estimates, forecasts, indicative, should, will, would, expects, plans, or similar expressions. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions, and other important factors, many of which are beyond the control of the Company, and which could cause actual results or trends to differ materially from those expressed in this report. Actual results may vary from the information in this report. The Company does not make, and this report should not be relied upon as, any representation or warranty as to the accuracy, or reasonableness, of such statements or assumptions. Investors are cautioned not to place undue reliance on such statements.

This report has been prepared by the Company based on information available to it, including information from third parties, and has not been independently verified. No representation or warranty, express or implied, is made as to the fairness, accuracy or completeness of the information or opinions contained in this report.

## Our business and value chain

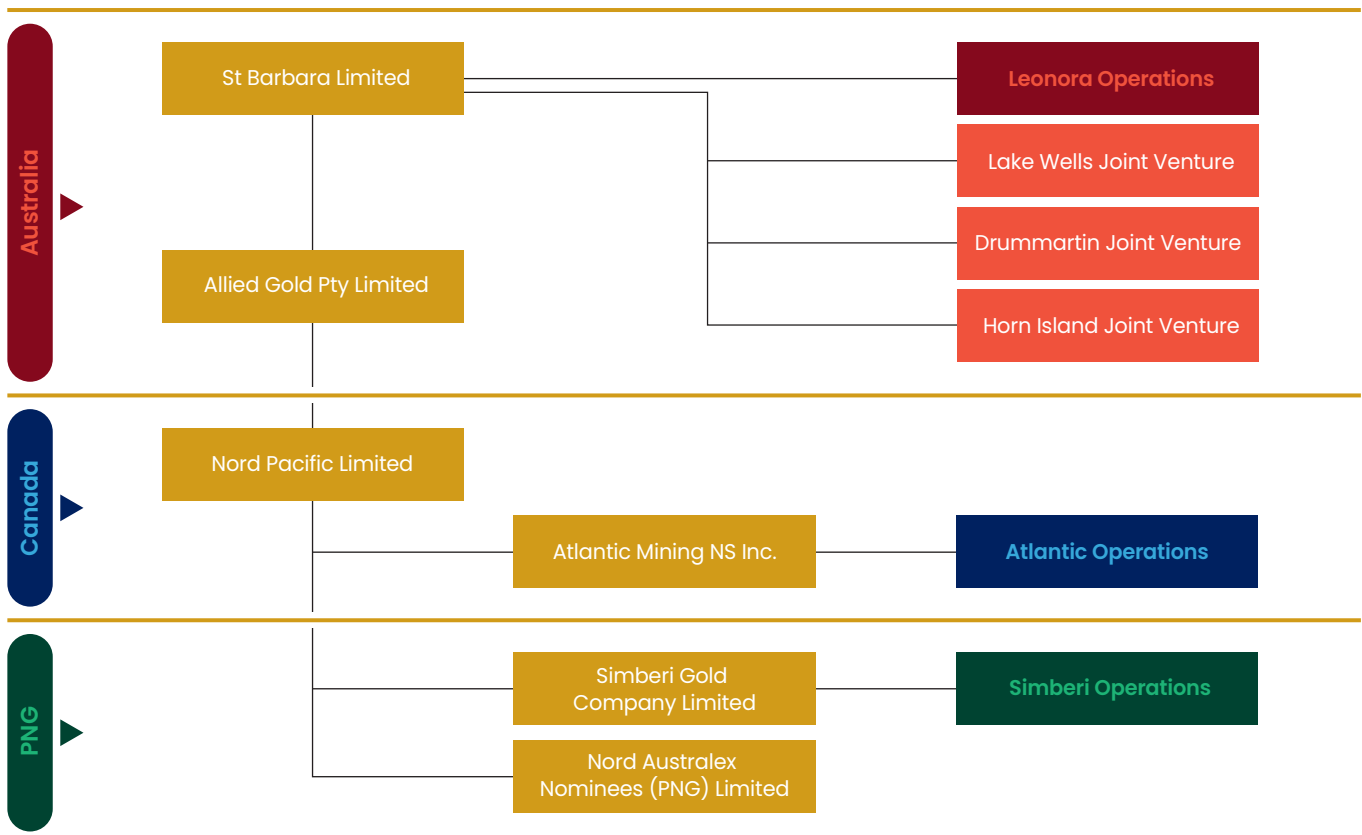
St Barbara has gold mining operations located in Australia (Leonora Operations), Canada (Atlantic Operations) and Papua New Guinea (Simberi Operations). The St Barbara group comprises six corporate entities with a workforce of 2,359 people, including employees and contractors.



A gold pour.

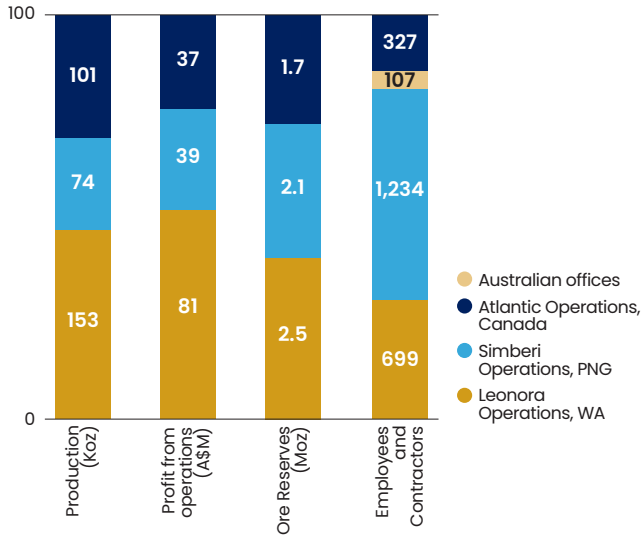
St Barbara Limited (ACN 009 165 066) is a publicly listed company on the Australian Securities Exchange (ASX) with offices in Melbourne, Victoria and Perth, Western Australia.

St Barbara conducts exploration activities globally, with exploration teams based at the Gwalia mine (Western Australia), Touquoy mine (Canada), Simberi mine (PNG) and Perth for regional projects in Australia. These regional projects include Pinjin and Lake Wells (Western Australia), Back Creek (New South Wales), Drummartin (Victoria) and Horn Island (Queensland – until March 2021). Refer to the Annual Report for further information.

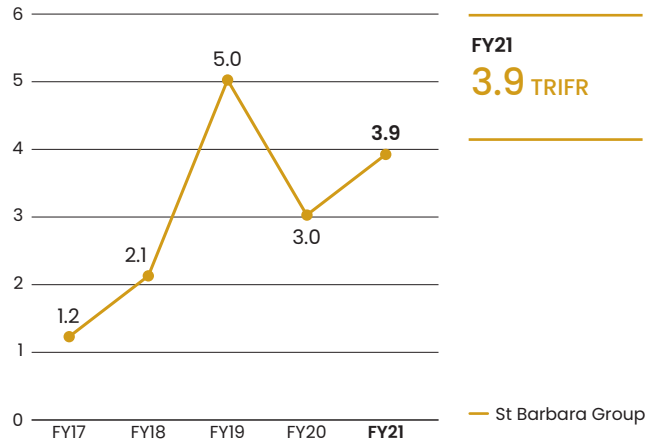


### FY21 key metrics

#### Operational profile (%)

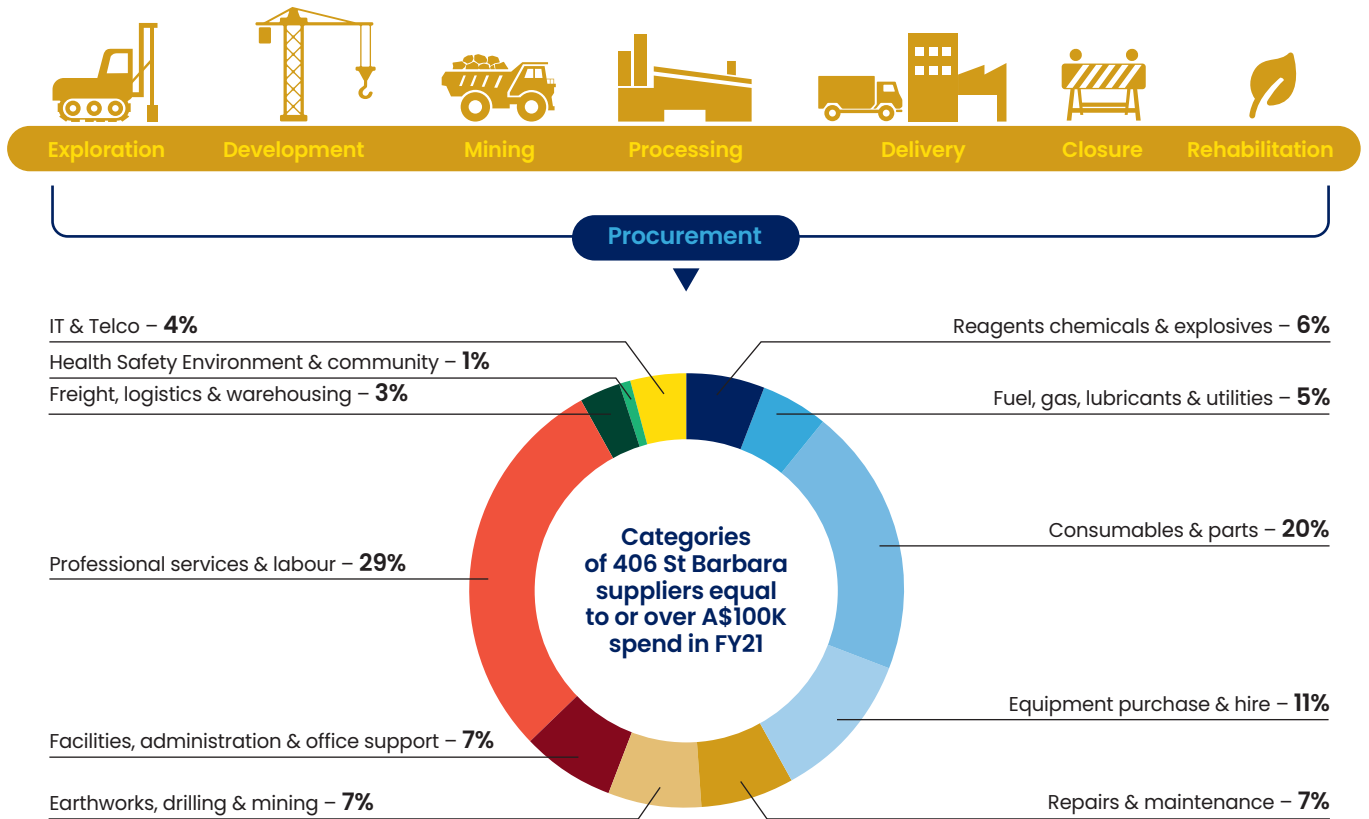


#### Total recordable injury frequency rate



### Our value chain

Our value chain is broadly described and illustrated as follows, including with our main supplier categories: exploration; development; mining; processing; delivery to the refinery; closure; and rehabilitation.



# Our sustainability approach

St Barbara's approach to sustainability is guided by our five business-wide commitments to safety, our people, our communities, the environment, and to growing our business sustainably. In this way we will create value for all stakeholders and leave a legacy that we are proud of.



Atlantic Operations.

We acknowledge the First Nations people of the ancestral lands on which we operate and recognise their unique cultural heritage, beliefs and connection to these lands, waters, and communities.

Our strong, values-led culture drives our behaviour and guides our decision making every day as we deliver to promise on our commitments. At St Barbara, doing the right thing is important to all of us.

## Our governance of sustainability

We believe high standards of governance are critical to delivering on our strategy, creating long-term value, maintaining workforce diversity and culture, and our social licence to operate.

The Board oversees the Group's values, culture, governance framework and sustainability approach, supported by the following committees.

- **Audit and Risk Committee**

Monitors and reviews the Group's systems of financial control and reporting, risk management, audit processes, and Mineral Resource and Ore Reserve estimation.

- **Growth and Business Development Committee**

Assists the Board with oversight of corporate strategy and business development.

- **Health, Safety Environment and Community (HSEC) Committee**

Monitors the Group's HSEC and sustainability reporting responsibilities and compliance across those activities.

- **Remuneration and Nomination Committee**

Advises the Board on the Group's overall remuneration and diversity strategies and policies, as well as overseeing the composition, structure, succession planning and performance of the senior executive team and Board.

- **Proposal Committee**

Advises the Board on considering and evaluating certain merger and acquisition proposals, having regard to the best interests of the Company's shareholders.

We monitor developments in Corporate Governance best practice and adapt our own practices accordingly. See the Governance section of the St Barbara website for further details on the charters of these committees and the Group's Governance Framework.

The Managing Director and CEO has overall executive responsibility for sustainability. His letter outlining highlights of St Barbara's reporting on sustainability appears earlier in this document.

## Applying our sustainability approach

In applying our sustainability approach, St Barbara's daily activities and decisions are supported by the Group's overarching Governance Framework and the applicable Board policies. Beneath these, associated standards, procedures, and guidelines specify Group performance requirements. The policies are the foundation for developing and implementing management systems at our operations. These policies align with environmental, social and governance management as set out in the table that follows. St Barbara's Sustainability Framework, within the Group Governance Framework, encapsulates the specific drivers of our centralised sustainability approach.

## Our Sustainability Framework

Our Sustainability Framework, set out on page 5, supports St Barbara's purpose, vision, and business strategy, which collectively focuses on value creation for our stakeholders. Environmental, social, and corporate governance are central to the framework, which represents that our sustainable performance is guided by St Barbara's five commitments and is directed by our Code of Conduct and values; our Governance Framework; and our alignment and reporting to standards and frameworks.

## Relevant policies and accountability

ESG area	Policies	Board/Board Committee	Executive/General Manager responsible
<b>Environmental</b>	Environmental Policy	HSEC <sup>1</sup>	EGM People
<b>Social</b>	Community Relations Policy Health and Safety Policy	HSEC	EGM People
	Diversity and Inclusion Policy Equal Employment Opportunity Policy Workplace Behaviour Policy	Remuneration & Nomination	EGM People
	Donations Sponsorships Community Programs Policy	Board	Company Secretary
	<b>Governance</b>	Anti-Bribery and Anti-Corruption Policy Code of Conduct Conflict of Interest and Related Party Transactions Policy Continuous Disclosure and External Communication Policy Privacy Policy Securities Dealing Policy Social Media Policy	Board
	Modern Slavery Policy Whistleblower Policy	Board	EGM People
	Delegation of Authority	Audit & Risk	Chief Financial Officer
	Risk Management Policy	Audit & Risk	Company Secretary

For further detail on relevant policies and accountability, refer to the Governance section of St Barbara's website.

## Managing risk

St Barbara maintains an enterprise-wide risk management framework to support the responsible achievement of its strategic objectives by identifying and addressing risk in an organised and transparent manner.

The risk management framework delivers enhanced risk reporting and control mechanisms designed to ensure that strategic, operational, environmental, legal, social, reputational, financial, and other risks are identified, assessed, and appropriately managed. The framework is consistent with international and Australian risk management standards.

The material business risks faced by the Group that may have an impact on the operating and financial prospects of the Group are described in the Annual Report.

The Group's Audit and Risk Committee of the Board oversees risk management. Senior management and the Board regularly review the risk portfolio of the business and the effectiveness of the Group's management of those risks.

St Barbara has internal and external audit programs also overseen by the Audit and Risk Committee, focusing on financial and governance type risks. The different corporate functional areas provide governance to the mine operations teams to ensure compliance with policies and standards, utilising independent expert review where appropriate.

St Barbara has a Crisis Management System with Business Continuity Plans (BCP) for key risks that have the potential to interrupt operations.

1. HSEC: Health, Safety, Environment & Community Committee

### External sustainability performance frameworks and standards

St Barbara's sustainability settings, approach and performance reporting are aligned to key external sustainability performance frameworks, standards, and initiatives relevant to the gold mining industry. These include:

- the Minerals Council of Australia's Enduring Value sustainability framework (member commitment);
- the United Nations Sustainable Development Goals;
- the United National Global Compact (signatory/member commitment);
- the Extractive Industries Transparency Initiative (member commitment);
- the Task Force on Climate-related Financial Disclosures;
- the Sustainability Accounting Standards Board Mining and Metals Standard;
- the Carbon Disclosure Project (Climate change disclosures); and
- the International Cyanide Management Code (in progress).

We annually report in accordance with Australia's Commonwealth Modern Slavery Act 2018.

### MCA Enduring Value framework

As part of our membership of the Minerals Council of Australia (MCA), we are committed to meeting the obligations of the MCA Enduring Value framework for sustainable development. The framework incorporates the International Council on Mining and Metals (ICMM) Sustainability Principles, which require the following of organisations.

1. Implement and maintain ethical business practices and sound systems of corporate governance.
2. Integrate sustainable development considerations within the corporate decision-making process.
3. Uphold fundamental human rights and respect cultures, customs, and values in dealings with employees and others who are affected by our activities.
4. Implement risk management strategies based on valid data and sound science.
5. Seek continual improvement of our health and safety performance.
6. Seek continual improvement of our environmental performance.
7. Contribute to conservation of biodiversity and integrated approaches to land use planning.
8. Facilitate and encourage responsible product design, use, re-use, recycling, and disposal of our products.
9. Contribute to the social, economic, and institutional development of the communities in which we operate.
10. Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

In 2021, the MCA adopted the Mining Association of Canada's 'Towards Sustainable Mining' sustainability performance framework. This set of tools and indicators drives more detailed management, public reporting and communication of site or facility-level ESG performance. It builds on MCA members' commitments to Enduring Value and must be implemented by 2025. During the year in review, we embarked on a process to achieve this.

### ESG analysts

St Barbara engages with several independent agencies and initiatives throughout the year that gather, benchmark, and disseminate company data on ESG performance for investors and the broader community concerned with sustainability performance. These are outlined on page 68.

### Understanding and responding to our stakeholders

We know that open, proactive, inclusive, and responsive interaction with our stakeholders is fundamental to our success, and to delivering to promise on our commitments as a trusted and responsible operator. We detail our relevant key stakeholders with respect to our material topics on page 67 and discuss our stakeholder engagement processes across this report.

### Key progress on sustainability initiatives

The key developments in the Group's sustainability reporting since the previous Sustainability Report include new disclosures on the following.

- Sustainability Framework
- Safety programs
- Mental health and wellbeing
- Community and Social Responsibility strategy
- Human rights
- Supply chain
- Greenhouse gas emission disclosures – scope 3 emissions, and other emissions data
- Waste management
- Land and biodiversity management
- SASB Mining and Metals Standard

# Safety Always

At St Barbara, zero harm is always our target. Zero harm to all people as we responsibly operate our assets to their full potential. This focus on safety guides everything we do.



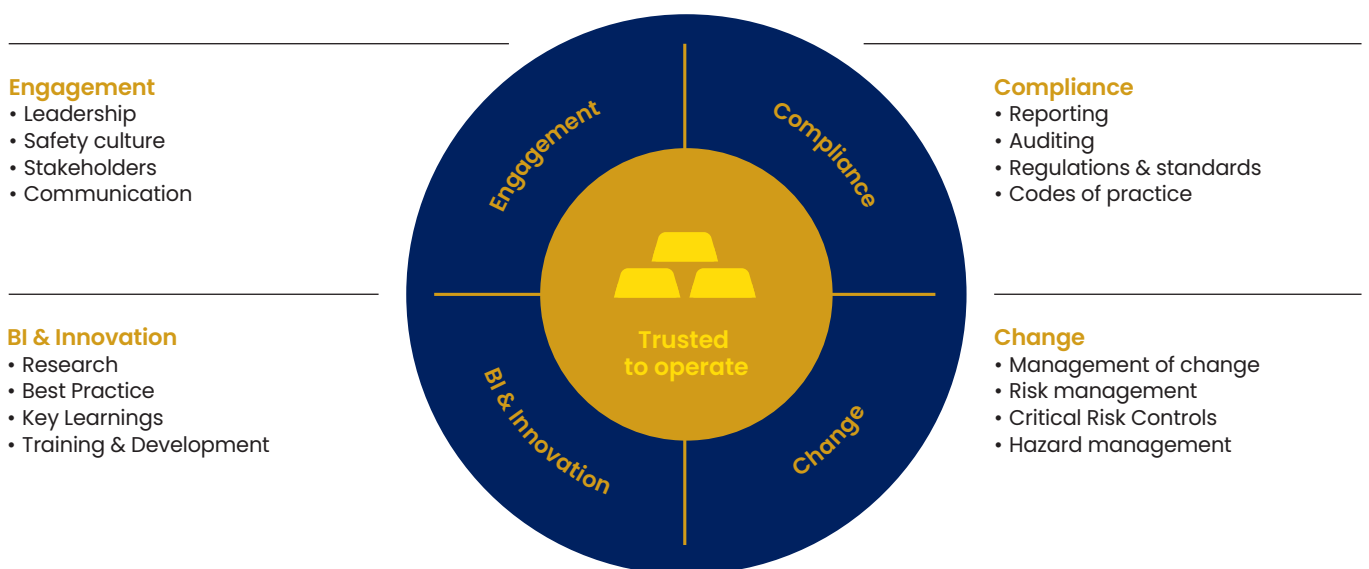
Leonora Operations.

We take a holistic approach to safety. We believe in everyone’s right to physical and psychological safety. Everyone at St Barbara has a responsibility as individuals, or within their work group, to apply the appropriate behaviours and work practices that contribute to maintaining a healthy, safe workplace.

Our Health and Safety Policy is available at: [www.stbarbara.com.au/about-us/governance/](http://www.stbarbara.com.au/about-us/governance/).

## HSEC Management System

St Barbara has a comprehensive Health, Safety, Environment and Community Management System (HSEC MS) which supports St Barbara’s HSEC Strategy and is aligned with AS/NZS 4801:2001 (Health and Safety Management Standard).



Our management of safety is comprehensive, well-resourced, strict, and proactive.

## Safety Always continued

The HSEC MS is supported by specialist HSEC staff at all sites, and by our corporate leadership. The HSEC MS encompasses the below standards.

- Leadership and Accountability
- Risk and Management of Change
- Contractor Management
- Incident Investigation and Reporting
- Communication and Participation
- Critical Risk Control Standards
- Environmental Management
- Training, Competency and Behaviour
- Health and Hygiene
- Legal Requirements and Records Management
- Crisis and Emergency Management
- Design, Construct, Commission and Decommission
- Monitor, Audit and Review
- Planning, Goals and Targets
- Community Engagement

### Critical Risk Control Standards

St Barbara has developed and maintains a set of Critical Risk Control Standards. Each contains minimum requirements and expectations and applies to all controlled sites and activities. The purpose of these standards is to ensure critical controls are identified and implemented for high-risk work activities, preventing injury to workers. The standards include everything outlined below.

- CRCS 1: Light Vehicles
- CRCS 2: Surface Mobile Equipment
- CRCS 3: Underground Mobile Equipment
- CRCS 4: Lifting Operations
- CRCS 5: Hazardous Material Handling
- CRCS 6: Underground Ground Control
- CRCS 7: Plant, Equipment and Power Tools
- CRCS 8: Isolations
- CRCS 9: Working at Heights
- CRCS 10: Surface Mining Ground Control
- CRCS 11: Confined Spaces
- CRCS 12: Explosives
- CRCS 13: Marine Operations
- CRCS 14: Drilling Operations
- CRCS 15: Electrical Work
- CRCS 16: Infectious Diseases

All standards apply equally to employees and contractors. We have a proactive, annual regime of education and training linked to these standards and workplace health and safety performance. This includes ongoing safety observations. Our workforce's completion of annual mandatory training modules is recorded in our Group training management system.

The Group's Contractor Management Standard specifies minimum mandatory requirements for the engagement, management, and performance of contractors on St Barbara's sites. This includes that all contractors must complete health and safety training before commencing work, and at appropriate regular intervals, or when required procedures change. Contractors are encompassed by our daily commitment to workers' health and safety and must be registered on site. Performance to the standard is assessed in our audit cycle.

Health, Safety, Environment and Community functions' settings and performance are audited at our sites, regularly, including:

- annual regulatory audits by the relevant government authorities;
- external audits of compliance of the Group's HSEC Management System including the Critical Risk Control Standards; and
- regular internal audits performed by the Group's specialist staff.

During FY21, external audits of HSEC practices were not conducted at all sites due to the impact of COVID-19.

A cyanide management review was conducted at Simberi Operations using remote auditors over a live-view link. This was successful and will be expanded in FY22. Where audits have been conducted, the audit result improvement actions are a component of individual at-risk remuneration for employees with middle and senior site management responsibilities.

Health and safety performance is measured using Total Recordable Injury Frequency Rate (TRIFR), which expresses the number of injuries<sup>1</sup> per million hours worked on a rolling 12-month basis. This measure is a widely recognised benchmark, allowing measurement and comparison of safety performance across industries.

Health and safety targets are included in the at-risk remuneration of all employees and most contractors. Major contracts also have at-risk components on HSEC matters.



St Barbara's 'Rules to live by' are a daily part of our CARE program.

1. Recordable injuries include any fatalities and any injuries resulting in lost-time, restricted work, or significant medical treatment, but exclude basic first aid incidents and near miss incidents.



### Health and hygiene management

St Barbara has highly developed health and hygiene standards and procedures covering a wide range of risks and hazards, in line with the strict regulatory conditions in place in our jurisdictions. These cover various basic personal protective equipment requirements (clothing, safety glasses, gloves, helmets) through to the more-advanced requirements for managing health exposures, such as in dusty environments where silicosis is a relevant risk, and management of engine fumes underground at our Gwalia mine. St Barbara also has procedures to manage fitness for work and fatigue management, as well as infectious diseases (covered in detail on page 24) and mental health (see Empowered People, Diverse Teams, page 27).

### CARE framework and initiatives

During the year we launched our Safety Always CARE framework. CARE stands for: **C**ontrol; **A**ction; **R**espect; **E**ngage. The framework incorporates safety behaviours and a culture program, including Group-wide initiatives and training programs to embed its principles.

Having a culture of care has always been important to St Barbara, which is why the CARE behaviours are now central to our safety culture. We recently began expanding the CARE framework to our local communities, near to our operations, from where much of our workforce is drawn, targeting mental health, domestic violence and community wellbeing.

Acting with CARE is how we always put safety first.

- We **C**ontrol our environment by identifying hazards, conducting risk assessments, and reducing our exposure.
- We take **A**ction by planning our work, managing change and reporting.
- We **R**espect our processes that are there to keep us safe including permit to work, inspections and incident investigations.
- We **E**ngage through visual leadership, safety discussions and forums.

Achieving and maintaining this commitment requires strong visual leadership and the involvement of all employees and contractors. Our CARE framework forms part of the 'A2E' ability to execute training that is offered to everyone at St Barbara. A2E Trainers and Champions lead this training at each site. A genuine and proactive approach to caring for each other, the environment, and the community we work in, is paramount.

### Safety Always – CARE framework and behaviours



**COVID-19 management**

Since the World Health Organisation identified COVID-19 as a pandemic in March 2020, we have focused on ensuring the safety, health and wellbeing of our employees and their families, business partners and communities throughout this extending global crisis. The Board and executive management continue to acknowledge the extraordinary effort demonstrated by our people and our business partners in keeping each other safe whilst maintaining operations.

Under our Health and Safety Policy and related policies and standards – particularly the Critical Risk Control Standard – Infectious Diseases – we implemented the COVID-19 Management Framework. Through this set of protocols and guidance, we have managed the health and safety aspects of the COVID-19 pandemic effectively.

In March 2021, because of the worsening COVID-19 conditions in Papua New Guinea, and a small number of COVID-19 cases being identified and contained within our on-site quarantine program, we activated additional controls at our Simberi Operations under the COVID-19 Management Plan.

These additional controls were introduced as a safeguard for our people and the community, with operations continuing. The controls included limiting the movement of personnel to and from site, and the community. These containment measures and controls are designed to support safe operations, in line with our commitment to Safety Always.

Sadly, we acknowledge the deaths in April of two of our Simberi national employees who had underlying health conditions and a positive COVID-19 diagnosis.

An important part of our management plan is working with local authorities to ensure controls are in place to protect the surrounding community and safeguard the continuity of essential services and supplies.

Our COVID-19 protocols continue to be successful in the early identification of cases, with on-site isolation, quarantine procedures, contact tracing and regular testing – for employees and the community – all proving to be effective. At Simberi, we have also begun vaccinating employees through our clinics.

While localised lockdowns have occurred in both Nova Scotia, Canada, and Australia, our Atlantic and Leonora operations have not been directly affected, although domestic border closures have impacted the mobility of personnel. St Barbara did not reduce its workforce during the 2021 financial year as a result of COVID-19, and has not sought any COVID-19 related government direct financial assistance, such as the Australian Government JobKeeper scheme.

**COVID-19 community support**

Our operations are in communities that have at times struggled to manage the medical and economic impacts of the virus and the processes necessary to safely contain its spread. We have worked where practical to support our local communities by sharing our health and safety expertise and resources, to help prevent the introduction, spread, and impacts of the virus. Some of these support efforts are detailed on page 35.

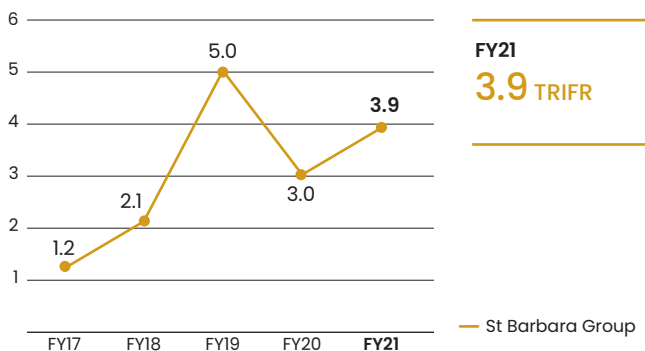
**SBM COVID-19 Management Framework**



### Safety performance

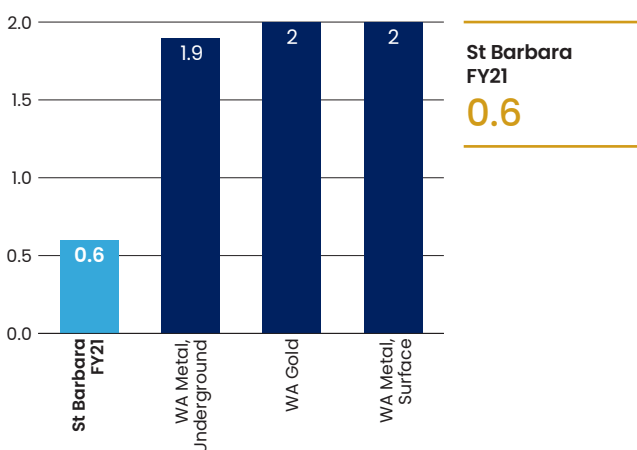
While zero harm to all people is our target every day, primary safety performance measure is Total Recordable Injury Frequency Rate (TRIFR) per million hours worked on a rolling 12-month basis. The Group's **health and safety performance** data is published in the Performance Data section of this report.

#### Total recordable injury frequency rate



While TRIFR is a broad, industry safety performance measure, comparative TRIFR data for our gold peer group is not readily available, and it is not regularly used as a safety performance measure by regulators in Western Australia or by international regulators. Therefore, Lost Time Injury Frequency Rate (LTIFR) per million hours worked is used here for external comparison of performance. The Group's LTIFR of 0.6 (Leonora Operations: 0.7) for the year to 30 June 2021 (Group 2020: 0.4; Leonora: 0) is well below relevant available Western Australian industry benchmarks<sup>1</sup>.

#### Lost-time injury frequency rate



### Performance trend

It is with great sadness that we reported a fatality at our Simberi Operations in May 2021, involving a local Papua New Guinean employee. A full investigation into the incident took place, led by the PNG Mineral Resources Authority. This tragic event and the findings from the incident investigation process, coupled with the slight rise in TRIFR over the year, has led to a comprehensive review of the Critical Risk Control Standards and the establishment of communities of practice to review and improve St Barbara's safety standards and their implementation.

In FY21 there was a 25% increase in recordable injuries with respect to ongoing operations (20 recordable injuries versus 16 in 2020).

The majority of recordable injuries were of low severity, and:

- mainly involved contractors (75%) at Leonora Operations;
- the year-on-year increase was attributable to an increased number of injuries to contractors (15 versus 11);
- involved hand, arm, and shoulder injuries (65%).

Consistent with previous years, and the nature of mining in Western Australia, the number of injuries for contractors was higher than for employees (15 of 20 recordable injuries). Outsourcing of mining and exploration services is a common feature of the Western Australian mining environment.

To help improve the Group's Contractor Management processes, in FY21 a survey was conducted of contract owners across the Group to identify gaps between work as designed and work as done. In response to the survey, we have developed:

- an online portal, housed on the external website, for suppliers to access St Barbara HSEC Standards; and
- a training pack for use in site-based workshops for Contract Owners.

Our underground mining contractor at Gwalia, (Macmahon from May 2021, previously Byrnescut), has a robust, comprehensive, standardised Health, Safety, Environment and Quality Management System, designed on the principles of continual improvement, and adopts the methodology of Plan, Do, Check and Act. Macmahon is certified for ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Occupational Health and Safety Standard). At Simberi and Atlantic operations contractors make up a small percentage of the workforce.

Details regarding all 20 recordable injuries in 2021 are shown in the table that follows.

1. Industry Lost Time Injury Frequency Rate (LTIFR) for Western Australia Mining industry. [https://www.dmp.wa.gov.au/Documents/Safety/MSH\\_Stats\\_Reports\\_SafetyPerfWA\\_2019-20.pdf](https://www.dmp.wa.gov.au/Documents/Safety/MSH_Stats_Reports_SafetyPerfWA_2019-20.pdf)

Details of safety incidents

Number	Location and type of injury	Employee	Contractor	Australia	Canada	PNG
1	Fatality	1	–	–	–	1
13	Fingers, hand, arm	2	11	7	1	5
2	Shoulder	–	2	2	–	–
2	Back	1	1	–	2	–
1	Knee	–	1	–	1	–
1	Eye	1	–	–	–	1
<b>Total</b>						
<b>20</b>	<b>Recordable injuries</b>	<b>5</b>	<b>15</b>	<b>9</b>	<b>4</b>	<b>7</b>
3 (included in 20 total)	Lost time injuries (requiring time off work, including fatality)	1	2	1	–	2

**Safety risk management and emergency preparedness**

Health and safety risks are identified and managed under our HSEC Management System and ultimately under our Group enterprise-wide risk management framework (see page 19).

All three of St Barbara’s operations have emergency response systems, plans, procedures, and highly trained Emergency Response Teams (ERT). The ERTs are equipped and trained appropriately to perform the functions of first aid, rescue, and firefighting, specific to their location and mining activities.

At the Chamber of Minerals and Energy of Western Australia (CMEWA) Safety competition in May 2021, an ERT team from our Leonora Operations partnered with Northern Star’s Carosue Dam team in the Surface Competition. This allowed St Barbara ERT members to train and compete with colleagues from another company who, under our Mutual Aid Agreement, may be called to work together in the event of an emergency. The Simberi Operations team also competes periodically in the PNG Extractive Industries Emergency Response Challenge.



The Leonora Operations ERT team in action.

# Empowered People, Diverse Teams

We are an employer of choice committed to inclusion and diversity. We provide a caring work environment where our talented people feel safe and are empowered to fulfil their potential.



Atlantic Operations.

## People strategy

St Barbara has a centralised Human Resources (HR) function with representation at every Group location. The HR function is focused on enabling best teams on the ground to fulfil our vision to be a brilliant global mining company that grows sustainably and creates enduring, positive impacts. To achieve this, our HR function works to ensure we have highly capable people in the right roles, doing the right work across our business.

The Group's HR strategy has six pillars as outlined below.



### Talent

Ensuring St Barbara recruits, identifies, develops and retains talent to reliably deliver its business strategy

### Diversity

Building greater awareness of the diversity throughout the Group and ensuring all employees are able to access and experience the same rewards, resources and opportunities

### Leadership

Developing adaptable leaders with a growth mindset who can proactively navigate and manage St Barbara's operations into the future

### Engagement

Ensuring we maintain productive direct relations with our people

### Performance

Developing a high-performance culture and supporting the right work being done well by all employees

### Capability development

Building St Barbara's workforce capability at an individual, team and operational level to facilitate increased productivity and technology adoption to accelerate growth

### Talent management

There are a number of HR frameworks, systems, and activities to ensure St Barbara attracts, recruits, and retains talent, including the following:

- talent management framework
- recruitment system
- career development system
- training and development system
- graduate development system.

All employees have a role description and an annual performance and development plan. Each year we identify high-performing talent and conduct succession planning.

HR metrics, including average hours and training and development expenditure per employee are reported in Performance Data.

### Leadership

St Barbara delivers annual leadership development programs for leaders at all levels as part of our capability strategy to attract and retain brilliant talent. Employee development is supported by career development plans and a work performance system that is easy to access and supported by all leaders. Our suite of development programs are made available to our people annually and include those outlined below.

- Appointed Person (Mines Safety Inspection Act 1994, s.44) training
- Building Brilliance Ability to Execute program (new in FY21)
- Frontline supervisor program
- Leadership essentials workshops
- Manager program\*
- Mental health awareness
- Modern Slavery workshop
- Senior Leaders' program\*
- Superintendent program\*
- Visual leadership workshop
- Cultural engagement workshop\*
- eLearning modules on a range of leadership topics

Due to COVID-19 restrictions, some leadership development programs were delivered virtually, and some were paused (\*) with a full program and underway for FY22. This is already evidenced by the recent Frontline Supervisor and Superintendent programs delivered for Simberi employees in July 2021.

### Employee engagement

Employee engagement is managed through a number of systems, and activities, including the following.

- Remuneration and benefits system
- Reward and recognition system
- Annual employee engagement survey
- Onboarding system and induction program for new employees and contractors
- Mentoring program
- Employee benefits
- Mental Health Policy and mental health and wellbeing guidelines
- Domestic Violence Policy

At St Barbara, we recognise our people are our greatest asset and that their alignment and commitment to our vision and values is fundamental to achieving our goals. As such, ensuring high levels of employee engagement is critical and demonstrated in the way we recruit, onboard, reward, develop and retain our people. It is reflected in our approach to communication and built into the way we lead people and teams.

An independent provider conducts our annual employee engagement survey. This provides an indication of how engaged employees are on key dimensions; their sense of accomplishment, how motivated they are to go the extra mile, how proud they are to work for St Barbara, and how satisfied they feel overall. In 2019 our Engagement Index was at 71% and in 2020 it was slightly lower at 68%.

A further pulse survey was taken of employee views on how the Group was managing the COVID-19 crisis. This provided valuable information for management and was overwhelmingly positive, with 93% of employees indicating high levels of satisfaction with St Barbara's management of COVID-19.

We have undertaken various initiatives over the year to improve the annual employee engagement outcome. These include renewed commitment by our senior leaders to improve the quality of their communications, an emphasis on genuine engagement with employees at all levels, and a refocus on creating learning and development opportunities for our people. The 2021 engagement score should also reflect the agreed Company strategy, which has been shared with all employees, together with our recent brand launch.

### Organisational effectiveness

St Barbara has a clear focus on continuous improvement, both in terms of business performance and our employee experience. Our increased turnover reflects trends being reported by many organisations with the constraints and pressures of the COVID-19 pandemic causing people to opt out of the workforce, despite the measures put in place to support them. Interrupted travel, extended rosters and quarantine periods have been a feature of mining during COVID-19. This has been compounded by the smaller candidate pool to recruit from and sector competition for talent. Reflecting this, our Group average employee turnover rose to 14.3% (2020: 8.3%), on underlying rises in Australia, Canada, and PNG, putting us slightly above the 2021 Australian industry benchmark<sup>1</sup> of 13.3%. The mining industry in Western Australia is facing challenges in this area with COVID-19 causing border closures limiting interstate fly-in, fly-out, creating a highly competitive hiring environment. Retention is a clear area for focus and the organisational effectiveness agenda is designed to arrest this trend in turnover.

In September 2020, we also embarked on a company-wide transformation program called Building Brilliance. The program encouraged all team members to look for opportunities to lift performance and unlock value across our operations worldwide. Everyone in the Company has been included in the Building Brilliance effort and it is already delivering significant value.

1. The Mackie RITA Report – April 2021 figures. The RITA report has 32 Australian Resource industry companies participating. Turnover is voluntary employment moves only, direct employees only.

At the same time, we undertook a specific review of the overall health of the organisation (Organisational Health Index, OHI), to help inform delivery of the Building Brilliance transformation. Our overall health score was 65, which placed us in the third quartile compared with global benchmarks, suggesting room to improve. These results have triggered significant activity in five areas, three of which impact our people directly: clarifying and aligning everyone in the organisation with our vision; refocusing leaders on the way they engage and communicate with our people; and clarifying roles, responsibilities, and accountabilities. We intend to repeat the OHI review every two years to help focus efforts on high-impact practices that will improve the overall health of the organisation into the future.

### Mental health and wellbeing

We believe that the mental health and wellbeing of our personnel is key to organisational success and sustainability. Our mental health and wellbeing (psychological health) program is managed through the accountability of the People function, under the Mental Health Policy. Through our commitments to Safety Always, and Empowered People, Diverse Teams we strive to provide a safe, healthy, and supportive workplace. St Barbara aims to promote and maintain the positive mental health and wellbeing of all personnel through our workplace practices. We also support people to take responsibility for their own mental health and wellbeing.

To achieve this, we aim to:

- foster a workplace and culture that supports positive mental health and wellbeing and prevents unlawful discrimination (including bullying and harassment);
- increase employee knowledge and awareness of mental health and wellbeing issues and behaviours;
- reduce any stigma around mental health in the workplace; and
- facilitate employees' active participation in a range of initiatives that support and promote positive mental health and wellbeing.

St Barbara has implemented Human Resources systems, processes, and initiatives to deliver the above objectives.

Initiatives during the reporting period were focused on supporting the health of our people during the challenges of COVID-19 and we did this largely through our Psychological Health program. These included:

- online sessions for leaders on leading through ambiguity and uncertain times and psychological health awareness;
- resources and tools for employees, including maintaining healthy sleep patterns and mental health in lockdown/quarantine;
- counselling for employees undergoing travel-related isolation and quarantine;
- focused attempts to ensure mental health and wellbeing resources were widely and easily available to employees including access to free;
  - professional and confidential counselling services for employees and their immediate family (in Simberi, recognising the impact on local employees, these services were also provided in the native language, which has been very positively received); and
  - ergonomic assessments supporting home working.

Corporate Flexible Working Arrangements were expanded and formalised in a standard, recognising the additional pressures placed on families and to help our employees manage all aspects of home and work life, and to support their overall mental health and wellbeing.

Through our Safety Always Matters campaign, we encouraged conversations around all aspects of health and safety. We are providing opportunities for our people to openly share their mental health challenges and, as a company, are proactively supporting and addressing psychological safety concerns. During Mental Health week in October, we ran a communications campaign across the Group to encourage our people to consider mental health for themselves as well as their family and friends. This is complemented by our annual recognition of and support for RU OK Day. We also highlighted the education and support resources we now have in place.

Through long-standing representation on the Australian Resources and Energy Group (AMMA) Mental Health Advisory Board, St Barbara's EGM, People has been instrumental in the development of a 'Workforce Mental Health Framework' for the broader resources and energy industry, due to be launched later in 2022.

### Employee performance

There are a number of HR systems and processes to ensure employees perform to their full potential including:

- Recognition and reward
- Employee bonus plans
- Short and long-term incentive plans
- Training and development
- Performance improvement
- Professional membership support
- Study assistance
- Annual CEO awards.

Our Group HR policies support our standalone Code of Conduct, and are available on our website at [www.stbarbara.com.au/about-us/governance/](http://www.stbarbara.com.au/about-us/governance/).

They include:

- Diversity and Inclusion Policy
- Equal Employment Opportunity Policy
- Workplace Behaviour Policy
- Whistleblower Policy.

These policies are supported by a range of internal guidelines, including:

- Grievance Resolution Framework
- Fair Treatment System
- Flexible Working Guideline
- Mental Health and Wellbeing Guidelines.

Australian employees who are members of the Group's preferred superannuation fund also have access to free:

- at-home medical information service;
- salary continuance, death, and disability insurance;
- financial advice.

The Group's performance on people metrics is published in the Performance Data section of this report (page 57).

### Diversity and inclusion

St Barbara is an employer of choice committed to diversity and inclusion. We provide a caring work environment to support our talented people to be happy, thrive, feel safe and fulfil their potential. Our Diversity and Inclusion Policy sets the scope of our strategy and programs, with progress against Board-approved objectives reported annually in our Corporate Governance Statement.

We're at the forefront of diversity and inclusion in the minerals industry and continue to lead the industry with our gender diversity initiatives. St Barbara has been recognised by the Australian Workplace Gender Equality Agency (WGEA) as an Employer of Choice for Gender Equality for the last seven years. We are currently the only Australian mining company to be awarded the citation.

In February, we were also proud to be included for the first time in the 2021 Bloomberg Gender Equality Index, one of only 10 Australian ASX-listed companies in the Index, together with 380 other companies across 11 sectors worldwide.

During the year we became a signatory to the UN Women's Empowerment Principles (WEP). The WEP are a set of principles offering guidance to business on how to promote gender equality and women's empowerment in the workplace, marketplace, and community. Established by UN Global Compact and UN Women, the WEPs are informed by international labour and human rights standards and grounded in the recognition that businesses have a stake in, and a responsibility for, gender equality and women's empowerment.

Recognising the importance of diversity, in April 2021 we ran a highly successful Diversity Matters campaign, where employees shared their own reasons for why diversity is important to them, and as an organisation we took the time to celebrate the diversity we have in our teams.

As a member company of the MCA, we are participating in a working group formed by the industry organisation, focused on driving progress on the issues faced by women in mining.

Other recent diversity achievements include:

- significant progress on the number of women in key leadership positions (33% of Board members are women);
- in a tightening labour market, we continue to make progress against our gender targets for women in key roles (achieved 28% women employees in our Australian operations against a 30% target);
- critical policy and procedures in place to support inclusion, flexibility, respect and safety (refer to the example on domestic violence below);
- strategies in place to support gender equity, domestic violence, flexible working and mental health, including the appointment and training of mental health first responders (this will be a key focus of the Diversity and Inclusion Strategy in the coming period);
- a comprehensive suite of learning programs available to all employees, including on domestic violence, inclusive leadership, unconscious bias, and appropriate workplace behaviours;
- gender safety audits and resulting programs to improve gender safety at key locations (in the year ahead, the scope will be widened to ensure we understand the experience of multiple diverse groups and their safety in our locations);

- a Board-level commitment to developing the national workforce in PNG and increasing Indigenous and First Nation employee representation across the Group, particularly in Australia and Canada;
- St Barbara's Executive General Manager (EGM), People presented at the FY21 International Mining and Resource Conference on the journey to becoming and maintaining our accreditation as an Employer of Choice; and
- our EGM People was also invited to the first UN Pacific Forum on Business and Human Rights held in Fiji during December (she was asked to present on St Barbara's leading gender safety program, and our wider gender diversity achievements).

### Domestic violence and gender safety

Supporting employees who are dealing with domestic violence, has been a key focus area for many years. Recent initiatives include a new Domestic and Family Violence Policy Statement and Framework, accompanying guidelines, and training for key staff in first-response support to domestic violence situations.

The Group seeks to support employees impacted by domestic violence through the following:<sup>1</sup>

- paid leave provisions
- free confidential specialist counselling
- personal safety arrangements
- short-term financial assistance
- flexible working arrangements.

At our Simberi Operations, we pioneered a gender safety program, recognising the different safety concerns of women, in partnership with the PNG Business Coalition for Women.

This program followed a research project into women working in remote locations in PNG and incorporates an annual audit process including employee surveys, focus group meetings, interviews, risk assessments and benchmarking. The annual audit report includes recommended actions based on the findings of the audit. Gender safety audits are planned across all three operations in FY22.

Examples of changes enacted at Simberi Operations as a result of prior audits include:

- nightshift signs are now fixed on doors of sleeping quarters so female workers can identify which rooms are occupied during the day;
- female camp staff have been provided trousers as a uniform option; and
- the appointment of Contact Officers who provide a confidential point of contact for employees to report harassment.

A Family Sexual Violence Guideline for our Simberi Operations was developed and implemented in FY20.

A non-violence initiative for men, the Warrior Program, has been running for male employees since 2015, and since 2018, for contractors and community members also. The program is delivered in Tok Pisin, the local language. The content of the workshop covers the following.

- What is family sexual violence?
- Strategies and tools to control temper/anger.
- Building strong relationships in the family.
- Working with the community to overcome family sexual violence.

1. Currently, employees of Australian Operations only.



## Sexual harassment

St Barbara is committed to zero tolerance for all forms of harassment including sexual harassment, discrimination, bullying and behaviours that are not aligned to our values and Code of Conduct. We have reviewed and updated our Workplace Behaviour Policy to ensure clarity of expectations and support for our personnel. As a WGEA Employer of Choice for Gender Equality, St Barbara is required to have appropriate systems in place to identify, address and ensure everyone is treated with respect in our workplace. We have taken this action since achieving the original citation in 2014. This includes our strategy aimed at achieving gender equality with clear objectives, measures and an evaluation process and established policies supporting gender equality. We also annually evaluate our progress against gender equality strategy with progress reported to the workforce and the Board. This includes all gender-based discrimination and sexual harassment complaints. We provide ongoing education and training across the Company on workplace behaviour as part of our inclusive workplace strategy.

We have been active in championing the elimination of sexual harassment in the mining industry identified through the Australian Human Rights Commission's Respect@Work: Sexual Harassment National Inquiry (2020) findings. This includes our member participation in the MCA's Workplace and Innovation Committee, Safety and Sustainability Committee and the Diversity and Inclusion Working Group, to expand the scope of the minerals industry's safety and health policy as part of action to eliminate workplace sexual harassment.

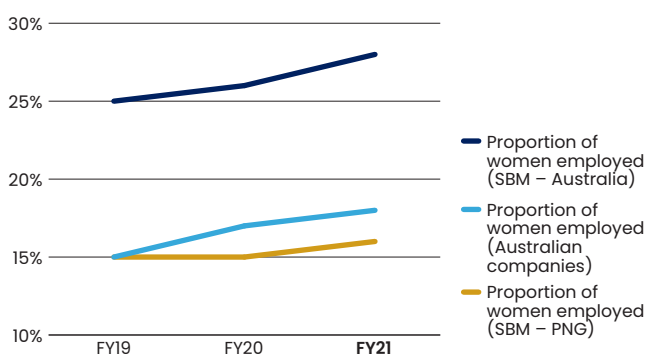
We are also contributing to the Chamber of Minerals and Energy Western Australia's initiative to form a cross-portfolio Sexual Assault & Harassment (SASH) Working Group to lead proactive work on several priorities aiming to support best-practice management of these issues.

As a member of the Business Coalition For Women (BCFW) in PNG, we have access to resources including the intensive in-country anti-sexual harassment program.

## Diversity performance

Our FY21 Performance Data (page 57) shows we moved further towards our gender diversity targets for 2022. The proportion of women employed (excludes contractors) in Australian operations increased in 2021 to 28% (26% in 2020), with a target to reach 30% in 2022. The proportion employed in Papua New Guinea increased to 16% (15% in 2020), toward our revised target of 18% by 2022. The proportion of female employees in Canada has been reported for the first time as 27% against our 2022 target of 30%.

## Gender diversity



1. Like-for-like gender pay gap measures the difference in base salary over the year between male and female employees in comparable roles.
2. Overall Gender Pay Gap is calculated according to the WGEA guidelines ([www.wgea.gov.au](http://www.wgea.gov.au)) and represents the difference between the average pay for all male employees and the average pay for all female employees across the whole organisation.

The Group conducts regular gender pay audits and has a nil gender pay gap for like-for-like roles<sup>1</sup>. The Group has a target to reduce the overall gender pay gap<sup>2</sup> to 8% by 2022. On 30 June 2021, the overall gender pay gap (based on full-time base remuneration of men and women across levels working in Australia) was 7.65% which is a significant improvement to the previous gap of 14.87% in June 2020.

We conduct a monthly overall organisational gender pay gap analysis and an annual like-for-like gap analysis. The annual 2019/2020 WGEA snapshot indicates that while marginally more organisations are now analysing pay data (up to 46.4%) there has been a significant reduction in organisations actively working to close the gap (down 6.6% to 54.4%).

The internal recruitment recommendation process includes assessment of the current and adjusted gender pay gap upon appointment of the preferred candidate to ensure remuneration is set at 90% to 100% of the P75 (in line with the St Barbara Remuneration Strategy). An analysis is conducted on the STI Overall Performance Payment to analyse gender comparisons.

St Barbara is represented on a number of committees and groups focusing on gender diversity in the resources industry.

- **Australian Women in Resources Alliance (AWRA) Gender Advisory Board** – St Barbara is represented on this Board which is limited to 6–8 members. AWRA's charter is to assist employers on their gender diversity journey with the overarching goal to increase women's participation in the resources, allied and related construction sectors to 25%.
- **MCA Gender Diversity Working Group** – St Barbara's EGM People is Chair of the Working Group which focuses on advocacy on behalf of and within the industry to promote commitment to advancing gender diversity and inclusion, advancing industry practice, and sharing information. In 2020, the group developed a first-of-kind 'industry of choice for diversity' which was endorsed by the MCA Board and this year is planning a symposium.
- **MCA Workforce and Innovation Committee** – in 2018, St Barbara's EGM People was invited to join this Committee and is currently the Stream Leader for Diversity.
- **CME WA Gender Diversity Reference Group** – this group meets regularly to discuss and identify diversity and inclusion initiatives for WA. St Barbara has been a member of this group since 2011.

## Indigenous employment

Under our commitments to Empowered People, Diverse Teams, and Stronger Communities, we continue to pursue higher levels of Indigenous (including First Nations) local employment at our operations. We know this meets our purpose and vision as a strong business: to share long-term value with our communities as we develop sustainably through the mine lifecycle.

The proportion of Indigenous Australians we employ at Leonora Operations in Western Australia decreased year-on-year from 3 to 2% (our target is 5% by 2022). Leonora's Indigenous employment program was impacted by COVID-19. We are committed to turning that trend around with targeted recruitment campaigns and a new 'traineeships for locals' program.

## Empowered People, Diverse Teams continued

Following the appointment of a Senior Community Engagement Specialist, working in partnership with HR, community engagement has been reinvigorated with a particular on focus on youth education and building Indigenous capability.

Our sponsorship of the Leonora Shooting Stars program (girls' netball, education, and skills development) and Kalgoorlie Clontarf Academy programs (boys' football, education, and skills development) helps Indigenous youth from local communities continue their education and achieve their goals.

Our support of Shooting Stars has helped increase Indigenous girls' school attendance rates – by 24% above the average school attendance in 2018, by 19% in 2019, and by 11% in 2020 – despite some impact from COVID-19 (see page 39).

Through our partnership with Shooting Stars, we became aware of three Indigenous sisters from Leonora who needed financial support to accept partial scholarship positions at St Hilda's Anglican School in Perth.

We committed to providing return flights home for the girls over their years of attendance at St Hilda's, as well as items essential for them to participate fully in school life. This will ensure they can take advantage of their scholarship opportunities, while still retaining their all-important connection with their family, culture, and community.

St Barbara and our mining contractor Macmahon are partnering to recruit from the local community with a program of events scheduled from August 2021. Macmahon's Indigenous workforce representation at Gwalia currently stands at 2.5%. The Macmahon contract stipulates that each year they will engage at least two Indigenous fully paid trainees.

Our community newsletters include information about employment and traineeship opportunities. At the August 2021 Community Information Session, opportunities for employment were promoted and discussed with Indigenous and other local attendees.

At Atlantic Operations the proportion of First Nations employees reported for the first time was 2% against the target of 5% by 2022. The strategies in place to support this objective include:

- the establishment of a talent pool identifying First Nations talent for vacant roles;
- Atlantic's Community and HR teams are developing a cultural awareness training program to encourage greater internal awareness of culture and thereby encourage an environment that is welcoming and inclusive of First Nations people.

### Awards

St Barbara has won multiple awards for its achievements in gender equality and mental health and wellbeing.

Financial Year	Authority	Award
FY21	Workplace Gender Equality Agency	Employer of Choice for Gender Equality for seventh consecutive year.
FY20	International Mining Journal	Runner-up Gender Diversity Leader
FY18	Australian Women In Resources Alliance – National Awards 2018 Women In Resources National Awards 2017	Excellence in Diversity Excellence in Diversity Programs and Performance
FY17	Victorian Women in Resources Awards Australian HR Awards	Gender Diversity Programs Finalist for Best Health & Wellbeing Program

## Stronger Communities

We strive to help our communities thrive, grow and prosper. We build meaningful relationships, investing time and energy to ensure local communities are enriched by being our neighbours.



Artist, Leonora.

St Barbara's Community Relations Policy statement is available on the website at [www.stbarbara.com.au/about-us/governance/](http://www.stbarbara.com.au/about-us/governance/).

We know that achieving our vision depends on the strength of our working relationships – our community and broader stakeholder engagement – and being valued by our stakeholders as a trusted operator that delivers to promise.

In accordance with our Community Engagement Standard, we engage regularly with a variety of stakeholders in each of the localities where we operate including, but not limited to, landowners, First Nations, employees, contractors, suppliers, community organisations, local and national-level governments, media, research and academic organisations, peer companies, and industry bodies. This primarily involves the resources of the Community Relations team at each operation, with other St Barbara representatives, including in Exploration, supported in their own various engagement activities.

The Community Engagement Standard, part of the Health, Safety, Environment and Community Management System, ensures that the Group develops and implements effective and transparent community stakeholder engagement and associated processes with relevant stakeholders. The standard has 15 requirements, including those outlined below.

- There are strategies in place to employ, engage and retain local talent, underpinned by employment protocols on work rights and conditions and in line with the Group's commitment to diversity.
- An assurance process is in place to verify the absence of compulsory and/or child labour across the St Barbara Group, and to the extent possible, supply chain.

- All workers should be trained in cultural awareness and human rights relevant to their area of work and their operation's local cultural context.
- The Group seeks to minimise resettlement and, where this is not feasible, to structure appropriate arrangements that maintain and/or improve the livelihoods of affected people.
- A process shall be in place to manage risks to local culture and heritage and to effectively maintain and, where possible, enhance local culture and heritage through an ongoing and open dialogue.
- A system is in place to manage questions, concerns, issues, complaints, and requests from the local community, and includes records management, reporting and processes to engage and respond to submissions.

The Standard requires our operations to have a Community Stakeholder Engagement Plan, resourced with dedicated local teams, as well as a community team at the corporate level. We are progressively strengthening our stakeholder management and engagement system and are committed to retaining the trust and acceptance of stakeholders through:

- regular and effective engagement;
- recording, monitoring, and delivering on promises, especially promises targeted at preventing and mitigating negative environmental and social impacts;
- providing fair and rapid procedural responses (and, if required, action) to concerns or grievances; and
- consulting carefully with stakeholders when there are mining and exploration activities that impact them.

1. Grievances are any complaints submitted, from the more informal to those that impact operations (an incident).

### Community and Social Responsibility Strategy

In FY21, we enhanced our Community and Social Responsibility team to ensure a holistic focus on community relationships and development, and alignment with our commitment to Stronger Communities.

Our strategy includes three progressive stages to bring sustained improvements to enhance our performance and deliver on our commitments. The first of these is building a strong foundation with the strategy, structure, systems and support. The next stage will focus on enhancing our performance via compliance and collaboration, with an ultimate focus on leadership through integration and innovation.

**Strategy:** focuses on alignment, taking an evidence-based approach to improvements via baseline assessment, establishing a knowledge base to inform planning, and greater monitoring, analysis, and identification of emerging issues.

**Structure:** to provide guidance, tools, and templates to support site practitioners with compliance to internal and external requirements, improved internal and public reporting, including publishing our first Modern Slavery Statement.

**Systems:** improve tracking and provide greater transparency of social data including engagement, grievance management systemisation and streamlining social investment processes and procedures.

**Support:** support growth projects and community practitioners with First Nations and Traditional Owner engagement through agreement making, cultural awareness training, information sharing and collaboration via a Community of Practice.

#### Baseline assessment project

A baseline assessment was undertaken in FY21 to determine levels of operational awareness and compliance with internal policies and standards, as well as external codes and protocols. This includes TSM (see page 12) which we adopted in 2021. The baseline assessment was designed to increase understanding of site practice and facilitate key document collection to aid the development of a knowledge base to inform social contribution planning.

From the assessment's insights, action plans have been developed which consider the unique context of each operation. These guide our site community teams in addressing immediate needs and taking exciting opportunities to enhance the ways in which we communicate with and give back to our communities.

The CSR function will continue to build on and work to its strategic direction, with goals and outcomes identified for the coming years. Supported by a clear plan, the function continues to advance its contribution toward the sustainable growth and development of our business, whilst ensuring the delivery of ongoing positive outcomes for our local communities.

### Environmental and social risk management

St Barbara has processes, procedures, and practices to manage risks and opportunities associated with the rights and interests of communities in communities where we conduct our business. This includes undertaking of environmental and social impact assessments, as well as quarterly risk assessments which assess economic, environmental, social, and cultural risks to communities. St Barbara maintains a series of policies and standards that deal with these risks and opportunities including:

- Environment Policy
- Risk Management Policy
- Community Relations Policy
- Diversity and Inclusion Policy
- Equal Employment Opportunity Policy
- Community Engagement Standard
- Risk and Management of Change Standard
- Environment Management Standard

In line with the Community Engagement Standard, sites are required to have engagement plans to guide engagement within communities of interest to identify risks and opportunities to deliver benefit.

#### Responding to concerns

Under the Community Engagement Standard, St Barbara's sites have a system to manage questions, requests, concerns, and complaints from the local community. This includes records management, reporting and processes to engage and respond to submissions, including through operations' grievance (complaint) management processes. Our response to stakeholder and community concerns is managed at each operation or site through both electronic and face-to-face channels. We respond to stakeholders on a concern-level basis and apply priority to elevated or protracted issues. We provide further detail by operation in the content that follows.

#### Local employment and local supply

We're committed to sharing the value of our operations with the communities in which we operate. We strive to employ locally and aim to support and use local supplier companies where possible to meet our operational requirements.

At Atlantic Operations, over 91% of our employees are from the local area. The mine recently reached the milestone of employing over 300 staff members on Nova Scotia's Eastern Shore. At Leonora Operations 3% of our current employee base is from the local area. The small local community has relatively few people in the highly skilled categories typically required for underground mining. In Western Australia 'FIFO' (fly-in, fly-out) labour is the prevalent employment mode in the resources industry. At Simberi, 44% of our employees are from Simberi and the neighbouring Tabar Islands, and 53% are from other parts of Papua New Guinea.

At our Leonora Operations, we are a Foundation partner of the GE Register, along with other gold mining companies. This is a tool that maps capability and connects business owners to create local growth across the Goldfields-Esperance region where Leonora is located. This tool aids local businesses in promotion, networking, marketing, and professional development. In FY21 St Barbara spent \$15.5 million with regional suppliers. This was in addition to contributions in Australia of \$17 million in wages and salary tax, \$19 million in income tax, and \$11.7 million in royalties and other taxes and duties to communities and government.

At Simberi, St Barbara spent \$11.1 million with local landowner businesses. We also provide business support and training to small businesses at Simberi. To date, new businesses have included inland fisheries, market gardens and cocoa plantations (further discussion follows, see page 40). In addition, operating in PNG, St Barbara paid \$9 million in wages and salary tax, \$9 million in income tax, and \$5.9 million in royalties and other taxes and duties to communities and government.

At our Atlantic Operations, St Barbara is an active member of the Halifax Chamber of Commerce which enables us to link with and build relationships with local suppliers. Atlantic Operations' annual operating expenses are approximately \$50 million, providing many benefits for the local economy. Approximately \$30 million is spent each year supporting local workers and businesses. In FY21 we contributed \$9 million in total wages and salary tax, and \$4 million in royalties paid to communities and government. Atlantic Operations are in discussion with a local school regarding future skills needs and emerging technologies and industries.

## COVID-19

A key priority in our management of COVID-19 is to ensure that St Barbara's employees and contractors do not introduce the virus into a community associated with our activities. As previously discussed, our COVID-19 Management Framework and protocols form the basis for our successful management of that risk.

St Barbara also contributed to and initiated various measures to support our local and wider communities to cope with the medical, isolation-related, and economic impacts of COVID-19. Some of these initiatives are described briefly in the following sections. Activities such as community outreach, volunteering and other programs undertaken by the Group were suspended, delayed, or redirected due to COVID-19 restrictions.

## Community programs and initiatives

### Atlantic Operations

#### Context

Atlantic Operations has run the Touquoy mine for four years, and permitting processes are underway for three proposed mining projects: Beaver Dam, Fifteen Mile Stream and Cochrane Hill.

Touquoy and the proposed mine sites are all situated in rural Nova Scotia. There are small but strong neighbouring communities around these sites, including members of Mi'kmaq First Nation. Working closely with the community has always been of great importance to the entire team at Atlantic Operations.

The focus during the year was the response to COVID-19 and keeping our employees and community safe and supported. Meanwhile the team also progressed communication and consultation about our proposed future projects.

## COVID-19

Like other provinces and countries, Nova Scotia was hit hard by COVID-19 and the effects continued across FY21. The Atlantic Operations team continued to prioritise the safety of both the worksite and the local communities by:

- Limiting movement across the province by mandating that all staff who were not required to be on site worked from home.
- Providing support for local rural organisations and businesses in a range of ways, including food and monetary donations to Food Banks in the area.
- Supporting nursing homes, especially those affected by the pandemic, helping control outbreaks and support with lack of family contact. Atlantic Operations provided homes with iPads for video calls, and when restrictions allowed for outdoor visits, we supplied the nursing home closest to Touquoy with heated tents for outside visits.
- Educating staff on COVID-19 to ensure that our team members were active participants in keeping the community safe. Through the pandemic we shared information on restrictions, vaccinations, and testing. During the second wave in Winter 2020, an Atlantic Operations team member took part in a video for staff sharing his experience of contracting COVID-19.
- Keeping the community updated via electronic channels, including through initiatives such as hosting an online Information Session for our Touquoy Environmental Assessment Project Update, where community members could attend online to hear from experts, ask questions, and voice concerns around the project.

## Delivering benefit

Atlantic Operations supports and partners with the local communities in ways that aim to empower them over the life of mining.

### Schools

Over the past few years Atlantic Operations has supported scholarships at St Marys Education Centre, Marine Drive High School and Musquodoubout Rural High to ensure that two local students at each school can attend post-secondary education.

When public graduations were not possible due to COVID-19 restrictions, we assisted local schools and parent groups to produce graduate banners featuring the names and photos of all graduates, allowing the communities to celebrate their graduates while respecting COVID-19 restrictions.

### Local ATV and Snowmobile Club

All-terrain vehicle (ATV) and snowmobile users are key stakeholders for Atlantic Operations. Large parts of the land around Touquoy mine, and our proposed mine sites, are frequently used by ATV and snowmobile users. These groups have contributed to public consultation, attended information sessions, and taken the time to provide feedback through the Community Relations Line. This year, Atlantic Operations supported the Sheet Harbour ATV and Snowmobile Club by providing financial support toward a new clubhouse, ensuring that the members had an up-to-date and safe community space.

**Camp Kidston**

Camp Kidston is a local summer camp a few kilometres from the Touquoy mine. Since the commissioning of Touquoy, our Atlantic Operations has provided both in-kind and financial support for the camp, including:

- an annual sponsorship to Camp Kidston to subsidise camp fees for children and families who do not have the ability to fully pay for summer camps;
- in-kind support offered by team members, including summer volunteering in landscaping and preparations, as well as hosting workshops for the children; and
- provision of emergency support when needed (in FY21, a storm led to a power cut at the camp, which had the potential to result in the loss of large amounts of food, but our team was able to quickly supply and fit the camp with a generator for use whilst awaiting the end of the power cut).

**Research partnership**

This year, Atlantic Operations signed a five-year funding agreement of C\$200,000 per year to support Dr Linda Campbell’s leading research in the remediation of historic mine tailings in wetlands around Nova Scotia. Dr Campbell leads the team at the Dynamic Ecology and Environmental Health Research Group at St Mary’s University in Halifax, which, with our support, will be studying remediation techniques with the goal of reducing the impact of historical mine tailings on wetlands. The aim is to apply the research through Canada and the world, with dividends for communities that benefit from these wetlands.

**Engagement**

Atlantic Operations proactively communicates with the community through the site Community Relations team, but also via Community Liaison Committees and two community-based offices. Considerable project engagement has been undertaken during FY21.

**Moose River region**

The Touquoy/Beaver Dam Community Liaison Committee met three times during the year and Atlantic Operations hosted a virtual Environmental Impact Assessment (EIS) Information session on the proposed project changes at the Moose River mine site for the broader community. Attendees had the opportunity to hear from a panel of experts and ask questions about the project modifications.

**Proposed Beaver Dam mine**

The EIS process is underway for the Beaver Dam project at Atlantic Operations. Since May 2020, the Atlantic Operations team has been liaising with stakeholders to provide project updates and identify any emerging areas of concern.

To gain further information from the local community, our Atlantic Operations worked closely with the residents of Mooseland, the closest community to Touquoy mine. Our team members went door-to-door to speak to people in this community, held focus group meetings, and circulated a plain language summary of the Beaver Dam Mine Project to all mailbox holders.

The revised EIS includes the results of these recent engagement activities with the local community, Indigenous communities and landowners, and wider stakeholders. Atlantic will be consulting with stakeholders over the life of the Beaver Dam Mine project.

**Proposed Fifteen Mile Stream mine**

The Fifteen Mile Stream Community Liaison Committee held four meetings both virtual and in person. Our comprehensive EIS for the Fifteen Mile Stream project was submitted to the regulator in February 2021. Once the regulator reviewed the EIS for conformance to the Project Description, the EIS was posted on the Impact Assessment Agency of Canada (IAAC) website and a public comment period opened in April 2021.

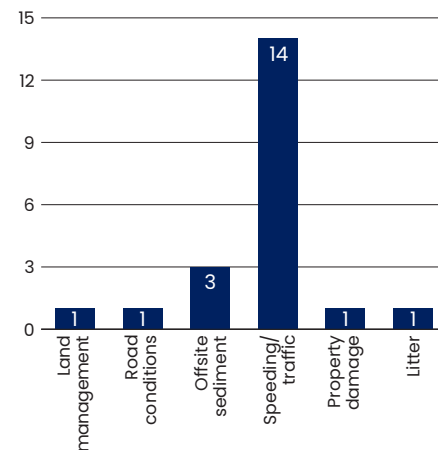
**Proposed Cochrane Hill mine**

Atlantic Operations continues to prepare an EIS submission to the Impact Assessment Agency of Canada (IAAC). During FY21, Atlantic supported community organisations and responded to needs caused by COVID-19 in the Cochrane Hill area. Our Sherbrooke office continues to be an active engagement location, with over 115 visitors attending since it opened. Atlantic understands that there are many questions regarding the mine project and encourages visitors. The Cochrane Hill Community Liaison Committee also held five virtual meetings during the year where the community was informed about project developments and outcomes of studies.

**Addressing concerns**

In accordance with St Barbara’s Community Engagement Standard, Atlantic Operations records community concerns (grievances) through the grievance management system. The local communities are encouraged to directly express their concerns with the Atlantic Operations team. There is an open Community Relations line – supporting both email and phone contact for any community-based inquiries or concerns. The contact information is provided by our community-based offices, Touquoy security checkpoint, by our employees, and in our community newsletters. All inquiries are recorded and followed up.

**FY21 Atlantic Operations grievances by type**



In FY21, there were 21 community complaints made by six individuals and one organisation. The highest number of these was related to traffic and speeding, followed by concerns regarding off-site sediment.

### Response to speeding with MACA

In FY21, one of the local community groups, Mooseland Area Community Association (MACA), approached Atlantic Operations with concerns about vehicles speeding through the community of Mooseland. To address MACA's concerns, Atlantic Operations reached out to the complainant to compile information, then implemented corrective action, including attempting to locate the vehicle/s and driver/s in question, and provided instructions for supervisors to inform employees and contractors of the situation and ensure that they were aware of the concerns and risks of speeding through local communities. Through collaboration with MACA, the province of Nova Scotia and the Halifax regional municipality, a plan was developed to purchase and install radar powered speed signs in the community of Mooseland.

### Response to sediment concerns

To address community concerns regarding sediment entering an off-site watercourse near a contractor clay excavation, Atlantic Operations assisted the contractor with implementing remediation works and developing an ongoing protocol for monitoring the effectiveness of the sediment control measures.

## Leonora Operations

### Context

The township of Leonora lies 230km north of Kalgoorlie, in the Goldfields region of Western Australia. The Shire of Leonora supports a population of over 1,400 people. Leonora Operations is located 3km from the township in Gwalia, with our accommodation camp located in Leonora's town centre.

Most of the workforce at Leonora are fly-in, fly-out or drive-in, drive-out workers, yet they continue to be active participants in the Leonora community through volunteering and other community activities. In FY21, we appointed a Senior Community Engagement Specialist to enhance community engagement as part of our commitment to Stronger Communities.

### COVID-19

During FY21 our Leonora Operations continued to successfully manage the risk of COVID-19 to the workforce and in our interface with the local community. Despite restrictions being applied, the site team maintained awareness of local implications of the pandemic, to support community needs. During FY21, COVID-19 restrictions postponed some planned community engagement activities and regularly supported events in the Leonora region. Further detail on the progress of these support programs, once government restrictions lifted, follows.

### Delivering benefit

Many residents of the Shire of Leonora experience a high level of socio-economic disadvantage and associated social, health and education challenges. The Leonora Operations Stakeholder Engagement Plan stipulates that our community programs target and prioritise support for health, youth, and education opportunity initiatives. Leonora Operations supports some core partnerships as well as a diverse range of other local and site-based initiatives and events. The partnerships particularly meet our commitments to Indigenous youth development and leadership.

### Shooting Stars partnership

Shooting Stars is an educational program that uses netball and other avenues to drive its primary vision of increasing school attendance rates to above 80% for Indigenous girls living in remote communities and regional towns. We renewed our partnership with the Leonora Shooting Stars program for another three years, together with neighbouring Leonora-region gold miner Northern Star Resources Ltd.

This program continues to have a positive impact on the participant's lives. We remain committed in our efforts to build authentic and long-lasting relationships while continuing to ensure the sustainability of Shooting Stars within the Leonora community.

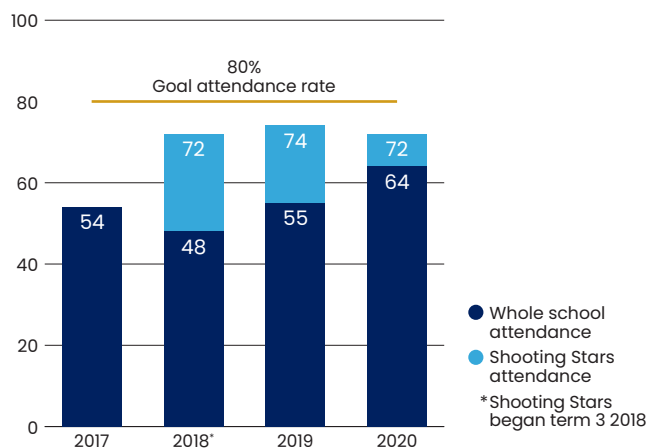
Through this partnership, over calendar years 2017-2019, the participants' attendance at Leonora District High School increased. In 2020 and despite COVID-19 restrictions, attendance reached 72%, still well above the high school's 64% average. The program not only focuses on school attendance but empowers each girl to make positive choices and to live to their full potential.

The partnership has developed into much more than increasing school attendance. With the support, passion, and dedication of many of our Leonora employees, we have broken down barriers, built trust and genuine relationships with the girls, their families and the broader Leonora community.

Our engagement goes beyond the netball court and into the Leonora community. We provide housing to program staff, career advice and volunteering at the school and in the community. Our weekly community netball games remain a highlight.

In October 2020 at the Department of Mines Industry Regulation and Safety Awards, our Shooting Stars partnership was awarded with a Special Commendation for Individual Empowerment. The judges recognised that while this is only a relatively new partnership, the program has already made a real difference in empowering girls in Leonora. Since this award, some of the Shooting Stars participants have won scholarships to attend St Hilda's Anglican School for Girls in Perth.

### Shooting Stars attendance Leonora High School (%)





A local school visit with Shooting Stars coordinators, Leonora.

#### **Clontarf Foundation partnership**

St Barbara has a three-year partnership with Clontarf Foundation, which uses Australian Rules football as a vehicle to improve the education, discipline, life skills, self-esteem and employment prospects of young Indigenous men. Clontarf provides a talent pipeline, with plans underway with Clontarf to actively deliver this into our Leonora Operations.

#### **Youth education**

Leonora Operations has also invested into educational programs that engage and support students at the local Leonora District High School, including:

- Rising Sons: a new program for young Indigenous boys to address non-attendance at school and improve behaviours so they become leaders for younger boys.
- Nature Cultural Playground: creating a cultural playground that incorporates a yarning circle and Indigenous artworks.
- Major school activities: such as Open Classrooms, NAIDOC<sup>1</sup> Week, and an athletics carnival, where the community can mingle and have access to St Barbara employees to discuss career opportunities.

We also continued our platinum sponsorship of the *Get into Resources* event in Perth, which showcases the career opportunities available in the resources industry to secondary school students.

#### **Other community support**

Leonora Operations sponsored major community events in FY21, including:

- Leonora Golden Gift: a historic and world-famous elite mile running event. The associated community carnival includes other fun runs, horse races, a fashion parade, an elite cycling event and a live music festival.
- Leonora Bike Challenge: a 10-week cycling training program and event to encourage fitness and exercise, resilience, and commitment in the Leonora community.
- Goldfields Girl: a program that provides young Indigenous women from the Goldfields region with valuable educational activities and opportunities that directly address their needs in the areas of contemporary Indigenous culture, mental and physical health, positive lifestyle support, and leadership values, whilst minimising the effects of social, economic, and geographical isolation.
- Leonora Cup: a horseracing fixture each October that brings the Leonora community together for a fun day out and provides networking opportunities between employees and community members.

Other community Investment programs supported in 2021 include:

- Gwalia Museum – Upgrade Project;
- Leonora Inland Art Prize;
- Leonora Bush Mission;
- Leonora Women’s Group;
- Women’s Hub to be developed into a holistic service for all women in Leonora; and
- Leonora Men’s Club.

1. NAIDOC stands for National Aborigines and Islanders Day Observance Committee – related to raising awareness of the status and treatment of Aboriginal and Torres Strait Islander Australians. Staff participated at Leonora District High School in activities such as arts, and the NAIDOC march.



## Engagement

In FY21 our engagement with the community focused on reconnecting after COVID-19 restrictions. St Barbara's 15-year ownership of Gwalia was celebrated with the community and enjoyed by many. Leonora's newly appointed Senior Community Engagement Specialist was introduced to the community, including to local organisations, service providers and partners.

Other engagement highlights include:

- Hosted WA School of Mines students at our Leonora Operations in March 2021 where students had the opportunity to participate in learning experiences that support and enhance the knowledge they have gained in the classroom-based activities. The students also had the opportunity to meet with senior leaders of our operations for insights into current mining practices.
- Setting up the first St Barbara Market Stall at the Leonora Golden Gift which gave us the opportunity to talk directly to the community about our operations.
- Participated in the Kalgoorlie-Boulder Chamber of Commerce and Industry's Community Relations Forum that meets twice-yearly to share information across the gold mining industry.

Other planned site-based engagement that could not proceed due to COVID-19 restrictions included the Leonora Family Day and Aboriginal Cultural Bush Days.

Leonora Operations implemented a new stakeholder engagement platform to strengthen management of stakeholder activity tracking, daily communications, and the delivery of the mine's programs and benefits.

### Addressing concerns

Community members can contact Leonora Operations to register concerns or grievances via phone or email. In FY21, there were no grievances received.



NIPHA COVID-19 surveillance testing at Karanas community near our Simberi mine.

## Simberi Operations

### Context

Simberi is a small tropical island in the New Ireland province of Papua New Guinea. Over 95% of St Barbara's workforce on the island are from Simberi, the nearby Tabar Islands, and other parts of Papua New Guinea.

The Simberi Community Relationship Office comprises a large team of employees, mostly local people, who are frequently engaging with the community and are involved in civil works that prioritise environmental and community sustainability. The group performs a range of functions, including infrastructure projects, support for health and education initiatives, small business support, and general community management.

In early FY21, significant focus was given to COVID-19 risk management and support throughout a number of waves of infection across PNG. However, community initiatives have continued in a COVID-safe manner, with investment and support aimed largely at development of local infrastructure and sustainable business.

One of the biggest achievements for our Simberi Operations was the completion of the sulphide awareness program in all the villages in Simberi and the two neighbouring Tabar islands. The community participation was excellent with tremendous support from community leaders and people.

### COVID-19

Throughout FY21, we had a strong focus around infection prevention, hygiene education, and management of movement between islands to limit transmission. Initiatives included:

- assisting Islanders with monitoring boats moving between other islands, with employees and contractors contributing to completing COVID-19 questionnaires and temperature taking;
- establishing a Simberi Community COVID-19 Committee (SCCC);
- testing community members;
- donating test kits to provincial health authorities;
- donation of 1,500 face masks to schools, health staff and SCCC members and their families;
- providing COVID-19 and hygiene and health guidance and awareness sessions in all communities;
- providing handwashing facilities for the local school; and
- providing electric sewing machines to the Simberi Women in Mining association (SWIM) to support mask production.



A Simberi community COVID-19 vaccination awareness meeting.

In early 2021, PNG experienced a second wave of COVID-19, affecting both community members and employees in Simberi. The focus of the community team quickly shifted to ensuring quarantine measures were in place to limit the spread of the virus. The Community Relations team maintained communication with the community to ensure locals were informed of changing circumstances and lockdown requirements. Initiatives during this time included:

- Comprehensive testing.
- Communicating with community leaders to ensure clarity of information.
- Ensuring that school children had access to learning materials during school closure.
- Replacing two deteriorated health centre staff houses.
- Establishing a COVID-19 isolation tent.
- Facilitating a New Ireland Provincial Health Authority (NIPHA) surveillance team to assist community surveillance.
- Weekly SCCC meetings for COVID-19 updates.

Our Australian offices were also able to again contribute with small but meaningful gestures, pooling donations to create care packages of treats and activities for those in quarantine on the island.

Phone counselling and mental health support were sourced through both Australian and Papua New Guinean providers to ensure that those in quarantine had access to appropriate support.

#### **Delivering benefit**

##### ***Small business support***

Our Simberi Operations focuses directly on empowering local businesses in effective business practices to ensure their sustainability following mine closure. Simberi also offers ongoing support, training, and capacity building to various small landholders. Recent initiatives at Simberi are discussed below.

##### ***Simberi Mine Services***

In 2016 St Barbara facilitated the creation of Simberi Mine Services (SMS), a community business umbrella and governance company. St Barbara provided training in governance and commerce practices, as well as seed funding.

SMS continues to thrive as a centralised voice for the community and landowner-owned businesses. Facilitation of training and partnering in the development of commercial ventures remains an ongoing focus for the Simberi Community Relations team.

##### ***Community cocoa business***

A project to create a sustainable cocoa business is in its fourth year, with disease resistant cocoa seedlings grown in the company nursery and distributed to local farmers in collaboration with SMS. Traditional mixed cropping organic farming methods, where subsistence crops provide shade for lower growing cocoa plants, are utilised.

In addition to the original company nursery on Simberi, a number of additional nurseries are now in place on the other two islands (Big Tabar and Tatau). Around 120 family farmers are involved in the project, receiving guidance and technical advice from St Barbara's Community Relations Team.

In September 2020, through a partnership with Paradise Foods, 30 kilograms of sun-dried beans from Simberi's Pigiupit plantation were flown to Port Moresby for trialling at Queen Emma Chocolate Factory. 1,900 packets of dark chocolate were produced and have been distributed to farmers and New Ireland government leaders to sample.

A local St Barbara employee and farmer on Simberi said: 'People are getting psyched up to plant cocoa again. They had never seen this (finished product) before, as cocoa was always exported to other countries to make chocolate and other products'.

##### ***Other small business support***

In addition to the cocoa business, we also support several other small businesses. The following initiatives are in planning and implementation stages.

- Poultry businesses for meat and eggs.
- Piggery for pork farming.
- Fisheries and mariculture.



Cocoa seedlings from the nursery for delivery to the farms, and harvested and bagged cocoa ready to be shipped out to buyers.

### Community infrastructure

Our Simberi Operations contributes to both the construction of new community infrastructure and rehabilitation of existing structures. FY21 initiatives included:

- Bodar Sport Field construction.
- Las Ples Community Market construction.
- Maragon Community Market construction.
- Various bus stops.
- Ring road maintenance.
- Maintenance of water supply.

### Education

In recognition of the education of young people as essential to the maintenance of strong communities, we continue to support a range of education initiatives, including:

- Construction projects including a teacher house and library for the primary school.
- Construction of various classrooms for elementary schools around the island.
- Construction of new metal stairs for Simberi's primary school.
- Provision of a shuttle service for students on the island.
- Scholarship programs for secondary and tertiary education.



Four new health staff houses were co-funded by Simberi Operations, Simberi Mining Area Association and New Ireland Province.



New metal stairs for the local school double classroom.



The new school library funded by Simberi Operations.

**Engagement**

The Community Relations team at Simberi engage frequently with the community through several channels including landowner association meetings, enquiries at the Simberi SBM Community Office, and regular community outreach. The Community Office allows the community to easily connect with the Community Relations team and the Company.

A range of engagement methods are used as needed, including letters, emails, and face-to-face meetings. Additionally, quarterly newsletters for community, environmental, and operational updates are published and distributed locally. Whilst COVID-19 restrictions have introduced challenges for face-to-face engagement, channels of communication have remained open, and engagement has remained strong.

A significant community awareness campaign was undertaken for the Simberi Sulphide Project, to ensure local stakeholders were appropriately informed and able to have any questions answered. Commencing with a General Manager-led session, the campaign involved meetings and conversations with local employees, Relocation Committee Leaders, community associations, various community representatives, and landowner associations. Communities across Simberi and neighbouring islands, Tatau and Big Tabar, were involved, ensuring that each community was represented. The feedback and response from this program was largely positive, reflecting the communities' comfort for the Sulphide Project to commence. The involved groups continue to be informed of progress by the Simberi team.

**Addressing concerns**

In accordance with St Barbara's Community Engagement Standard, Simberi Operations has a stakeholder grievance management system which records communications and data on stakeholder concerns and complaints (grievances). The Community team responds to any grievances through a Grievance Resolution Process. The data from this system allows for issues profiling and volume tracking, management performance analysis, and improvement.

In FY21, Simberi Operations recorded 50 grievances. The chart below shows the top five most prevalent grievance categories for the year. Most prominent were compensation, payment, and environmental concerns. Often these grievances concern commercial issues relating to locally controlled contractors. In addition to these top categories, small numbers of grievances fell under other categories including education, employment, housing assistance and mine operations. Since FY20, instances of contractor engagement and transportation grievances have fallen, whilst contractor payment and water supply grievances have increased. Payment, compensation, and environment have remained the three most common issues across FY20 and FY21.

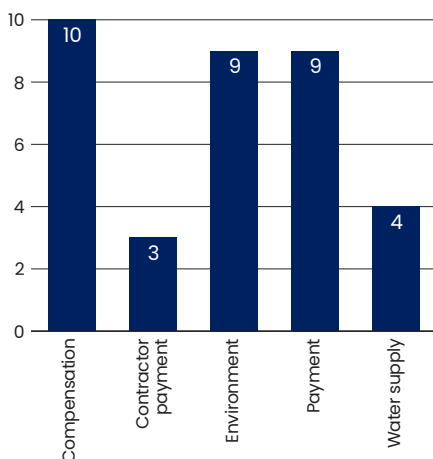
Activities at our Simberi mine are occasionally disrupted due to community concerns arising through the local cultural context or processes. For this reporting period there was an increase in COVID-19 related grievances from the community. In March 2021 four communities disrupted site access routes in relation to a misunderstanding regarding COVID-19 risks and communication. The duration of the restricted access by each community was:

- Munun village ~48hrs;
- Botlu village ~10hrs;
- Simberi village ~24hrs; and
- Bodar villages ~24hrs.

The disruptions impacted travel time to site and personnel pick up and drop off, and were resolved with no impact to production. Simberi Community Relations staff worked closely with Chiefs, their community members, and local police to resolve concerns and restore access.

To address these concerns, Simberi Community COVID-19 Committee (SCCC) was formed. This group comprises community leaders and Simberi Operations staff. They meet every week for COVID-19 updates to address issues and provide resolutions that work for both the community and the operations.

**Simberi FY21 grievances by type**



Community engagement at Simberi.

## Human rights, modern slavery, and indigenous rights

### Human rights

St Barbara's commitment to respecting and protecting human rights in all their forms is primarily enshrined in our Code of Conduct, and our values statement, with supporting policies and internal standards specifically reiterating our commitments<sup>1</sup>.

As a member of the Minerals Council of Australia (MCA), and the UN Global Compact, our management approach is aligned, respectively, to the human rights stipulations of the Enduring Value framework and the associated UN Guiding Principles on Business and Human Rights. St Barbara's policies and standards also mandate the use of practices and procedures with respect to human rights that uphold, or are consistent with, the International Labour Organisation conventions on freedom of association (No. 87), collective bargaining (No. 98), forced labour (No. 29, No. 105), child labour (No. 138, No. 182), fair wages (No. 100), and discrimination (No. 111).

St Barbara is an awarded sector leader in workplace human rights, particularly in the domain of diversity and inclusion (refer to page 30).

We have policies for diversity and inclusion, equal opportunity, and community relations, protecting employees from discrimination based on race, age, union affiliation, ethnicity, religion, gender, sexual orientation, disability, family and marital status, nationality, and political belief.

In addition, our Community Relations Policy Statement specifies that operations and interactions with local communities must be conducted in a manner consistent with internationally recognised principles on security and human rights.

Our Supplier Code of Conduct requires suppliers to comply with our policies and standards addressing human rights. The Code also sets an expectation that St Barbara suppliers comply with all applicable laws relating to anti-bribery and anti-corruption, diversity and inclusion, health and safety, modern slavery, and sustainability. Our supply engagement terms also specify that suppliers undertake to identify and encourage opportunities which benefit Indigenous/First Nations people and local communities, wherever reasonably possible.

Other than our process to assess and manage our supply chain for forced labour (modern slavery) risks (see the following section), St Barbara's procurement team undertakes supplier due diligence assessments focused on high-risk suppliers for broader sustainability risks – including human rights, and anti-bribery and corruption.

St Barbara had no reportable human rights incidents in FY21.

### Modern slavery

Under our commitment to respect and work to uphold human rights (Code of Conduct), St Barbara strives to eliminate modern slavery (forced labour) practices within our operations and supply chain. We recognise that slavery, in its many forms, continues to permeate the supply chains of global entities. In conjunction with guidance from industry bodies, such as the MCA, we have developed processes and procedures to better understand our areas of potential impact and influence in order to address, mitigate and remediate any instances of modern slavery.

In February FY21 our inaugural Modern Slavery Statement was approved by St Barbara's Board of Directors and submitted to the Australian Government's Online Register for Modern Slavery Statements. Our Statement aligned to the submission requirements of Australia's Commonwealth Modern Slavery Act 2018 and discussed the risks of modern slavery across our business and supply chain, and the actions we are taking to assess and address those risks, including identified year-on-year improvement opportunities.

We established a Modern Slavery Working Group to oversee our actions and guide our way forward as we further engage with other organisations and industry to keep abreast of emerging developments.

### Indigenous lands and rights of Indigenous people

St Barbara operates on a range of lands in Canada, Australia, and Papua New Guinea which have traditionally been under the custodianship of Indigenous and First Nations people. In accordance with the United Nations Declaration on the Rights of Indigenous Peoples and the International Labour Organisation's definition of Indigenous lands as those occupied by people who self-identify as Indigenous, we acknowledge that all lands on which we operate are classified as Indigenous lands.

St Barbara maintains due diligence practices and procedures with respect to Indigenous rights within the communities in which we operate, that consider the International Labour Organisation Convention No. 169 and consultation practices to establish free, prior, and informed consent. We also maintain relevant grievance mechanisms for each site that allow for concerns to be raised by individual community members and community organisations. We have established formal community agreements where required, including benefit agreements, and agreements that address compensation, Native Title, and cultural heritage.

None of our existing operations are in areas of conflict as defined by the Uppsala Conflict Data Program. As such, frameworks which define relevant practices and procedures to be carried out in these settings are not deemed to be relevant to our operations.

1. Our relevant policies, published on our website, are: Code of Conduct; Diversity and Inclusion Policy; Equal Employment Opportunity Policy Statement; Community Relations Policy Statement; Modern Slavery Policy; Whistleblower Policy; and Supplier Code of Conduct.

### Cultural heritage

All three of the Group's operations have practices and processes to identify and protect sites of archaeological or spiritual significance for Indigenous peoples, including communications with local First Nations groups and conducting surveys as needed. In FY21, delays occurred to our planned cultural heritage programs across all sites due to the effects of COVID-19.

Prior to exploration commencing, thorough environmental and community-orientated review of the proposed ground is undertaken. Regulatory requirements around protection of sites of spiritual and archaeological significance for Indigenous people differ in our various jurisdictions, so as well as targeting compliance, the Group is determined to ensure that local Indigenous/First Nations and island communities (in Australia, Canada, and Papua New Guinea, respectively) are consulted and involved in surveys of proposed exploration and development sites. In response to a request from the Kwilmu'kw Maw-klusuaq Negotiation Office (KMKNO) in Nova Scotia, Canada, St Barbara ceased drilling in the Acadia region in FY21.

As we pursue growth projects at various stages across several locations, studies are conducted to gain an understanding of current cultural practices and land use by Indigenous and First Nations peoples.

We have implemented system improvements at our Atlantic and Leonora operations, with LeaseControl and Borealis programs to better track tenure, engagement, and site activity.

We also participate in industry forums to improve cultural heritage and Indigenous engagement policy, practice, and performance.

In FY21 we reviewed the recommendations from the Joint Standing Committee on Northern Australia inquiry interim report and undertook a review of our agreements as well as engagement with peak bodies to identify a range of actions for implementation in FY22.

Finally, in response to the devastating finding of the remains of 215 First Nations' children at the site of a residential school in Kamloops, British Columbia, Canada in May, our site flags in Canada were lowered for 215 hours with support from Pictou Landing First Nation.

### Community investment

St Barbara is committed to strengthening the long-term independence of the communities where we operate. Our program of community investment, including supporting local charitable causes and events, is consistent with our governance obligations.

The Group's performance on social and community metrics is published in the Performance Data section of this report.

In FY21 community investment at Leonora Operations (consisting of charitable support) increased to \$500,000 from \$300,000 in FY20, including the new multi-year partnerships discussed earlier to improve educational pathways.

At Atlantic Operations, community investment (consisting of charitable support) increased in FY21 to A\$60,000 from A\$40,000 in FY20. In addition, St Barbara has begun a five-year C\$200,000 per annum sponsorship of St Mary's University research on the remediation of historic mine tailings (not related to the Company's own site remediation, see page 13).

At Simberi Operations community investment (consisting of provision of medical clinic services, community infrastructure, and local business development for closure obligations) decreased in FY21 to \$1.8 million from \$2.8 million in FY20, however, there was an extensive investment program on managing and supporting the local response to COVID-19. Our initiatives included donation of rapid testing kits and other medical supplies to the provincial health authorities and schools, enhancing our local health clinic facilities, supporting provincial health surveillance, communication and administration, and funding new handwashing facilities and housing (see also page 39).

Spend with landowner enterprise organisations for mine services at Simberi Operations increased to \$11.1 million in FY21 from \$9.1 million in FY20.



Cultural designs, Leonora.

# Respecting the Environment

We are committed to caring for the environment. We think differently to find solutions to actively manage and neutralise our impact; because we care about the environment and our planet.



Simberi Operations.

## Environmental management

We place great importance on responsible environmental management and are committed to continued improvement in the identification, assessment, mitigation, and monitoring of the environmental impact of our operations. This section includes commentary on waste management, water management, and climate change.

The Group's Environment Policy is available at [www.stbarbara.com.au/about\\_us/governance/](http://www.stbarbara.com.au/about_us/governance/).

St Barbara has a well-resourced Environment function, with a program of compliance and proactive protection and mitigation activities, as part of the Environment Strategy within our comprehensive Health, Safety, Environment and Community Management System (HSEC MS). The HSEC MS includes the environmental components listed below.

- Leadership and Accountability.
- Communication and Participation.
- Crisis and Emergency Management.
- Environmental Management.
- Incident Investigation and Reporting.
- Legal Requirements and Records Management.
- Monitor, Audit and Review.
- Planning, Goals and Targets.

## Reporting

St Barbara's performance on environmental metrics is published in the Performance Data section of this report.

## Incidents

St Barbara records, classifies, reports, and manages environmental incidents through the HSEC MS according to both regulatory requirements and our internal categorisation matrix, aligned to those requirements. Refer to our Performance data on page 63 for disclosed numbers of categorised incidents for the year, and the Group's categorisation matrix.

During FY21 the Group reported and managed two separate environmental compliance issues.

Atlantic Operations received notification from Nova Scotia Environment (NSE) of legal proceedings in relation to various environmental incidents and non-compliances, in the 2017 to 2020 calendar years period, which were self-reported by the previous operation's owner (2017-July 2019) and St Barbara (2019-2020) to NSE and categorised provisionally as 'moderate'-level' environment incidents by St Barbara.

The Atlantic Operations team has been proactively working with NSE to address these matters. The main issue raised by the NSE relates to 11 instances where significant rainfall events caused water containing silty road materials to run-off secondary access driveways away from the immediate mine vicinity, overwhelming the existing storm water management system. Full and thorough remediation work was conducted at the time of the incidents, with an ongoing focus on mitigation. There is no connection with, or impact on, current mining activities, including the tailings processing and management facility. Some fines or compulsory donations to relevant charities may result, with mediation discussions with NSE, supervised by Environment Canada, currently occurring.

At our Simberi Operations in May, placement of tailings through the deep-sea tailings placement (DSTP) pipeline was suspended when a routine inspection of the pipe, by a remote-controlled submersible vehicle, discovered significant pipe damage at a depth of 55 metres. No environmental damage or pluming of tailings was observed. A project is underway to replace the pipe so as to allow compliant resumption of processing (subject to regulator approval).

1. Refer to our categorisation matrix on page 63.

An external technical investigation commissioned by St Barbara indicated that a sub-sea landslide appeared to be the root cause of the failure. The concrete blocks that anchor the pipe to the seabed were impacted by the landslide, potentially placing the latter half of the pipe under extreme weight.

We have identified areas for improvement that have been addressed as part of the pipe replacement project:

- improved monitoring via the purchase of our own remotely controlled submersible, allowing more frequent deep-sea inspections; and
- an improved pipe design eliminating some of the risk factors and a continuous monitoring system to identify failure.

DSTP remains the most appropriate and lowest-risk permanent tailings treatment option for Simberi Operations. This is discussed in detail in the tailings sub-section of this report on page 50.

### **Leonora Operations (Western Australia)**

At the Leonora Operations, the environment team has four full-time qualified professionals, supported by contractors as required.

Mining in Australia is intensely regulated with multiple reports and audits required by federal and state government regulation. The Leonora team completes externally audited environment-related reports pursuant to legislation and licences regarding our Gwalia mine. These reports and audits are summarised below.

#### **State Government (Western Australia)**

##### ***Annual Environmental Report to Department of Water and Environmental Regulation (DWER)***<sup>1</sup>

This report provides data on monitoring, compliance, complaints, tailings storage, wastewater, dust, incidents, hazardous chemicals, land disturbance and other environmental type metrics. This report is publicly available and on our website.

##### ***Annual Audit Compliance Report to Department of Water and Environmental Regulation (DWER)***<sup>2</sup>

This report provides details around compliance with the EP Act License Conditions.

##### ***Annual Environmental Report to Department of Mining, Industry Regulation and Safety (DMIRS)***

This report provides data on major activities, environmental management and rehabilitation activities, proposed developments, compliance, incidents, monitoring and disturbance.

#### ***Water Efficiency Management Plan***

This report is to the Western Australian Water Corporation. It comprises potable scheme water efficiency and water usage reduction activities.

#### ***The Annual Groundwater Monitoring Review***

This report provides information on water abstraction, including monitoring, compliance, and impact assessment.

#### ***Mine Rehabilitation Fund (MRF) Report***

All Western Australian mines contribute to a state rehabilitation fund and report annually to government on the estimated cost of rehabilitation. Based on the MRF report, the rehabilitation Liability Estimate is calculated, and the annual levy is paid.

#### **Federal Government (Commonwealth of Australia)** ***National Pollution Inventory***

This is a report to the Australian federal government and provides data on use of classified priority substances as well as control measures and any improvements. A summary is publicly available.<sup>3</sup>

#### ***National Greenhouse and Energy Reporting Scheme***

This is a report to the Australian federal government on Group information about greenhouse gas emissions, energy production, energy consumption and related information.<sup>4</sup>

#### ***Environment events and achievements***

Leonora Operations won a Gold Waterwise Business award in 2020 (as well as previously in 2013 and 2014) for water conservation from the Western Australian Water Corporation, as well as Golden Gecko certificates of merit in 2009 and 2015, see: St Barbara Sustainability Awards.

#### ***Gwalia Closure Plan***

Closure planning at Gwalia has shifted from broad strategic planning to specific and highly detailed, and includes:

- detailed assessments and, where necessary, rehabilitation plans for current and legacy Tailings Storage Facilities (TSFs); and
- identification of other legacy pollution issues and associated assessment and rehabilitation plans if required (e.g., asbestos).

#### **Simberi Operations (PNG)**

The Simberi Environment team has twelve full-time qualified staff, an extensive nursery to support revegetation of finished mining areas, supported by landowner companies and casuals from the local community as required.

The team produces monthly and quarterly reports to the Conservation and Environment Protection Authority, including water testing results, grievance reporting and progress in meeting closure obligations. Further reports are required for variations to permits and for other relevant operational changes.

Key recent initiatives include:

- ongoing investment in site rehabilitation and closure preparation, including disposal of site scrap metal and tree planting of waste dumps and disused mining areas (tree planting in 2020 included over 1,000 trees on the mining lease and 2,000 mangrove seedlings in the coastal zone adjacent to the Group's aerodrome); and
- an ongoing investment in hydrology monitoring and management program (this included construction of permanent water monitoring infrastructure at key stream and catchment locations, automatic weather monitoring, and daily monitoring schedules and awareness programs with Island communities).

The Environment team utilises a long-established and effective grievance resolution process, in conjunction with the Community Relations office. The Exploration team manages a similar grievance resolution function to support communities impacted by exploration activities in the Tabar Island Group. Details of the grievance process can be found in the Social and Communities section earlier in this report.

1. Available on our website from 2008 to 2018, and on the regulator's website from 2013 to present.

2. *Ibid.*

3. A summary is available at the regulator's website.

4. The St Barbara 2018/2019 report and summary of previous years is available at <http://www.npi.gov.au>



### Atlantic Operations (Canada)

At our Atlantic Operations (Nova Scotia, Canada), the Environment team at the Touquoy mine comprises seven full-time qualified employees.

Mining in Canada is also intensely regulated and there are extensive reporting requirements, with auditors visiting the Group's Touquoy mine regularly. There are more than 20 specific environment management plans of various kinds that may require annual, quarterly, monthly, and sometimes weekly reporting, depending on the type, recent issues, and particular activities occurring on-site. St Barbara also completes a number of environment related reports pursuant to legislation and permits issued to Atlantic Operations. These reports are summarised below.

#### Industrial Approval Annual Report

This report provides data on reportable releases and non-compliances, annual surface water and groundwater monitoring, air quality, blast monitoring, mill activities, Tailings Management Facility (TMF) inputs and outputs, TMF inspections and capacity reviews, mine rock geochemistry, erosion and sediment control, insurance requirements and community consultation and engagement.

#### Scraggy Lake Water Withdrawal Permit Annual Report

This report provides freshwater usage volumes, pumping rates and monitoring results from Scraggy Lake as required by the water withdrawal permit.

#### Wetland Post Construction Monitoring Annual Report and Annual Wetland Compensation Report

These reports provide the results of annual wetland monitoring and annual wetland compensation activities.

#### Reclamation Plan

This report was most recently updated in November 2020. The Plan provides details of the proposed activities including progressive reclamation, final closure, and post-closure monitoring. Key upcoming projects to support the Reclamation Plan in FY22, include continuation of vegetation trials started in FY21 (waste rock stockpile), and completion of erosion modelling, soil suitability testing and risk assessment (arsenic), and continuation of geochemical and geotechnical testing to support TMF dry cover design. A reclamation security bond is submitted to the province to ensure funding is available for closure.

#### Metal and Diamond Mining Effluent Regulations Quarterly and Annual Reporting

These reports are required by the Canadian federal government and provide effluent quantity and quality at the final discharge point, including acute and sublethal toxicity testing. Water quality monitoring of the exposure water body (Scraggy Lake) and a reference water body (Long Lake) is also reported.

#### National Pollutant Release Inventory (NPRI)

This report to the Canadian federal government provides data on over 320 pollutants from over 7,000 facilities across Canada. The data gathered includes an inventory of releases, disposals, and transfers. A summary is publicly available.

### Greenhouse Gas Reporting Program (GHGRP)

This report to the Canadian federal government must be completed by facilities generating 10 kilotonnes or more of Scope 1<sup>1</sup> GHG emissions, in carbon dioxide (CO<sub>2</sub>) equivalent units per year.

Spills and emergencies are reported as per regulatory requirements (provincial and federal requirements).

### Development projects in Nova Scotia – planned environmental management and protection

The Group is in the application process to develop three proposed new mines in central-east Nova Scotia, which are subject to both federal and provincial environmental assessment processes. These processes ensure that any potential mining project has very low to no short or long-term environmental impact. We intend to continue with our existing record in Nova Scotia of performing beyond the prescribed regulatory requirements. Two examples of initiatives at Atlantic Operations in line with this intent include voluntary formation of an Independent Tailings Review Board and remediation of historic mining waste during the construction of each project.

The three new proposed mines will function in conjunction with the current Touquoy mine, with the focus on minimising the overall processing footprint. For instance, the only planned location for cyanide gold processing is at the existing Touquoy mine, with the other mine sites planned to be simple quarries (such as at Beaver Dam), or to have on-site concentration processing only.

Where some environmental impact is unavoidable, such as with the initial construction of the mine footprint, St Barbara will develop environmental management programs that work to limit impacts during construction and mining operations. The Group is also required to develop a fish habitat offsetting plan, which includes creating new fish habitat.

Where the development of projects may impact the traditional lands and communities of the First Nation, the Atlantic Operations team continues to work with the First Nation groups to identify any potential impacts and how those impacts may be mitigated or compensated. St Barbara is committed to meaningful engagement with the First Nation communities and of their position, enshrined in Canadian Law via treaty, as separate nations within Canada.

### Waste management

Gold mining generates two bulk waste products: process tailings; and waste rock.

#### Tailings

St Barbara manages tailings through the HSEC Management System, according to strict regulatory requirements. Our terrestrial tailings storage/management facilities are managed to ICOLD<sup>2</sup>-aligned engineering standards and audited solutions at each mine.

The Board HSEC Committee has oversight for tailings management.

The Global Industry Tailings Management Standard will be implemented by the Group over the prescribed period.

Below are details of the two operational Tailings Storage/Management Facilities groups St Barbara currently operates, at Touquoy in Nova Scotia, Canada, and at Gwalia in Western Australia.

1. Scope 1 = direct emissions generated by the company through its own activities; that is not grid related emissions.

2. International Committee of Large Dam Owners <https://www.icold-cigb.org/>

### **Touquoy Mine Tailings Management Facility (Atlantic Operations)**

Touquoy commenced operations in 2017. Tailings are stored in a Tailings Management Facility (TMF) of downstream construction. The TMF was designed and built by a leading specialist engineering firm to the Mining Association Canada/Canadian Dams Association (MAC/CDA) standards and regulatory requirements. An Independent Tailings Review Board (ITRB) of leading Canadian tailings experts must supervise the TMF construction and operation, overseeing the work of the Engineer of Record (EOR). The Touquoy TMF is inspected semi-annually by the facility EOR, and annually by the ITRB. Other engineered risk-prevention measures for management of the TMFs include: telemetry; piezometers; freeboard monitoring; and chemical testing, all reported to the regulator in compliance with legal requirements.

Almost all cyanide from (40 ppm in the processing plant to less than 1 ppm) is removed in the process plant via an INCO<sup>1</sup> detox facility and other cyanide minimisation measures. The TMF has a water treatment capability with specific processes for removing the remaining cyanide, solids, and metals. Cyanide-free treated water is released into a nearby lake (which is also the water intake source) via an effluent treatment plant and an engineered wetland.

#### **Touquoy TMF construction**

- Type of TMF: downstream raise.
- Rock dam with clay core and two filter layers.
- Water Management: tailings pond, effluent treatment plant (ETP), polishing pond and engineered wetland.

#### **Metrics and characteristics**

- Elevation: 128 m above sea level (masl).
- Current wall height: 22m.
- Projected final wall height: 24m.
- Tailings deposition rate (water volume): 8,727 m<sup>3</sup>/d.
- Reclaim (water recycling) rate 8,779 m<sup>3</sup>/d.
- Deposited dry density: 1.41 t/m<sup>3</sup>, below design.
- Total capacity: 9.3 Mt.
- Cyanide treatment: destruction via INCO sulphur dioxide treatment in processing plant.
- Metals treatment: in two stages. Initially in processing plant via oxygen reduction with ferric sulphate (~80%). Then at Effluent Treatment Plant (ETP), with hydrated lime to adjust pH, peroxide, and ferric sulphate with a coagulant polymer, capture of precipitate with geo-bags/tubes.
- 96% of Touquoy water requirements are extracted from the TMF. Remaining 4% is extracted from Scraggy Lake (which is also the final discharge point).
- Built to Canadian Dam Association (CDA), member of International Commission on Large Dams (ICOLD) guidelines.
- Engineer of Record & Independent Tailings Review Board in place.
- Twice annual dam safety inspections and a dam safety review in year five.
- Groundwater testing performed at multiple locations and depths, reported to regulators.
- Surface water testing completed at multiple locations downstream of TMF, reported to regulators.

- Effluent testing completed since 2018 with deleterious substance concentrations consistently well below federal regulations, Metals and Diamond Mining Effluent Regulations (MDMER).
- Historical tailings permanently stored within an engineered containment cell.
- Potential for acid rock drainage is low.
- Multiple protection plans (including wetland, groundwater, wildlife) in place and audited.
- A regulatory-compliant Mine Closure Plan is in place which includes rehabilitation of the TMF.

As discussed earlier in this report, St Barbara's plans for three further mines in Nova Scotia are currently undergoing federal government permitting review. For all three, a processing strategy is in place with no cyanide usage planned at those three locations.

Once mining is completed at the current Touquoy mine, it is anticipated that the processing circuit will switch to processing ore from the other three mines. Pending regulatory approval, tailings will then be stored in the old Touquoy mine pit. This is considered the optimum safe storage method for tailings.

#### **Touquoy TSF governance**

Refer to the opening paragraph of this section.

### **Gwalia Mine Tailings Storage Facility (Leonora Operations) Tailings Storage Facility 3 and 4**

The current Gwalia Tailings Storage Facilities (TSF) were designed by a leading specialist engineering firm to comply with Western Australian regulatory requirements. They are inspected annually by an external engineering firm. Other engineered risk-prevention methods include: telemetry; piezometers; freeboard monitoring; and chemical testing, all reported to the regulator in compliance with legal requirements.

The current TSFs are located in isolated, flat desert land or paddocks with upstream raising, entirely separate to natural water catchments. The wide, arid, desert environment and low propensity for earthquakes, together with the particulate qualities of the tailings, makes a permanent storage structure of this style extremely reliable. As for most of outback Western Australia, water courses do not drain to the ocean and have standing water only occasionally at certain times of the year.

#### **Gwalia (Tailings Storage Facility) TSF 3**

##### *Type of TSF*

- Paddock.
- Upstream raise construction.

##### *Metrics*

- First approved: 1992.
- Elevation: ~376 masl.
- Current wall height: 30m.
- Projected final wall height: 32m.
- Tailings deposition rate: 750–850 ktpa.
- Deposited density: 1.4–1.5 t/m<sup>3</sup>.
- Total capacity: 30 Mt.
- Perimeter: 3,000m.
- Impoundment area: ~70ha.
- Current impoundment volume: ~17.1 x 106m<sup>3</sup>.
- Current mass of solids stored: ~25.6 x 106t.

1. Cyanide destruction process patented by Inco Ltd.

- Tailings are mined for concrete aggregate material for the paste fill plant.
- During 2018/19, a review of the emergency plan and dam rating was completed based on ANCOLD and regulatory standards.
- In 2020 studies and testing were completed to improve the resilience of the active Gwalia TSF (TSF 3) to ANCOLD guidelines. An international expert also conducted an independent review of TSF 3. An additional eight piezometers have been installed and works to augment the TSF are currently underway.

During the year a new TSF was constructed and commissioned: TSF 4. The final raise (wall) for TSF 4 is expected by 2032; TSF 3 and 4 will work in rotation to ensure maximum drying and settling time.

#### **Gwalia Mine Tailings Storage Facility – TSF 4**

- First approved: 2018.
- Elevation: ~336m masl.
- Current wall height: 7m.
- Projected final wall height: 32m.
- Tailings deposition rate: 650–750 ktpa.
- Deposited density: 1.4–1.5 t/m<sup>3</sup>.
- Total capacity: 5 Mt.



Gwalia mine's TSFs 3 and 4.

#### **Gwalia TSF governance**

- Engineer of Record & Independent Tailings Engineer: annual safety inspections.
- Insurance Assessment: annual visit.
- WA Government, Department of Water and Environmental Regulation: periodic inspections.
- WA Government, Department of Mines, Industry Regulation and Safety:
  - Guide to Departmental requirements for the management and closure of TSFs (2015);
  - Tailings Dam Audit Guide (2013);
  - Safe Design and Operating Standards for Tailings Storage (1990).
- A regulatory Mine Closure Plan is in place which includes rehabilitation of the TSF.

#### **Historical rehabilitated TSFs**

A further 11 historical TSFs lie within the St Barbara mining lease. Ten of these are rehabilitated (buried under layers of soil and rock, vegetated, isolated from potential watercourse erosion). One TSF falls within the area of disturbance of a proposed new mining area called Tower Hill that has ore reserves. During 2018–2019 a program of drilling was undertaken at nine of the 11 legacy TSFs as part of a review process for detailed closure planning. One TSF was excluded from the review after initial drilling was unable to reach below legacy rehabilitation rock armour due to its depth. The Tower Hill TSF, for reasons noted above, was also excluded.

This review included:

- assessment of seismic stability of the TSFs, including water content of dam walls where applicable;
- chemical and water content testing of the stored tailings to update databased assessments from the time of closure; and
- depth of rock armour and soil at previously rehabilitated TSFs.

The review concluded with no significant further remedial actions or concerns.

#### **Underground tailings storage**

Gwalia's tailings are themselves mined to provide suitable aggregate material for use in cement (paste-fill) to fill underground mining voids. In 2021, 328,000 tonnes of Gwalia's tailings (43% of total tailings, 2020: 54%, 2019: 68%) were deposited permanently underground by this method (read more in Waste Rock). This also prolongs the life of the two existing operational TSFs, by creating space for the deposit of new tailings. Approval is in place for an additional TSF when required.

#### **Simberi Mine DSTP Facility (Simberi Operations)**

Tailings at Simberi are disposed by deep-sea tailings placement deposition (DSTP). In PNG, DSTP is a long-established, government-approved tailings management process due to prevailing geological and climate conditions. The Simberi mine has no other safe tailings disposal or treatment option. Pond or dam-type TSFs (such as at Gwalia or Touquoy) are inappropriate due to high tropical rainfall, rugged topography, and the high potential for earthquakes in the area. The proximity to extremely deep water makes tailings management of this type uniquely low-impact and low-risk to the environment and local communities.

The discharge point is 135 metres below sea level and 300 metres offshore. Simberi is a volcanic island in an otherwise deep ocean zone, so the discharged heavier-than-water tailings are deposited past the island's reefs to rest approximately three kilometres deep on the ocean floor. The tailings themselves are benign (non-toxic levels of cyanide and other minerals naturally found in the ore). The system was designed and built by a leading specialist engineering firm to regulator requirements and what is generally recognised as being best international practice for DSTP<sup>1</sup>. The DSTP is a key component of the PNG government-approved mining lease. As described earlier in this report section, in May 2021 Simberi reported that serious damage to the DSTP pipeline was discovered (at a depth of 55 metres) in a routine inspection. Processing operations were suspended. The pipeline replacement project is underway. The pipeline will be commissioned upon regulator approval.

1. PNG's DSTP guidelines were co-developed by the Scottish Association for Marine Science.

Simberi Operations conducts monthly testing of the marine environment at multiple locations around Simberi Island. Results are reported to the regulator and the Simberi Island communities. The tailings pipeline is regularly inspected by divers in the shallower zone, and periodically in the deeper zone by deep-sea robotic submersibles.

### Targets and progress

The Group does not have (and does not propose to have) tailings volume reduction targets beyond organic economic incentives, however, the Group seeks to avoid or minimise all environmental impacts, as well as to comply with the related strict regulations and licence obligations in place at all mines.

### Waste rock

The Group manages waste rock according to strict regulatory conditions at all mines.

### Leonora Operations – Gwalia

Waste rock is presently deposited in the historic Gwalia open pit, excavated by mining in the 1980s. This assists with rehabilitation obligations, reducing future closure costs. Since 2015, where possible, the Group has deposited waste rock directly in underground voids, generally in conjunction with paste-fill (next section). During the year, a geochemical analysis of all historical waste in the Leonora Operations domains has been commissioned with results to be available in FY22. There is no potentially acid-forming material at Gwalia.

### 'Paste Aggregate Fill' underground waste rock crushing

In 2020 the Group completed construction of underground infrastructure, called the Paste Aggregate Fill (PAF) plant, to allow permanent underground storage of up to 100% of waste rock. This involves underground crushing and mixing with paste-fill (incorporating tailings) piped down from surface, then pumped to fill mining voids (refer to Target and Progress).

### Simberi Operations

Simberi waste rock is deposited into licenced dumps in valleys on the mining lease adjacent to the mining pits. All dumps have been built to civil engineered designs and reviewed and approved by PNG government environment department auditors. All dumps are progressively revegetated as part of closure planning.

Drainage from the mining areas is engineered to ensure erosion does not impact neighbouring communities.

Acid forming rock is present at Simberi but counteracted by the mostly alkaline nature of the Simberi geology (which contains various bands of limestone). Future mining at Simberi may generate acid-producing waste rock that requires engineered solutions.

### Atlantic Operations – Touquoy

Waste rock at Atlantic Operations is currently stored in a waste rock stockpile with all drainage controlled by ditching and collection ponds, with water pumped to the Tailings Management Facility (TMF). When mining concludes the stockpile will be reclaimed with angles moderated and topsoil and vegetation added, with ongoing monitoring of water quality in the area. To support the Reclamation Plan, revegetation trials commenced on the waste rock stockpile slopes in spring 2021. Some of the waste rock at Touquoy is classified as 'low potential acid-producing'. Should this occur, this will be counteracted by the much larger quantities of acid-absorbing waste rock that is deposited in a manner to surround the potentially acid-producing rock.

### Targets and progress

The Group targets 100% of waste rock to be disposed of via licenced and controlled solutions, including by the PAF underground solution (in FY20 approximately 7% of Gwalia waste rock was disposed of via PAF, the commencement year, in addition to 43% of tailings). The Group does not have (and does not propose to have) other waste rock volume reduction targets, as waste rock in open pit mines is determined by safety requirements of in-pit wall angles and access roads.

### Cyanide and arsenic management

Compliance and risk management regarding pollution from hazardous chemicals is one of the Group's main risk focus areas.

Cyanide and arsenic are commonly associated with gold mining.

### Cyanide

All three of St Barbara's mines use cyanide in the processing of gold, as do most gold mines globally. The use, storage and disposal of cyanide is closely monitored and subject to strict government regulations.

At Gwalia mine and Touquoy mine, cyanide naturally breaks down to harmless cyanate compounds while exposed to air and sunlight in the shallow TSF/TMF ponds. Historical (pre-St Barbara control) tailings in the immediate vicinity have safe, background cyanide levels similar to that of the surrounding soil.

At Touquoy, 99% of cyanide is removed from the tailings before it is deposited in the TMF. Prior to discharge to the environment, water passes through an Effluent Treatment Plant where the remaining arsenic and other metals are removed. A polishing pond removes dissolved solids, and an artificial wetland further treats the water before it flows into a nearby lake, which is also the processing water intake for mine. Water in the TMF, lake and 32 separate groundwater wells around the TMF are tested regularly with the results reported to the provincial government. Results are reviewed regularly and mitigative actions are taken following guidance from the Groundwater Contingency Plan. See page 48 for a detailed description of the Touquoy TMF design.

At Simberi, a minimal concentration of cyanide is present in tailings deposited to the deep seabed via the DSTP facility, as described in the previous Tailings section. The oceanic environment is regularly tested to ensure cyanide levels are within the government-approved limit of 0.01mg/l, with results reported to the government on a quarterly basis.

There are five routine testing points in a one-kilometre radius of the DSTP outlet point. Samples are taken at surface and at 115 metres below surface depth. Regular testing also occurs at the final Carbon-In-Leach tank in the processing plant and at the mixing tank prior to deposition.

The Group is investigating becoming a signatory to the International Cyanide Management Code and is currently preparing the necessary gap analysis and related review of procedures, supply chain and treatment necessary to understand the path to code compliance.

## Arsenic

Arsenic is not added as a chemical to the gold processing circuit however, arsenic often occurs naturally in gold bearing ores, especially sulphide ore containing pyrite. These types of ore are present at the Simberi mine and to a lesser extent at Gwalia and Touquoy. At Simberi and Touquoy, arsenic is also present at very low levels of concentration in natural erosion regionally, and therefore it is also present in sediment from the mine areas as well as in the tailings.

The concentration of arsenic in the tailings outflows is less than one tenth of the World Health Organisation guidelines for drinking-water quality<sup>1</sup>. Arsenic is included in the testing regimes for cyanide mentioned above, with results also reported to the government on a quarterly basis.

At Touquoy, the arsenic in tailings is chemically treated in the processing plant and tailings management facility (see the previous Tailings section), and, to date, effluent monitoring results are below federally authorised concentration limits.

## Other categories of waste

### Landfill waste

#### Leonora Operations

Leonora operates a putrescible-licensed landfill facility which receives the mine's general waste, such as wood, plastic, food scraps and other putrescibles, packaging, and tyres. The facility also has a special waste cell that is licensed to accept asbestos-containing materials (such as piping and construction materials).

#### Simberi Operations

Simberi has a licensed landfill location managed by the umbrella business organisation for local landowners Simberi Mine Services (SMS). Various other landfill locations have been used historically, typically former quarries. In recent years the Simberi Environment team has completed various clean-up initiatives including collecting scrap metal.

#### Atlantic Operations

General landfill waste is collected in bins at five locations across site. In calendar year 2020, 116.5 tonnes were collected and disposed of at an off-site landfill. Atlantic Operations disposed of contaminated soil at a licensed off-site facility. This soil was collected from environmental spills that occurred on site, typically hydrocarbon spills.

Cardboard, paper, and beverage containers are also collected for recycling at locations across the site. The total quantity recycled for calendar year 2020 was 6,552kg.

### Oil waste

Leonora Operations: all waste oil is collected and removed off-site in accordance with controlled waste regulations for recycling.

Simberi Operations: waste oil is disposed of via an incinerator.

Atlantic Operations: waste oil and oily wastewater is collected by a third-party contractor and recycled at their facility. In calendar year 2020, 24,070 litres of waste oil were collected and recycled. In addition, 14,205 litre drums and 21,000 litre totes of oil filters were collected and recycled.

## Hazardous waste

Leonora Operations: hazardous waste is collected and removed off-site in accordance with controlled waste regulations.

Simberi Operations: cyanide bags are safely collected and cleaned before being incinerated.

Atlantic Operations: hazardous waste is collected and disposed of via a third-party contractor. Hazardous waste disposed of includes waste streams such as cyanide boxes and drummed assay lab waste. For calendar year 2020, 332 cyanide boxes and over 4,100 litres of lab waste were disposed of.

Data and commentary on several other categories of waste relating to the Gwalia mine is available in publicly available Annual Environment Reports<sup>2</sup>.

## Water management

St Barbara has a low risk with regard to water scarcity at its three mines in Leonora, Western Australia, Simberi Island, PNG, and Nova Scotia, Canada.

Water recycling (refer to Performance data on page 63) is an economic efficiency measure. None of our three operations are in competition with other users for water abstraction (see below).

#### Leonora Operations

Gwalia mine has negligible water security risk, as it is not in competition with domestic or agricultural water users. Gwalia is located in a desert region with no natural potable water sources. However, there is an abundance of non-potable saline water sources, which are not suitable for domestic or agricultural use.

The mine participates in two types of water regulation.

Town, or scheme, potable water (water extracted from non-potable brackish sources by the municipal authorities and treated by them to a potable standard) is used in the mining accommodation camp and other domestic-type situations, making up less than 3.4% of overall mine water usage.

The mine works closely with the relevant water regulator and local government on town water usage. This has included participating in a third five-year Water Efficiency Management Plan (WEMP<sup>3</sup>). The plan involves minimising water usage and early detection of leaks and a self-selected target based on projected usage and planned efficiencies.

In 2020, St Barbara won a Gold Waterwise Award from the Water Corporation, Western Australia, for its water conservation efforts at Leonora. This is the third such award; the earlier two in 2012 and 2013 were for excellence in water usage reduction, including a 35% reduction in total water usage.

Leonora extracts non-potable ground water from saline bore sources, as well as from deep parts of the Gwalia mine. The mine is a net producer of saline water and uses less than a quarter of its regulated non-potable saline water allocations<sup>4</sup>. Much of this water is treated to a near-potable standard by Leonora's own treatment plants for use in processing applications.

1. [www.who.int/news-room/fact-sheets/detail/arsenic](http://www.who.int/news-room/fact-sheets/detail/arsenic), 0.05 mg/l

2. Available on our website here, from 2008 to 2018, and on the regulator's website <http://ace.dmp.wa.gov.au> from 2013 to present.

3. Western Australian Water Regulator website concerning its WEMP program for major water users.

4. Refer to the Performance data section of this report.

### Simberi Operations

Potable water at Simberi is abundant due to the high rainfall of greater than four metres per year, typical of tropical maritime regions.

For commercial reasons, our Simberi Operations utilises various water efficiency techniques, recycling more than 50% of potable and process water.

### Atlantic Operations

Water is a key focus of environmental risk management at Touquoy mine. This is focused on the protection of aquatic life in surrounding water bodies, rather than water scarcity. High rainfall, the isolated situation of the mine away from population centres, and intense agriculture, mean water abundance management, rather than scarcity is the management priority.

Canadian regulators require mining companies to keep any disruption of natural waterways to an absolute minimum and methodologies to ensure this are very mature in the Canadian mining sector. See the earlier Tailings and Waste Rock sections of this report for more information.

Intake of water at Touquoy is minimal as water recycling supplies 96% of the mine's needs, of 136 Ml in 2021, slightly less than outflow due to rainfall on the mine area catchment.

### Targets and progress

The Group is satisfied with its management of water scarcity risk.

The business-essential water usage at Gwalia mine is from brackish, non-potable groundwater sources and is not in competition with any other user. Less than 25% of the permitted water entitlement is used by the mine. The Group works closely with regulators and local government on an ongoing basis regarding potable town water usage (less than 3.5% of total mine usage).

At Simberi, our mine's use of water does not impact the community or the environment due to the very high rainfall associated with the tropical climate.

At Atlantic, high rainfall, the positive water balance and a high level of water treatment maintained by our operation ensures that water scarcity is a low risk.

### Land and biodiversity management

The management of natural landscape and biodiversity falls under our Environment Policy, and the relevant company Health, Safety, Environment and Community Management Standards. Our management is to the standard set by regulatory authorities at a minimum, and to specific management plans, as required, at each operation or relevant site.

We firstly avoid environmental disturbance and impacts wherever possible, and then undertake rehabilitation of disturbed land according to best practices and regulatory requirements. Where appropriate, we provide offsets for unavoidable land and water harm to a higher standard of biodiversity.

We prepare for mine closure in accordance with strict government requirements for forward financial provisioning. St Barbara must rehabilitate all disturbed lands as part of closure requirements and has audited provisions on its balance sheet, appropriate for this commitment.

The Group has no forestry or plantation operations outside of those related to meeting closure revegetation and community obligations.

The Group has no operations in High-Conservation Value areas.

### Climate change

St Barbara acknowledges the Paris 2015 UNFCCC agreement and seeks to make it relevant to the Group as detailed in this section. We present in this report our first reduction targets and intend, at minimum, to meet our obligations to align our emissions with Paris 2015 compatible requirements.

The following section is aligned with the requirements of the Taskforce on Climate-related Financial Disclosures (TCFD).

St Barbara seeks to:

- limit absolute emissions;
- use carbon-based fuels more efficiently; and
- protect the business from the effects of already occurring climate change and future climate change impacts.

### Climate risk strategy and governance

#### Summary

In 2020 the St Barbara Board considered risks and opportunities regarding climate change as part of its strategic planning.

#### Governance

The Board has determined it will retain oversight of climate change related issues rather than delegate it to a Board sub-committee.

#### Strategy

The Board considered risks and opportunities regarding climate change. A summary of these are available below.

It was concluded that the major potential operational impacts of climate change (potential changes to weather patterns including more frequent and severe weather-related interruptions, and sea level increases) fell beyond the period where current Reserves<sup>1</sup> are mined and processed and therefore were not material for the current financial reporting period. Impacts of climate change risk and decarbonisation strategies will be incorporated into planned extensions to Reserves.

Regulatory risk and the possibility of changes to regulation of carbon emissions in Australia and Canada pose the strongest climate-related risk to the Group. These risks could impact the profitability of the Group:

- through the requirement to purchase carbon credits (or equivalent schemes); or
- through increased operational costs from the requirement to purchase renewable power (or through directly investing in renewable power).

1. Mineral deposits that are defined to a certain level of accuracy and have an economic plan for mining and processing are classified as 'reserves'. See St Barbara's formal declaration regarding its mineral inventories under Annual Reports on our website.

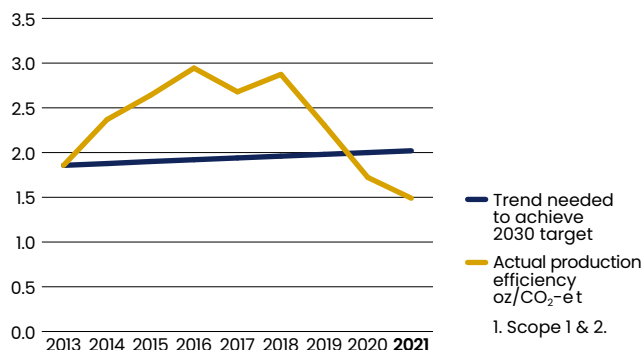
**Targets**

The Group has reviewed previous and forecast emissions data, production, and likely methodologies for aligning these with the requirements for reduction in global emissions identified in the Paris 2015 agreements.

St Barbara intends to submit targets to the relevant United Nations authority, the Science Based Targets Initiative (SBTI), with the commitment that the Group will at a minimum meet its obligations under the Paris 2015 agreements, including carbon neutrality in 2050 and an intermediate reduction target.

The Group has a target to increase its emission efficiency (ounces of gold/tonnes of Scope 1 and 2 CO<sub>2</sub>-e) by 18.6% in 2030, versus a provisional 2013 baseline year, and achieve carbon neutrality by 2050.

**Climate GHG emissions – 2030 Efficiency target<sup>1</sup> oz production per CO<sub>2</sub>-e t**



**Elements of recommended Climate-Related Financial Disclosures**



**Governance**

The organisation’s governance around climate-related risks and opportunities

**Strategy**

The actual and potential impacts of climate-related risks and opportunities on the organisation’s businesses, strategy, and financial planning

**Risk management**

The processes used by the organisation to identify, assess, and manage climate-related risks

**Metrics and targets**

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

**Scope 3 emissions**

St Barbara has completed a desktop study to estimate the Group’s Scope 3 emissions. The results are included in the Performance data table on page 60, (481 kt CO<sub>2</sub>-e). The Group will not adopt any Scope 3 related targets in 2021 but will consider this for the future, noting they are more than double Scope 1 and 2 combined (207 kt CO<sub>2</sub>-e).

Commentary on Scope 1 and 2 emissions by operation is provided on pages 61–62.

**Risk and opportunity detail**

**Gold industry**

The World Gold Council has provided analysis on the potential impact on gold demand from climate change and the transition to a low carbon economy, available here<sup>2</sup>.

**Energy usage intensity**

Gold producers are significant users of energy, and carbon intensity (amount of carbon emitted per ounce of gold produced, or dollar revenue), in the absence of proactive action by miners, is likely to increase.

- Underground mining is increasing as a proportion of total mining versus open cut mining, and existing underground mines are becoming deeper, requiring more ventilation.
- An increasing proportion of total gold mining is of refractory ores that require more energy-intensive processing.

This leads to greater vulnerability to climate change related energy regulation.

1. <https://sciencebasedtargets.org/>  
 2. [www.gold.org/goldhub/research/gold-investor/gold-investor-february-2019/golds-role-in-a-low-carbon-economy](http://www.gold.org/goldhub/research/gold-investor/gold-investor-february-2019/golds-role-in-a-low-carbon-economy)

### **Geo-political and macroeconomic risk and opportunity**

Gold mines are often located in developing countries with greater vulnerability to climate change. Developing countries are likely to see a greater incidence of disruption to business from climate related impacts, such as:

- natural disasters disrupting infrastructure, supply chain and human resources;
- increased immigrations flows; and
- political and economic instability.

Developing countries have been strong growth areas for gold consumption recently, and instability that stops or slows economic growth in these countries may have an impact on gold demand.

Gold is a traditional hedge instrument for government and investors versus uncertainty and downturn in other markets and its value may benefit from global instability.

### **Technology – substitution risk, opportunity**

The energy intensive nature of gold production and the related market price gives rise to the risk of substitution: that is, technological demands for alternatives to gold that are less power intensive, such as jewellery items that exclude gold, and high-conductivity products that might replace gold's industrial usages. Through history gold is almost 100% recycled, mitigating the likelihood of substitution.

Demand for gold in industrial applications is likely to increase (in the absence of viable substitutions) due to its conductivity properties in micro-circuitry.

### **St Barbara-specific potential impacts of climate change**

The following section details potential impacts of climate change and the transition to a low-carbon economy on the Group and its current mines.

#### **Leonora Operations**

##### **Physical impacts**

The Gwalia mine life based on current Reserves does not extend beyond 2040. In general, serious climate change impacts, as outlined by the Representative Concentration Pathways – UN climate scenarios (RCPs), the basis for companies to model the effects of climate change), occur well after this time.

As St Barbara considers mine life extensions at Gwalia to extend operations past 2040, the long-term climate change impacts in the central WA geography outlined by the RCPs (page 12 of the RCP document), including drying and increased average temperatures (in 2 degree to 8.5 degree scenarios), will be incorporated into the planning and design of those life extensions and associated permitting.

Implications for Gwalia mine include the following.

- (Saline) water is currently abundant, with the Leonora central desert environment characterised by large aquifers of usually hypersaline water unsuitable for domestic or agricultural use, meaning the mine is not generally in competition with other users. Changes in rainfall are not therefore high-risk for operations.
- Increases in temperature: as well as making surface maintenance and other operational tasks more difficult, extreme heat (in excess of 42 degrees Celsius) impacts the gas power generation of the type currently used at Gwalia. The gas/air mix has to be altered, reducing the power output. This is a current challenge at Gwalia that impacts the operation for up to five days per year, lessening the upper limit of availability of underground mine ventilation at those times. An increase in the number of such days would have an impact.

- Though increases in rainfall extreme events are not predicted, Gwalia is resilient to these. In the last five years, 1-in-100-year and 1-in-200-year rainfall events were managed with minimal interruption to production (2014: 6 days, 2017: no interruption).
- Possible impact on surface staff – health and safety processes for extreme weather days are known and effective. Should the duration of extreme weather events be greater than three days, additional measures have been considered.

#### **Simberi Operations**

##### **Physical impacts**

Simberi oxide mine-life currently extends to financial year 2023. Operations could extend a further 10 years or more, with a Feasibility Study on sulphide mining expansion currently underway to support this possibility and a financial investment decision likely within FY22.

As St Barbara considers opportunities for extending mine operations at Simberi, the following climate<sup>1</sup> risks may prove relevant.

- Potential for impact via sea level increases after 2050. The mine processing plant, airfield and wharf facilities are situated at low elevation on the coast.
- Increased rain likely (per the RCPs page 12) in this region could impact mining open pits. Though not currently a significant issue at Simberi due to the altitude and situation of mining (on ridges), open cut mines in high-rainfall areas are occasionally impacted due to pits flooding. In addition, the potential for more uncontrolled run-off and effluent may cause an indirect regulatory and reputational risk to general licence to operate.

#### **Atlantic Operations**

##### **Physical impacts**

Other than the current Touquoy mine, St Barbara has a series of proposed mines and an active exploration program in Nova Scotia.

As St Barbara considers opportunities to extend mine operations in Nova Scotia beyond 2040, the following are considerations.

- Extreme weather events in the North American region are expected to be more common and severe. The Group's mining activities could be impacted by short-term outages relating to heavy rain flooding open pits and high winds impacting either power generation or transmission via grid power.
- Increased forest fire activity: an increase in average temperatures could lead to increased forest fire activity in this region (per the RCPs page 12). The Group's mines are in remote areas inappropriate for farming and are thus moderately wooded and vulnerable to forest fires, though this is not currently a significant issue. Possible increased rainfall may mitigate this risk.

##### **Regulatory impacts**

Regulatory impact is the major short-term climate-related risk and potential impact on the Group.

##### **Carbon tax or trade**

St Barbara, as with all other significant energy consumers, could be impacted by commencement of carbon taxing and trading at any of its operations, or through extension of current Australian climate change mitigation initiatives, such as the 'Safeguard' scheme (which does not currently impact Leonora Operations).

The Group's current margins can tolerate various possible scenarios.

1. 'Acute' as described in the TCFD, meaning event driven.



Papua New Guinea has no carbon emission monitoring or targets, nor any readily observable trend in its public discourse advocating such legislation.

### Strategy

#### Energy efficiency and renewable energy studies

St Barbara is currently completing a Group-wide study of opportunities for greenhouse gas (GHG) emission production efficiency, at a minimum, meeting our Paris 2015 efficiency target of an 18% reduction in CO<sub>2</sub>-e t/oz gold by 2030. The study is led by an expert external engineering firm.

Considerations include:

- cost benefit analysis, including the lifetime of the GHG emission-reducing project, and the lifetime of the associated mine, any carbon taxes, or trading requirements; and
- relationship and tie-in with public power generation authorities, for instance where renewable power generation projects constructed by the company may be sensibly grid connected (particularly relevant at Atlantic Operations in Nova Scotia).

#### Accounting treatment of climate change

##### Impairments

The physical impacts of climate change on the Group's operations are beyond the projected 'value in use' of the Group's respective assets and therefore are not presently considered at material risk of impairment of the value of those respective assets.

The impact of a regulatory change, such as implementation of a carbon-trading scheme or changes to the safeguard mechanism, remains uncertain but is considered unlikely to be material.

##### Closure – Asset Rehabilitation Obligations

St Barbara includes potential climate change related risks in the design and implementation of closure planning at each operation.

#### Operational emissions

##### Leonora Operations – performance/future trends

In 2021 greenhouse gas emissions intensity on a production and revenue basis at the Gwalia mine trended upwards, as it has for the last two years. There are two primary contributors to this trend at Gwalia.

Firstly, the mine is progressing deeper, and this has necessitated the installation of additional generators to power a doubling of underground ventilation to ensure the safe operation of the mine.

Secondly, average gold grade per tonne mined and processed is decreasing (1% in 2021, 30% in 2020). This increases emission intensity as less gold is produced from the annual mined and processed ore tonnage.

The increase in intensity would be far larger but for ongoing improvement in operational performance as well as efficiency innovations.

In 2015 an absorption chiller plant was built and commissioned at Gwalia, a world-first application for a mine. The chiller plant, which uses waste heat from the power plant, and replaced a traditional ammonia refrigeration plant, saves ~A\$1 million (gas variable costs only), 96,000 GJ and 5,000 CO<sub>2</sub>t per annum.

We are seeking to manage costs of production and contain the increase in emissions intensity by continuing to implement innovative projects, as well as by incremental efficiencies. A study is underway in FY21–22 to understand opportunities for further efficiencies and renewable power generation.

##### Simberi Operations – performance/future trends

Greenhouse gas emission intensity at Simberi has improved over the last five years due to the improvements in production at that site.

An important contributor to emission efficiency at Simberi is the Aerial Rope Conveyor (or 'Ropecon'). This conveyor stretches nearly 2.5 kilometres from the mining areas to the processing plant over rugged terrain and utilises gravity as a power source. When fully loaded, the Ropecon contributes power to the Simberi grid and is a net contributor overall. Maximising usage of the Ropecon therefore has a strong impact on greenhouse gas emissions at Simberi. The Ropecon has saved ~A\$2.3 million, 90,000 GJ and 7,000 CO<sub>2</sub>t equivalent per annum since 2017 compared to conventional trucking.

##### Atlantic Operations – performance/future trends

Atlantic Operations began operations in 2017 and has steadily increased in production and mining related activity. This has led to absolute increases in emissions. Grid power in Nova Scotia is 43% from coal, with approximately a further 17% from other carbon-based sources<sup>1</sup>. Over two thirds of the Group's Atlantic Operations emissions come from grid power.

Atlantic Operations reports greenhouse gas emissions annually to Environment and Climate Change Canada (ECCC). The emissions reported do not include grid power, as power generators are required to report their emissions to ECCC as well. Atlantic Operations did not meet the threshold to report to the ECCC greenhouse gas reporting program in 2017. The 7% increase in 2021 emissions (57kt to 61 kt CO<sub>2</sub>-e) was attributable to an increase for tonnes processed and the mobile fleet deepening of the Touquoy open pit creating longer haulage distances.

Atlantic has aspired to net zero carbon in 2025. Achieving this is becoming increasingly challenging due to a slower than expected permitting of mining projects (resulting in a non-cash impairment loss on Atlantic Operations of \$248 million in FY21). We will proceed with relevant renewable power and related studies to ensure these can inform our projects as they move forward.

1. Nova Scotia Power real time power generation source results: <https://www.nspower.ca/cleanandgreen/todays-energy-stats>

### Fleet economy

St Barbara has a strong focus on fleet economy, monitoring diesel litres usage per tonne kilometres. We allow global underground truck manufacturers to test their newest and most-efficient models at our Gwalia mine. At the manufacturers' invitation, we attend various tests of the most recent electric underground mining trucks and have an ongoing watching brief on this generally. At both Simberi and Atlantic Operations, fleet efficiency opportunities are being considered as part of the respective feasibility studies for life extending operations.

We currently have no absolute fleet economy targets. Our strategy is to remain in the top half of our industry for gold production greenhouse gas (GHG) efficiency overall, inclusive of trucking. This provides opportunity for trade-off studies between trucking and fixed plant options that replace trucking (such as the above-mentioned Ropecon and PAF).

In FY21 fleet emissions were 59 kt CO<sub>2</sub>-e (Gwalia WA, 19 kt CO<sub>2</sub>-e, 7 ML of diesel, Simberi 26 kt CO<sub>2</sub>-e, 9 ML of diesel, Atlantic, Canada 14 kt CO<sub>2</sub>-e 4 ML of diesel), around 26% of the total (220 kt CO<sub>2</sub>-e) emissions. No fleet-related emissions are derived from renewable sources.

### Air quality – GHG emissions other than CO<sub>2</sub>, and other air pollutants

The Group has not been the subject of any air pollution related complaints. All three mines are in remote, isolated settings.

We have included Air Quality emissions data in this report for the first time this year. These emissions are derived from factors obtained from the Australian Federal 'National Pollution Inventory', applied to our fossil fuel consumption raw quantities in each country. They may not align to factors used by regulators internationally but will be approximately similar. Dust and emissions relating to explosives have not been included.

In reporting greenhouse gas emissions, the Group converts all other greenhouse gas emission into their CO<sub>2</sub> equivalent (CO<sub>2</sub>-e), according to the Australian federal government NGERs formula.

We have no current specific reduction strategies for Air Quality type emissions.

For our data on air quality refer to our Performance Data.

### Targets

The Group has a target to increase its scope 1 and 2 emission efficiency (ounces of gold/tonnes of CO<sub>2</sub>-e) by 18.6% in 2030, versus a provisional 2013 baseline year, and achieve carbon neutrality by 2050.

The Group has grown considerably in recent times, so an absolute emissions reduction target is inappropriate. The Group's emission efficiency in 2013 was 1.86 ounces of gold per tonne of CO<sub>2</sub>-e. The 2030 target intensity rate is 2.20 oz/CO<sub>2</sub>t.

St Barbara will seek formal recognition of these targets by the United Nations responsible agency, the Science Based Targets Initiative (SBTI)<sup>1</sup>.

The targets have been determined through consideration of guidance provided by the SBTi and alignment with the United Nations-approved absolute reduction targets for Australia (a 27% reduction on 2005 levels by 2030, or 1.1% per year).

The appropriate measure for targets for the gold industry is production intensity as part of a Sectoral Decarbonisation Approach<sup>2</sup>.

The intention of the SBTi in their guidance is that market supply (global gold production) will stay approximately static, meeting consumer demand, while associated emissions reduce in line with global requirements for emission reductions. An important element is that, globally, all producers converge to a best practice level (described as economic intensity contraction<sup>3</sup>).

Intensity has increased in 2021 in line with forecasts. Significant renewable power and efficiency projects will be required to meet our targets and planning for these is underway.

### Carbon Disclosure Project (CDP) – Climate information

The group has participated in CDP climate since 2017, scoring 'C' for 'in compliance'.

Risk management procedures for climate change are reviewed three times per year.

Climate change risk and opportunities are identified and assessed in the enterprise-wide risk management system.

This system defines equivalency levels for financial, compliance, environment, and reputation impacts.

The Board has determined it will retain oversight of climate change related issues rather than delegate them to a Board sub-committee.

The Group risk management procedures monitor risks greater than six years into the future.

1. <https://sciencebasedtargets.org/>

2. Science-Based Target Setting Manual, page 19 (<https://sciencebasedtargets.org/wp-content/uploads/2017/04/SBTi-manual.pdf>)

3. Ibid, page 21.

# Growing Sustainably

Growing our business sustainably, where it makes sense, and with strong governance practices, means we can add value for everyone: our shareholders, our people and our communities.



Gold bars for delivery.

## Governance

The Board and management of St Barbara are committed to maintaining high standards of ethics, integrity and statutory compliance in all Group dealings.

St Barbara's internal and corporate governance is explained in detail in the annual Corporate Governance Statement, which describes the Corporate Governance framework that underpins the Group's conformance with the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations 4th Edition (the ASX Principles and Recommendations), by reference to each of the stated principles. The eight central principles are listed below.

1. Lay solid foundations for management and oversight.
2. Structure the Board to add value.
3. Act ethically and responsibly.
4. Safeguard integrity in corporate reporting.
5. Make timely and balanced disclosure.
6. Respect the rights of security holders.
7. Recognise and manage risk.
8. Remunerate fairly and responsibly.

St Barbara has an integrated suite of governance policies that together support our standalone Code of Conduct. The individual policies are available on our website under Governance, and include policies addressing the following areas.

- Bribery and corruption
- Community relations
- Conflicts of interest
- Continuous disclosure
- Diversity and inclusion
- Donation and sponsorships
- Environment
- Equal opportunity

- Health and safety
- Modern slavery
- Privacy
- Risk management
- Securities dealing
- Social media
- Whistleblower
- Workplace behaviour

St Barbara reviews and updates the policies on a regular basis and has corresponding comprehensive employee training. Further detail on our governance settings as they pertain to sustainability can be found on page 18.

The Group's governance performance is published in the Corporate Governance Statement, with a key indicator set out in the Performance Data section of this report. The Group has maintained, and will seek to maintain, 100% compliance with the ASX Principles and Recommendations.

St Barbara supports the efforts of the Extractive Industries Transparency Initiative<sup>1</sup> (EITI) to improve transparency in financial dealings between mining companies and governments. PNG is a candidate country to the EITI and the Group reports annually to the PNG EITI. We are also a financial supporter of the PNG EITI International Secretariat. Canada is also a member country of the EITI, and St Barbara submits an Extractive Sector Transparency Measures Act report annually.

During 2021, St Barbara was a financial member of selected mining industry bodies, including:

- Minerals Council of Australia;
- Australian Mines and Metals Association;
- Chamber of Minerals and Energy of Western Australia;
- Gold Industry Group (Australia);
- Mining Association of Nova Scotia (Canada); and
- PNG Chamber of Mines and Petroleum.

1. <https://eiti.org/>

The Group publishes internally regular culture indicator reports including for:

- safety;
- employee engagement;
- employee turnover; and
- whistleblower related activity.

Relevant data is reported in the Performance Data section.

### **Economic performance and business growth**

St Barbara's economic performance is published in the Annual Report, with earnings per share as a key indicator set out in the Performance Data section of this report (page 59). Commentary on the Group's economic performance commences on page 3 of the Annual Report.

St Barbara's business strategy, and how it pertains to growth of the Group, is outlined in the Annual Report as well as our published reporting, announcements and presentations.

The material business risks faced by the Group that may have an impact on operating and financial prospects of St Barbara, are described in the Annual Report.

### **Contribution to government – taxes, royalties, and duties**

We have a strong focus on taxation compliance and our financial statements are audited annually by international firm PwC. We pay our full income tax and other tax obligations. On average, the total economic contribution of the business to government via all types of taxes and royalties has been equivalent to 70% of profits.

The Group's direct economic contribution to governments is published in the Annual Report and in the Performance Data section of this report.

St Barbara commenced paying company income tax in 2018, having fully utilised previously accumulated income tax losses incurred whilst establishing our operations.

Other taxes, royalties and duties have broadly increased over the last several years associated with the increase in gold production and related activity (such as fuel consumption, imports, employment, engagement of contractors and suppliers).

### **Contribution to communities**

St Barbara's economic contribution to communities – directly, and indirectly through our workforce and broader value chain – is discussed in previous sections of this report, and particularly on pages 31 and 44, with relevant figures also provided in our Performance Data (page 62).

### **Sustainable supply chain**

We are committed to partnering with suppliers whose principles are consistent with our own. Our suppliers are therefore required to comply with all applicable laws and, in all cases, they must meet the standards and principles set out in our Supplier Code of Conduct across all areas of their business.

To share the socio-economic value of mining, St Barbara is also committed to engaging local suppliers in the regions where we operate for goods and services, where they meet our mining requirements (including regulatory requirements). Our supply engagement terms also specify that suppliers undertake to identify and encourage opportunities which benefit Indigenous and First Nations people and local communities, wherever reasonably possible.

Refer to our discussion on page 43 relating to our review of high-risk suppliers, and modern slavery (forced labour) risks in our supply chain.

### **Supplier Code of Conduct**

Key aspects of the Supplier Code of Conduct include the following.

#### ***Anti-bribery and corruption***

Our suppliers must comply with all applicable laws relating to the prevention of bribery, corruption, fraud, tax evasion or similar or related activities.

#### ***Diversity and inclusion***

Our suppliers must comply with all applicable discrimination laws and actively promote diversity and inclusion within their own workplace, including in recruitment, retention, and promotion practices.

#### ***Health and safety***

Our suppliers must comply with all applicable health and safety laws and aim to create a safe working environment for their employees and anyone else affected by their businesses.

#### ***Modern slavery***

Our suppliers, whether directly or through their supply chain, must comply with all applicable modern slavery laws, including not engaging in human trafficking, slavery, servitude, forced labour, forced marriage, deceptive recruiting for labour and services, debt bondage and child labour. Refer also to our Modern Slavery Statement.

#### ***Sustainability***

Our suppliers must comply with all applicable environmental laws and continually strive to improve their sustainability performance, focusing on reduction (as appropriate) of waste, carbon emissions, water, and natural resources consumption.

#### ***Due diligence and enforcement***

The Group has put in place due diligence systems to identify and investigate suppliers identified as potentially being high-risk in relation to compliance with any of the above requirements.

#### ***Our value chain and supply chain process***

Our value chain is broadly described and illustrated on page 16 as: exploration; development; mining; processing; delivery to the mint; and closure and rehabilitation.

Our procurement function is responsible for purchasing goods and services for our business, providing commercial governance, and managing our supply chain risks.

A breakdown of our global FY20 material procurement supplier engagements, based on category, is set out in the diagram on page 16. Further detail on our supply chain and management process is provided in our Modern Slavery Statement.

# Performance Data

Due to rounding data may not exactly equal totals.

	Notes	FY19	FY20	FY21	Target
<b>Governance and economic performance</b>					
<b>Governance</b>					
Governance performance reported in Annual Report and Corporate Governance Statement (CGS).			A. Report CGS	A. Report CGS	
Selected key indicator of governance performance:					
Compliance with ASX Corporate Governance Council Principles and Recommendations	1	100%	100%	100%	100%
Political donations (A\$)		\$0	\$0	\$0	\$0
Payments to peak bodies (A\$M)	2	\$0.3M	\$0.3M	\$0.3M	n/a
Whistleblower complaints		0	1	0	n/a
<b>Economic performance</b>					
Economic performance reported in Annual Report.		A. Report	A. Report	A. Report	
Selected key indicator of economic performance:					
Earnings per share (basic, underlying)		\$0.27	\$0.16	\$0.11	n/a
<b>People</b>					
<b>Diversity – reported in Corporate Governance Statement</b>					
Diversity performance reported in Corporate Governance Statement.		CGS	CGS	CGS	
Selected key indicator of diversity performance:					
Proportion of women employed (Australia)		25%	26%	28%	30% by 2022
Proportion of women employed (PNG)		15%	15%	16%	18% by 2022
Proportion of women employed (Canada)			19%	23%	30 June 2022
First Nations employees (Canada)			3%	2%	5% by 2022
Indigenous employees at Leonora Operations		3.4%	3.2%	2%	5% by 2022
Overall gender pay gap	3	12%	15%	8%	8% by 2022
Nil gender pay gap for 'like-for-like' roles	4	nil	nil	nil	maintain nil
% women in entire workforce		14%	19%	20%	
% women in 'management'		24%	18%	24%	
<b>Employee and contractor numbers</b>					
Australia	Employees	242	261	250	n/a
	Contractors	520	485	449	
	Total	762	746	699	
Papua New Guinea	Employees	770	746	767	
	Contractors	470	428	467	
	Total	1,240	1,174	1,234	
Canada	Employees	272	318	321	
	Contractors	7	1	6	
	Total	279	319	327	
Total	Employees	1,284	1,325	1,337	
	Contractors	997	914	921	
	Total	2,281	2,239	2,259	

1. Compliance, or satisfactory disclosure of alternative governance practices adopted in lieu of a recommendation, as prescribed under the ASX Corporate Governance Council Principles and Recommendations (4th edition).
2. Comprises Minerals Council Australia, Chamber of Minerals and Energy Western Australia and (from FY18) Gold Industry Group. Excludes where company pays professional service fees and employee memberships (for CME WA).
3. The 'Overall Gender Pay Gap' is calculated according to the WGEA guidelines ([www.wgea.gov.au](http://www.wgea.gov.au)) and represents the difference between the average pay for all male employees and the average pay for all female employees across the whole organisation.
4. The like-for-like gender pay gap measures the difference in base salary over the year between male and female employees in comparable roles.

## Performance Data continued

	Notes	FY19	FY20	FY21	Target
<b>People (continued)</b>					
<b>PNG employment participation</b>					
Nationality	PNG – Simberi and local islanders	52%	57%	44%	
	PNG – Other	44%	38%	53%	
	Non – PNG (expatriates)	4%	5%	3%	Remain under 5%
<b>Employee turnover</b>					
Australia		16.1%	13.3%	25.3%	Under benchmark
Australia Mining average benchmark	1	13.8%	14.1%	13.3%	
Papua New Guinea		4.6%	5.7%	9%	
Canada		–	10.0%	17.7%	
Total turnover		7.2	8.3%	14.3%	
<b>Parental leave, return to work, last 3 years total</b>					
		<b># took parental leave</b>	<b>% returned to work</b>	<b>% retained 12 months after returning</b>	<b>Target % returned to work by 2022</b>
Australia %, # maternity leave		9	88% (8)	77% (7)	80%
Australia %, # paternity leave		21	100% (21)	86% (18)	80%
PNG %, # maternity leave		31	96% (30)	74% (23)	80%
PNG %, # paternity leave		0	0%	0%	No target
Canada %, # maternity leave		4	100% (4)	75% (3)	80%
Canada %, # paternity leave		1	100% (1)	100% (1)	100%
Overall			% (65)	78% (52)	80%
<b>Employee training &amp; development, average hours per person p.a. 2</b>					
Australia overall		21	18	25	
Australia: Women		22	17	17	
Australia: Men		20	18	27	
Papua New Guinea overall		37	23	16	
PNG: Women		44	18	17	
PNG: Men		34	24	15	
Canada overall				7	
Canada: Women				6	
Canada: Men				7	
Overall		34	22	15	
Overall: Women		36	18	14	
Overall: Men		30	23	15	

1. The Mackie 'Australian Resources Industry Turnover Analysis TA (RITA)' Report – Jan 2021 figures. RITA report has 32 Australian Resource industry companies participating. 'Turnover' is voluntary employment moves only. Only direct employees measured.
2. Does not include Study Assistance, Study leave hours and contains an approximate consideration for annual hours spent in online compliance training. No data for Canadian operations is available in FY20.

	Notes	FY19	FY20	FY21	Target
<b>People (continued)</b>					
<b>Employee training &amp; development spend average A\$ per person p.a.</b>					
	1				
Australia overall		1,568	1,326	1,610	
Australia: Women		1,645	1,255	1,095	
Australia: Men		1,542	1,350	1,739	
Papua New Guinea overall		589	477	159	
PNG: Women		644	343	168	
PNG: Men		571	521	149	
Overall		841	704	471	
Overall: Women		967	43	440	
Overall: Men		810	744	471	
<b>Employee engagement survey</b>					
% of employees who responded	2	77%	64%	58%	70%
% favourable responses	3	73%	71%	68%	64%
<b>Performance and development reviews, % of employees receiving</b>					
Australia %		100%	100%	86%	100%
PNG% management and supervisory staff		100%	100%	81%	100%
PNG% overall	4	16%	19%	22%	No target
Canada %		n/a	100%	81%	100%
Overall %		35%	54%	48%	No target
<b>Economic contribution</b>					
<b>Income tax paid</b>					
	<b>A\$M</b>				
Australia		61	21	19	n/a
Papua New Guinea	5	0	0	9	
Canada		n/a	0	0	
Total Group income tax paid		61	21	29	
<b>Wage/Salary taxes (paid by Group on behalf of direct employees)</b>					
	<b>A\$M</b>				
Australia		14	14	17	n/a
Papua New Guinea		7	8	9	
Canada		n/a	7	9	
Total		22	30	34	
<b>Royalties paid to gov't and communities (excluding corporate royalties)</b>					
	<b>A\$M</b>				
Australia		10	10	9	n/a
Papua New Guinea		6	6	5	
Canada		n/a	4	4	
Total royalties paid		16	20	18	
<b>Other taxes/duties paid</b>					
	<b>A\$M</b>				
Australia	6	(0.1)	0.1	2.7	n/a
Papua New Guinea		0.3	0.2	0.9	
Canada		n/a	0	0	
Total taxes/duties paid		0.1	0.3	3.7	

- Does not include Study Assistance, Study leave hours and contains an approximate consideration for annual hours spent in online compliance training. FY20 amounts are estimates based on hours and previous years per hour averages.
- Target = top quartile of participation observed by external survey provider (Blue Provident), global, all industries.
- Target = top quartile of participation observed by external survey provider (Blue Provident), global, all industries.
- FY19 figures represent number involved in the performance management system.
- The Company has accumulated tax losses in PNG, which have been applied to reduce tax paid during the reporting period.
- Differs to amount in previous years by approximately \$3M each year as Fuel credit tax now included.

## Performance Data continued

	Notes	FY19	FY20	FY21	Target
<b>Economic contribution (continued)</b>					
<b>Total taxation and royalties (excluding corporate royalties)</b>					
	<b>A\$M</b>				
Australia		85	45	48	n/a
Papua New Guinea		13	15	24	
Canada		n/a	11	13	
<b>Total</b>		<b>99</b>	<b>71</b>	<b>85</b>	
Total as % of Net Profit After Tax	1	68%	56%	-48%	
<b>Community expenditure</b>					
	<b>A\$M</b>				
PNG community expenditure	2	1.4	2.8	1.8	n/a
PNG expenditure with landowner associated companies	3	7.0	9.1	11.1	
Australian sponsorships, in-kind support		0.1	0.3	0.5	
Canadian sponsorships, in-kind support		n/a	0.04	0.06	
<b>Health and safety</b>					
<b>Total recordable injury frequency rate (TRIFR)</b>					
	4				<b>Target</b>
Australia		11.0	6.8	6.4	4.1
Papua New Guinea		1.7	0.7	2.7	0.7
Canada		n/a	4.4	5.7	2.9
<b>Total</b>		<b>5.0</b>	<b>3.0</b>	<b>3.9</b>	<b>2.1</b>
<b>Recordable injuries</b>					
Australia		18	10	9	n/a
Papua New Guinea		5	2	7	
Canada		n/a	4	4	
<b>Total</b>		<b>23</b>	<b>16</b>	<b>20</b>	
<b>Lost-time injury frequency rate (LTIFR)</b>					
	5				
Australia		1.4	0	0.7	n/a
Papua New Guinea		0.7	0.4	0.8	
Canada		n/a	1.4	1.4	
<b>Total (includes exploration)</b>		<b>1.1</b>	<b>0.4</b>	<b>0.6</b>	
Benchmark (underground mines, Western Australia)	6	1.9	1.9	1.7	
<b>Fatalities</b>					
Australia		0	0	0	0
Papua New Guinea		0	0	1	0
Canada		n/a	0	0	0
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Health and Safety fines &amp; penalties</b>					
Australia		0	0	0	0
Papua New Guinea		0	0	1	0
Canada		n/a	0	0	0
<b>Total</b>		<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

1. Net loss after tax of \$176 million, due mainly to a \$349 million valuation write-down relating to Atlantic Operations assets, announced August 2021.
2. Cost of Community Clinic and support functions. Converted from US\$ at exchange rates shown at the end of the Performance Data table.
3. Converted from PGK to A\$ at exchange rates shown at the end of the Performance Data table. 2017 re-stated from previous year, was 7.2.
4. Historical rolling 12 months recordable injuries per million hours worked.
5. Historical rolling 12 months lost time injuries per million hours worked.
6. [https://www.dmp.wa.gov.au/Documents/Safety/MSH\\_Stats\\_Reports\\_SafetyPerfWA\\_2019-20.pdf](https://www.dmp.wa.gov.au/Documents/Safety/MSH_Stats_Reports_SafetyPerfWA_2019-20.pdf).



	Notes	FY19	FY20	FY21	Target
<b>Environment</b>	1				
<b>Total incidents</b>	2				
Australia		14	6	8	No target
Papua New Guinea		53	34	40	
Canada		n/a	12	49	
<b>Reportable incidents</b>	3				
Australia		2	2	5	No target
Papua New Guinea		0	2	2	
Canada		9	2	21	
Canada 'non compliances'		2	2	0	
<b>Significant incidents</b>	4				
Australia		0	0	0	0
Papua New Guinea		0	0	1	0
Canada		0	0	1	0
<b>Environmental fines &amp; penalties</b>					
Australia		0	0	0	0
Papua New Guinea		0	0	0	0
Canada		0	0	0	0
Total		0	0	0	0
<b>Disturbed land (hectares)</b>					
Australia			1,260	1,132	No target
Papua New Guinea			248	259	
Canada			268	271	
<b>Landfill (tonnes)</b>					
Australia		–	–	2,128	
Papua New Guinea				Not calc	
Canada		–	–	80.8	
<b>Water use Leonora Western Australia mega litres (MI)</b>					
Potable	5	38	46	46	35
Non-potable	6	984	939	1,132	Below allocation
% of allocation utilised		22%	19%	24%	
Non-potable recycling		80%	113%	132%	

- Final external reporting for NPI and NGRS (National Pollutant Inventory & National Greenhouse Emissions Reporting Standard – federal Australian government reporting obligations) had not been finalised as at the date of this report and may vary.
- Incidents are categorised via St Barbara Environment Incident Categorisation risk matrix as to their potential and actual environmental impact. The consequence component of this matrix is shown below. 'Total' incidents include all types of incident except 'insignificant', i.e., Minor, Moderate, Major, Critical.

Insignificant	Minor	Moderate	Major	Critical
Very low environmental impact (e.g.: localised spill).	Reversible environmental impact, immediately contained.	Reversible environmental harm extending beyond site boundary, immediately contained.	Widespread environmental impact, not immediately contained.	Widespread irreversible environmental harm.

- A reportable incident is where a licence or regulatory condition requires certain events to be reported. Typically, any environmental incident that impacts beyond the mine lease borders must be reported. Some events within the mine boundary must also be reported, for instance, discovery of certain hazardous materials in landfill. Relatively low impact environmental events can therefore sometimes be reportable.
- Incidents are categorised via a risk matrix as to their potential and actual environmental impact. The consequence component of this matrix is shown in note 2 above. 'Significant' incidents include 'Major' and 'Critical' incidents. The FY21 incidents don't qualify as 'major' environmental incidents but have been included due to the compliance aspects.
- Leonora only, potable water usage is measured versus an annual self-selected then approved target. Results re-stated to include use in the Leonora 'village' – the mining accommodation camp 5km away from the Gwalia mine. Simberi is in a high rainfall environment with normal rain activity (>4m p.a.) typically in excess of community requirements. The operation nevertheless has a strong commercial focus on process water recycling and potable water usage minimisation.
- Non-potable water at Leonora is usually saline, unfit for domestic or agricultural use, and comes from boreholes or is pumped from the underground mine. The mine has an allocation associated with earlier operations.

## Performance Data continued

	Notes	FY19	FY20	FY21	Target
<b>Environment (continued)</b>					
<b>Water use Simberi (PNG) mega litres (MI)</b>					
Fresh	1	Not calc	721	492	
Saline			5,834	3,837	
Recycling		Not calc	54%	49%	
Grey water discharge (via DSTP)		Not calc	42	43	<114
<b>Water use Touquoy (Canada) mega litres (MI)</b>					
Water usage		3,018	3,336	3,363	
Recycling		95%	96%	96%	
Water drawn from environment		152	143	136	
Treated water discharged		2,243	1,165	947	
<b>Climate</b>					
<b>Absolute GHG emissions Australia kilo tonnes (kt) CO<sub>2</sub> equiv</b>					
Scope 1 emissions	2	68	80	85	
Scope 2 emissions		1	1	2	
<b>Absolute GHG emissions PNG kilo tonnes (kt) CO<sub>2</sub> equiv</b>					
Scope 1 emissions	3	75	82	59	
Scope 2 emissions		0	0	0	
<b>Absolute GHG emissions Canada kilo tonnes (kt) CO<sub>2</sub> equiv</b>					
Scope 1 emissions		12	13	15	
Scope 2 emissions		42	44	46	
<b>Absolute energy usage, tera joules (TJ)</b>					
Australia, all sources	4	1,474	1,826	1,542	
PNG, all sources	5	958	1,046	761	
Canada, all sources	6	300	326	357	
<b>Production GHG emissions intensity – tons of CO<sub>2</sub>-e per ounce</b>					
Australia, scope 1 & 2		0.31	0.47	0.57	
Papua New Guinea, scope 1 & 2		0.53	0.81	0.81	
Canada, scope 1 & 2		0.51	0.54	0.61	
<b>Production GHG emissions efficiency – ounces per ton of CO<sub>2</sub> equiv</b>					
Australia, scope 1 & 2		3.25	2.11	1.76	
Papua New Guinea, scope 1 & 2		1.89	1.24	1.24	
Canada, scope 1 & 2		1.71	1.86	1.63	
<b>Revenue GHG emissions intensity – tons of CO<sub>2</sub>-e per US\$000 revenue</b>					
Australia, scope 1 & 2		0.21	0.33	0.35	
Papua New Guinea, scope 1 & 2		0.42	0.55	0.39	
Canada, scope 1 & 2		0.48	0.38	0.40	

1. Simberi is in a high rainfall environment with normal rain activity (>4m p.a.) typically in excess of community requirements. The operation nevertheless has a strong commercial focus on process water recycling and potable water usage minimisation.
2. 2021 is estimate only pending formal NGRS report subsequent to this report.
3. Estimates from fuel and lubricants purchases.
4. 2021 is estimate only pending formal NGRS report subsequent to this report.
5. Estimate factor applied to generate total energy used from net energy used.
6. Note use of grid power gives our Canadian operations a much lower energy use as it includes only a direct kWh to GJ calculation and does not account for energy used in transmission and generation, as is the case at the other operations.

	Notes	FY19	FY20	FY21	Target
<b>Climate (continued)</b>					
<b>Revenue GHG emissions efficiency US\$000 revenue per ton of CO<sub>2</sub> equiv</b>					
Australia, scope 1 & 2		4.75	3.01	2.84	
Papua New Guinea, scope 1 & 2		2.38	1.83	2.56	
Canada, scope 1 & 2		2.16	2.66	2.48	
<b>Consolidated GHG emissions results (Scope 1 and 2)</b>					
Absolute GHG emissions (kt) CO <sub>2</sub>		197	220	208	
CO <sub>2</sub> tons per US\$000 revenue		0.32	0.40	0.38	
CO <sub>2</sub> tons per ounce		0.43	0.58	0.63	
US\$000 revenue per ton of CO <sub>2</sub>		3.13	2.48	2.65	
Ounces per ton of CO <sub>2</sub>		2.31	1.72	1.58	2.20 by 2030
<b>Self-generation of electricity (GWh)</b>					
Australia		74	102	114	
Papua New Guinea	1	54	55	39	
Canada		–	–	–	
Total		128	151		
<b>Grid power (GWh)</b>					
Australia		2	2	2	
Papua New Guinea		–	–	–	
Canada		41	43	46	
Total		43	45	48	
<b>Renewable power (GWh)</b>					
Australia		1	1	1	
Papua New Guinea		–	–	–	
Canada		–	–	–	
Total		1	1	1	
<b>Scope 3 emissions</b>					
Australia		–	–	235	n/a
Papua New Guinea		–	–	157	
Canada		–	–	88	
Total				481	
<b>Air Quality – FY21 Only</b>					
		<b>Australia</b>	<b>Canada</b>	<b>Papua New Guinea</b>	<b>Total</b>
CO (t)		372	52	217	641
NO <sub>x</sub> (t)		629	99	539	1,267
SO <sub>x</sub> (kg)		392	113	331	836
PM <sub>10</sub> (t)		10	7	32	49
Mercury (g)		0.1	0.1	–	0.2
Lead (kg)		–	–	–	–
Volatile Organic Compounds (VOCs, t):		78	9	30	117

1. Estimates based on power capacity times utilisation.

## Performance Data continued

	Notes	FY19	FY20	FY21	Target
<b>Waste</b>					
<b>Gwalia (WA) tailings</b>					
Absolute tons (dry, kt)		652	771	749	No target
# Leakage/spills to environment		0	0	0	0
<b>Simberi (PNG) tailings</b>					
Absolute tons (dry, kt)		3,072	3,314	2,758	No target
# Leaks/spills to environment		0	0	1	0
<b>Touquoy (Canada) tailings</b>					
Absolute tons (dry, kt)		2,299	2,588	2,918	No target
# Leaks/spills to environment		0	0	0	0
<b>Gwalia (WA) waste rock – absolute and target</b>					
Absolute tons (Mt)		0.4	0.3	0.3	No target
% stored disposed according to licenced responsible methodologies		100%	100%	100%	100%
<b>Simberi (PNG) waste rock – absolute and target</b>					
Absolute tons (Mt)		8.9	8.6	6.4	No target
% stored disposed according to licenced responsible methodologies		100%	100%	100%	100%
<b>Touquoy (Canada) waste rock – absolute and target</b>					
Absolute tons (Mt)		N/A	3.5	4.7	No target
% stored disposed according to licenced responsible methodologies		N/A	100%	100%	100%

### Foreign exchange rates

The Group uses Australian dollar presentation currency for reporting purposes. Financial figures are in Australian dollars unless otherwise stated. The following exchange rates (as used in previously published financial statements) have been applied where appropriate:

A\$/US\$ – average for year	0.7153	0.6709	0.7470
PGK/A\$ – average for year	2.4378	2.3513	2.6810

# Appendices

## Material issues and boundaries

St Barbara assessed (assesses) materiality of issues disclosed in this report according to materiality determination as described by the Global Reporting Initiative, and:

- our values;
- laws, licences and regulations;
- engagement with key stakeholders (internal and external) identification of issues discussed frequently or as priority;
- engagement with experts, peer reporting and industry organisations, and international initiatives focused on sustainability issues; and
- issues identified in our internal reporting and defined as critical in our Risk Management System.

Boundaries are defined by our impacts. We define our impacts to include direct and indirect, intended, and unintended, short and long-term consequences.

We do not consider our impacts to include:

- product safety and product recycling;
- the role of gold in international political and economic relations;
- engagement with communities beyond those geographically proximate to our operations;
- commercial activity of individuals and entities connected with our operations but not relating to us (for example, other business activities of contractors and royalty recipients); or
- issues relating to minority equity interests and previously divested assets.

This Sustainability Report prioritises reported 'top ranked' issues (topics) according to assessed materiality, as summarised in the table below. Other 'medium ranked' issues and supplementary content are described in the report where they support our communication and/or disclosures to other relevant external sustainability/ESG frameworks (see page 68).

Reported top issues (topics) by chapter	Boundaries and key stakeholders	
	External	Internal
<p><b>Safety Always</b> <b>Safety</b> Injury risks and management systems for zero harm. Pandemic and disease management. Mental health and well-being support.</p>	<ul style="list-style-type: none"> <li>• Existing and potential workforce</li> <li>• Local communities</li> <li>• Government and regulators</li> <li>• Investors and analysts</li> <li>• Suppliers</li> <li>• NGOs</li> </ul>	All the reported issues are identified and managed according to the impact upon our employees and contractors
<p><b>Respecting the Environment</b> <b>Tailings</b> Integrity of tailings management systems to regulations, industry standards, and for full mine life.</p>	<ul style="list-style-type: none"> <li>• Government and regulators</li> <li>• Local communities</li> <li>• Investors and analysts</li> <li>• NGOs</li> </ul>	
<p><b>Climate</b> Approach and systems for assessment and management of climate change-related risks and opportunities. Low-carbon scenarios and transition pathways to reducing GHG footprint to Paris-aligned targets. Abatement and C-intensity reduction within future mining plans.</p>	<ul style="list-style-type: none"> <li>• Investors and analysts</li> <li>• NGOs</li> <li>• Government and regulators</li> <li>• Local communities</li> <li>• Suppliers</li> </ul>	
<p><b>Water effluent</b> Systems and approach to the management of water effluent from operations – risks and opportunities in doing so. Relates to water consumption and release by category, recycling, and sediment management.</p>	<ul style="list-style-type: none"> <li>• Government and regulators</li> <li>• Local communities</li> <li>• NGOs</li> <li>• Investors and analysts</li> </ul>	
<p><b>Our approach to sustainability, Growing Sustainably</b> <b>Governance</b> Management of comprehensiveness, strength, and disclosure of the Group governance framework, including encapsulation of sustainability/ESG governance and its aspects. Alignment to industry standards, applied in all operating jurisdictions.</p>	<ul style="list-style-type: none"> <li>• Existing and potential workforce</li> <li>• Local communities</li> <li>• Government and regulators</li> <li>• Investors and analysts</li> <li>• Suppliers</li> <li>• NGOs</li> </ul>	

Reported top issues (topics) by chapter	Boundaries and key stakeholders	
	External	Internal
<p><b>Empowered people, Diverse teams</b>  <b>Employee development</b>                      System to manage and optimise direct employees' capability (skills and resourcing), engagement and career development.                      Relates to training, annual performance reviews, engagement, and managing company employee turn-over rates.</p>	<ul style="list-style-type: none"> <li>• Existing and potential workforce</li> <li>• Local communities</li> <li>• Investors and analysts</li> <li>• Government and regulators</li> <li>• NGOs</li> </ul>	
<p><b>Diversity benefits/risk</b>                      Approach to managing levels of diversity and inclusion of direct employees and where this materially impacts or benefits the business and reduces risks.</p>	<ul style="list-style-type: none"> <li>• Existing and potential employees</li> <li>• Investors and analysts</li> <li>• NGOs</li> </ul>	
<p><b>Stronger Communities</b>  <b>Indigenous engagement</b>                      Commitment to, and management process for, respectfully, inclusively, and responsively engaging Indigenous/First Nations people/communities on planned and current operational activities – including community development and closure planning.                      Working for mutual respect and progress.                      Relates to human and Indigenous rights, and cultural heritage management.</p>	<ul style="list-style-type: none"> <li>• Local communities</li> <li>• Existing and potential workforce</li> <li>• Investors and analysts</li> <li>• Government and regulators</li> <li>• NGOs</li> </ul>	
<p><b>Local benefits</b>                      Process to plan, execute and track the delivery of long-term and sustainable shared value from mining as local benefits to the community – both as regulated in mining licences and agreements and in addition at a level aligned to industry standards. Relates to community and stakeholder engagement, local employment, payment of wages, payments to government, and local supply.</p>	<ul style="list-style-type: none"> <li>• Local communities</li> <li>• Existing and potential workforce</li> <li>• Investors and analysts</li> <li>• Government and regulators</li> <li>• NGOs</li> </ul>	

### Alignment to international sustainability initiatives

The Group is a member of or responds to the following key international sustainability initiatives.

- Global Reporting Initiative (GRI) and reports sustainability disclosures in accordance with its Core option<sup>1</sup>.
- The UN Global Compact<sup>2</sup> (a signatory and member).
- Extractive Industries Transparency Initiative (EITI)<sup>3</sup>. (a member and financial supporter).
- Carbon Disclosure Project (CDP)<sup>4</sup>, Climate (since 2018, rated 'C' for compliance).
- Sustainability Accounting Standards Board (SASB) Mining and Metals Standard.

### ESG ratings and indices

St Barbara is reviewed and benchmarked by the following leading ESG ratings and indices.

- S&P CSA (DJSI) – rated top-quartile in sub-sector
- Sustainalytics – rated top-quartile in sub-sector
- Australian Council of Superannuation Investors – rated in ASX 200 reporting 'leader' group
- MSCI – rated top-quartile in sub-sector
- Moody's FTSE Russell – FTSE4Good – rated top-quartile in sub-sector
- ISS Corporate Solutions – rated a strong performer in sub-sector.

1. <https://www.globalreporting.org>  
 2. [www.unglobalcompact.org/](http://www.unglobalcompact.org/)  
 3. <https://eiti.org/>  
 4. [www.cdp.net/en](http://www.cdp.net/en)

## Global Reporting Initiative Standards

### GRI Content Index

This table indicates how St Barbara has used the Global Reporting Initiative (GRI) sustainability reporting standards to guide its sustainability disclosures. St Barbara's sustainability disclosures comprise relevant sections of its:

- 2021 Annual Report (AR in table below);
- Corporate Governance Statement (CGS in table below); and
- website ([www.stbarbara.com.au](http://www.stbarbara.com.au)).

Sustainability reporting, as promoted by the GRI Standards, is an organisation's practice of reporting publicly on its economic, environmental, and/or social impacts, and its contributions – positive or negative – towards the goal of sustainable development.

St Barbara is a member of the UN Global Compact. The column to the furthest right in the table below provides additional guidance as to where to find Commentary on Progress (CoP) relevant discussion for the UNGC 10 principles.

### General Disclosures

GRI Ref <sup>1</sup>	GRI Core <sup>2</sup>	Item	Disclosure	UNGC <sup>3</sup>
<b>1. Organisational profile</b>				
102-1	●	Name of the organisation	St Barbara Limited	
102-2	●	Activities, brands, products, and services	Annual Report, Principal activities (p2)	
102-3	●	Location of headquarters	Annual Report, Registered Office (back cover)	
102-4	●	Location of operations	Annual Report, Our company (pi)	
102-5	●	Ownership	Annual Report, Shareholder information (p99)	
102-5	●	Legal form	St Barbara Limited is a public company incorporated in Australia and listed on the Australian Securities Exchange (ASX: SBM)	
102-6	●	Markets served	All gold bullion is sold to Australian registered financial institutions	
102-7	●	Scale of the organisation	Annual Report, Directors' Report (p3)	
102-8	●	Information on employees and other workers	Sustainability Report, Performance Data	
102-9	●	Supply chain	Annual Report, Directors' Report (p4, p11), this report, (p58)	
102-10	●	Significant changes to the organisation and its supply chain	Annual Report, Directors' Report (p4, p11)	
102-11	●	Precautionary Principle or approach	Environmental Policy	7
102-12	●	External initiatives	<a href="http://stbarbara.com.au/our-company/recognition-of-our-work/">stbarbara.com.au/our-company/recognition-of-our-work/</a>	
102-13	●	Membership of associations	The Group maintains membership involvement in relevant business associations, resource sector specific associations, commodity specific associations, at local and national levels, including: Chamber of Minerals and Energy of Western Australia (CME WA) Minerals Council of Australia (MCA) Gold Industry Group (GIG) PNG Chamber of Mines and Petroleum The Mining Association of Nova Scotia (MANS) Minerals Association Canada (MAC)	
<b>2. Strategy</b>				
102-14	●	Statement from senior decision maker	Sustainability Story, Letter from MD & CEO	
102-15	●	Key impacts, risks, and opportunities	The Group's activities have various impacts upon the environment, neighbours, and local communities. See Sustainability Report, Material issues and boundaries, (p67), and <a href="http://stbarbara.com.au/our-commitments/">stbarbara.com.au/our-commitments/</a>  Risks: Annual Report, Material business risks (p12)  Opportunities: Annual Report, Business strategy and future prospects (p11)	8, 9

1. GRI disclosure standard, [www.globalreporting.org](http://www.globalreporting.org)

2. Disclosure required to comply with GRI Standards core reporting option, [www.globalreporting.org](http://www.globalreporting.org)

3. UN Global Compact Principle

GRI Ref <sup>1</sup>	GRI Core <sup>2</sup>	Item	Disclosure	UNGC <sup>3</sup>
<b>3. Ethics and integrity</b>				
102-16	●	Values, principles, standards, and norms of behaviour	Corporate Governance Statement, Principle 3: Instil a culture of acting lawfully, ethically, and responsibly Code of Conduct, <a href="http://stbarbara.com.au/about-us/governance">stbarbara.com.au/about us/governance</a>	
102-17		Mechanisms for advice and concerns about ethics	Board Charter, 6. Independent Advice, <a href="http://stbarbara.com.au/about-us/governance">stbarbara.com.au/about us/governance</a> Whistleblower Policy, <a href="http://stbarbara.com.au/about-us/governance">stbarbara.com.au/about us/governance</a>	10
<b>4. Governance</b>				
102-18	●	Governance structure	Corporate Governance Statement, <a href="https://stbarbara.com.au/our-company/governance/">https://stbarbara.com.au/our-company/governance/</a>	10
102-19		Delegating authority	High-level delegation set out in Board Charter. Sustainability Report (p18)	
102-20		Executive level responsibility for economic, environmental, and social topics	Board and Committee Charters <a href="http://stbarbara.com.au/our-company/governance/">stbarbara.com.au/our-company/governance/</a> .	
102-21		Consulting stakeholders on economic, environmental, and social topics	Sustainability Report, Material issues and boundaries (p67) and general discussion. Relationships and topics in general covered by licences and regulation. Participation with industry and peak bodies on a variety of topics including economic, environmental, and social issues is also discussed through the Sustainability Report.	
102-22		Composition of the highest governance body and its committees	Corporate Governance Statement, Principle 2: Structure the Board to be effective and add value	
102-23		Chair of the highest governance body	Annual Report, Directors' Report (p15)	
102-24		Nominating and selecting the highest governance body	Constitution, <a href="https://stbarbara.com.au/our-company/governance/">https://stbarbara.com.au/our-company/governance/</a>	
102-25		Conflicts of interest	Conflict of Interest and Related Parties Policy, <a href="http://stbarbara.com.au/our-company/governance/">stbarbara.com.au/our-company/governance/</a>	
102-26		Role of highest governance body in setting purpose, values, and strategy	Board charter <a href="https://stbarbara.com.au/our-company/governance/">https://stbarbara.com.au/our-company/governance/</a>	
102-27		Collective knowledge of highest governance body	Annual Report, Directors' Report (p15-18) Corporate Governance Statement, Principle 2: Structure the Board to be effective and add value	
102-28		Evaluating the highest governance body's performance	Board performance review, reported in Corporate Governance Statement, Principle 2: Structure the Board to be effective and add value	
102-29		Identifying and managing economic, environmental, and social impacts	Board and Committee Charters, Board Policies inc. Code of Conduct, Community Relations Policy, Diversity Policy, Environmental Policy, Health and Safety Policy, Risk Management Policy, all available at <a href="http://stbarbara.com.au/our-company/governance/">stbarbara.com.au/our-company/governance/</a>	
102-30		Effectiveness of risk management processes	Corporate Governance Statement, Principle 7: Recognise and manage risk	
102-31		Review of economic, environmental, and social topics	Economic topics are reviewed annually as part of the strategic planning process. Environmental and Social topics are reviewed regularly in the Health, Safety, Environment and Community Committee (HSEC) with broader reviews annually at Board level as part of strategic planning	
102-32		Highest governance body's role in sustainability reporting	As per 102-31 above	
102-33		Communicating critical concerns	The Group has clear hierarchy, and role responsibility for communicating critical concerns and escalating process where needed	
102-34		Nature and total number of critical concerns	None in this or former reporting periods	
102-35		Remuneration policies	Annual Report, Remuneration report (p21)	



GRI Ref	GRI Core <sup>2</sup>	Item	Disclosure	UNGC <sup>3</sup>
102-36		Process for determining remuneration	Annual Report, Remuneration report (p21)	
102-37		Stakeholders' involvement in remuneration	Annual Report, Remuneration report (p21)	
102-38		Annual total compensation ratio	Disclosure not required for GRI Core option	
102-39		Percentage increase in annual total compensation ratio	Disclosure not required for GRI Core option	

### 5. Stakeholder engagement

102-40	●	List of stakeholder groups	See page 67 of this report	
102-41	●	Collective bargaining agreements	The Group respects employee rights to freedom of association and collective bargaining. The majority of Group employees are not covered by collective bargaining agreements  There have been no examples of significant industrial action in the reporting period	3
102-42	●	Identifying and selecting stakeholders	The Group utilises in-house qualified and experienced (and where needed external) advisors and managers to manage government and community relations. The relevant departments have agreed mechanisms with executive management and the Board for managing and reporting on stakeholder engagement	
102-43	●	Approach to stakeholder engagement	As per 102-42 above	
102-44	●	Key topics and concerns raised	No general or significant concerns were noted in the reporting period	

### 6. Reporting practice

102-45	●	Entities included in the consolidated financial statements	Annual Report, Note 17 Controlled Entities (p73)	
102-46	●	Defining report content and topic Boundaries	See Sustainability Report, Material issues and boundaries, (p67), and <a href="https://stbarbara.com.au/our-commitments/">stbarbara.com.au/our-commitments/</a> . In general, matters relating to Health and Safety, Environment and Community discussed through the lens of our five Commitments.	
102-47	●	List of material topics	Sustainability Report, Material issues and boundaries, (p67)	
102-48	●	Restatements of information	2020 GHG emissions at Leonora have been re-stated. At Leonora measurement process for GHG emissions each year concludes in October, so an estimate is used in the Sustainability report. Other minor corrections as noted in the report	
102-49	●	Changes in reporting	A number of changes have been made, in general increasing disclosure. Sustainability Report (p15)	
102-50	●	Reporting period	1 July 2020 to 30 June 2021	
102-51	●	Date of most recent report	17 September 2021	
102-52	●	Reporting cycle	Annual, released in conjunction with Annual Report	
102-53	●	Contact point for questions regarding the report	Head of Investor Relations, <a href="mailto:info@stbarbara.com.au">info@stbarbara.com.au</a> <a href="https://stbarbara.com.au/contact/">https://stbarbara.com.au/contact/</a>	
102-54	●	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option. Sustainability Report (p15)	
102-55	●	GRI content index	Sustainability Report (p69), GRI content index	
102-56	●	External assurance	This report has been reviewed by the Board  This report has been prepared in accordance with ASX Corporate Governance Council 'Corporate Governance Principle 5' to be 'factual, complete, balanced (disclosing both positive and negative information) and expressed in a clear and objective manner'  The Remuneration Report and Financial Report in the Annual Report is subject to independent external audit, the report on which appears in the Annual Report as the 'independent auditor's report' (p81-85)  Certain other information is assured by external providers, as noted in this report	

**GRI materiality commentary**

The Group has reported to its identified material issues (topics) as detailed on page 67.

Coverage of reported topics in the Sustainability Report is generally prioritised according to materiality of those topics (per GRI Standards). Those GRI standards, areas and topics not considered material may have been excluded from this report. Other topics may have been included where relevant to additional GRI indicators as set out below. Our report disclosures may also align with other external reporting frameworks, such as the Global Compact, TCFD, SASB Standards, or ESG ratings/indices.

GRI Ref <sup>1</sup>	GRI Core met <sup>2</sup>	Item	Discussion	UNGC <sup>3</sup>
201	Yes	Economic Performance	<p>The Group discloses the following material issues:</p> <ol style="list-style-type: none"> <li>1. Direct Economic value generated</li> <li>2. Financial implications and other risks and opportunities due to climate change</li> </ol> <p>The following issues are not considered material to the Group and are not disclosed:</p> <ol style="list-style-type: none"> <li>3. The Group does not have exposure to defined benefit plans</li> <li>4. The Group does not receive any financial assistance from government, including COVID-19 related measures such as the Australian 'jobkeeper' (other than generally available tax deductions)</li> </ol>	10 7, 8, 9  10
		Mining and Metals Supplement area G4EC1	<ul style="list-style-type: none"> <li>• Report countries of operation that are either candidate to or compliant with the Extractive Industries Transparency Initiative (EITI) – disclosed</li> <li>• Payments to local communities as part of land use agreements, not including land purchases. – disclosed, royalties, spending with local community companies</li> </ul>	10 10
202	No	Market Presence, Mining and Metals Supplement area G4EC6	In significant locations of operation, report proportion of the facility's total workforce from the local community – disclosed. This is a key requirement of PNG Government reporting so is considered material	1, 6
205	No	Anti-corruption	The Group became a financial supporter of the International EITI and has provided information for the PNG EITI since the acquisition of the PNG operations in 2012. The Group has invested in anti-corruption efforts at all sites, including training, policies, and procedures as well as related areas such as insider trading and conflict of interest. The Group has a whistleblower service and investigation system. Detail regarding this is disclosed. This system has been evaluated via external audit but not within the reporting (3 year) period	10
302	Yes	Energy	<ol style="list-style-type: none"> <li>1. Energy Consumption within the organisation – disclosed</li> <li>2. Energy consumption outside the organisation – not disclosed</li> <li>3. Energy Intensity – disclosed</li> <li>4. Reduction of Energy Consumption – disclosed</li> <li>5. Energy requirements of products and services – not disclosed</li> </ol> <p>Energy consumption outside the organisation (2) and Reductions in energy requirements of products and services (5) have not been reported on as they are inappropriate for a gold mining company</p>	7, 8, 9
303	Yes	Water	All topics are disclosed to the extent of topic relevance	7, 8, 9
305	Yes	Emissions	All topics 1-7 except 6 'Ozone depleting substances' are disclosed	7, 8, 9
		Mining and Metals Supplement area G4DMA	<p><i>Dust, Noise, Seismic</i> – dust and noise are covered at Leonora by the Regulatory 'Annual Environment Report' which is disclosed here: <a href="https://stbarbara.com.au/our-commitments/our-environment/">https://stbarbara.com.au/our-commitments/our-environment/</a></p> <p>Neither Leonora Western Australia, Simberi PNG, or Touquoy, Canada have had stakeholder complaints on these issues in the period. For this and other reasons the area is considered of low materiality</p>	
	Yes	G4EN21	<p>NOx, SOx, Ambient air quality</p> <p>Broadly, the Group considers this related to health and safety. Neither Leonora nor Simberi have had a stakeholder complaint on these issues in the period</p>	

1. GRI disclosure standard, [www.globalreporting.org](http://www.globalreporting.org)

2. Disclosure required to comply with GRI Standards core reporting option, [www.globalreporting.org](http://www.globalreporting.org)

3. UN Global Compact Ten Principles, <https://www.unglobalcompact.org/what-is-gc/mission/principles>

GRI Ref <sup>1</sup>	GRI Core met <sup>2</sup>	Item	Discussion	UNGC <sup>3</sup>
306	Yes	Effluents and Waste	<p>1. Water discharge – disclosed</p> <p>2. Waste by type and disposal method – waste oil and various others – disclosed qualitatively in this report, page 51. Leonora Western Australia – several types of waste are covered in the Annual Environment Reports here: <a href="https://stbarbara.com.au/our-commitments/our-environment/">https://stbarbara.com.au/our-commitments/our-environment/</a></p> <p>3. Significant spills – disclosed</p> <p>4. Transport of Hazardous waste – not disclosed as this is not considered material due to the lack of significant transported hazardous waste</p> <p>5. Water bodies affected – disclosed</p>	7, 8, 9
		Mining and Metals Supplement area G4DMA, MM3	<i>Waste rock and mine tailings</i> – these topics are material and are disclosed	
		G4EN23	Waste oil and various others – disclosed qualitatively in this report, page 51. See also for Leonora, Western Australia as per above separately in The Annual Environment Report here: <a href="https://stbarbara.com.au/our-commitments/our-environment/">https://stbarbara.com.au/our-commitments/our-environment/</a>	
307	Yes	Environmental Compliance	Disclosed	7, 8, 9
401	No	Employment	<p>Disclosed:</p> <p>1. Turnover is provided</p> <p>Not disclosed:</p> <p>2 &amp; 3. Benefit Full time vs Part time/ temporary employees is not considered material. Parental leave is disclosed</p> <p><i>Application of policies to contractors</i></p> <p>Group OH&amp;S policies apply equally to contractors</p> <p>Group HR policies do not apply to contractors, however, the 'Code of Conduct' and all related policies (including Workplace Discrimination and Harassment Guideline) apply to contractors</p>	6
		Mining and Metals Supplement area G4DMA		
403	Yes	Occupational Health and Safety (OH&S)	<p>Disclosed:</p> <p>2. Data concerning injuries</p> <p>3. High risk of occupational disease</p> <p>Not disclosed:</p> <p>1. Worker representation in formal HS committees</p> <p>4. HS topics in formal agreements with trade unions</p> <p>Health and Safety in Canada, Australia and PNG is the subject of detailed government regulation put in place by democratic representative governments</p>	1, 2
404	Yes	Training and Education	Average hours per year, and percentage of employees getting a performance and development review are disclosed	1, 2
405	Yes	Diversity and Equal Opportunity	All topics are disclosed. The focus in Australia and Canada is Gender and Indigenous diversity. In PNG the focus is on minimisation of expat labour, which is disclosed as a component of 413 and the Mining and Metals Supplement G4DMA and MM5	6
413	No	Local Communities, Mining and Metals supplement – G4DMA	<i>'Impact on local communities'</i> in the Mining and Metals supplement G4DMA is excluded as a heading, but is disclosed under 'waste'. Benefits to the community in terms of initiatives is disclosed	7, 8, 9
		MM6, MM7	MM6 'Disputes' and MM7 'Grievance Mechanisms' are disclosed	1, 2
		G4DMA	Emergency preparedness: community aspects are disclosed in the 'Waste' section	1, 2
		Mining and Metals supplement – MM10	Number of sites with Closure plans. This is disclosed. 100% of Group sites have fully funded closure plans	7
414	Yes	Supplier social assessment	Various percentages, due diligence methodology all described	3, 4, 5, 6, 10
415	Yes	Public Policy	Political contributions are disclosed (none)	10

1. GRI disclosure standard, [www.globalreporting.org](http://www.globalreporting.org)

2. Disclosure required to comply with GRI Standards core reporting option, [www.globalreporting.org](http://www.globalreporting.org)

3. UN Global Compact Ten Principles, <https://www.unglobalcompact.org/what-is-gc/mission/principles>

**Commentary on selected standards, areas and topics considered not to be material and excluded from this report:**

202	–	Market Presence	The Group does not have a sufficient size and market power to have a material impact in this area	–
		Mining and Metals Supplement area G4EC6:	<i>Proportion of senior management hired from the local community at significant locations of operation</i> – the Group holds that this area is not a material impact for the Group	1, 6
203	–	Indirect Economic Impacts	The Group does not have a sufficient size and market power to have a material impact in this area	10
204	–	Procurement Practices	The Group performs due diligence related to the sustainability performance of suppliers. The Group has an appropriate policy and detailed training for procurement specialists. However, given the Group’s small size, with the large majority of its spend with large multinational conglomerates, this area is considered to be immaterial	10
206	–	Anti-competitive behaviour	The Group does not have a sufficient size and market power to have a material impact in this area. Gold mining globally is not vulnerable to this type of market manipulation	10
301	–	Materials	The Group’s material environment impacts are not related to recyclable impacts. The Group pays third parties to recycle some waste products, notably waste oil, tyres (except in PNG) and scrap metal	7
		Mining and Metals Supplement area G4EN2:	<i>Percentage of materials used that are recycled input materials</i> – not disclosed. Tailings are used as an ingredient for underground void-filling concrete at Leonora, but in general this area is not material	
304	–	Bio-diversity	The Group’s mining operations are located in areas of low biodiversity characterised by pervasive long-term human habitation	7
		Mining and Metals Supplement area G4DMA, G4EN12, MM1 & 2:	Disturbed land and other impacts – not disclosed as per above. Disturbed land area is tracked and reported to government in both Australia and PNG in regulatory annual environmental reports, see here: <a href="https://stbarbara.com.au/our-commitments/our-environment/">https://stbarbara.com.au/our-commitments/our-environment/</a>	
308	–	Supplier Environmental Assessment	The Group performs due diligence related to the sustainability performance of suppliers. The Group has an appropriate policy and detailed training for procurement specialists. However, given the Group’s small size, with the large majority of its spend with large multinational conglomerates, this area is considered to be immaterial	7
402	–	Labour management relations	Though important, the Group holds that this area is not a material impact for the Group. Employees at our Australian, Canadian and PNG mines have wages and conditions far exceeding the norm in those countries because of market factors (such as possession of in-demand skills and difficulties in attracting labour to remote locations)	3
		Mining and Metals supplement – MM4	<i>Number of strikes and lockouts exceeding one week’s duration</i> – though also important, the Group holds this area to be of low materiality. No strikes or lockouts of this duration have occurred at any location in the Group’s ownership in the period covered by this report	
406	–	Non-Discrimination	The Group has appropriate anti-discrimination policies, annual training for managers and staff, a whistleblower service, and in Australia, is a national award winner and recognised industry leader in gender diversity. Notwithstanding this, the Group holds that this area is not a material impact for the Group	1, 2
407	–	Freedom of association and collective bargaining	Though important, the Group holds that this area is not a material impact for the Group. Employees at both our Australian, Canadian and PNG mines have wages and conditions far exceeding the norm in those countries because of market factors (in-demand skills and difficulties in attracting labour to remote locations). In PNG, labour relations with local employees are also regulated via mining licence type regulation where certain levels of local employment are mandated	3
		Mining and Metals supplement	The <i>Freedom of Association</i> areas in the Mining and Metals supplement under ‘Human Rights’ are also excluded for the same reasons	

408	–	Child Labour	Children are forbidden from entering (as well as working in) the Group's operations. The Group holds that this area is immaterial because the assessed risk of incidence is low. See the Group's Modern Slavery Statement	5
409	–	Forced or Compulsory Labour	The Group holds that this area is immaterial, as the assessed risk of related issues is low. See the Group's Modern Slavery Statement	4
410	–	Security Practices	The Group holds that this area is immaterial, as the assessed risk of related issues is low	2
411	–	Rights of Indigenous Peoples	This area is considered immaterial. The Group has extensive procedures in place to ensure the rights of Indigenous peoples are not violated and has had no significant incidents during the reporting period. See page 42	2
		Mining and Metals supplement	MM5 <i>Operations adjacent to indigenous people's territories</i> . This area is considered immaterial for the same reasons as stated in 411 above In Canada and PNG, the Group has formal agreements with Indigenous groups	2
412	–	Human Rights Assessment	The long-term history of democratic liberal constitutional government in Australia, Papua New Guinea and Canada make these important issues of low materiality to the Group, in the sense that the assessed risk of related issues is low	1, 2
		Mining and Metals supplement	The <i>Human Rights</i> areas in the Mining and Metals supplement G4 DMA and MM5 are excluded also for the same reasons	1, 2
413	–	Local Communities	In Leonora, Western Australia (WA), the township is too small to meet the labour and supply demands of the operation. The labour needs of the operation are met via a 'fly-in, fly-out' workforce (common in WA) and suppliers based mostly in Western Australia. In Papua New Guinea mining regulation mandates a high level of involvement. As a result, 1-2% of total costs of the Simberi mine are related to Community support functions, ~45% of the workforce lives locally, and 6% of total costs are spent with local suppliers and contractors. The Group reports on its employment of local community members, its contracting with local community companies and its grievance/complaint function in this report. In Touquoy, Canada, nearly all employees live locally. As a newly acquired operation the Company is reviewing all procurement arrangements with engagement of local businesses an important consideration	1, 2, 3, 6
		Mining and Metals supplement – G4DMA	' <i>Impact on local communities</i> ' in the Mining and Metals supplement G4DMA is excluded as a heading, but is disclosed under 'Waste'. Benefits to the community in terms of initiatives is disclosed	7, 8, 9
		Mining and Metals supplement – MM8	<i>Artisanal and Small-scale Mining</i> : the Group has no mine sites that feature artisanal mining. The Leonora Western Australia mine is underground. The gold in Simberi ore can typically only be liberated by modern processing methods	1, 2
		Mining and Metals supplement – MM9	<i>Resettlements</i> – the Group has no mine sites with significant resettlements	1, 2
416	–	Customer Health and Safety	This area is considered to be immaterial	1, 2
417	–	Marketing and Labelling	This area is considered to be immaterial	1, 2
418	–	Customer Privacy	This area is considered to be immaterial	1, 2
419	–	Socio-economic Compliance	All environmental and safety related penalties are disclosed (inclusive of G4 SO8 in the Mining and Metals supplement)	1, 2, 7

**UN Sustainable Development Goals alignment**

As part of its membership of the UN Global Compact, St Barbara supports the United Nations Sustainable Development Goals<sup>1</sup> (UNSDGs, 'the Goals'). The Group provides the following guidance on our impacts mapped against the most relevant Goals:

**United Nations Sustainable Development Goals alignment**

UNSDG (only most relevant goals)	Contribution	Self-assessment of impact
	<p>We contribute through the employment of people at high relative wages in:</p> <ul style="list-style-type: none"> <li>• a developing country, PNG</li> <li>• a rural location in Nova Scotia, Canada, with relatively low employment rates, wages, and opportunities.</li> </ul> <p>We pay our taxes, contribute to charities and, in PNG and Canada, engage local businesses.</p>	High
	<p>We provide financial and administrative support for the establishment of local enterprises, including for farmers near Simberi Operations, who sell food, other goods, and services to our mines and into the local economy. These revenues for local suppliers, as well as the wages earned by local employees, contribute to income streams that help combat food insecurity. We have also supported food banks in Nova Scotia and Western Australia.</p>	High
	<p>We aim for zero harm to our employees and strive for improvement in our safety metrics year on year. We fund and run programs that support good health and wellbeing among employees and the community at our operations. In PNG, we provide free vaccinations to the community at our clinic, and where necessary roll out emergency vaccination programs. We also fund anti-malaria non-governmental organisations (NGOs) in PNG.</p> <p>In Australia and Canada, we provide free flu vaccinations.</p> <p>In all three countries, we offer free mental health support to all employees, with special measures taken during the COVID-19 pandemic.</p>	Medium
	<p>In PNG, we support primary schools in the community and adult education for our employees and employees of contractors. This has included building houses for teachers, and donations of stationery, books and desks.</p> <p>In Western Australia, we provide multi-year support to development and sports foundations that help Indigenous children in remote locations to attend school and achieve their goals.</p>	Medium
	<p>We are a global mining industry leader for gender equality, winning numerous awards for promoting and achieving high levels of women's employment, gender safety at work, domestic violence prevention and strong post parental leave return-to-work initiatives.</p>	High
	<p>None of our mines is in competition with domestic and agriculture water users.</p> <p>All three mines utilise recycling to minimise water use and costs.</p> <p>Our Gwalia mine in Western Australia has received government 'Waterwise' awards for reductions in water use in 2012, 2013 and 2020.</p>	Medium
	<p>We strive to employ locally at our sites. At Simberi and Atlantic operations, large proportions of our employees are from the immediate local area, or the region. We also contribute to economic growth by aiming to use and support local and regional businesses and suppliers (in PNG we frequently purchase from local landowner-owned businesses).</p> <p>We have kept our mines fully operational and workforce employed during the COVID-19 pandemic, and have growth projects at all three mines in the construction, planning or permitting stages. All employees and contractors are treated with respect and protected by a range of workplace policies. Our Papua New Guinea and Canada mines provide jobs at above average wages in those regions.</p>	High
	<p>At Leonora Operations in Western Australia, we have pioneered new developments in underground mining.</p> <p>At Simberi in PNG, we build and maintain roads, water, education, and health infrastructure for our local communities.</p> <p>At Atlantic Operations, Canada, we are trialling scalable salt-water batteries that will be the basis of our drive for carbon neutrality.</p>	Medium

1. [www.un.org/sustainabledevelopment/](http://www.un.org/sustainabledevelopment/)

UNSDG (only most relevant goals)	Contribution	Self-assessment of impact
	We have a history of striving for relatively high GHG efficiency per ounce of gold produced. Last year we announced long-term targets to 2030 and 2050 to improve this efficiency further in line with Paris 2015 goals to achieve carbon neutrality by 2050.	Medium
	We undertake rehabilitation of disturbed land and management of waste and effluent according to regulatory requirements as well as provide offsets for unavoidable land and water harm to a higher standard of biodiversity.  We prepare for closure in accordance with strict government requirements for forward financial provisioning.	Low
	We have been a financial supporter of the EITI for five years and publish government taxation related information in our Sustainability Report.  All political donations are prohibited under our governance policies.  We published our first Modern Slavery Policy and statement in alignment to our human rights commitments (within our 'Community Relations' policy) this year, and have a comprehensive supply chain code of conduct and updated procedures.	Medium

### Alignment to Sustainability Accounting Standards Board (SASB) – Metals and Mining Standard (2018-10)

Topic	Accounting metric	Sbm alignment reference
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	143 t CO <sub>2</sub> -e, 65% (Australian plus Canadian operations, data table page 64)
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Climate Change section, pages 52-56
Air quality	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N <sub>2</sub> O), (3) SOx, (4) particulate matter (PM <sub>10</sub> ), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	Data table page 68, commentary page 56
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	(1) Data table page 67, (2) 21% total CO <sub>2</sub> -e, (3) 0.5%
Water management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	(1) 674 ML, (2) 674 ML, 7% (Leonora WA) page 64
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations Quantitative Number EM-MM-140a.2	2 page 45
Waste and Hazardous Materials Management	Total weight of tailings waste, percentage recycled	6,425 kt, 5%
	Total weight of mineral processing waste, percentage recycled	Waste rock: 11.4Mt, 1%
	Number of tailings impoundments, broken down by MSHA hazard potential	3, all 'high'
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Page 52
	Percentage of mine sites where acid rock drainage is:	1. 2
	(1) predicted to occur, (2) actively mitigated, and	2. 1
	(3) under treatment or remediation	3. 0
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	1. 0% 2. 0%

## Appendices continued

Topic	Accounting metric	Sbm alignment reference
Security, Human Rights and Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	1. 0% 2. 0%
	Percentage of (1) proved and (2) probable reserves in or near indigenous land	1. 100% – as per SASB definitions 2. 100% – as per SASB definitions
	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Page 43
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	Various in community section, starting page 33
	Number and duration of non-technical delays	None. Pages 33-42
Labour Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	<1%. In Australia, approximately 1%, Papua New Guinea 0%, Canada 0%.
	Number and duration of strikes and lockouts	None
Workforce Health and Safety	(1) MSHA all-incidence 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	All incidence rate = 20 x200,000/ hours worked (5 million) = 0.78 Fatality rate = 1 x200,000/ hours worked (5 million) = 0.04 NMFR – not recorded Average hours of emergency training – not calculated
Business Ethics and Transparency	Description of the management system for prevention of corruption and bribery throughout the value chain	Company page 57. Supply chain – page 58. <a href="http://www.stbarbara.com.au">www.stbarbara.com.au</a> – Governance section.
	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	23%
<b>Activity metric</b>		
Production of (1) metal ores and (2) finished metal products		(1) 6,425 kt of ore (2) 327,662 oz of gold
Total number of employees, percentage contractors		2,259, 41% contractors



## UN Global Compact – Communication on progress<sup>1</sup>

In this section, we describe our integration of Global Compact principles into our business strategy, culture, and daily operations.

Issue Area	Ten Global Compact Principle	Implementation and measurement
<b>Human Rights</b>	<p><b>Principle 1 –</b> Businesses should support and respect the protection of internationally proclaimed human rights</p> <p><b>Principle 2 –</b> Businesses should make sure that they are not complicit in human rights abuses</p>	<p>Company policies and charters, especially:</p> <ul style="list-style-type: none"> <li>• Code of Conduct</li> <li>• Community Relations Policy</li> <li>• Health and Safety Policy</li> <li>• Modern Slavery Policy</li> <li>• Modern Slavery Statement 2020</li> </ul> <p>2021 Sustainability Report (this document), 'Safety Always', 'Stronger Communities' sections and related data table components.</p>
<b>Labour</b>	<p><b>Principle 3 –</b> Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining</p> <p><b>Principle 4 –</b> Businesses should uphold the elimination of all forms of forced and compulsory labour</p> <p><b>Principle 5 –</b> Businesses should uphold the effective abolition of child labour</p> <p><b>Principle 6 –</b> Businesses should uphold the elimination of discrimination in respect of employment and occupation</p>	<p>Company policies and charters, especially:</p> <ul style="list-style-type: none"> <li>• Code of Conduct</li> <li>• Diversity and Inclusion Policy</li> <li>• Equal Opportunity Policy</li> <li>• Health and Safety Policy</li> <li>• Modern Slavery Policy</li> <li>• Modern Slavery Statement 2020</li> <li>• Workplace Behaviour Policy</li> <li>• Supply chain code of conduct</li> </ul> <p>2021 Sustainability Report (this document), 'Empowered People, Diverse Teams' and related data table components.</p>
<b>Environmental</b>	<p><b>Principle 7 –</b> Businesses should support a precautionary approach to environmental challenges</p> <p><b>Principle 8 –</b> Businesses should undertake initiatives to promote greater environmental responsibility</p> <p><b>Principle 9 –</b> Businesses should encourage the development and diffusion of environmentally friendly technologies</p>	<p>Company policies and charters, especially:</p> <ul style="list-style-type: none"> <li>• Environment Policy</li> </ul> <p>2021 Sustainability Report (this document), 'Respecting the Environment' section (sub-sections, 'Waste', 'Climate Change' and 'Water').</p>
<b>Anti-Corruption</b>	<p><b>Principle 10</b> Businesses should work against corruption in all its forms, including extortion and bribery</p>	<p>Company policies and charters, especially:</p> <ul style="list-style-type: none"> <li>• Anti-Bribery and Corruption Policy</li> <li>• Audit and Risk committee charter</li> <li>• Code of Conduct</li> <li>• Conflict of Interest and Related Parties Policy</li> <li>• Donations, Sponsorships, Community Programs Policy</li> <li>• Modern Slavery Policy</li> <li>• Whistleblower Policy</li> <li>• Supply chain code of conduct</li> </ul> <p>2021 Sustainability Report (this document) in the 'Our approach to sustainability' section and related 'Performance data table.</p>

1. [www.unglobalcompact.org/](http://www.unglobalcompact.org/)

# Glossary

## Annual Report/AR

St Barbara Limited Annual Report 2021

## CDP

Carbon Disclosure Project, [www.cdp.net/en](http://www.cdp.net/en)

## Climate Change<sup>1</sup>

'A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods'

## CGS/Corporate Governance Statement

St Barbara Limited ASX Appendix 4G and Corporate Governance Statement 2021

## EITI

Extractive Industries Transparency Initiative, <https://eiti.org/>

## ESG

Environmental, social, governance

## GHG

Green-house gas

## GRI

Global Reporting Initiative, [www.globalreporting.org](http://www.globalreporting.org)

## HSEC

Health, Safety, Environment and Community

## LTIFR

Lost Time Injury Frequency Rate (number of lost-time injuries per million hours worked on a rolling 12-month basis)

## Material topic<sup>2</sup>

'Topic that reflects a reporting organisation's significant economic, environmental and social impacts; or that substantively influences the assessments and decisions of stakeholders'

## MCA

Minerals Council of Australia, [www.minerals.org.au/](http://www.minerals.org.au/)

## NGO

Non-governmental organisation

## PPE

Personal protective equipment

## RCP

Representative Concentration Pathways, UN climate scenarios, the basis for companies to model the effects of climate change, <https://www.climatechangeinaustralia.gov.au/en/changing-climate/future-climate-scenarios/greenhouse-gas-scenarios/>

## Stakeholder<sup>2</sup>

'Entity or individual that can reasonably be expected to be significantly affected by the reporting organisation's activities, products and services, or whose actions can reasonably be expected to affect the ability of the organisation to successfully implement its strategies and achieve its objectives'

Note 1: Stakeholders include entities or individuals whose rights under law or international conventions provide them with legitimate claims vis-à-vis the organisation.

Note 2: Stakeholders can include those who are invested in the organisation (such as employees and shareholders), as well as those who have other relationships to the organisation (such as other workers who are not employees, suppliers, vulnerable groups, local communities, and NGOs or other civil society organisations, among others).

## SASB

Sustainability Accounting Standards Board

## Sustainability/sustainable development<sup>2</sup>

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs'

Note 1: Sustainable development encompasses three dimensions: economic, environmental, and social.

Note 2: Sustainable development refers to broader environmental and societal interests, rather than to the interests of specific organisations.

Note 3: In the GRI Standards, the terms 'sustainability' and 'sustainable development' are used interchangeably.

## TCFD

Task Force on Climate-related Financial Disclosures, <https://www.fsb-tcfd.org/>

## TRIFR

Total Recordable Injury Frequency Rate (number of injuries per million hours worked on a rolling 12-month basis)

## UNGC

United Nations Global Compact, [www.unglobalcompact.org/](http://www.unglobalcompact.org/)

## Acknowledging the contributors

St Barbara's report preparation involves a large team of people whose contributions and brilliant efforts are acknowledged and appreciated.

1. United Nations Framework Convention on Climate Change, 1992  
[https://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/conveng.pdf](https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf)  
2. Definitions from GRI Standards Glossary 2016, [www.globalreporting.org](http://www.globalreporting.org)

# Corporate Directory

## Board of directors

T C Netscher	Non-Executive Chairman
C A Jetson	Managing Director and CEO
S G Dean	Non-Executive Director
K J Gleeson	Non-Executive Director
S E Loader	Non-Executive Director
D E J Moroney	Non-Executive Director

## Company secretary

S Standish

## Registered office

Level 10, 432 St Kilda Road  
Melbourne Victoria 3004 Australia

Telephone: +61 3 8660 1900

Facsimile: +61 3 8660 1999

Email: [melbourne@stbarbara.com.au](mailto:melbourne@stbarbara.com.au)

Website: [www.stbarbara.com.au](http://www.stbarbara.com.au)

## Stock exchange listing

Shares in St Barbara Limited are quoted on the  
Australian Securities Exchange Ticker Symbol: SBM

## Share registry

Computershare Investment Services Pty Ltd  
GPO Box 2975

Melbourne Victoria 3001 Australia

Telephone (within Australia): 1300 653 935

Telephone (international): +61 3 9415 4356

Facsimile: +61 3 9473 2500

## Auditor

PricewaterhouseCoopers

2 Riverside Quay

South Melbourne, Victoria 3000 Australia

## American depository receipts (ADR)

American Depository Receipts (ADR OTC code 'STBMY') through BNY Mellon,  
[www.adrbnymellon.com/dr\\_profile.jsp?cusip=852278100](http://www.adrbnymellon.com/dr_profile.jsp?cusip=852278100)

