Our approach to sustainability

Responsibly sourcing the commodities that advance everyday life
Responsibility is one of our core values. Our commitment to responsibility drives our approach to sustainability. We put it into practice through prioritising safety, managing and mitigating our environmental footprint and positively contributing to local economies.

Our sustainability communications
Our Approach to Sustainability details how we integrate sustainability throughout our business and our approach and commitment to key sustainability-related topics. It forms part of Glencore’s corporate reporting suite.

In addition to this document, we also publish annually a sustainability report, environment, social and governance (ESG) data book, payments to governments report, standalone human rights and water reports and modern slavery statement, as well as making regular updates on our activities via our website and social media platforms.

Find us on:

Our sustainability framework
Who we are 3
Applying our sustainability framework 4
Risk management 7
Sustainability assurance 8
Catastrophic hazards 9
Emergency response preparedness 10
Raising concerns 10
Stakeholder engagement 11
Material topics
Safety 14
Our approach 15
Promoting a risk-based safety culture 15
Driving continuous improvement 16
Contractor management 16
Health 17
Our approach 18
Environment 19
Our approach 20
Environmental incidents 20
Climate change and energy 21
Water management 24
Land management 26
Waste management 28
Air emissions 29
Community 30
Our approach 31
Understanding communities 31
Community development 33
Human rights 34
Our approach 35
Responsible sourcing and supply 39
Our approach 40
Our people 44
Our approach 45
Additional information
Glossary 49
Important notice 52
Contacts 53
Who we are

We take our responsibilities to our people, to society and to the environment seriously, and align all our activities with the relevant international standards.

Glencore plc is one of the world’s largest diversified natural resource companies.

We are active at multiple stages of the commodity supply chain, with assets and offices located in over 35 countries. Our diversity by geography, product and activity, maximises the value we create for our business and its diverse stakeholders.

We divide the assets and activities of our business into two categories: industrial, which involves commodity production and processing; and marketing, which covers purchasing and sales activities, as well as the logistics that involve the infrastructure and resources used to deliver the commodities to customers.

We market and distribute physical commodities sourced from third-party producers as well as our own production. We also provide financing, processing, storage, logistics and other services to both producers and consumers of commodities.

The products we produce and market play an essential role in modern life. From the copper, cobalt and nickel powering the electric vehicle revolution, and the energy products helping keep the lights on, what we do touches every part of life as we know it.
Applying our sustainability framework

Our approach to sustainability reflects our ambition to integrate it throughout our business.

We recognise our ongoing responsibility to not only deliver financial performance but also make a positive contribution to society and create lasting benefits for stakeholders in a manner that is responsible, transparent and respects the rights of all.

We establish and progress good and consistent business practices and standards through our sustainability strategy, policies and procedures. We strive to become a better operator with a reputation for doing things the right way.

Our Values reflect our purpose, our priorities and the principles by which we conduct our business activities and ourselves. They define what it means to work at Glencore, regardless of location or role. They form the fundamental basis of our sustainability framework along with our Code of Conduct and Group policies.

We expect each commodity department to adhere to our Group policies. Our Values and Code of Conduct, which detail the behaviour and performance expectations for all assets and offices where we have operational control, underpin our policies. Assets operationalise Group policies to ensure local cultures, challenges and opportunities are reflected while meeting the expectations captured in the policies. All our employees have a role to play in respecting human rights, as outlined in our Code of Conduct.

Our sustainability framework is the primary vehicle for the collection and reporting of sustainability risks, opportunities and performance to inform our business strategy. Our approach to integrating sustainability throughout our business has clearly defined imperatives, objectives, priority areas and targets. It supports meeting legislative requirements, managing the catastrophic hazards associated with our business, and maintaining our societal licence to operate.

We focus our approach through four pillars: health, safety, environment, and community and human rights.

Sustainability framework

Integration of sustainability throughout our business

Corporate strategy

- Maintain a robust and flexible balance sheet
- Focus on cost control and operational efficiencies

Values

- Integrity
- Responsibility
- Openness
- Simplicity
- Entrepreneurialism

Code of Conduct

Group sustainability strategy

- Health: Become a leader in protecting and improving the wellness of our people and communities
- Safety: Become a leader in safety and create a workplace free from fatalities and injuries
- Environment: Become a leader in environmental performance
- Community and human rights: Foster socio-economic resilient communities and respect human rights everywhere we operate

Material topics

- Internal and external materiality assessment process to identify material topics
- Material topics are the focus of our sustainability strategy review and reporting
- Operational activities focus on addressing and progressing the material topics

Group HSEC policies

Operational policies

Developed for the specific needs of individual assets

Management, data reporting, risk management and assurance to monitor compliance

Sustainability principles, guidance and policies

Board HSEC Committee (the Committee) has oversight and ultimate responsibility
The Committee receives regular updates and has oversight of how our business is performing across all our internally defined sustainability related material risk areas
Integrated throughout the business and give guidance on the standards we expect
Sustainability governance

We have a Board committee for health, safety, environment and community and human rights (HSEC) (HSEC Committee).

Peter Coates (a non-executive director) chairs the HSEC Committee; the other members are Ivan Glasenberg (our CEO), Tony Hayward (our non-executive Chairman of the Board of Directors) and Patrice Merrin (an independent non-executive director). The Board receives its meetings’ minutes and, at each scheduled Board meeting, Peter Coates leads a discussion on HSEC activities and performance since the previous Board meeting.

The main responsibilities of the HSEC Committee are:

• To set the strategic direction for our sustainability activities
• To ensure the development of an appropriate Group sustainability strategy and policies that align with our Values and Code of Conduct and support the identification and management of current and emerging HSEC risks
• To support the effective communication of these policies throughout Glencore and the development of appropriate operational processes for their implementation
• To evaluate and oversee the quality and integrity of any reporting to external stakeholders concerning HSEC matters and to report HSEC matters to the Board

The HSEC Committee’s members have the experience and sector-specific expertise to provide robust leadership, with access to the training and internal and external technical expertise needed to carry out their duties.

In the event of a fatality or a major or catastrophic incident, the HSEC Committee reviews the incident investigation, its findings and next steps, working with the management of the mine and Group senior management. The information they receive covers the nature of the incident, details of subsequent investigations and the actions taken.

Ultimate responsibility for our Group sustainability strategy and framework rests with our senior management team. This includes our CEO, Chief Financial Officer, and Head of our Industrial Assets, as well as the heads of our commodity departments. They take a hands-on approach to the management of sustainability activities across the Group.

Our sustainability teams

The Group sustainability team includes our sustainable development, HSEC and Human Rights accountability and HSEC audit functions. It develops and oversees implementation of our HSEC strategy, policies and improvement programmes, as well as delivering relevant assurance processes. It provides regular updates to the HSEC Committee on long-term strategic sustainability projects, trends and developments, both formally through the Committee’s scheduled meetings and on an ad hoc basis when required.

Our Group sustainability team and commodity department HSEC leads oversee catastrophic and fatal hazard management, mitigation of environmental impacts, identifying relevant trends, management of community relations and engagement with local stakeholders. They also take responsibility for product stewardship, and record and report progress against key performance indicators (KPIs).

The Group sustainability team is also responsible for engaging with external stakeholders, analysing their perceptions of Glencore, understanding their expectations and translating them into practice on the ground.

Our assets have their own HSEC teams who, along with the commodity department HSEC leads, are responsible for implementing Group HSEC policies and standards at an asset level and supporting the achievement of our sustainability goals. They manage the sustainability risks specific to their commodities and operating regions, and support the HSEC assurance process.

The Group sustainability team hosts a monthly cross-commodity department HSEC meeting and an annual meeting of senior HSEC practitioners to support our global performance. These regular meetings facilitate strategy reviews and adjustments, reporting on performance, discussion of trends, operational changes, regulatory compliance and sharing of best practice, as well as a periodic review of the overall HSEC strategy to check whether our performance and progress are on track or if they need revising.

Our Group sustainability database monitors, measures and tracks the sustainability performance of our assets. This information is a key input into corporate decision making on business strategy.
KPIs and executive remuneration

Our CEO and a number of our senior management, do not, as substantial shareholders in the business, receive a bonus or participate in long-term incentive arrangements. As such, sustainability-related KPIs for executive remuneration is absent for this senior management team. This approach aligns management interests with those of our shareholders.

In recent years, a number of our senior management team have left the business and their replacements have a different remuneration structure. We are currently reviewing how to apply sustainability-related KPIs to the remuneration arrangements for the in-coming senior management team members.

Currently, we apply sustainability-related KPIs for our asset-level management. We believe that our assets have the greatest opportunity within our business to introduce and drive meaningful improvements in sustainability performance.

Training on sustainability and good business practice

Our employees and contractors with regular access to a work computer complete an annual Code of Conduct e-Learning which includes guidelines on HSEC and raising concerns.

For the Anti-Corruption e-Learning we target employees and contractors whose function may require them to interact with third parties. For those employees and contractors who do not have regular access to a work computer, we provide training in other ways, including face to face induction sessions, pre-shift general training and topic specific toolbox talks.

External standards

As we rely on the application and assurance of our own HSEC management framework, we do not insist that our assets undergo third party ISO 14001 or OHSAS 18001 certification and we do not use external certification as an indicator of performance.

Some of our sites undertake third party ISO 14001 and/or OHSAS 18001 certification where there is an external requirement, or where it provides additional value to our business, customers or other stakeholders.

Sustainability at our independently operated joint ventures (JVs)

We have a non-controlling interest in four major mining assets, the Antamina copper-zinc mine in Peru (33.75% interest), the Cerrejón coal operation in Colombia (33% interest), the Collahuasi copper mine in Chile (44% interest) and the Hunter Valley coal operations in Australia (49% interest).

Independent management committees operate the non-controlled JVs. Along with our JV partners, we are active participants in these committees and we use our role to influence them to adopt appropriate operational and governance standards that reflect those of Glencore and the other JV partners.
A variety of risks and opportunities can affect our business and its prospects, future performance, financial position, liquidity, asset values, growth potential, sustainable development and reputation. Our principal risks and uncertainties are highly dynamic and our assessment and our responses to them are critical to our future business and prospects.

**Risk management**

**HSEC risk management**

Our HSEC risk management framework applies to all assets over which we have operational control. The framework provides a standardised approach to identifying, assessing and managing HSEC risks and opportunities.

We base our HSEC risk management on our group-wide approach to identifying, assessing and mitigating risks and maximising opportunities. We manage both risks and opportunities proactively to create and protect value, encourage continuous improvement and support business decision making.

We use the HSEC risk management framework to identify hazards, particularly those with potentially major or catastrophic consequences, and to develop management plans to address and eliminate, or mitigate, the related risks. Our HSEC risk management tools include mandatory protocols, training packages, software and reporting processes. We take a risk-based approach to prioritise the development of protocols for fatal or catastrophic hazards.

**Risk management responsibilities**

At every level of the Group, we manage risk as part of our day-to-day business activities. We fully integrate risk management into our business planning and decision-making processes. We require assets to provide resources and training on our risk management processes for both employees and contractors.

Our Group HSEC and human rights team provides detailed risk management guidance and our HSEC audit team audits catastrophic and fatal hazard management plans. They also sign off on the sustainability aspects of the Group risk management framework.

Each asset is responsible for implementing, monitoring and reviewing its own risk management processes, as well as maintaining local risk registers.
Our sustainability assurance processes support the management’s assessment of risk and provide assurance on the key mitigation controls. Our processes have three elements:

1. **General risk management**: throughout the Group, we use our risk management framework to identify hazards, particularly those with potentially major or catastrophic consequences, and to develop management plans for the related risks.

2. **Self-assessments**: our assets complete annual self-assessments against Group sustainability policies, standards and fatal hazard protocols. We use the results to drive performance and to identify gaps. As part of our annual sustainability data audit, our external auditor checks the work at a number of assets for data accuracy and policy compliance.

3. **HSEC auditing**: our HSEC Assurance Policy specifies HSEC auditing activities at both Group and departmental levels and focuses on catastrophic hazards.

## Group-level audit programme

Our audit programme primarily focuses on assessing our management of catastrophic hazards across our business. Our Group HSEC audit function is separate from our other business functions and delivers auditing of our catastrophic hazard management on an arms-length basis. It includes internal and independent subject matter experts that follow up and verify findings.

The audit team’s programme evaluates the effectiveness of our sustainability risk identification, assessment and management, as well as our dissemination of information on risks, controls and best practice across the Group. Every three years an independent third party reviews the programme.

We also undertake multi-disciplinary assessments. These allow us to audit complex issues from a range of viewpoints and support a more robust appraisal. These assessments are suitable for reviewing different operational conditions and activities with varying risk factors, such as underground operations (which may include strata control, fire and explosion, power), open pit mines and metal processing plants.

The Board HSEC committee reviews the results of all HSEC audits, together with key findings, observations and good practice. The Board receives a quarterly report that monitors the progress of closing out the corrective actions.

## Department-level audit programmes

Each department implements their own internal and external auditing, covering areas such as catastrophic hazards, fatal hazard protocols, HSEC policies, legal, compliance and HSEC data. Audit activities are planned, risk-based and developed specifically for the needs of each asset or project.
We define catastrophic events as those with a low probability but severe consequences that could cause widespread loss of life or significant environmental harm, or resulting in major reputational or financial damage. We are committed to eliminating catastrophic incidents at our assets.

We recognise the exceptional nature of such events and we have developed specific programmes to actively identify, monitor and mitigate catastrophic hazards within our business. Our Group Catastrophic Hazard and Fatal Hazard Management Policy specifies our approach to their management.

Our management policy and guidance reflects the on-the-ground reality for our assets as well as international leading practice and International Council on Mining & Metals (ICMM) guidance.

Catastrophic hazards

Catastrophic hazard management

Our approach supports a consistent application of standards across the business for the identification and management of catastrophic hazards. Our catastrophic hazard management process requires identification and implementation of critical controls for each identified catastrophic hazard. Rigorous monitoring and reporting supports the effectiveness of catastrophic hazard controls.

We take a portfolio approach to catastrophic hazard management to identify priority areas. We consider how each hazard affects different types of operational processes and assets, to improve our understanding of our full exposure to each hazard and to focus on priority assets or activities.

We have a suite of protocols that provide minimum requirements to manage catastrophic hazards and we require each of our assets to conduct self-assessments against the appropriate protocols for their sites.

Our HSEC audit programme focuses on catastrophic hazards and critical control management, using both internal and external expert assessor. It gives particular attention to identifying catastrophic hazards, their critical controls and management plans, as well as the effectiveness of verification and reporting processes.

The HSEC audit team monitors through to closure outstanding actions identified during site visits. The Board HSEC Committee reviews the status and results of the audit reports.
Emergency response preparedness

We require each asset to identify potential emergencies at or adjacent to their operations and to develop an appropriate Emergency Response Plan (ERP). Assets communicate their ERP to all employees, contractors and relevant external stakeholders.

Our assets regularly assess their need for emergency equipment, facilities and other resources against their HSEC risk register. We require emergency resources to include:

- The appointment, training and equipping of rescue teams
- Procedures for responding to specific emergency situations
- The provision of firefighting equipment as required by the risk assessment
- A first aid management plan supported by appropriate medical equipment and services
- The provision of appropriate equipment to assist in rapid containment and recovery of environmental spills
- A process for dealing with all hazardous substances and dangerous goods identified as being at risk of causing an emergency on site

Assets are expected to undertake an annual simulation emergency exercise to test their ERP. These include the involvement of external emergency services when appropriate.

Raising concerns

We are committed to creating a culture where everyone feels free to raise concerns regarding breaches of Glencore’s Code of Conduct and policies in a secure and confidential way. If one of our permanent or temporary employees, contractors, suppliers or other stakeholder encounters such a situation, we encourage them to promptly report it through local channels, such as a supervisor or manager, as applicable.

If the concern remains unresolved, or should an employee, contractor, supplier or other stakeholder, for whatever reason and at any time, feel uncomfortable utilising the local channels for resolution of their concerns, they can raise their concerns (whistleblowing) through our Raising Concerns mechanism: glencore.raisingconcerns.org

The website allows individuals to raise concerns on an anonymous basis. Alternatively, concerns can be raised by using the telephone numbers published on this website. Both options allow two-way communication without compromising anonymity.

The platform allows the raising of concerns in 21 languages. It encrypt and store messages in high security data centres. All concerns are taken seriously, handled promptly and managed confidentially.

We have a strict policy against retaliation against any employee, contractor or other stakeholder who reports a concern in good faith and, where required, provide appropriate support for those raising a concern.

We publicise the local mechanisms through dedicated training, both e-learning and in person, and visual material, such as posters, available widely throughout work sites.
Stakeholder engagement

Part of our commitment to operating responsibly is to develop, maintain and strengthen our relationships with our stakeholders. Constructive stakeholder relationships support the successful running of our business.

We engage in a transparent and open manner with a broad range of stakeholders throughout the lifecycle of our assets. We conduct ourselves in accordance with Glencore’s Code of Conduct.

We maintain an open-door policy, and our CEO and senior management team will meet anyone with genuine concerns about our practices. We welcome engagement with our stakeholders to build meaningful relationships and understand external expectations and aspirations.

We develop relationships on local, national, regional and international levels, as well as fostering public dialogue and contributing to legislation development in sectors that affect our business.

We require that our assets identify their stakeholders, taking particular care to determine vulnerable groups, such as women, children and Indigenous people.

We require our assets to complete stakeholder assessments that cover all stakeholder circumstances, needs and concerns, as well as potential impacts, risks and opportunities for that asset. Using this assessment, the asset designs an engagement strategy, which includes procedures for information sharing, consultation and collaboration.

These engagement strategies align with the asset’s business objectives and lifecycle, as well as local concerns and the broader socio-economic situation in the region.

We provide our stakeholders with information on a wide range of platforms, tailored to the local context. These include radio broadcasts, site publications, regular town hall meetings, and individual meetings with the community.

All our operations are required to have in place local complaints and grievance processes that are legitimate, accessible, predictable, equitable, transparent and rights-compatible and in line with the United Nations Guiding Principles’ effectiveness criteria. These processes encourage people to raise concerns with us without fear of recrimination. Our commitment is to investigate the concerns and take necessary actions to ensure rights are being respected.

The key stakeholders groups that we regularly engage with are:

**Workforce**

Through developing and building a cohesive workplace culture that encourages all of our people to focus on the same goals, we can deliver our strategic priorities.

Whenever there are significant organisational changes – closures, acquisitions, mergers or divestitures we consult, communicate and provide appropriate support to our people and local communities. Our workforce receives regular briefings on a wide range of sustainability matters.

**Communities**

Our asset-based community engagement teams build relationships within local communities and decision-making authorities. They meet and engage with the communities living around our operations to share information about our activities that may affect them, key risks and control measures. Through interacting with community members, we can improve our understanding of their views and address any concerns raised. We adapt our engagement approach to reflect the operational and cultural environment and it can include open-house sessions, formal engagements, face-to-face discussions and local grievance mechanisms.

**NGOs and civil society**

We engage with NGOs, think tanks and business associations that share our interests and concerns. These could be broad policy issues with a global or national reach, or local matters that affect the communities close to our assets. We welcome constructive feedback on our activities, and seek to engage with all our critics transparently and constructively.

**Government**

We develop and maintain constructive relationships with national, regional and local governments in the countries where we operate, and maintain regular dialogue on all relevant issues. We do this by a variety of means that best reflect the local context.

Evolving government legislation and policy affects our assets and, where possible, our assets use their local knowledge to identify and affiliate with appropriate local partners and develop good working relationships with local and national governments. Regular contact allows us to understand governmental views and aims, and to plan for regulatory changes and better react to them.

Where appropriate, we take an informed and constructive role in public policy development processes.

Engagement activities may include individually, collectively with other companies or organisations, or as part of an industry association. When dealing with governments, we conduct ourselves in accordance with Glencore’s Code of Conduct and we do not, directly or indirectly, participate in party politics or make payments to political parties or individual politicians.
Labour unions
We are committed to working honestly and openly with labour unions at our operations and undertake negotiations in good faith.
We uphold our workers' rights to freedom of association, to unionise and to collective representation, regardless of their location or duties. At many of our assets, unions play an active role in safety committees.

Business partners and customers
We maintain good relationships with our suppliers, customers, joint venture partners, service providers and other counterparties, engaging regularly with them to understand their views, expectations and perspectives.
We undertake risk-based due diligence on our supply chain, both for the resources and services we procure as well as the third-party materials we purchase for trading purposes. We are active in many industry initiatives, where we work to promote the safe use and handling of our products. We share the specifications of our products and any associated risks with our customers.

Financial community and media
We actively engage with our investors and financial institutions through regular communication, one-on-one meetings, roadshows and topic-specific webinars.
We engage with the media at global, national and local levels on topics of public interest. Our approach is one of transparency and timely communications to support fair disclosure.

Peer companies
At both global and national levels, we engage with other mining and extractive companies through platforms such as the International Council on Mining & Metals (ICMM), Extractive Industries Transparency Initiative (EITI) and the Voluntary Principles on Security and Human Rights.
These initiatives provide an opportunity to learn from best practice and find industry-wide solutions to common challenges. At an operational level, we often work with other multinational and domestic mining companies through nationally run chambers of commerce to deliver an industry-consistent voice during engagement on common topics.

External commitments and memberships
We participate in a wide range of external initiatives, including global, national and regional organisations. Our participation supports our commitment to ongoing improvement in our approach and performance.
Our activities in these organisations vary from reporting on our progress to taking a role in driving strategic change.
We are also members in a number of other industry- and commodity-specific organisations that encourage our sector to adopt and implement a consistent approach.
We uphold the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work and the UN Universal Declaration of Human Rights. We work in accordance with a number of specific international frameworks, including the:
- ILO Core Conventions
- UN Guiding Principles on Business and Human Rights (UNGPs)
- Extractive Industries Transparency Initiative (EITI)
- Global Reporting Initiative (GRI)
In 2014, we signed up to the United Nations Global Compact (UNGC), aligning our strategies and operations with the UNGPs, which cover human rights, labour, environment and anti-corruption. The UNGC also encourages participants to support the UN Sustainable Development Goals (SDGs), with an emphasis on collaboration and innovation.
In the same year, we joined the ICMM and endorsed its sustainable development framework principles.
In March 2015, we became a corporate participant in the Voluntary Principles on Security and Human Rights (Voluntary Principles) Initiative. We have been implementing the Voluntary Principles at our assets with a high risk of security-related human rights breaches since 2013. We report on our progress in an annual report to the Plenary of the Voluntary Principles, relevant sections of which are available in our sustainability report.
We are a member of the World Economic Forum's Partnering Against Corruption Initiative (PACI). Members collaborate on collective action and share leading practice in organisational compliance. The initiative has a commitment of zero tolerance on bribery and the requirement to implement practical and effective anti-corruption programmes. We are also an associate member of the Maritime Anti-Corruption Network (MACN).
We actively participate in PACI and MACN’s annual events and have incorporated guidelines from both organisations into our procedures.
Informing our stakeholders

In addition to the sustainability section on our website and regular updates across our range of social media platforms, we publish a number of annual and ad hoc reports on subjects of interest to different stakeholder groups. This includes the communications in line with the disclosure requirements and expectations of a publicly listed company:

- Sustainability Report and Highlights
- Environment, Social and Governance data book and Global Reporting Initiative Index
- Modern Slavery Statement
- Payments to Governments Report
- Human Rights Report
- Water Report
- Climate Change Considerations for our Business
- Review of our Membership Organisations

These are available at: www.glencore.com/sustainability/reports-and-presentations

We also submit annual reports on progress as part of our participation in the UNGC, ICMM and Voluntary Principles.
Safety

The health and safety of our people is our top priority and we believe all fatalities, injuries and occupational diseases are preventable. Through strong safety leadership, we can create and maintain safe workplaces for all our people.

Strategic imperative

Become a leader in safety and create a workplace free from fatalities and injuries.

Targets and strategic priorities

- Zero fatalities
- 50% reduction of Group LTIFR by the end of 2020 against a 2015 baseline1 of 1.34
- 50% reduction of Group TRIFR by the end of 2020 against a 2014 baseline1 of 5.02

ICMM Mining Principles

5. Health and Safety

Pursue continual improvement in the health and safety performance with the ultimate goal of zero harm.

UNGC Principles

n/a

Sustainable Development Goals

1. Good Health and Well-Being
8. Decent Work and Economic Growth
Mitigating risk is at the heart of our safety management approach. Our leaders, at all levels of the business, are responsible for identifying and managing risks, to create and maintain safe work environments and protect our people. We expect every individual, both employees and contractors, to take responsibility for their own safety and for that of their colleagues and host communities.

We require an effective safety management system at each asset to assure the integrity of plants, equipment, structures, processes and protective systems, as well as the monitoring and review of critical controls.

Our Board HSEC committee oversees the Group’s safety performance. The CEO, Board HSEC committee and Group sustainability team receive notification of any fatality within 24 hours, with independent third-party assistance on site within 72 hours.

The Board HSEC Committee reviews every fatal incident with the senior management of the affected commodity department and asset, and shares relevant learnings across the Group. It also reviews the findings of investigations into high potential risk incidents (HPRIs). HPRIs are incidents that could have potentially resulted in a catastrophic or major outcome.

The commodity department implements appropriate corrective actions to prevent re-occurrences.

Our sustainability team set targets and develop programmes to drive continual improvement in safety performance. The targets and programmes focus on delivering robust risk identification and assessment processes. All our performance data and targets include contractors, as well as our employees.

All levels of management work to make sure that our people work in accordance with approved systems and procedures to prevent, mitigate or remedy safety impacts, including the recording of all safety incidents and HPRIs.

Along with our industry peers, we report on our safety performance to the ICMM each year, to promote the improvement of the industry’s safety performance.

We believe sound risk management drives an effective safety culture. Our SafeWork initiative supports changing attitudes towards safety and bringing about long-term sustainable change that supports the elimination of fatalities and serious injuries.

The initiative’s aim is to provide everyone within our business with the knowledge and tools to perform every task safely; the key message is that every individual has the authority to stop unsafe work.

The SafeWork framework is risk-based. It focuses on identifying the hazards that cause serious injuries and fatalities within our operations and developing life-saving behaviours and protocols to target them.

The fundamental components of SafeWork are:

- **Fatal hazard protocols**: specific requirements to address the most common causes of fatalities and serious injuries within the industry.

- **Life-saving behaviours**: the behaviours intended to save lives and protect people from serious injuries. The approach encourages everyone to value safety, protect themselves, their colleagues and the company’s assets.

- **Training**: supporting tools that include universal risk awareness training and virtual reality training materials on each fatal hazard, as well as other training aids.

- **Empowering first-line supervisors**: to take responsibility for their work areas, manage technical safety aspects and motivate safe behaviours.

Our assets use SafeWork as the basis for their own individualised safety improvement plans. It focuses on appropriate behaviour and consequences at all levels. The life-saving behaviours focus attention on behaviours and consequences, rather than using a rigid rules-based approach.

Our people work together at every level to identify operational hazards, whether they are a risk to the workplace or to the public. We assess the associated risk and take appropriate action based on a hierarchy of controls, including critical controls, to prevent fatalities and catastrophic events.

We monitor and assess the effectiveness of these controls and the management of residual risks and exposures using recognised methodologies under continual improvement.

We also require assets to use effective change management processes to address hazards and risks arising from changes in the workplace.
Driving continuous improvement

Our assets report and share HPRIs every week to the corporate sustainability team. HPRIs are an opportunity to learn about the effectiveness of critical controls and underpin our approach of continuous learning.

The emphasis on reporting and recording HPRIs has been vital to our progress in safety management; identifying trends as they arise, and taking corrective action, helps to prevent systemic issues and repeat incidents.

Through utilising the knowledge gained from the analysis of HPRIs, we put measures in place to prevent similar incidents as well as find solutions to situations that contribute to the highest cause of HPRIs.

Contractor management

We expect anyone on our site, including contractors, to comply with the same safety requirements as our direct employees, and to meet our safety training standards. We have contractor management systems in place at our assets to support contractor compliance.

Our contractors’ safety performance is included in the data publicly reported by Glencore.
Health

The health and safety of our people is our top priority and we believe all fatalities, injuries and occupational diseases are preventable. Through strong safety leadership, we can create and maintain safe workplaces for all our people.
Managing risks to the health of our people is essential for their long-term wellbeing. We use a variety of onsite programmes to manage occupational diseases and exposure to health hazards; we extend many of these health programmes to our host communities, to combat regional health problems and promote healthy lifestyles.

We require our assets to have formal plans, processes and records to allow routine monitoring of occupational health including spot checks. The plans also focus on early intervention. If one of our people suffers an injury at work or an occupational disease requiring rehabilitation, we support the individual to return to work as soon as possible.

The most common health hazards in our workplaces are working with heavy loads, noise, silica, diesel exhaust fumes, acid mist and coal dust containing heavy metals. We monitor our people’s exposure to toxic hazards and seek to control this exposure wherever possible.

Our approach to sustainability

### Controlled work environment:
- Maintain a comprehensive and effective risk-based approach to the management of the health risks associated with our operations and activities ensuring the assessment and control or elimination of our work environment risks and exposures.
- Establish exposure action levels for priority contaminants across the organisation.
- Standardise the evaluation and analysis of occupational monitoring data to that actions related to employee exposures to health hazards are appropriate.

### Fit for work:
- Establish requirements for and monitor our employees’ physical, mental and cognitive capability to carry out their work duties.
- Provide appropriate support for employees whose capabilities are no longer consistent with those required for the work environment.
- Apply risk-based medical surveillance programmes for pre-placement, periodically through employment and pre-separation.

### Fit for life:
- Identify key health issues, needs and interests of our people and develop approaches to inform and educate our people regarding personal health risks, public health risks, prevention and harm reduction.
- Actively engage local public health officials where significant public health risks exist.
- Actively participate in health education, promotional opportunities and contingency planning activities that are applicable to the communities in which we operate.

Our occupational health management strategy addresses the health risks facing our workforce, their families and the communities inside and outside our gates. The strategy has three pillars, which build on what has proved successful at individual assets:
Environment

Our operations can have direct and indirect impacts on the environment. We work to minimise our potential impact, complying with or exceeding relevant regulations. We look for ways to improve our environmental performance and reduce our impact, including our use of resources, wherever possible.

Strategic imperative
Become a leader in environmental performance

Targets and strategic priorities
- Reduce carbon emission intensity by at least 5% on 2016 levels by 2020
- No major or catastrophic environmental incidents

ICMM Mining Principles
6: Environmental performance
Pursue continual improvement in environmental performance issues, such as water stewardship, energy use and climate change.

7: Conservation of biodiversity
Contribute to the conservation of biodiversity and integrated approaches to land-use planning.

UNGC Principles
7: Businesses should support a precautionary approach to environmental challenges
8: Undertake initiatives to promote greater environmental responsibility
9: Encourage the development and diffusion of environmentally friendly technologies

Sustainable Development Goals

- 6: Clean water and sanitation
- 12: Responsible consumption and production
- 13: Climate action
- 14: Life below water
- 15: Life on land
Our environmental management approach aligns with international and industry-specific environmental standards and guidance.

We require our industrial assets to adhere to environmental standards and guidance, through the development and implementation of robust environmental management systems, while applying the plan-do-check-act principle. Assets’ environmental management systems should include standard elements such as:

• An environmental policy
• Planning, implementation and operation
• Measurement, recording and evaluation
• Review and corrective actions and continuous improvement

Assets undertake detailed environmental risk assessments, tracked by their commodity departments, as part of the development, maintenance and closing-out of their environmental management plans. These assessments identify appropriate mitigation actions or remediating measures.

The environmental management plans address all relevant environmental aspects and considerations, and include:

• Maintaining the integrity of our facilities to avoid environmental incidents
• Efficient resource use
• Preserving protected areas and biodiversity
• Closure planning and rehabilitation (including financial provisions)

We require assets to update these plans at each stage of their lifecycles, and incorporate them into their overall risk registers and management plans.

Our business encompasses a wide range of operational activities across different geographical locations. We recognise the need for meaningful environmental targets that reflect Glencore’s operational and geographic diversity, as well as the various ecosystems where we operate. As such, we are focusing our efforts on establishing and tracking environmental performance management at local and regional levels. At a corporate level, to support our Group-wide performance, we have established, or are identifying and developing, selective targets for the specific issues that are key to our global business.

Environmental incidents

Many of our activities involve the production, use, transport and storage of large quantities of both hazardous and non-hazardous materials. We also operate facilities where operational or process failures could result in incidents with the potential to cause significant harm to the environment or surrounding communities, as well as damage our reputation.

We are committed to reducing our environmental impacts through decreasing the number of environmental incidents, and incurring no fines, penalties or prosecutions. We have established a global target of no moderate, major or catastrophic environmental incidents – see glossary for incident classification.

We report and record high potential risk incidents (HPRIs), events that could have resulted in a catastrophic or major environmental incident. The relevant senior management teams share learnings from HPRIs and the affected assets are required to implement action plans to address the causes and prevent repeats.
Climate change and energy

As one of the world's largest diversified resource companies, Glencore is proud of the role we play in supporting the transition to a low-carbon economy. We see this transition as a key part in the global multi-participant response to the risks and challenges created and fuelled by climate change. Our well-positioned portfolio includes commodities that are essential to energy and mobility transformations such as copper, nickel and cobalt.

Our position on climate change

We recognise climate change science as set out by the United Nations Intergovernmental Panel on Climate Change. We believe that the global response to climate change should pursue twin objectives: both limiting temperatures in line with the goals of Articles 2.1(a) and 4.1 of the Paris Agreement ('the Paris Goals') and supporting the United Nations Sustainable Development Goals, including universal access to affordable energy.

We believe the measures implemented by national and intra-national governments, as well as public sentiment, will drive public policy developments and programmes that restrict global greenhouse gas emissions (GHGs). This is likely to affect our business and presents both risks and opportunities that we need to manage.

To deliver a strong investment case to our shareholders, we invest in assets that we expect to be resilient to regulatory, physical and operational risks related to climate change.

Our well-positioned portfolio supports the transition to a low-carbon economy, while also meeting the need for universal access to reliable energy. To support the growing needs of a lower carbon economy, Glencore aims to prioritise its capital investment to grow production of commodities essential to the energy and mobility transition and to limit its coal production capacity broadly to current levels.

Our business will continue to evolve over time as we look to deliver on our climate objectives as part of a Paris consistent strategy. At present, our projection indicates a reduction of our Scope 3 emissions – those arising from the sale and use of our own products, notably oil and coal – of approximately 30% by 2035.

The expected depletion of our coal resource base in Colombia, and to a lesser extent those in South Africa and Australia, will contribute to this reduction. We anticipate that our Australian operations will maintain a longer and flatter production profile and continue to produce high quality coal, which will be required to meet expected levels of global steel production and energy demand in Asia.

Climate change working group

In 2016, Glencore's Board established a Climate Change Working Group (the Working Group). The Working Group supports the delivery of our public commitments on climate change in a timely manner through reviewing, developing and progressing the Group's strategic approach to climate change. Its work underpins the identification, mitigation and management of climate-related risks and enables our business to be alert to developing opportunities.

Glencore's Chairman, Tony Hayward, leads the multi-disciplinary, cross-commodity Working Group and its members include commodity department heads and representatives from relevant corporate functions. The Working Group has formal, face-to-face meetings twice per year, with additional engagement on an ongoing basis, as required to support the advancement of its various work programmes.

The Working Group reports on its work plan and progress to the Board HSEC Committee.

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1 Article 2.1(a) of The Paris Agreement states the goal of 'Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.'

2 Article 4.1 of The Paris Agreement reads: "In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peak greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.'

3 This may include the exercise of our pre-emptive rights to acquire minority stakes of joint-venture partners in our existing operations.

4 When assessing the long-term projections for our Scope 3 emissions arising from the use of some of our products, we found an intensity metric is a less useful measure than absolute emissions. On this basis, and to support greater transparency, we report a projection of our absolute Scope 3 emissions.
Carbon pricing
We support a pragmatic and practical global approach that prioritises a least-cost, logical transition towards lower global emissions. Pricing carbon should be part of an informed and considered process, structured to provide market signals to drive behaviours and incentivise investments that deliver the least cost pathway to emissions reductions.

Glencore supports policy mechanisms aimed at achieving cost-efficient emissions reductions without compromising the development goals of nation states.

Our business continues to operate successfully in multiple jurisdictions that have direct and indirect carbon pricing or regulation, including Australia, Canada, Chile and South Africa, as well as our customer markets such as China, India and Europe.

We consider carbon price sensitivities as part of our ongoing business planning for existing industrial assets, new investments and as part of our marketing activities.

Energy costs
We are a significant energy consumer and our use of fuel and power is a key input and cost to our business as well as being a material source of our carbon emissions. We closely monitor international and national developments in energy and climate change regulation.

We incorporate energy costs and our carbon footprint into our annual planning process. Commodity departments are required to provide energy and GHG emissions forecasts for each asset over the forward planning period and provide details of emissions reduction projects.

The Working Group oversees the ongoing integration of carbon emissions and energy into our annual business planning and the mapping of our projected energy and carbon footprint. It includes an assessment of potential mitigation and abatement projects, and underpins the basis of our internal Marginal Abatement Cost Curve.

Renewable energy sources deliver around 12.5% of our total energy needs. In Australia, we use coal seam gas from our mines to supplement power generation at a number of our assets and have flares installed at those underground coal mines with the necessary supply and concentration of methane but where power generation is not feasible.

Physical impacts
Extreme weather events, such as floods, hurricanes and droughts, as well as changes in rainfall patterns, temperature, and storm frequency can affect our industrial assets’ operating processes, related infrastructure, and the communities living close to our operations.

Water is an essential input for our industrial activities. Concerns regarding the long-term availability and quality of water, and security of access to water, have increased due to changes to demography and climate. Damage caused by storm surges and strong winds can affect the availability of ports and critical infrastructure required to transport our goods. Changes in temperature can lead to heat stress affecting our workforce and equipment.

We track changing weather conditions and amend operating processes as appropriate. Looking ahead, we will continue to review current mitigating measures in place at our operations and consider opportunities to strengthen these.

Growing demand for electric vehicles
The growth in electric vehicle (EV) uptake is driving demand for the mass production of powerful batteries that require raw materials such as nickel and cobalt. In addition, the growth of renewable energy in the form of wind and solar is a positive opportunity for our business, given both technologies require significant amounts of copper and aluminium for construction.

Glencore has an opportunity to support the supply of this growing demand given its position as a producer and marketer of these materials, particularly with respect to nickel and cobalt for batteries.

The increased deployment of EVs will also result in greater demand for secure and reliable baseload electricity and associated infrastructure required to service the EV fleet – this is likely to benefit our business through supporting demand for the commodities we produce and market. Emerging technologies, policies, standards and incentives for batteries and EVs are liable to change and evolve over time, which may lead to volatility in market demand for these materials.
Supporting lower-carbon solutions

Our assets undertake a range of measures to reduce and mitigate their emissions profiles.

Glencore’s wholly-owned subsidiary, the Carbon Transport and Storage Company Pty Ltd (CTSCo), is continuing to progress its carbon capture, utilisation and storage (CCUS) project in Queensland’s Surat Basin. During 2019, CTSCo completed a front-end engineering and design study for the CO2 capture plant with a final investment decision on major infrastructure scheduled for 2020.

In 2019, our Raglan Mine in northern Canada began to integrate its second wind turbine, constructed in 2018, into its power network. A major element has been the addition of batteries to the second wind turbine. Through storing the wind-generated power, the batteries are addressing any capacity loss from the two wind turbines without affecting Raglan Mine’s power network.

Metrics and targets

We divide CO₂ emissions reporting into three different scopes, in line with the Greenhouse Gas Protocol, and measure both the direct and indirect emissions generated by the industrial activities, entities and facilities where we have operational control.

Scope 1 (measured in CO₂e) includes emissions from combustion in owned or controlled boilers, furnaces and vehicles/vessels and coal seam emissions (direct emissions). Scope 2 – location-based emissions (measured in CO₂) applies the grid emission factor to all our purchased electricity, regardless of specific renewable electricity contracts (indirect emissions).

The majority of our Scope 1 emissions include fugitive emissions from the production of coal (coal seam emissions) and consumption of fuel and reductants. Scope 2 emissions principally relate to purchased electricity for our operations, in particular our metals processing assets, which require secure and reliable energy 24 hours a day, 365 days a year.

In addition to Scope 1 and 2 GHG emissions, our activities include Scope 3 emissions. These relate to the indirect GHG emissions across our value chain. These include upstream emissions associated with the products and services we purchase from suppliers and downstream emissions that include emissions resulting from our customers’ use of the fossil fuels that we produce, their processing of our metals and concentrates, and the emissions resulting from time-chartered vessels.

In 2017, we announced our first target of reducing our greenhouse gas emissions intensity by 5% by 2020 compared to a 2016 baseline. We are on track to exceed our target, achieved by a range of measures including abatement, use of renewable energy sources and production changes at our operations.

As our 2020 target ends, we have committed to establish a new, longer-term target that supports the Paris Goals. We will communicate our longer-term target in late 2020.

Further information is available: https://www.glencore.com/sustainability/climate-change
Water management

Water is an essential resource for many of our industrial activities. We recognise that water is a shared and finite resource and we are conscious of the increasing concerns of our local stakeholders and other local water users regarding ongoing availability of water, security of access and the potential for impacts on water supply. In a number of the regions where we work, severe drought and flooding events exacerbate further these concerns, especially when for extended periods.

Some of our assets are located in areas with high to extremely high water baseline stress and share access to water with other local water users. Other assets manage surplus water that may involve dewatering activities and flood protection measures.

We acknowledge access to safe and clean water and sanitation as a human right. We seek to understand fully and minimise our water-related impacts and, in particular, we ensure that we manage our activities in a way that protects shared water sources.

We recognise that water management is a complex issue that requires engagement between the multiple stakeholders involved at each site. Our assets consult their host communities and other relevant local water users to find out their priorities and collaborate on solutions. They engage with regional and national governments on their work to identify material water stewardship risks, which improves our water management strategies. They share operational plans and increase their understanding of the cultural, economic and environmental value of water in the region.

We publicly report on our material water risks, management activities and performance. As an active member of the ICMM, we participated in the development of its Position Statement on Water Stewardship.

Strategic water management framework

Our aim is to manage our water impact responsibly without any adverse impact on the quality and quantity of any water body, and without compromising other users’ access to water.

We have developed a Group strategic water management framework with five primary objectives:

1. Understand our water catchment areas, baseline water conditions, and ecosystems
2. Assess our potential impacts on water resources, and identify risks and opportunities
3. Develop and implement water management plans to responsibly manage this important resource and reduce our water footprint
4. Improve our water management performance by monitoring compliance, setting targets, and continuously improving
5. Engage with involved stakeholders, report on our progress, and identify partnerships to progress water-related programmes

A water management guideline, aligned with the ICMM’s position statement on water and its water management framework, supports our strategic water management framework. The guideline covers the minimum requirements at an asset-level for water governance, the identification and evaluation of water-related risk and their mitigation, the management of water in terms of quality and quantity and engagement with relevant shareholders.

Since introducing the strategic water management framework, we have undertaken a number of actions to meet its objectives:

- Established an internal, cross-departmental water working group with water experts from different regions across the globe
- Aligned our water-related reporting indicators with the Minerals Council of Australia’s (MCA) Water Accounting Framework (WAF), a framework that was developed specifically for water accounting in the mining and metals industry. The indicators allow us to run high level water balances for each operation
- Established water balances at all our operations
- Analysed and identified potential high risk sites and potential medium risk sites with identified reputational issues and evaluated their actual exposure / contribution to water risks and impacts and introduced corrective actions, where needed
- Implemented our water management guideline at the majority of our assets
- Participated in the ICMM’s water working group to support the further development of water stewardship initiatives in the mining industry
- Represented the mining industry in the Global Reporting Initiative’s water working group for the revision of its Standard 303: Water and Effluents 2018
- Continued our participation in projects to analyse and mitigate shared risks in Australia, South Africa and Colombia in collaboration with mining peers and other stakeholders
Water management plans

We follow a risk-based approach for the implementation of water management plans. Each asset with water-related risks develops a water management plan that reflects its lifecycle, the steps needed to eliminate or mitigate water impacts and risks, and the opportunities to improve water performance.

We have identified the assets that we consider to have potentially high water-related risks by applying WRI’s Aqueduct Water Risk Atlas’ baseline water stress levels, with consideration for the assets’ quantity of freshwater withdrawal. Our assessment showed that nearly 4% of our sites are located in areas with a high and very high risk of baseline water stress.

In addition, we identify, assess and monitor our water-related risks through an annual internal survey. The survey defines a substantive financial or strategic business impact as an operational change resulting from a water risk that causes a material financial impact due to physical impacts including environmental impacts and social unrest. Financial impact may arise from:

- Increased operating costs
- Negative reputational impact that leads to a loss of operating licence
- Regulatory restrictions placed on production processes, and/or
- Materially reduced or disrupted production

When operational changes occur at assets with significant water-related risk (eg scarcity, floods or proximity to sensitive water bodies), the asset develops and implements a new water management plan that includes a review of its water-related risks.

We have identified and implemented various water conservation opportunities that help to conserve water, reduce water withdrawals and mitigate environmental and local community impacts. Any reduction in our water consumption usually results in lower energy consumption, which also means lower costs and lower carbon emissions, due to the dedicated equipment and processes required for extracting, transporting, and treating water.

When procuring new plant and equipment, we encourage the use of the most water and energy efficient products possible. For example, new conceptual designs for our mineral processing plants now include tailings thickening as standard and we build in infrastructure to maximise water recycling at the design stage rather than requiring retrofitting.

Water-related risks in our supply chains

In 2019, we developed a high-level materiality-based method to assess the risks associated with our supply chain. Our work showed that water-related risks from our supply chain was low relative to the risks within our production profile. As such, we will continue our work on resource-use efficiency at our own assets.

Metrics and targets

We have aligned our water indicators, metrics and definitions with the Water Accounting Framework (WAF) of the Minerals Council of Australia. In accordance with the WAF, we differentiate the quality of our water into three categories:

- **Category 1**: Water that is of a high quality and requires minimal and inexpensive treatment (eg disinfection and pond settlement of solids) to raise the quality to appropriate drinking water standards (comparable to potable).
- **Category 2**: Water that is of a medium quality with individual constituents encompassing a wide range of values. It requires a moderate level of treatment such as disinfection, neutralisation, removal of solids and chemicals to meet appropriate drinking water standards (eg agricultural use).
- **Category 3**: Water that is of a low quality with individual constituents encompassing high values of total dissolved solids, elevated levels of dissolved metals or extreme levels of pH (high or low). It requires significant treatment to remove dissolved solids and metals, neutralise and disinfect to meet appropriate drinking water standards (eg industrial and waste water).

Most of our water withdrawals represent the water quality Category 2 followed by Category 3 then Category 1. Wherever possible we use the water category that is economically and ecologically the most adequate option (ie use the lowest available quality for the required purpose) while considering other water users’ needs.

We define targets for specific asset, basins, countries and/or departments as a means to prioritise areas for improvement and corrective action that deliver the largest returns and create shared benefits for multiple stakeholders. These include targets on water efficiency, reducing fresh water withdrawal, and increasing the quality of discharged water. We consider this approach to be the most effective way of target setting compared to setting a group-wide target.
Our assets around the world have direct and indirect impacts on the land. We work to minimise our potential impact, complying with or exceeding relevant regulations. We look for ways to improve our land stewardship and reduce our impact on landscapes and to enable sustainable land use following the closure of our operations.

We require our industrial assets to implement land stewardship and biodiversity management plans throughout their lifecycles; this not only reduces operational risk, but also minimises our liabilities when our mines close and influences our legal and societal licence to operate. Our approach includes standard elements such as an environmental policy, measuring, recording, evaluating and continuous improvement.

Our assets maintain these plans based on risk management reviews. These include considerations such as maintaining the integrity of our facilities to avoid environmental incidents that could affect the land, efficient resource use, preserving protected areas and biodiversity and closure planning and rehabilitation (including financial provisions).

We respect legally designated areas as protected and adhere to associated regulations.

We understand that local Indigenous people have a unique connection with the land on which they live; we make efforts to recognise their cultural heritage when planning our operations.

**Land management**

**Biodiversity**

Mining activities directly impact the surrounding land, flora and fauna throughout the lifecycle; our goal is to minimise and manage those impacts. Assets’ land stewardship and biodiversity management plans, can include measures for preliminary clearing works, habitat relocation, flora and fauna conservation, weed and pest control and fire and grazing management. Where possible, these plans support the continuation of existing land practices, including grazing and other agricultural activities.

Assets often involve local stakeholders, such as local communities and conservation organisations in developing these plans. Our management plans and procedures for site exploration, development and construction have fully integrated biodiversity baseline surveys and protection measures. Our assets also assess their biodiversity impact when permits change, an expansion project takes place or any similar changes.

Assets incorporate biodiversity considerations into their environmental impact assessments, along with any risks that our biodiversity impact may have for local communities. If our activities cannot avoid or mitigate significant biodiversity impacts then offsetting measures are applied.

Assets develop and implement processes and procedures for the effective management and conservation of biodiversity and landscape functions in the areas affected by our operations.

As an ICMM member, we are committed not to conduct any exploration, drilling or mining in World Heritage areas and IUCN category I-IV protected areas (‘no-go’ areas), and not to put the integrity of such properties at risk. Our assets work to avoid the loss of any International Union for Conservation of Nature (IUCN) Red List threatened species.

We own, lease or manage 83,550 hectares adjacent to protected areas and 188,285 hectares adjacent to high biodiversity areas. Our assets located in or near areas identified as having a high biodiversity value include:

- Our PASAR copper smelting operation in the Philippines is located in an area adjacent to areas of high biodiversity value. It maintains a forest reserve that support mangroves species and associated fauna such as hermit crabs, mud crabs and birds like the kingfisher.
- Our Koniambo nickel operations in New Caledonia are located in an area of high biodiversity value where 80% of the plant species are endemic, as well as most of the reptiles in the mine site area. In addition to undertaking progressive site rehabilitation, we produced a detailed biodiversity management plan in 2007, followed by a protected area management plan in 2011 and a rare species management plan in 2014. Our objectives are to avoid net loss of biodiversity, maintain large conservation areas onsite (approximately 825 hectares) that minimise the risk of fire and invasive exotic species, and perform in-house research into these rare species.

Across New South Wales, our United Warombo Joint Venture mine is near to the Wollomi National Park. Bulga Mine is near to both the Wollomi and Yengo National Parks. The Wollomi and Yengo National Parks are part of the Greater Blue Mountains World Heritage Area. Our Ulan surface operations are close to the Cooilburn River National Park and our Mount Owen mine is partly within the Ravensworth State Forest.

- The Raglan Mine is close to a meteoritic crater filled with exceptionally clear blue water that sits within the Parc national des Pingualuit.
- Our Koniambo nickel operations in New Caledonia are located in an area of high biodiversity value where 80% of the plant species are endemic, as well as most of the reptiles in the mine site area. In addition to undertaking progressive site rehabilitation, we produced a detailed biodiversity management plan in 2007, followed by a protected area management plan in 2011 and a rare species management plan in 2014. Our objectives are to avoid net loss of biodiversity, maintain large conservation areas onsite (approximately 825 hectares) that minimise the risk of fire and invasive exotic species, and perform in-house research into these rare species.
Rehabilitation
We recognise that we are custodians of the land on which we operate and are committed to responsible land ownership and meeting community expectations.

Planning for land rehabilitation starts prior to the disturbance of operational areas. The land rehabilitation plans are a fundamental component of our environmental and social impact assessment (EISA) process. The EISA take place ahead of the start of the project and supports the application for environmental permitting. During the EISA process, financial provision is made and held in reserve for the purpose of rehabilitation and closure efforts once operations have ceased.

A core component of our operations’ lifecycle is progressive rehabilitation. Where active operations have ceased, we review opportunities for restoration in the previously operated areas. Progressive rehabilitation has many benefits, including reducing an operation’s footprint, improving the visual appeal of the landscape and reducing dust, erosion and sedimentation, as well as improving conditions for local communities and future land users.

To support progressive rehabilitation, our assets may excavate and reserve topsoil and overburden from newly accessed areas.

During the EISA process, our assets undertake baseline data collection and monitoring programmes, which include collecting pre-disturbance data, to support the eventual restoration efforts. Assets use this data to understand the potential impacts of the operation on the local ecosystem and to identify opportunities to manage and mitigate these potential impacts. Assets develop action plans to minimise disturbance to the ecosystem and engage with local communities to identify appropriate post-mining land uses.

Closure management
Unlike many other industrial uses of the land, mining is temporary and transitions to post-mining land use at the end of its operational lifecycle. We require each asset to have a closure plan, including progressive rehabilitation and financial provision, to support a responsible exit. Assets regularly review their closure plan to ensure it remains fit-for-purpose, aligns with the asset’s lifecycle. Assets develop and maintain their closure plan to align with good practice, such as the ICMM’s Integrated Mine Closure Good Practice Guide. Assets consult with local communities on the development of their closure plans and monitor the societal risks and opportunities associated with closure.

In addition to the assets we have constructed and developed, Glencore has acquired, through mergers and acquisitions, a number of older mines and legacy operations. We have a specialised management process for these legacy operations, which supports the identification and implementation of appropriate monitoring and responsible restoration.

Metrics and targets
Our Environmental Policy requires that all assets develop and implement a site-specific biodiversity action plan. Through these plans, assets undertake robust and effective land stewardship and biodiversity programmes. We are developing a Land Stewardship and Biodiversity Management Standard, which will include:

• Consistent implementation of mitigation hierarchy
• Collecting robust environmental baseline data for new project areas, as well as effective data management and trends analysis for all phases of an asset’s lifecycle
• Minimising our physical disturbance footprint through effective and efficient project design and planning of operational activities
• Developing effective targets and monitoring performance
• Taking into consideration traditional knowledge on local land stewardship and biodiversity management
• Applying, where possible, the principles and indicators of ecosystem services
• Implementing progressive rehabilitation in areas where activities have ended
• Identifying opportunities for collaboration, research and partnerships
• Improving assurance processes
Waste management

Our assets are required to review their waste management procedures and plans and identify opportunities for improvement, to minimise the impact of the waste we produce.

Mineral waste

Most of the waste Glencore generates is mineral and includes tailings, slag and rock. The design, construction, operation and closure of our waste storage facilities align with the requirements of environmental assessments and government approvals. These are received prior to the start of operations and maintained throughout an asset’s life. In addition, during an asset’s lifecycle it monitors the environmental conditions of waste storage facilities and reports the data to regulators. We reuse as much inert waste as possible. For example, waste rock is used to backfill our mines.

A potential risk associated with waste rock dumps and tailings storage is acid rock drainage (ARD). While not present in every rock type, ARD can occur from the exposure of certain types, particularly those containing sulphide, to oxygen and water leading to the formation of atmospheric sulphuric acid. This has the potential to leach heavy metals (such as lead, zinc and cadmium) from the ore in the waste rock. Assets are required to reduce the risk of ARD via waste management technologies. These include segregating non- and potentially acid generating rock types, efficient mining practices to reduce waste rock volumes and capping waste rock dumps to reduce contact with air, precipitation and sensitive water bodies. The effectiveness of these design and management controls are monitored and updated to support the management and mitigation of potential impacts.

Tailings storage facilities

Our metal and coal assets generate tailings (residues of mineral processing), which are stored in purpose-built tailings storage facilities (TSFs). TSFs are specially designed reservoirs filled with tailings and water. We remove water through drains or evaporation while the tailings settle, gradually filling the reservoir. At this point, we cap, seal and rehabilitate the TSF.

We are committed to aligning the design, operation and closure of our TSFs with international best practices. We continually review and strengthen our TSFs management system through our catastrophic hazard evaluation programme.

We monitor our TSFs for integrity and structural stability. Our assets evaluate natural phenomena and incorporate these considerations into their TSFs’ designs where relevant. Flooding and seismic activity are the main natural phenomena that may affect TSFs. In addition, our TSFs undergo regular external inspections.

We continue to manage closed TSFs responsibly post-closure. We regularly inspect our facilities and external experts conduct independent inspections and reviews.

As part of our ongoing approach to manage our TSFs safely from design through to closure, we strengthened our Group-wide TSFs Management Protocol in 2019.

Our revised Protocol reflects learnings from across the business and consultations with internal and external experts. It aligns with the recommendations of the ICMM and requires all our TSFs to meet the Canadian Dam Association’s Dam Safety Guidelines, currently considered one of the leading international guidelines for tailings dam design, operations and management.

Our TSFs Management Protocol requires all new tailings projects to assess alternative technologies that may reduce the dam’s consequence classification or minimise its long-term risk.

As technologies and knowledge evolves, we investigate and, when possible, implement new approaches to the management of our TSFs. For example, we are migrating some of our existing facilities to filter press tailings, which uses dewatering technologies to produce relatively ‘dry’ tailings that allow for stable and stackable storage. However, dry tailings are not suited to all environments and we continue to consider options to improve our TSFs management.

We are active participants in ICMM’s TSFs working group, which shares knowledge on ways to eliminate or reduce tailings.

When we decommission and close our TSFs, we require that assets put in place appropriate measures for physical and geochemical stability and that the rehabilitation of the land for appropriate post-mining land use in a manner that enhances stability. Where a landform for a closed TSF is not possible, closure plans must address physical stability and the control of geochemical stability in a manner that protects the environment.

Following the catastrophic TSF failure in early 2019 in Brumadinho, Minas Gerais, Brazil, a group of around 100 institutional investors established the Tailings Safety Roundtable, in which we were an active participant from the outset.
Air emissions

All assets are required to obtain and comply with regulatory approved air quality limits and approvals, supported by routine monitoring and trends analysis, wherever we operate.

Our metallurgical smelters emit sulphur dioxide (SO₂), dust and nitrogen oxide (NOx) as both stack and fugitive emissions. Stack emissions emanate consistently from a fixed source (such as a smelter furnace), and are measurable. There are many control options for stack emissions, including mitigation during production processes and the capturing and treating of off-gases prior to emission external environment through technologies such as electrostatic precipitators, scrubbers or sulphuric acid plants.

Fugitive emissions, also referred to as particulate matter, emanate irregularly from many diffuse sources. Controlling and managing fugitive dust emissions are a main environmental management focus area for our mining assets. These can occur during the blasting, excavating, moving and crushing of ore rock, or the removal of topsoil, overburden or waste rock, especially in more arid environments.

Stationary filter equipment technologies are not effective for fugitive emissions and other controls are utilised, such as dust suppression, construction of berms to prevent dust travelling to communities, optimising our blasting activities, watering our haul roads and using protective coatings on product and waste storage facilities.

Our assets also undertake progressive rehabilitation once active operations have completed to support the reduction or elimination of dust-related impacts on our local communities.
Community

Our activities can make a significant contribution to the national, regional and local economies in which we operate through the provision of employment and training, tax and royalty payments to governments that help provide essential services, local procurement, social development and environmental stewardship. Our aim is to minimise any negative impacts from our activities, to engage respectfully and honestly and to work in partnership with others to support sustainable development and growth.

**Strategic imperative**
Foster socio-economic resilient communities everywhere we operate.

**Targets and strategic priorities**
- Community investment spend
- Number of community complaints

**ICMM Mining Principles**
1: Ethical Business
Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development
2: Decision-making
Integrate sustainable development in corporate strategy and decision-making processes
3: Human Rights
Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities
9: Social Performance
Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities
10: Stakeholder engagement
Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance

**UNGC Principles**
1: Businesses should support and respect the protection of internationally proclaimed human right
2: Businesses should make sure that they are not complicit in human rights abuses

**Sustainable Development Goals**

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Glencore Our approach to sustainability 30
Our assets are located in an extremely diverse contexts, some in highly developed countries with strong legal and political frameworks and others in more challenging socio-political circumstances, with a history of conflict, limited basic services or weak rule of law.

We are committed to being a valued partner in all the communities where we operate, working with others to find and implement solutions to social issues and helping to build resilient and peaceful communities. Our aim is to always operate ethically, in line with our values, and set and achieve consistently high standards in our social performance.

The first step in designing our social programmes is to build an understanding of our host communities through data gathering and engagement. We analyse local demographics, economies, sociocultural activities, religions, existing and potential conflict and availability of services and infrastructure to build a picture of our host communities. We supplement this work by listening to people’s needs and concerns, as well as identifying our potential impacts, risks and opportunities.

From these assessments, we design stakeholder engagement strategies aligned with our business objectives and local needs. We work to create meaningful, constructive and proactive dialogue with our local communities.

We design our community consultation processes to be inclusive, respectful of local context, cultures and traditions. We take particular care to identify vulnerable groups, such as women, children and Indigenous people, and develop and implement strategies to include them in the engagement process. We provide our local communities with information in a range of different ways, tailored to the local context and culture. These may include radio broadcasts, social media channels, site publications and a range of face-to-face meetings.

Our community teams are responsible for community engagement activities and are responsible for bringing community perspectives into the company to inform business planning and decision-making.

We require assets to regularly review their approach to ensure that they are meeting community needs and addressing priorities. We expect our assets to undertake community perception surveys to evaluate the effectiveness of their approach and provide valuable information to shape future plans.
Paying special attention to vulnerable groups

Some people living in our host communities are at risk of economic and social discrimination. These may include Indigenous people, women, children, disabled and elderly people, and victims of conflict. Wherever we operate, we look for these groups during our stakeholder identification and determine appropriate ways to engage with them. We try to understand and respect their situation and concerns and identify opportunities for their inclusion and participation.

Involving Indigenous people

Some of our assets are located on or near the traditional lands of Indigenous people. Our approach aligns with the ICMM Position Statement on Indigenous People and Mining. This requires mining projects located on lands traditionally owned by, or under customary use of, Indigenous people to respect Indigenous people’s rights, interests, special connections to lands and waters, and perspectives.

ICMM members must adopt and apply engagement and consultation processes that ensure the meaningful participation of Indigenous communities in decision making, through a process consistent with their traditional decision-making processes, based on good faith negotiation. Members must work to obtain the consent of Indigenous people for such projects.

We have formal agreements with Indigenous groups at a number of our assets, including Indigenous Land Use Agreements (ILUAs) in Australia and Impact Benefit Agreements (IBAs) in Canada.

In alignment with ICMM’s Position Statement, we engage in open and continuous dialogue with Indigenous communities to understand their culture, views and aspirations. This helps us work with them to minimise our impact and maximise the benefit we bring to them. In both Australia and Canada, we have programmes to increase Indigenous employment levels in our workforce.

See also, Engagement with Indigenous people in the Our People section.
Community development

In addition to our employment, local procurement, taxes and royalties, we seek to make a positive contribution to social and economic development of our host communities. Our strategic objective is to do this in a way that builds resilient communities and regions by reducing dependency on our operations wherever possible. This is challenging when the immediate, short-term needs in many of our communities are high. However, our aim is to focus our efforts on developing programmes that contribute to longer-term social objectives through activities such as education, health and wellbeing and capacity building.

In remote and underdeveloped areas, our presence can also contribute to increased access to infrastructure, such as roads, water and electricity. These infrastructure projects grant local people safer and faster access to other towns and markets and an improved quality of life. Our community investment programmes are subject to our third party due diligence procedure.

Programmes must comply with the asset or project’s licence, approval or permit conditions; assets must develop them in consultation with support from the compliance team.

Our community development activities target needs identified on a local or regional level, plus a number of Group-wide focus areas: capacity building, including education/training; enterprise development and economic diversification; health; and environment.

To help us measure and report on local contributions, we have developed a socioeconomic contribution scorecard. The scorecard improves our management of contributions to host regions and supports our efforts to meet objectives for maintaining and strengthening our social licence to operate, while supporting our local communities’ own objectives.

We developed the scorecard using external expertise, as well as our own experience from multiple regions, including countries with both developing and established regulatory environments. The scorecard includes ten KPIs, selected to help us understand and communicate how the full spectrum of our activities combine to contribute to local communities.

Supporting local business

We use local suppliers whenever we can, to reduce our costs and provide our host communities with alternative employment opportunities.

We work to support and promote businesses based close to our assets to drive local economic diversification through the provision of finance, management expertise and advice, or work premises. Our approach varies from region to region, but can include:

- Encouraging our large international suppliers to build partnerships with local businesses and to transfer skills and build capacity locally
- Financing or constructing business parks and centres to host and support local entrepreneurs
- Training for small businesses
- Programmes to support local businesses, to help them meet local and international quality standards
- Working with local government agencies to support training and help develop business plans

In regions with a less developed small business sector, our community and procurement teams work together to identify needs and develop programmes to help local businesses meet our quality standards and expectations for conduct. We offer targeted business management training, underwrite credit applications and guarantee future business within specific limits.

Making our payments to governments transparent under the EU Accounting Directive

We pay all relevant taxes, royalties and levies required by local and national regulation in our host countries. The payments we make to our host governments include local, national, sales and employment taxes, government royalties and licence and permitting fees.

In addition, we contribute to local economies through our use of local suppliers, wages and employee benefits, voluntary support of socio-economic initiatives such as health and education projects and infrastructure development.

We welcome fiscal transparency, as it encourages the responsible management of revenues from extractive activities. We are a supporter of the Extractive Industries Transparency Initiative (EITI) and its principles of transparency and accountability. We participate in in-country forums supporting the EITI.

Our annual payments to governments report includes the information required by the EU Accounting Directive, and details payments by country, project and recipient. The report also includes disclosure on our oil purchases payments to state-owned enterprises in EITI-compliant countries.
Human Rights

We recognise that we have the potential to impact on human rights directly through our operations or through our relationships with joint ventures, contractors and suppliers. We are committed to respecting human rights and actively support our employees, business partners and others to understand and meet this commitment.

Strategic imperative

Respect human rights everywhere we operate.

Targets and strategic priorities

- Number of serious human rights incidents

ICMM Mining Principles

1: Ethical Business
Apply ethical business practices and sound systems of corporate governance and transparency to support sustainable development

2: Decision-making
Integrate sustainable development in corporate strategy and decision-making processes

3: Human Rights
Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities

9: Social Performance
Pursue continual improvement in social performance and contribute to the social, economic and institutional development of host countries and communities

10: Stakeholder engagement
Proactively engage key stakeholders on sustainable development challenges and opportunities in an open and transparent manner. Effectively report and independently verify progress and performance

UNGC Principles

1: Businesses should support and respect the protection of internationally proclaimed human right

2: Businesses should make sure that they are not complicit in human rights abuses

Sustainable Development Goals
We are committed to implementing the United Nations (UN) Guiding Principles on Business and Human Rights and uphold the UN Declaration of Human Rights and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. We support the UN Global Compact and follow the principles set out in OECD Guidelines for Multinational Enterprises. In addition, we operate in accordance with the Voluntary Principles on Security and Human Rights (Voluntary Principles), International Finance Corporation’s (IFC) Standard 5 and ICMM’s Position Statement on Indigenous Peoples and Mining.

We have embedded these commitments in our Code of Conduct and Group policies. We actively communicate our Group Human Rights Policy to interested stakeholders. Our Board HSEC Committee oversees its implementation.

We require assets, at a minimum, to:

- Identify and assess risks of human rights impacts
- Develop controls to prevent, mitigate or remediate adverse human rights impacts
- Engage and consult with affected groups to enable their meaningful participation in decisions affecting them
- Set up and maintain effective grievance and/or complaints mechanisms
- Provide or participate in effective remediation, if they have caused or contributed to an adverse human rights impact, giving particular attention to vulnerable and previously disadvantaged groups
- Take steps to ensure business partners demonstrate respect for human rights
- Set up monitoring and review processes to meet the requirements of the Group Human Rights Policy
- Implement risk controls and corrective actions where relevant to improve continually human rights performance
- Assets are required to conduct regular human rights training for their workforces. This covers general human rights awareness during day-to-day activities for our wider workforce, as well as focused training employees in positions exposed to human rights concerns, such as security.
- We report complaints, grievances and serious incidents relating to human rights to the Board HSEC Committee

Implementing the UN Guiding Principles on Business and Human Rights

The UNGPs have three requirements for companies to demonstrate that they are fulfilling their responsibilities. We meet these requirements as follows:

<table>
<thead>
<tr>
<th>UNGP requirement</th>
<th>Glencore’s approach to implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express a commitment to human rights through a policy</td>
<td>We state our commitment to human rights in our Group Human Rights Policy and in our Code of Conduct, which we communicate to all employees and contractors.</td>
</tr>
<tr>
<td>statement</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Perform human rights due diligence to identify, prevent,</td>
<td>Our operations conduct risk assessments at key phases of their lifecycles. The assessments may cover issues related to labour and workplace, use of security, our business partners, and interactions with stakeholders and vulnerable people. An operational risk register logs risks; assets report their progress in addressing them to senior management and the Board as appropriate.</td>
</tr>
<tr>
<td>mitigate and account for potential human rights</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>breaches</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Provide remediation where business enterprises are</td>
<td>We expect our people to avoid complicity in human rights breaches and to uphold international standards at our assets, regardless of location or function.</td>
</tr>
<tr>
<td>identified as having caused or contributed to breaches of human rights</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

Our approach to sustainability
Our salient risks

We have identified six salient human rights risks across the Group: labour rights, safety, health, security, inequality and water. We regularly evaluate our salient human rights risks through engagement with internal and external stakeholders, risk assessments completed by our assets and our analysis of changes in the industry and the social, economic and political context in our host countries.
Enabling complaints and grievance

All our operations are required to have in place local-level complaints and grievance processes that are legitimate, accessible, predictable, equitable, transparent, and rights-compatible. In line with the UN Guiding Principles, we require our assets to ensure local people are aware of the mechanism and can access it easily.

Processes may range from informal complaint channels to formal dedicated grievance mechanisms. Channels for communication include dedicated phone lines, complaint registers in public places, SMS hotlines, and offices in local towns where people can visit in person. Where necessary, assets record complaints with a witness present.

A risk assessment determines the sophistication and formality of each type of mechanism, covering elements such as existing legal frameworks in the local region and the asset’s existing or future impact on its host communities.

We encourage people to raise concerns with us without fear of retaliation.

Our commitment is to investigate the concerns and take necessary actions to promote respect for human rights.

Working with security providers

We pay particular attention to handling human rights in regions where our assets employ security. Our Group risk framework specifically includes concern for the risk of security-related human rights abuses.

In some instances, our sites are legally required to engage with public security forces. We work with security providers in accordance with the Voluntary Principles and our own Security Standard.

We require our assets to conduct risk assessments for conflict and security concerns. All assets that will utilise security providers must align their practices with the Voluntary Principles. This includes engaging private and public security providers on our expectations for the conduct of personnel deployed at our assets and agreeing a mechanism for incident investigation and escalation. The guidance specifically requires assets to report any concerns with public security providers to the appropriate local authorities, and to collaborate with any subsequent investigation.

Our assets consult regularly with their host governments and local communities about the impact of their security arrangements, and enable local stakeholders to express concerns on security activities. These mechanisms may include regular meetings between security management and communities, existing complaints and grievance mechanisms, or dedicated hotlines or mailboxes for security issues. We review and investigate all complaints; where they concern the conduct of public security officers deployed on our concessions, we escalate these with the relevant chain of command.

While some of the countries where we work have a higher risk of security-related human rights breaches, we expect our people to avoid complicity and uphold international standards everywhere. We ensure we have contracts that reference the Voluntary Principles or MoU that state our expectations on upholding human rights.

We detail the standards we expect of all our suppliers in our Supplier Standards. Our standards align with ICMM principles and international standards, the ILO conventions and the UNGPs. We also monitor private security providers to ensure they operate in a manner consistent with our standards.

When we enter into joint ventures where we are not the operator, we seek to influence our business partners to adopt similar policies and procedures to those of Glencore wherever possible.
Avoiding resettlement wherever possible

We seek to avoid resettlement wherever possible. When unavoidable, we follow the principles of IFC Performance Standard 5: Land Acquisition and Involuntary Resettlement. Throughout, our priority is to ensure that all affected stakeholders have full participation. Following any resettlement, through ongoing monitoring, we seek to ensure the communities involved can maintain productive livelihoods.

Artisanal and small-scale mining

Artisanal and small-scale mining (ASM) represents a livelihood and income source for many poverty-affected populations around the world. When carried out responsibly and transparently, ASM can play a sustainable role in the economy. However, the sector is largely un-mechanised and informal. Artisanal miners illegally trespassing on the property of large-scale mines introduces security and safety challenges and human rights risks.

A further key issue is the participation of children in artisanal mining. We do not tolerate child labour or associated activities that present risks to our people or our communities.

ASM is particularly prevalent near our operations in the Democratic Republic of the Congo (DRC) where artisanal miners mine cobalt.

In the DRC, we implement programmes to reduce ASM and deter child labour. We work with our local communities on generating sustainable income sources and educate local people about the dangers of ASM. These activities include support for agricultural co-operatives, capacity building for small business associations and a range of educations interventions including support for school and school holiday programmes.

Any of our people who might directly engage with those involved in ASM activities has the relevant human rights training, especially in security issues.

Tackling ASM requires diverse elements such as community development, access to resources, security and developing a relevant legal framework. For this reason, we consider it vital to engage and share information with all stakeholders, including local and provincial authorities.

Due to the link between child labour and artisanal mining, many of our customers require assurance that our product does not contain ore sourced from artisanal mining. Further details on our approach are available in the Responsible Sourcing and Supply section.

Forced labour

We recognise the risks of forced labour, modern slavery, human trafficking and other labour standards violations within our supply chains. We are committed to preventing the occurrence of modern slavery and human trafficking in our operations and supply chains.

We publish an annual Modern Slavery Statement that aligns with the UK government’s reporting requirements. Our Statement sets out our approach and the steps we take.

Similar reporting requirements are also in place in Australia. We used this as an opportunity to make Australia a priority region for embedding our Supplier Standards. Most of our commodity departments have assets in Australia and implementing the Supplier Standards was core to our compliance with Australia’s new Modern Slavery Act. The presence of multiple commodity departments also created an opportunity for a coordinated rollout that minimised impacts on our regional suppliers.
We aim to deliver competitively priced commodities that meet our customers’ needs and contribute to the continued development of global society while progressively reducing any associated risks. As a vertically-integrated commodity supplier with a diverse commodity mix, we have a unique perspective on supply chains and make a valuable contribution across a range of responsible sourcing initiatives.

**Targets and strategic priorities**
- Number of new suppliers
- Number of suppliers screened on environmental criteria
- Number of suppliers screened on social criteria

**ICMM Mining Principles**
B. Responsible Production:
Facilitate and support the knowledge base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals

**UNGC Principles**
7: Businesses should support a precautionary approach to environmental challenges
8: Undertake initiatives to promote greater environmental responsibility
9: Encourage the development and diffusion of environmentally friendly technologies

**Sustainable Development Goals**

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**Responsible sourcing and supply**

We aim to deliver competitively priced commodities that meet our customers’ needs and contribute to the continued development of global society while progressively reducing any associated risks. As a vertically-integrated commodity supplier with a diverse commodity mix, we have a unique perspective on supply chains and make a valuable contribution across a range of responsible sourcing initiatives.
Our approach

Responsible sourcing, or supply chain responsibility, is our commitment to take into account social, ethical and environmental considerations when managing our relationships with suppliers and customers, as well as to conduct due diligence on their supply chains and mitigation of human rights risks.

Our approach to responsible sourcing supports our diversified range of activities and incorporates our strong commitment to health and safety.

Our responsible sourcing strategy considers production, sourcing of metals and minerals and procuring goods and services. Our policy and standards framework captures our commitments and expectations.

We work collaboratively with experts, industry consortia, our peers and customers to understand fully the properties and potential impacts of our products throughout their supply chains and lifecycles.

**Responsible production**

We mine and beneficiate minerals across a broad range of commodities, mining techniques and countries, for processing and/or refining at our own facilities or for sale to third parties. It contributes to the establishment of protective exposure action limits (EALs) and environmental reference values.

Determining EALs is a difficult and complex process, involving experts in a range of fields, including medical areas, industrial hygiene and process management. As part of our approach to managing and mitigating occupational health risks, we maintain a database on the potentially hazardous substances that are present at our operations. The database prioritises substances, based on their properties, regulatory developments and inputs from external stakeholders. It supports our ability to put in place appropriate mitigation measures.

Regulatory bodies or industrial hygiene associations establish environmental reference values. We contribute to these discussions by monitoring occupational diseases and exposures within our business and sharing that knowledge. This monitoring also helps us maintain and improve wellbeing in our workplaces through improving engineering controls and PPE.

**Supply chain due diligence**

Our approach supports the identification, prevention and mitigation of potentially adverse impacts that could negatively affect people, environment or company reputation. It supports the responsible and ethical sourcing and production of the minerals and metals that we bring to market, as well as meeting external expectations and complying with regulations.

Our customers are increasingly seeking assurance that their own supply chains do not have any links to human rights abuses. Recognising the increased demands for responsible sourcing and supply chain due diligence (SCDD) throughout the commodity value chain, we established our Supplier Standards (Standards) in 2019.

Our Standards apply to any individual, organisation or company that provides, sells or leases materials directly to Glencore companies, including goods and services. The Standards form the base of our robust risk-based SCDD programme aligns with the Organization of Economic Cooperation and Development’s Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD DDG). We expect these Standards to be incorporated, by reference, into all of our supplier contracts.

Our marketing teams source commodities from the industrial assets that we fully or partly own, as well as from third-party suppliers.

Our industrial assets work closely with our marketing teams, with our traders regularly visiting industrial sites. We promote cooperative networks within the Group to ensure we incorporate lifecycle management into all phases of production and sales. Our traders meet with our customers regularly to share advice on process safety and good practice.

It is an ongoing process to identify and address actual or potential risks in order to prevent or mitigate adverse human rights impacts in our supply chain. We tailor the SCDD programme to work collaboratively with our suppliers to evaluate their business practices and support the realisation of our Standards’ expectations.

Our SCDD for third-party minerals and metals volumes seeks to confirm that our suppliers operate in accordance with our Standards, as well as to confirm our suppliers do not knowingly tolerate, contribute to or profit from any of the OECD DDG’ ANNEX II risks. If a high-level of risk is identified, we work with the supplier to determine appropriate corrective action until both parties agree the desired outcome has been achieved.
We complement our Group compliance programme with site-specific supply chain programmes to meet local or product-specific regulations.

For example, CCR, our refinery in Montreal, Canada, has a global supply chain management policy and procedures to demonstrate that its gold is conflict-free and complies with high anti-money laundering standards. The policy aligns with guidelines from the OECD and the London Bullion Market Association’s (LBMA) Responsible Gold Guidance. An approved, external LBMA auditor has audited the policy and procedures, certified CCR as compliant with the LBMA Responsible Gold Guidance.

Our Kazzinc zinc asset in Kazakhstan and Britannia Refined Metals refinery in the UK underwent a similar process and are on the LBMA’s good delivery register.

**Responsible procurement**

We are committed to purchasing products and services from suppliers that operate in a manner that is responsible, transparent and respects the human rights of all. Our industrial assets are implementing systems and processes to ensure they are working with responsible suppliers.

We require all suppliers that have potentially high-risks of human rights-related impacts within their supply chain to complete a self-assessment based on our Supplier Standards. If self-assessment identifies issues or unacceptable levels of risk, we agree with the affected supplier, prior to contracting, appropriate corrective actions and risk mitigation measures. We monitor progress and measures and track implementation of performance KPIs.

**Transportation and distribution**

Our products move through the hands of many service providers, such as warehouses, land freight and shipping lines. As each stage can have an impact on quality, we have quality controls at specific stages of the supply chain, especially loading and discharge locations.

These controls form the backbone of our quality assurance programmes. Independent assessors or qualified Glencore people conduct the assurance, which an internationally accredited inspection organisation signs off.

We inform our workers, transporters and customers of the possible hazards of our products and which safety precautions they need to follow when handling, storing and transporting our product to prevent physical, personal and environmental harm. We provide this information in safety data sheets, which we update regularly and send to our customers.

We maintain over 7,000 safety datasheets covering all our products, including variants for different countries and legal entities. The datasheets reflect the classifications developed by industry associations and consortia; they provide information on the precautions workers should take during handling, as well as responsible storage and distribution.

They are available in all 24 official EU languages, plus others such as Mandarin, Japanese and Korean where appropriate.

Our centralised database integrates with many of our regions’ sales and marketing systems, allowing them to issue automatically datasheets to customers on purchase.

We participate in the industry consortia that focus on the EU’s Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations. These related to the metals we produce, including zinc, cadmium, sulphuric acid, lead and precious metals. We also engage with external and internal stakeholders on this evolving topic as other countries, such as Korea, Turkey and India, implement REACH-like legislation.

We follow the UN globally harmonised system for classification and labelling of chemicals (GHS), REACH regulations and the London Bullion Market Association (LBMA) Responsible Gold guidance.
Engagement

We work with experts, industry consortia and our peers to study the properties and impacts of our products throughout their lifecycles. This helps our products conform to international standards and regulations, and to control any risk to the environment or human health.

We not only send out information to our supply chain participants; we also bring learnings from other stakeholders back to our operations and assets. This supports improvement of our facilities and procedures on the potential health impacts of production activities.

Regulatory developments

To meet customer expectations and maintain our access to markets, our products must meet the latest regulatory requirements and industry standards. Increasing hazard awareness and risk perception in society has led to new requirements for the responsible delivery of products. We closely monitor these regulatory developments, and engage with the relevant stakeholders to anticipate and respond to any regulatory change and ensure undisrupted delivery of our products.

Our product stewardship scorecard communicates internally on regulatory developments and covers new regulatory or product-related developments that may affect our business or the markets we work in. We use it to track and rank developments by priority and potential impact, as well as communicate their significance to senior management.

We also provide customers with regulatory related information to help them ensure their compliance with national regulations. For example, documentation that shows our products do not contain minerals sourced from conflict-affected and high-risk areas, or evidence to support compliance with the EU Restriction of Hazardous Substances Directive and REACH.

Working with the Cobalt Institute

Glencore is one of the world’s leading producers and marketer of cobalt, a metal in rising demand due to its use in batteries for electric vehicles and portable electronics. We produce cobalt mainly as a by-product of copper mining in the DRC, as well as from nickel mining in Australia and Canada.

Early in 2019, we worked with the Cobalt Institute on its Cobalt Industry Responsible Assessment Framework (CIRAF). This framework strengthens the ability of cobalt producers and buyers to assess, mitigate and report on responsible production and sourcing risks in their operations and supply chain.

The CIRAF also enables a more coherent and consistent approach to cobalt due diligence and reporting by the cobalt industry.

Glencore has supported the development of the CIRAF programme from the outset. In 2019, we piloted its self-assessment tool. Piloting the programme gave us the opportunity to assess our policies and systems against the CIRAF and multiple external expectations, as well as allowing us to gauge our responsible sourcing and operation practices.

The CIRAF’s decision tree determines the scope of material risks that are applicable to particular operational processes. Reflecting Glencore’s business diversity, as both a producer and trader of cobalt, our operational processes can fit multiple risk profiles. As a result, we manage and report on all the areas identified as material.

We will report on our efforts regarding the risks identified by the CIRAF and utilise the CIRAF to develop more focused reporting on ethical practices in the cobalt supply chain.

Site audits with the Responsible Minerals Initiative

We are a member of the Responsible Minerals Initiative (RMI). The RMI is a respected resource for its 380 member companies, which seek to address responsible mineral sourcing issues in their supply chains. The RMI brings together many of our major customers.

We worked with the RMI to pilot its Responsible Minerals Assurance Process (RMAP) at our Murrin Murrin nickel asset in Australia. The RMAP uses independent third-party assessments of smelter and refinery management systems and sourcing practices to validate conformance with RMAP standards. Its standards meet the requirements of the OECD DDC, Regulation (EU) 2017/821 of the European Parliament and the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act.

The pilot assessed Murrin Murrin’s level of conformance with the RMAP Cobalt Standard. The assessment demonstrated that Murrin Murrin’s due diligence management system conforms, in all material aspects, to the requirements of the standard.

The RMI publish a summary of its findings on its website.

Engaging in blockchain networks

Traceability is an important enabler for the promotion of responsible practices in supply chains, and blockchain technology offers an effective platform for this purpose.

In late 2019, we signed up to the Responsible Sourcing Blockchain Network (RSBN) to support our efforts on responsible cobalt sourcing. The RSBN is a pioneering initiative of the metals supply chain, which looks at ways of applying blockchain to commodity sourcing.

Joining RSBN required us to demonstrate that our cobalt sourcing practices align with the OECD DDG. In addition, the assessment considered additional responsible sourcing good practice standards and compliance verifications and those enshrined by key industry bodies, including the RMI.

During 2019, we became one of seven leading mining and metals companies to join forces to accelerate responsible sourcing of raw materials with the World Economic Forum. The Mining and Metals Blockchain Initiative will explore the building of a blockchain platform to address transparency, tracking and tracing materials, reporting carbon emissions or increasing efficiency.

The initiative aims to be a neutral enabler for the industry, addressing the lack of standardisation and improving efficiency and trust between upstream and downstream partners.
Ongoing engagement with the London Metal Exchange
In 2019, we engaged with the London Metal Exchange (LME) ahead of the launch of its responsible sourcing requirements, which align with the OECD DDG. The approach looks at supply chain transparency and custody. The LME expects refineries to establish frameworks that comply with this requirement by mid-2022.

The LME also requires registered brands to undergo a number of assessments, including independent third-party audits of supply chain due diligence and ISO 14001 and OHSAS 18001/ISO 45001 certifications, or equivalent, by the end of 2023.

Engaging with our peers
We have strong relationships with industry organisations. Our participation allows us to engage with peers and downstream users of our products, to identify opportunities for a coordinated approach in demonstrating responsible supply chains and to contribute to the development of industry standards.

In early 2020, Glencore joined the Global Battery Alliance, a public-private collaboration dedicated to sustainable battery value chains.
Our people

Our success relies on our ability to attract, develop and retain the best talent, at every level. We have a highly capable, entrepreneurial and engaged workforce that brings a diverse range of experience and perspectives to the organisation.

 Targets and strategic priorities

- Number of employees + contractors
- Percentage female employees
- Turnover rate

ICMM Mining Principles

3: Human Rights
Respect human rights and the interests, cultures, customs and values of employees and communities affected by our activities

UNGC Principles

1: Businesses should support and respect the protection of internationally proclaimed human rights
2: Businesses should make sure that they are not complicit in human rights abuses
3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining
4: Businesses should uphold the elimination of all forms of forced and compulsory labour
5: Businesses should uphold the effective abolition of child labour
6: Businesses should uphold the elimination of discrimination in respect of employment and occupation

Sustainable Development Goals

1. No poverty
2. Zero hunger
4. Quality education
5. Gender equality
10. Reduced inequalities
Our approach

We believe that diversity is essential to our business and prohibit discrimination on any basis. We do not tolerate any form of racial, sexual or workplace harassment. We protect and uphold fundamental human rights around the Group, with fairness, dignity and respect. We uphold the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. We recognise and uphold our workforce’s rights to a safe workplace, freedom of association, collective representation, just compensation, job security and development opportunities.

We are signatories to the United Nations Global Compact, a set of principles covering human rights, labour, environment and anti-corruption. We work in accordance with relevant international frameworks, including the ILO Core Conventions (on prohibition of forced labour, child labour, freedom of association and protection of the right to organise, the right to organise and collective bargaining, equal remuneration, discrimination and minimum age).

Our policies and operational processes align with the UN Guiding Principles and the International Council on Mining & Metals. We hire, promote, reward and develop our people according to their ability, contributions and skills. We generally tie our remuneration policies to experience, ability and performance, with rewards for self-improvement and ambition. We review our pay and incentive practices regularly, and are currently looking to better align our approach with international best practice.

We prohibit all forms of child, forced or compulsory labour and human trafficking throughout the Group. We do not allow employees aged less than 18 to carry out hazardous work.

Career development

We believe that it is vital to our business to attract and retain the best people at every level. We offer regular assessments of skill levels and competence, with the aim of spotting good performance, talent and potential and offering suitable reward, development and support.

Our decentralised approach allows individuals to take significant responsibility. Our people are accountable for their contributions to our businesses around the world, including the creation of long-term relationships with our stakeholders.

Succession planning and retention strategies need to reflect local working environments as well as longer-term talent development and retention across the Group. For this reason, we encourage our assets and departments to develop their own strategies that compliment Group career development activities.
Diversity and equal opportunities

As a global organisation, diversity and inclusion are integral to our success. We believe that employing people from different cultures, countries, races, ethnicities, genders, abilities, beliefs and backgrounds is essential to our culture. Diversity brings new and innovative ideas that allow us to advance our business and continue to improve. Our diversity and inclusion agenda aims to ensure our workforce reflects our local communities.

We prohibit discrimination on the basis of race, nationality, religion, gender, age, sexual orientation, disability, ancestry, social origin, political or other opinion, or any other bias. We value diversity and treat employees and contractors fairly, providing equal opportunities at all levels of our organisation; we do not tolerate any form of racial, physical, sexual or workplace harassment. Our position is included in all training materials for new and current employees, and reinforced regularly in management training.

We aim to employ workforces that reflect the demographics of the communities in which we operate. At many of our assets, achieving gender parity is a major challenge due to geographic remoteness or shift working rostering. In these regions, we focus on maximising local employment instead, including any vulnerable communities represented there. Like many of our peers, we are trialling a number of approaches to improve gender diversity in our business.

We have procedures, guidelines and training on bullying, harassment and discrimination that are available both online and via traditional channels. Our supervisors and managers implement our equal opportunities policies and guidelines.

Our Group diversity objective is to create a diverse and inclusive workforce; we seek to achieve this objective through building a working environment that provides full and equal participation for all groups in our workforce and creating an inclusive team culture.

We work on improving gender diversity and preventing gender discrimination or any other divers attribute in relation to employment matters. Through providing flexible working arrangements, part-time employment and job-sharing when appropriate, we can encourage and support diversity of thought and experience.

We include information on equality and diversity in employee induction and diversity training programmes; these are available via multiple learning mediums to suit a range of adult learning styles (including but not limited to classroom training and online self-paced e-learning in multilingual formats). We ensure that all our employees can report grievances through either formal or informal processes.

We have a transparent and fair internal disciplinary process.

Working ethically

We are committed to maintaining a culture of ethics throughout Glencore. To support this, we have a Group Ethics and Compliance programme that includes risk assessments, policies, standards, procedures and guidelines, training and awareness, monitoring and investigations.

Employees access our compliance policies, standards, procedures and guidelines through various channels, including the Group and local intranets. Our managers and supervisors are responsible for ensuring employees understand and comply with the policies, standards and procedures.

We monitor and test their implementation on a regular basis. Employees with access to a work computer must confirm their awareness and understanding of our compliance requirements annually thereafter.

In accordance with our Code of Conduct, anybody working for Glencore who breaches our Code of Conduct, policies, standards or procedures or the law may face disciplinary action including dismissal.

Local employment

Employment is one of the most direct opportunities for us to support the local development of our host countries. We provide families with their livelihoods, via direct employment at our operations and indirect employment via contractors and our use of local suppliers.

We are committed to employing locally wherever possible. To support local markets and provide further economic uplift, we invest significantly in workforce development, as well as offering our host communities training for non-mining jobs.

We emphasise diversity in our training initiatives and work with local governments, education authorities and community representatives to identify skill gaps and find the best ways to meet the needs and expectations of our stakeholders. We fund and operate training centres and programmes around the world that include complete secondary education, as well as artisanal skills for the mining sector and elsewhere.
Engagement with Indigenous communities

A number of our assets are located in regions close to, or on, the traditional lands of different Indigenous, aboriginal and First Nations communities. We base our relationships with these communities on open and continuous dialogue to understand their varying cultures, views and aspirations. We are also committed to identifying opportunities for their inclusion and advancement.

Some of our Canadian sites are in or near long-established indigenous communities and we work in partnership with them to provide work, training and educational opportunities for individuals from those communities to secure employment at our assets. This includes scholarship programmes; recruitment initiatives; training; personal, language and skills development; and cross-cultural support.

Since 2009, our Raglan Mine in northern Canada has run its Tamatumani (second start in Inuktitut) programme. The programme encourages and supports local Inuit community members to work at the mine. Tamatumani supports the Inuit employees in their professional skills development and aims to accelerate their progression to higher responsibility positions. Raglan Mine’s Inuit employees represented around 20% of its workforce.

Some of our assets have also entered into formal agreements with local Indigenous communities that include participation agreements, impact benefit agreements and memoranda of understanding.

In Australia’s Northern Territory, our McArthur River Mine (MRM) targets 20% Indigenous employment through its recruitment and development programmes. MRM’s targeted local Indigenous trainee programme matches young people’s existing skills with different work areas and it leads to a structured 12-month, on-the-job traineeship programme. The programme has led to many of the trainees securing permanent employment and upskilling through nationally recognised qualifications.

Labour relations

We believe that our people are our greatest asset. We uphold the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. We recognise and uphold the rights of our workforce to a safe workplace, freedom of association, collective representation, collective bargaining, just compensation, job security and development opportunities.

Our assets ensure that working hours are not excessive by monitoring rosters, shifts and other recording procedures, in compliance with local legislation and agreements with unions or works councils.

We are committed to working honestly and openly with labour unions at all our locations and treating employees with respect. As unions play different roles at our assets depending on geographical region and industrial sector, our assets engage with the unions active at their sites in different ways and at different levels. We do not interfere with the rights of unions and prohibit any form of intimidation or retaliation against workers seeking to exercise their rights to freedom of association, collective representation and/or collective bargaining.

Whenever there are significant organisational changes, such as closures, acquisitions, mergers and divestitures, we consult, communicate and provide appropriate support to our people. We work with our employees, unions and host governments to identify and agree alternative opportunities, severance packages and support during transition.

We have clear, formal processes for our people to report labour grievances. Our assets hold regular meetings with union representatives, to provide updates on safety, production and costs and discuss upcoming business challenges, opportunities, and risks to longer-term viability.

Where appropriate, we involve union leaders in day-to-day management, eg health and safety councils. We engage directly with full-time union health and safety representatives on ways to improve safety performance.

We actively advise retiring unionised employees with education on pensions and optimisation of post-retirement health benefits, as well as wellbeing. We have joint disability management programmes to ensure effective return to work programmes for workers who have previously been on leave due to injury or illness.
Employee retention and turnover

We make every effort to minimise the impact of redundancies on our employees and our host governments and communities. We engage extensively with all those affected to ensure they are aware of our planned actions.

Our severance and compensation packages are in line with labour agreements and employment contracts; they either meet or exceed the requirements of local legislation. Many of our assets include voluntary redundancies in their processes in the first instance.

If we are forced to make employees redundant, we make every effort to find roles them within the business, within their local communities and across the wider Group. We engage in retraining and up-skilling for employees affected by redundancies in the lead-up and notice periods to closures, to increase their prospects for redeployment within the Group. Affected employees receive retraining subsidies.

We work with our people to find suitable alternative employment wherever possible. We have local and global preferred supplier agreements with career transition and outplacement support and offer employees career counsellor as part of local support arrangements.

We can offer financial support for career transition that includes but is not limited to job search workshops, one on one coaching and job placement. Job placement support includes identification of opportunities in other organisations and individualised mentoring to help the finding of new jobs. Many of our assets also offer specific support to employees with low financial literacy, including basic financial management training.

We carry out all redundancies in consultation and agreement with local government and community stakeholders and trade unions. We negotiate with local unions on severance agreements.
A control that is crucial to preventing or mitigating the consequences of an event. The absence or failure of a critical control would significantly increase the risk connected to the relevant hazard, regardless of the existence of other controls. Controls include mitigation and management actions, devices and technical systems.

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critical control

A formal grievance process/mechanism for local community members or other stakeholders community members or other stakeholders to use to register any concerns about real or perceived actions by nearby operations, with the objective of resolving problems before they escalate.

grievance process

A natural commodity consisting of extracted and processed mineral ores, the first step towards producing refined minerals and metals.

copper equivalent

We calculate a product-specific production value by dividing the average price of a specific product in a baseline year with the average price of copper in the same baseline year.

concentrate

A formal document detailing a costed conceptual outline of how to close an operation, taking into account the options available to deal with prevailing social and environmental issues. We set aside funds specifically for site closure, including land rehabilitation.

closure plan

Artisanal and small-scale mining.

ASM

Filling mined voids with non-hazardous material generally sourced from mine residues, to ensure long-term stability of excavations and minimise the effects of seismic activity.

backfilling

Baseline water stress measures the ratio of total water withdrawals to available renewable water supplies. Water withdrawals include domestic, industrial, irrigation and livestock consumptive and non-consumptive uses. Available renewable water supplies include surface and groundwater supplies and considers the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users.

baseline water stress

The carbon Scope 1 and 2 location-based intensity is calculated as a ratio of Scope 1 and 2 location-based emissions of Glencore operated industrial assets owned at the end of the reporting year, divided by their copper equivalent production. Further synonyms of these metrics used in this report include ‘carbon emissions intensity’ and ‘greenhouse gas emissions intensity’.

Carbon Scope 1 and Scope 2 location-based intensity

A phase in the lifecycle of an asset where production is stopped, but with the potential to recommence operations later; we manage conditions to ensure that the asset remains in a safe and stable condition.

care and maintenance

Carbon dioxide equivalent is the universal unit of measurement for the global warming potential (GWP) of greenhouse gases, where one unit of CO₂e is the GWP for one unit of carbon dioxide (CO₂). This unit allows us to discuss the equivalence of different GHGs in terms of their GWP. The GWPs used in this publication are 1 for CO₂, 28 for methane and 265 for nitrous oxide, as per IPCC’s 5th Assessment.

CO₂e

direct energy

Energy used and generated by our operations, including energy generated by combustion in boilers, furnaces and vehicles owned or controlled by us. Sources include coal, coke, diesel, gasoline, biomasa, biodiesel, fuel oil, jet fuel, kerosene, LPC, naphtha, natural gas, propane and electricity generated from renewable source or recovered on-site.

See indirect energy and Scope 1 and 2 emissions

DPM

Diesel particulate matter.

ECHA

The European Chemicals Agency is an agency of the European Union that manages the technical, scientific and administrative aspects of the REACH system and drives implementation of the EU’s chemicals legislation.

EITI

The Extractive Industries Transparency Initiative (EITI) aims to strengthen governance by improving transparency and accountability in the extractive sector (oil, gas and mining). EITI promotes revenue transparency by monitoring and reconciling payments from mining businesses and government revenues at country level.

ESG

Environment, social and governance.

ferroalloys

Various iron alloys that have a high proportion of one or more other elements, eg manganese, chrome or silicon.

fugetive emissions

Emissions that emanate irregularly from many diffuse sources, such as gas leakages from equipment, and, in the case of dust, the movements of trucks and machinery in dusty areas.

GHG

Greenhouse gas.

Greenhouse Gas Protocol

Standards and guidance for corporate accounting and reporting on GHG emissions, which help governments and business leaders to understand, quantify, and manage GHG emissions [e.g. CO₂]. The GHG Protocol separates GHG emissions into different scopes depending on source.

GRI

The Global Reporting Initiative (GRI) is an international independent standards organisation that develops and disseminates voluntary sustainability reporting frameworks; there is a specific supplement for the mining and metals industry; there is a specific supplement for the mining and metals industry.

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See ‘incident classification’

HSEC

Health, safety, environment and communities and human rights.

Healtech

High-efficiency, low-emission.

HELE

High potential risk incidents (HPRIs) could potentially result in a catastrophic or major outcome.

HPRIs

See ‘incident classification’

hours worked

Total hours worked by employees and contractors at our industrial sites, including overtime but excluding any scheduled or unscheduled absence (e.g holidays or sickness) during the reporting year.

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ICMM
The International Council on Mining & Metals (ICMM) is an industry trade body dedicated to establishing and promoting leading sustainability practices.

incident classification
We classify the severity of all sustainability-related incidents against a five-point scale: 1. negligible, 2. minor, 3. moderate, 4. major and 5. catastrophic.

IFC
The International Finance Corporation (IFC) is part of the World Bank Group; it finances private sector ventures and projects in developing countries and provides these with advice and guidelines.

ILO
The International Labour Organization (ILO) is a United Nations agency for the promotion of social justice and internationally recognised human and labour rights.

ILO Declaration
In 1988, the ILO adopted the Declaration on Fundamental Principles and Rights at Work, with the core categories of collective bargaining, discrimination, forced labour and child labour.

indirect energy
Energy used by our sites, but supplied by third parties, often as electricity. This includes electricity, steam and heating/cooling.

See direct energy and Scope 1 and 2 emissions

industrial activities
Glencore term covering assets and activities related to commodity production and processing, as separate from marketing activities.

See marketing activities

IPCC
The United Nations Intergovernmental Panel on Climate Change (IPCC) assesses scientific, technical and socio-economic information on the risk of human-induced climate change. The United Nations Environment Programme and the World Meteorological Organization established the IPCC.

LBMA
The London Bullion Market Association (LBMA) is an international trade association, representing the London market for gold and silver bullion, which promotes refining standards, trading documentation and the development of good trading practices.

ISO 9001
A quality management system standard (not a performance standard) issued by the International Organization for Standardization (ISO). A voluntary standard that certifying bodies can independently audit.

ISO 14001
A management system standard, similar to ISO 9001, but focusing on environmental impacts and risk.

LTIs
Lost time injuries (LTIs) are recorded when an employee or contractor is unable to work following an incident. We record lost days as beginning on the first rostered day that the worker is absent after the day of the injury. The day of the injury is not included. LTIs do not include restricted work injuries (RWIs) and fatalities.

LTIFR
The lost time injury frequency rate (LTIFR) is the total number of LTIs recorded per million working hours.

MACC
A marginal abatement cost curve (MACC) is an estimate of the volume and costs of opportunities to reduce emissions in a given year.

marketing activities
Glencore term covering trading and sales activities as well as the infrastructure and resources used in transporting products from our industrial sites to customers.

See industrial activities

nitrogen oxides
A range of related chemical compounds, collectively indicated as NOx, which can react to form GHGs. Examples are nitric oxide and nitrogen oxide.

occupational disease
Any chronic ailment or illness that occurs as a result of work or occupational activity; these are typically identified as being more prevalent in a given body of workers than in the general population, or in other worker populations. An occupational disease is different from an occupational injury.

NDCs
Nationally Determined Contributions (NDCs) are the efforts by each country to reduce national emissions and adapt to the impacts of climate change.

OECD
The Organisation for Economic Co-operation and Development (OECD) is an international organisation that provides a forum in which governments can work together to share experiences and seek solutions to tackle economic, social, environmental and governance challenges.

OECD DDG
The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas

the Paris Agreement
An agreement within the United Nations Framework Convention on Climate Change, dealing with GHG emissions mitigation, adaptation, and finance, signed in 2016.

petajoule (PJ)
A measure of energy equivalent to a thousand trillion joules, or 1015 joules, usually used to express energy consumption by cities or major industries.

PM
Particulate matter, or dust, usually from industrial sources.

protected area
A location that receives protection because of its natural, ecological or cultural value.

REACH
Registration, Evaluation, Authorisation and Restriction of Chemicals is the European Union’s chemicals control act.

SafeWork
A Glencore initiative to change attitudes towards safety and bring about long-term sustainable change to eliminate fatalities and serious injuries.

Safeguard Mechanism
The Safeguard Mechanism provides a framework for Australia’s largest emitters to measure, report and manage their emissions.

Scope 1 emissions
Greenhouse gas emissions from owned or controlled sources (ie direct emissions), including emissions from combustion in owned or controlled boilers, furnaces and vehicles/vessels and coal seam emissions. Our Scope 1 emissions are measured in CO2e.

Scope 2 – location-based emissions
This approach applies grid emission factors to all purchased electricity, regardless of contractual purchase arrangements. Our Scope 2 – location-based emissions are measured in CO2.

Scope 2 – market-based emissions
This approach applies GHG emissions from contractual arrangements; we apply supplier-specific emission factors when relevant and available, but where they are not, the country’s residual or grid emission factor is applied. Our Scope 2 – market-based emissions are measured in CO2.

Scope 3 emissions
Indirect greenhouse gas emissions (not included in Scope 2) that occur in our value chain, including both upstream and downstream emissions.

sulphur dioxide
A chemical compound (SO2) produced by various industrial processes, including the combustion of sulphur-containing fuels. SO2 is a pollutant gas and a precursor to particulates in the atmosphere. It can be captured and converted to saleable sulphuric acid.
tailings
The residue of an industrial process, especially residue that contains mineral ore.

TSF
Tailings are stored in purpose-built tailings storage facilities (TSFs).

TRIFR
The total recordable injury frequency rate (TRIFR) is the sum of fatalities, LTIs, restricted work injuries (RWIs) and medical treatment injuries (MTIs) per million hours worked. The metric represents all injuries that require medical treatment beyond first aid.

United Nations Global Compact (UNGC)
The UNGC is a voluntary initiative based on CEO commitments to implement universal sustainability principles and to take steps to support UN goals. Its principles cover human rights, labour, environment and anti-corruption.

United Nations Guiding Principles on Business and Human Rights (UNGPs)
The UNGPs are a set of guidelines for states and companies to prevent, address and remedy human rights abuses committed in business operations.

Universal Declaration of Human Rights
The Universal Declaration of Human Rights is a common standard for all peoples and all nations that sets out fundamental human rights to be universally protected.

Voluntary Principles
The Voluntary Principles on Security and Human Rights (Voluntary Principles) Initiative is a multi-stakeholder initiative involving governments, companies and NGOs, which promotes a set of principles for oil, gas and mining companies to guide them in providing security for their operations in a manner that respects human rights.
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This document contains statements that are, or may be deemed to be, “forward-looking statements” which are prospective in nature. These forward-looking statements may be identified by the use of forward-looking terminology, or the negative thereof such as “outlook”, “plans”, “expects” or “does not expect”, “is expected”, “continues”, “assumes”, “is subject to”, “budget”, “scheduled”, “estimates”, “aims”, “forecasts”, “risks”, “intends”, “positioned”, “predicts”, “anticipates” or “does not anticipate”, or “believes”, or variations of such words or comparable terminology and phrases or statements that certain actions, events or results “may”, “could”, “should”, “shall”, “would”, “might” or “will” be taken, occur or be achieved. Forward-looking statements are not based on historical facts, but rather on current predictions, expectations, beliefs, opinions, plans, objectives, goals, intentions and projections about future events, results of operations, prospects, financial condition and discussions of strategy.

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For example, our future revenues from our assets, projects or mines will be based, in part, on the market price of the commodity products produced, which may vary significantly from current levels. These may materially affect the timing and feasibility of particular developments. Other factors include (without limitation) the ability to produce and transport products profitably, demand for our products, changes to the assumptions regarding the recoverable value of our tangible and intangible assets, the effect of foreign currency exchange rates on market prices and operating costs, and actions by governmental authorities, such as changes in taxation or regulation, and political uncertainty.

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