

DELIVERING SUSTAINABILITY

CONTENTS

Sustainability highlights	01
Introduction	02
Chairman's letter	04
At a Glance	06
Our markets	08
Sustainability framework overview	10
Material topics	12
– Delivering value through stewardship	12
– Maintaining health and safety	18
– Focusing on our people	26
– Caring for the environment	32
– Unlocking value for our communities	44
Glossary	52

OUR COMMITMENT TO SUSTAINABILITY

Sustainability is central to our business and the Central Asia Metals (‘CAML’) team appreciates the importance of integrating sustainability into all of our activities.

Our purpose is to produce base metals, which are essential for modern living, profitably, and in a safe and sustainable environment for all our stakeholders.

SUSTAINABILITY HIGHLIGHTS

LOST-TIME INJURY FREQUENCY RATE (‘LTIFR’)

0.42

2018: 3.76

REDUCED LOST-TIME INJURIES (‘LTIs’) IN 2019 BY

88%

2019 CAML CARBON EMISSION INTENSITY

3.46 tCO₂-e

PER TONNE OF CU EQUIVALENT PRODUCTION

2019 TAX PAID IN KAZAKHSTAN

\$21.8m

2018: \$21.6m

2019 TAX PAID IN NORTH MACEDONIA

\$13.3m

2018: \$22.5m

CAML 2019 SOCIAL PROJECT SPEND

\$0.6m

2018: \$0.6m

EMPLOYEES AND CONTRACTORS FROM COUNTRIES OF OPERATION

99%

2019 AIR QUALITY EXCEEDANCES AT EACH OPERATION

Zero

2019 SIGNIFICANT SPILLS AT EACH OPERATION

Zero

APPOINTMENT OF NEW NON-EXECUTIVE DIRECTOR, DR GILLIAN DAVIDSON, TO CHAIR SUSTAINABILITY COMMITTEE

LONG-TERM PLANS IN PLACE TO REDUCE SURFACE DEPOSITION OF TAILINGS

DECREASE IN NET WATER CONSUMPTION AT SASA DUE TO A RECYCLING INITIATIVE

43%



for more info, visit us online
www.centralasiametals.com

ABOUT OUR SUSTAINABILITY REPORT

As a Group, we have always taken our social responsibilities seriously, having developed policies and strategies in this regard since 2013, and employing a site-based Sustainability Director (formerly 'CSR Director') at that time to implement them.

We have, for many years, provided commentary on what we previously referred to as our Corporate Social Responsibility ('CSR') activities in our Annual Reports. However, we have become increasingly aware in 2019, in particular, of the requirement for additional quantitative disclosure regarding our sustainability efforts and achievements.

This report is Central Asia Metals' ('CAML' or the 'Company') first standalone annual Sustainability Report and discusses the Company's approach to maintaining safe operations, maximising the value we create for our stakeholders and our efforts to minimise negative environmental or societal impacts.

The report covers the Sasa mine in North Macedonia, the Kounrad operation in Kazakhstan and, where relevant, the London head office. Data is provided for the 2019 financial year, ended 31 December, with comparisons for previous periods where possible. All financial figures are stated in US Dollars, with an average exchange rate of 55 MKD/USD being used for North Macedonia and 383 KZT/USD being used for Kazakhstan. This document should be read in conjunction with the Company's 2019 Annual Report, and both reports are available on our website at www.centralasiametals.com.

Going forward, neither our Annual Report nor our Sustainability Report will be printed. We have moved to electronic communications with our stakeholders wherever possible so as to avoid using unnecessary paper.

We welcome any feedback or questions on our sustainability reporting from stakeholders. Please contact Louise Wrathall, Director of Corporate Relations, on louise.wrathall@centralasiametals.com



Drilling boreholes at Kounrad

OUR APPROACH

We recognise the importance of determining and prioritising the sustainability topics relevant to the business and our stakeholders. For this reason, we engaged a stakeholder engagement consultancy to carry out an external, desk-based materiality assessment which ensured that current views and emerging trends are being addressed by CAML.

The consultant's methodology was based on factors derived from a full review of 'AccountAbility's A1000 Principles Standard', the International Integrated Reporting Council's ('IIRC') Integrated Reporting Framework, UN Sustainable Development Goals ('SDGs'), the Global Reporting Initiative ('GRI') Standards, Dow Jones Sustainability Index ('DJSI') and the Sustainability Accounting Standards Board ('SASB') guidance. The process ensures that all relevant topics have been considered appropriately within the scope of the study. The materiality assessment specifically considered topics under the umbrella of sustainability, and the assessment analysed data and information from a variety of internal and external sources to ensure that all potential topics were considered and captured.

THE MATERIALITY ASSESSMENT CONSISTED OF THE FOLLOWING STEPS:

IDENTIFICATION

Topic identification – desk-based research to capture a 'raw list' of all potentially relevant topics and impacts.

CONSOLIDATION

Consolidation and refinement of topics to ensure relevance to CAML and its industry.

ANALYSIS

Further analysis of topics significant to CAML and importance to stakeholders over the short, medium and long term.

ASSESSMENT

Assessment of each topic's impact on the business and to key stakeholder groups based on research carried out by the agency.

ALIGNMENT

Alignment and cross-referencing of material topics to business risks.

SCORING

Material topics were then scored based on their importance to CAML business and stakeholders.

Our final list of material topics was used to develop our sustainability framework (pages 10-11), which is used to drive our sustainability strategy and priorities moving forward.

EVOLVING OUR APPROACH TO SUSTAINABILITY



NICK CLARKE, CHAIRMAN

I am delighted to introduce our first Sustainability Report, which we believe is an important step in the Company's development. We have been listed on the AIM market of the London Stock Exchange for almost 10 years and sustainability has always had its place at the heart of our business model; we believe we largely have the systems, policies and procedures in place to produce responsibly and sustainably for all our stakeholders.

As we write this Sustainability Report, we are in the midst of the COVID-19 pandemic. The ramifications and outlook for our health, our business and the global economy are uncertain and changing daily. Our priority during this difficult time is the welfare of our employees.

Sustainability is a wide-ranging and crucial topic and we are aware of our duty to report in a more formal manner on our approach, the challenges we face, as well as our performance with regards to environmental, social and governance (ESG) factors.

In 2019, I took part in an ESG roadshow, where we approached some of our major shareholders to further understand their expectations from us with regards to governance and the reporting of our sustainability practices. Their important feedback has informed some of the paths that we have taken.

We believe that this forthcoming report will provide all our stakeholders with a greater understanding of our impacts, efforts and achievements in this critical aspect of our business. We see our reporting and communication of sustainability issues as an evolving process and anticipate many areas for continued improvement going forward. We are cognisant of the benefit of committing to ambitious and meaningful targets to progress our performance and will be considering this further during 2020.

A fundamental step in our efforts to further formalise sustainability governance at CAML was the November 2019 appointment of Dr Gillian Davidson to the Board, and as Chair of the Sustainability Committee. She is an experienced company director, whose sustainability knowledge has already been invaluable in guiding the Company forwards to continually advancing our strategies within this important sphere. While we have had a site-based Sustainability Director since 2013, we have taken steps in 2019 to revisit and review our approaches and policies in an effort to keep abreast of current developments and requirements.

Our purpose is to produce base metals, which are essential for modern living, profitably in a safe and sustainable environment for all our stakeholders. The metals we produce are indispensable enablers of modern living and of human progress into the future. We cover this in more detail on pages 8-9.

One of the fundamental aspects of our business in Kazakhstan, and a key differentiator for the Company, is that we produce copper from what was previously considered waste material.

We have been producing from our Kounrad facility for eight years now and, in the first half of 2020, we expect to achieve the significant milestone of 100,000 tonnes of copper production from this operation.

Sustainable development is one of our core objectives and we aim to operate in line with leading standards of health, safety, social and environmental management. Central to the running of our projects is a focus on safety and I am pleased to say we achieved strong performance in this area in 2019, with a LTIFR of 0.42. We provide employment for over 1,000 people in North Macedonia, Kazakhstan and the UK, and are particularly proud of the training and development we are able to offer at our projects and in their local communities. With a total of \$35.1 million spent in taxes in our countries of operation, we make a meaningful financial contribution and have targeted local employment practices as well as preferential procurement policies for local suppliers.

We are aware of the social and environmental impacts of our operations and look to mitigate these to the greatest possible extent, with energy efficiency audits having been undertaken at

both operations during the year. In 2019, we introduced a water recycling programme at Sasa which has been extremely successful, and we are constantly looking at ways to maximise productivity and minimise impact.

As we strive to continuously evolve our approach to sustainability, it is clear that effective, transparent and open engagement with our stakeholders is fundamental to the proper running of our business. We therefore welcome any feedback on this first report and look forward to sharing our progress going forward.



NICK CLARKE
CHAIRMAN

OUR STAKEHOLDERS

We are aware that the success of both our operations is dependent on the establishment and maintenance of transparent and close relations between CAML and our stakeholders. We are committed to following formal processes of engagement and dialogue and to ensuring interests and concerns are taken into consideration. Stakeholder identification and analysis has been conducted at both operations, and the main stakeholders are listed below:

	HOW WE ENGAGE	HOW WE DELIVER VALUE	
Shareholders	<ul style="list-style-type: none"> → Regular one on one meetings with Directors and investor relations department → Investor presentations → AGM → Industry conferences 	EPS 29.36 cents	2019 dividend 6.5p
Employees and contractors	<ul style="list-style-type: none"> → Regular newsletters → Email → Briefings → HR discussions → Notice boards and suggestion boxes → Local website at Kounrad → Union representatives at Sasa 	Total number of employees and contractors	1,230
Governments, NGOs	<ul style="list-style-type: none"> → Meetings with Company management → Local and national Government engagement → Site visits by Government officials and ministers 	Tax paid in North Macedonia since 2017	Tax paid in Kazakhstan since 2012
		\$36.5m	\$143.0m
Communities	<ul style="list-style-type: none"> → Education campaigns → Local media → Drop-in centre at Sasa → Public meetings → Local website at Kounrad → Community events such as Spring Festival in Kazakhstan and Miners' Day in North Macedonia → Site visits to Kounrad by school pupils and elders from the local community 	Sasa social contributions 2019	Kounrad social contributions 2019
		\$0.3m	\$0.3m
Suppliers	<ul style="list-style-type: none"> → Communications to suppliers regarding Local Procurement Policy → Communications covering anti-bribery and other ethical/governance issues 	Sasa % local procurement ¹	Kounrad % local procurement ²
		59%	73%
		<small>1 Locally includes North Macedonia</small>	<small>2 Locally includes Karaganda region</small>

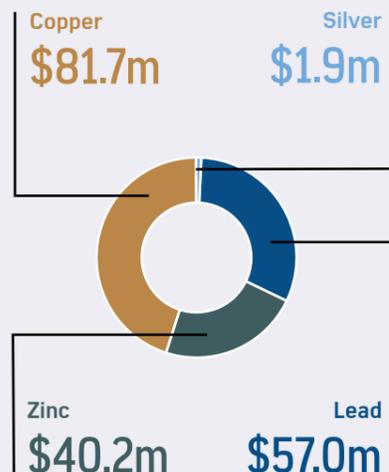
UNLOCKING VALUE IN BASE METALS

CAML is a diversified mining company with two low-cost operations producing three base metals essential for modern living.

REVENUE BY GEOGRAPHY



REVENUE BY METAL



EMPLOYEES BY GEOGRAPHY



1 Silver sold to Osisko Gold Royalties, in accordance with its streaming agreement.

KAZAKHSTAN

KOUNRAD MINE → COPPER



KOUNRAD

OVERVIEW

In 2012, CAML completed construction and began producing copper from the Kounrad in-situ dump leach and solvent extraction electro-winning ('SX-EW') operation close to Balkhash in central Kazakhstan.

Two self-funded expansions followed, and the Company has now fully developed Kounrad, with copper production expected to continue until the end of the licence period in 2034. Since production commenced, 96,245 tonnes of copper have been produced at Kounrad, at costs that are amongst the lowest in the world.

Life of operation to

2034

2019 copper sales

13,600t

2019 copper production

13,771t

Estimated remaining recoverable copper resources

160,000t

NORTH MACEDONIA

SASA MINE → ZINC → LEAD → SILVER



SASA

OVERVIEW

Sasa is a zinc, lead and silver mine in North Macedonia, approximately 150 kilometres from the capital city, Skopje. The operation is an underground mine and the processing plant uses froth flotation to produce a zinc concentrate and a lead concentrate containing silver. These products are then trucked to nearby smelters.

In 2019, the mine produced 23,369 tonnes of zinc in concentrate and 29,201 tonnes of lead in concentrate.

Life of mine

18 years

Probable Reserve (2020)

8.9mt

Zinc grade

3.1%

Lead grade

3.9%

PRODUCING THE METALS ESSENTIAL FOR MODERN LIVING

Modern society is increasingly dependent on new technology and, as the world moves away from fossil fuels towards renewable energy, these two factors will bring increased demand for certain metals, such as copper. Copper is an essential component of electric motors, wiring and electronics and, as such, will be a major component of electric vehicles. Zinc is an essential metal in today's society given its use in coating steel and preventing corrosion. In this manner it prolongs the life of metal products, reducing the need for replacement.

With sustainability now taking centre stage in the corporate world, it is important to recognise the mining industry for the positives that it brings to society. Nearly every mineral and metal in use in modern life is the product of some form of mining. Demand for metals is growing and, as world population increases and countries develop and as technology advances, the need for these commodities will continue to rise. Population growth and economic development, as reflected by rising GDP per capita, have historically been key drivers of global demand for commodities.

WHY DO WE NEED BASE METALS?

These are the basic building materials for much of the world around us, and are widely used in construction, manufacturing and transportation and energy transmission and storage, all of which foster economic growth and development.

WHY CAN WE NOT RELY SOLELY ON RECYCLING?

If we were to recycle all the freely available metals in the world today, we would only be able to generate a very small percentage of the metals needed by society. This is for three key reasons:

- Growing global population
- Metals remain in use for many years therefore are unavailable for recycling
- Low-quality scrap recycling can do more harm than good for the environment

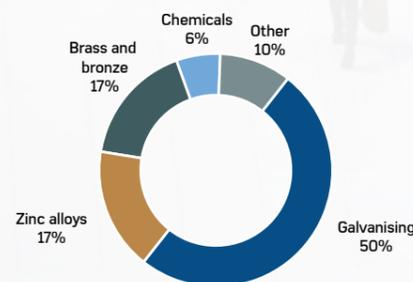
On average, over 30% of copper supply annually is from recycled sources and around 30% of zinc. The lead industry is already at the leading edge of metal recycling, with this 'secondary lead' providing a significant percentage of lead demand annually. Lead has one of the highest recycling rates of modern metals globally, and it is estimated that almost 75% of all lead used in the USA and Europe is produced through recycling processes.

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

BRUNDTLAND REPORT, 1987

ZINC

USAGE



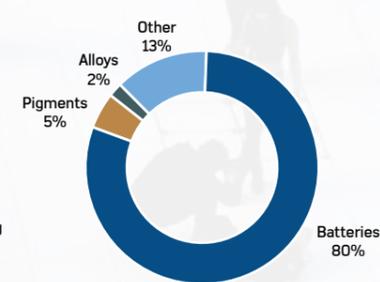
Around 50% of global zinc is used for galvanising, whereby a protective coating of zinc is applied to steel or iron. Galvanising protects the steel or iron by preventing corrosive substances from reaching the metals and by corroding first. Steel and iron that are not adequately galvanised will rust and weaken over time, resulting in premature replacement.

Long-term durability provided by galvanising is achieved at a relatively low environmental burden, with several studies demonstrating high economic and environmental costs associated with repeated maintenance and replacement of steel structures.

One of the less well-known uses for zinc is in nutritional supplements. It is estimated that almost 0.5 million undernourished children are at risk of dying each year from zinc deficiencies. Taking zinc regularly can treat stomach upsets, improve immunity, blood sugar levels and the function of the eyes, heart and skin.

LEAD

USAGE



Lead is an essential ingredient in the lead-acid storage batteries used in motor vehicles and over 80% of global lead demand is for batteries. Lead batteries are also very efficient at storing energy generated by clean, green power sources such as wind and solar.

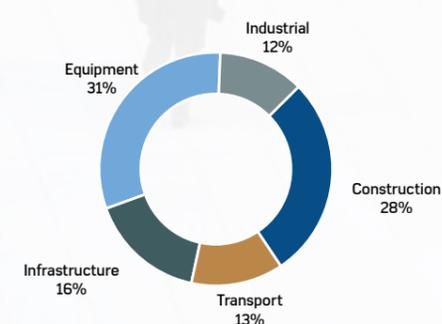
Currently, a billion vehicles worldwide use a lead-acid battery to start their engines, with such transportation of people and goods fostering economic growth and development around the world.

Hybrid and fully electric vehicles also require lead-acid batteries in conjunction with other battery technologies such as lithium-ion.

Lead batteries are also critical for fuel-saving technologies such as start-stop technology and powering exhaust-free industrial vehicles such as fork-lift trucks.

COPPER

USAGE



About 60% of all copper demand is for electrics such as wires, cables and connectors, as it is an excellent conductor of electricity. Approximately 20% of copper is used in construction for applications such as plumbing and copper tubes.

Copper plays a key role in information and communications technologies. Going forward, the need for copper in the electric vehicle revolution is expected to generate significant new demand as the world strives to reduce carbon emissions and arrest global warming. Where an internal combustion car uses approximately 22 kilogrammes of copper, the average electric vehicle contains almost four times that amount. In addition, each charging station also uses approximately 0.7 kilogrammes of copper.

Copper has unique properties known to kill many germs on contact so many hospitals are moving to use copper door handles and taps for their antibacterial properties. Such developments are important for our health with the rise of antibiotic resistant superbugs. The human body also needs traces of copper, as it plays an essential role in generating red blood cells, maintaining the immune system and helping the body to absorb iron.

If it's not grown, it's mined.

Source: ICMM, ICSG, ILZSG, ILA, World Bank

OUR MATERIAL TOPICS

DRIVING BENEFITS TO ALL OUR STAKEHOLDERS THROUGH OUR STRATEGY

Sustainability is an important part of the business, and we seek to create value for all of our stakeholders. Having a high standard of sustainability also enhances our reputation and our ability to do business in North Macedonia and Kazakhstan. This approach is supported by our Board and also helps us to attract and retain talented employees.

In 2019, we conducted a desk-based materiality assessment to identify the issues which are most important to our business. The strategic framework shown here is the outcome of our assessment, and is used to drive our sustainability strategy and priorities moving forward.

DELIVERING VALUE THROUGH STEWARDSHIP

We adhere to high standards of corporate and sustainability governance. We also recognise that through business success, we are able to generate and distribute economic value.

MATERIAL TOPICS

- Corporate governance and business ethics
- Sustainability management

→ see page 12

MAINTAINING HEALTH AND SAFETY

The health, safety and wellbeing of our employees is of the utmost priority. We adhere to the highest standards and ensure that safety measures are taken to mitigate risk.

MATERIAL TOPICS

- Safety
- Occupational health and wellbeing

→ see page 18

FOCUSING ON OUR PEOPLE

We are aware of the importance of our operations on our people's lives and we are committed to making a positive impact on these individuals.

MATERIAL TOPICS

- Employee retention and development
- Diversity and inclusion

→ see page 26

CARING FOR THE ENVIRONMENT

We are committed to preventing, mitigating and controlling the impacts of our activities on the environment. We recognise that as a business, we have a responsibility to the health of the environment.

MATERIAL TOPICS

- Energy usage and climate change
- Air quality and pollution
- Water usage
- Waste management
- Rehabilitation and biodiversity

→ see page 32

UNLOCKING VALUE FOR OUR COMMUNITIES

Our focus on customers and communities aims to provide the highest product quality and drive social value in the communities we operate in.

MATERIAL TOPICS

- Community engagement and development
- Social investment
- Economic value added
- Supply chain

→ see page 44

DELIVERING VALUE THROUGH STEWARDSHIP

We are committed to protecting the safety and health of our employees and contractors and to upholding human rights and sound governance, providing adequate training and development and preventing discrimination. We aim to reduce our environmental footprint wherever possible and have policies and procedures to assist in this goal. We develop and maintain constructive, professional relationships with all our stakeholders and look for opportunities to partner with them to enhance the communities in which we operate.



The Kounrad team



Our primary objective is to ensure that sustainability is integrated and embedded in every aspect of our business. Our goal is to create long-term value for all our stakeholders and therefore we take our responsibility for ensuring sustainable operations at CAML very seriously. We aim to continually improve our sustainability performance and regularly review, audit and improve our systems.

NIGEL ROBINSON, CHIEF EXECUTIVE OFFICER

CORPORATE GOVERNANCE AND BUSINESS ETHICS

Strong corporate governance and ethical behaviour are crucial for the effective running of our operations and the sustainability of our business.

We place great importance on ensuring there is a strong foundation of governance to underpin the Group's strategy and create long-term value for our shareholders and other stakeholders. Leading from the top, the Board is responsible for setting the appropriate culture to drive good governance and ethical behaviour throughout the Company. Read about our culture and values on page 26.

The Board is committed to excellence and, supported by its Committees, looks to promote best practice throughout the Group and amongst stakeholders. Health and safety metrics are included as corporate performance targets in the Company's remuneration practices.

+ See our 2019 Annual Report for more information on corporate governance

POLICIES

The Company has clear policies in place to facilitate transparency and responsibility and to underpin our commitment to sound governance. These include:

- QCA Code adherence
- Anti-bribery Policy
- Whistle-blowing Policy
- Trade Sanctions Policy
- Modern Slavery Act Statement
- Code of Conduct
- Sustainability Policy
- Human Rights Policy

No employee, officer or associated person may engage in any form of bribery or other corruption anywhere in the world. This is reinforced by the Group's Anti-bribery Policy, which covers employees as well as consultants, agents, suppliers and representatives. We expect all our suppliers to adhere to our sustainability and ethical standards and the Company's Code of Conduct also applies to them. However, we are aware that currently there is limited contractual enforcement in place; this is therefore a priority area for improvement in 2020.

MATERIAL TOPICS CONTINUED

We encourage whistle-blowing as a means for our employees to speak up against unethical behaviour. Any incidents or violations of the Whistle-blowing Policy should be reported to line managers and are treated confidentially. All issues are dealt with in a timely and sensitive manner, with feedback being provided to the Group Compliance Officer as well as the Audit Committee. In addition to the line manager, other Board and Management members are named in the Whistle-blowing Policy for employees to contact if required.

CAML is committed to removing potential modern slavery risks relating to our business and publishes an annual statement pursuant to section 54 of the Modern Slavery Act 2015, which is available on our website.

The CAML Code of Conduct clearly lays out how we expect our employees to behave and is underpinned by our values. We pride ourselves on operating in a way which ensures that we respect human rights and treat our workers and those along our supply chains humanely, from our labour practices to our security measures on site, and everything in between.

Training is provided on all Company policies through teleconferences, regular updates, and in-country presentations for management teams, and implemented downstream to all employees.

+ See our website for policy and Code of Conduct details

SUSTAINABILITY MANAGEMENT

We operate in full compliance in all material aspects with the laws and regulations of our host countries and are working towards compliance with best-practice international standards where possible. We adhere to International Finance Corporation Performance Standards (IFC PS) at both operations and have been audited as such in 2017 and 2018, which resulted in action plans that have been implemented. We are ISO9001, 14001 and OHSAS18001 certified at Sasa (with audits conducted on an annual basis) and look to comply with the relevant International Organization for Standardization (ISO) at Kounrad.

External official regulatory audits are undertaken on a regular basis at both operations to verify compliance and we frequently conduct independent audits internally within the Group.

We have a Sustainability Policy, which is available on our website, and we conduct regular audits of our operations to ensure compliance with its principles. The Sustainability Policy is the overarching document upon which various components of the sustainability management systems are built. It is provided to all new employees as part of the induction process and is clearly displayed in strategic locations in all operational offices.

+ See our full Sustainability Policy on our website

Sustainability, which is fully integrated into our day-to-day operations, is an essential element of our strategy and is led from the top, by CAML's Board.

+ See our 2019 Annual Report for more information on the Board of Directors

CAML has a Sustainability Committee comprising CAML's CEO, three Non-Executive Directors as well as the Company's Sustainability Director, Nick Shirley. We were delighted to strengthen our Board oversight of this vital area of the business with the appointment of Dr Gillian Davidson in 2019, who has over 20 years of sustainability experience in the extractives and natural resources sectors and is an independent sustainability advisor. Gillian is Chair of the Sustainability Committee and is dedicated to ensuring that sustainability remains core to our business.

Our Sustainability Committee enables us to maintain a strong focus on health, safety and environmental governance as well as internal and external social matters. It meets on a quarterly basis and reviews progress, statistics and matters associated with health, safety and the welfare of our employees, environmental matters and local community issues and projects.

At site level, regular meetings are held at Sasa and Kounrad between the General Directors and senior management to discuss sustainability-related activities and ensure this important aspect is fully integrated into all activities. In addition, the Executive team in London receives monthly, quarterly and annual reporting of sustainability-related activities.

+ See our 2019 Annual Report for more information on Sustainability Committee activities during the year



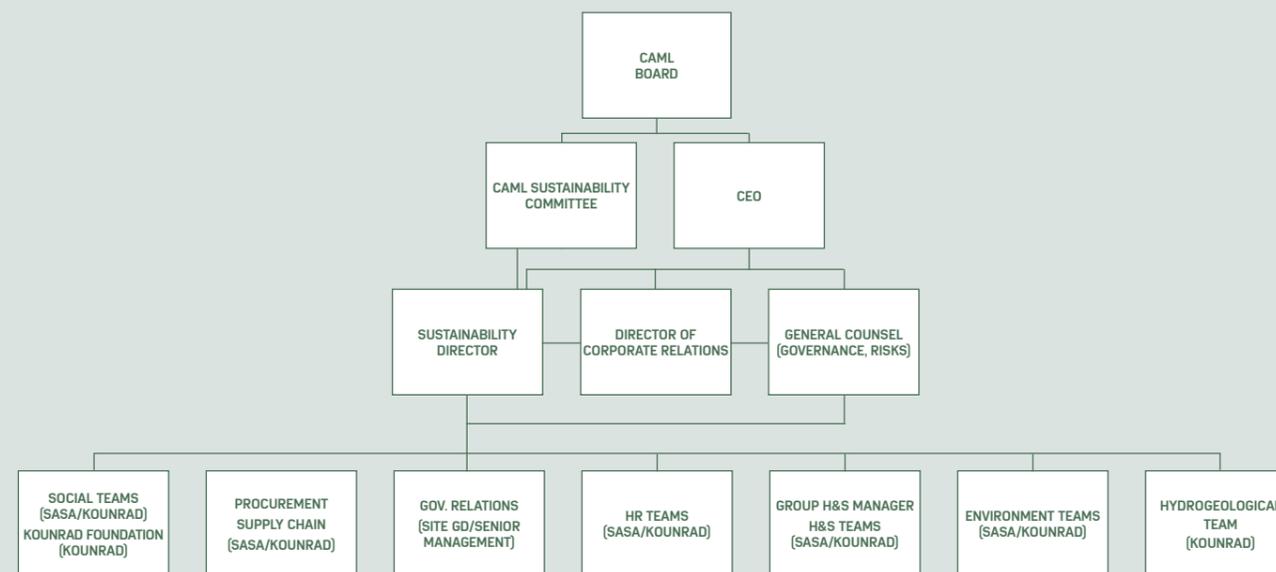
Central Asia Metals has long recognised the importance of integrating sustainability into our business and we are strongly committed to the responsible production of minerals. At the same time, we recognise the growing need for transparency and the increasing expectations of our stakeholders, from investors to local communities, to understand our business, its impacts and the creation of long-term value. As such, I am delighted to introduce our first Sustainability Report, a key step to enriching the conversation on our sustainability performance and vision for the future.

**DR GILLIAN DAVIDSON,
INDEPENDENT NON-EXECUTIVE DIRECTOR**



Firefighting training at Kounrad

CAML SUSTAINABILITY STRUCTURE



RISK MANAGEMENT FRAMEWORK

Operating in the mining sector brings inherent risk in the extraction and processing of natural resources, particularly where sustainability-specific risks are concerned. CAML therefore has specific and effective risk management systems in place to enable the Company to meet its strategic objectives.

Whilst the Board of Directors has ultimate accountability for risk management, ensuring that high-level strategies and changes are implemented on a macro level, the Audit Committee acts as the Board-level Risk Committee and elevates all necessary areas of risk management to the Board. Specific sustainability-related risks are generally reported to the Board via the Sustainability Committee. Reporting directly to the Audit Committee is the Group-level Risk Management Committee, whose membership includes Executive Directors and senior management. It is responsible for reviewing the principal risks of the business and advising senior management on appropriate mitigation activities.

The Sustainability Director takes overall responsibility for the day-to-day sustainability-related risk management process, detailed in the diagram to the right. The Group General Counsel oversees the process related to non-sustainability risks. Each site has a 'risk champion' who assists with risk management and can call upon the assistance of the Group's Risk Manager.

Periodic Risk Management Committee meetings are held with the senior level management from operations and the corporate team. These meetings review the risk profile and any significant changes or developments with regards to risk.

Importantly, by ensuring that our on-site employees and managers provide the first level of sustainability risk identification, we enable an 'on the ground' approach which engenders ownership and responsibility at our operations. We hold regular meetings to review and update risks. Comprehensive sustainability risk awareness and identification training has been provided at both operations. External sustainability-related risk training was undertaken in 2019 at Sasa and previously at Kounrad for all site-based senior staff down to supervisor level.

Sustainability-related issues are considered in the Company's formal principal risk assessment process and are discussed in the Annual Report.

+ See Principal Risks and Uncertainties in the 2019 Annual Report for more information

RISK MANAGEMENT PROCESS

COMMUNICATION AND CONSULTATION

There is continual consultation with the relevant parties throughout the process to ensure consistency and appropriate decision-making is being made across the Group towards risk management.

IDENTIFICATION

Risks are identified and managed by Risk Managers via input from General Directors and site senior management.

ANALYSIS

An understanding of the risk is gained through investigation of causes and estimation of likelihood and potential consequences. This continues and repeats in response to the monitoring and review process.

EVALUATION

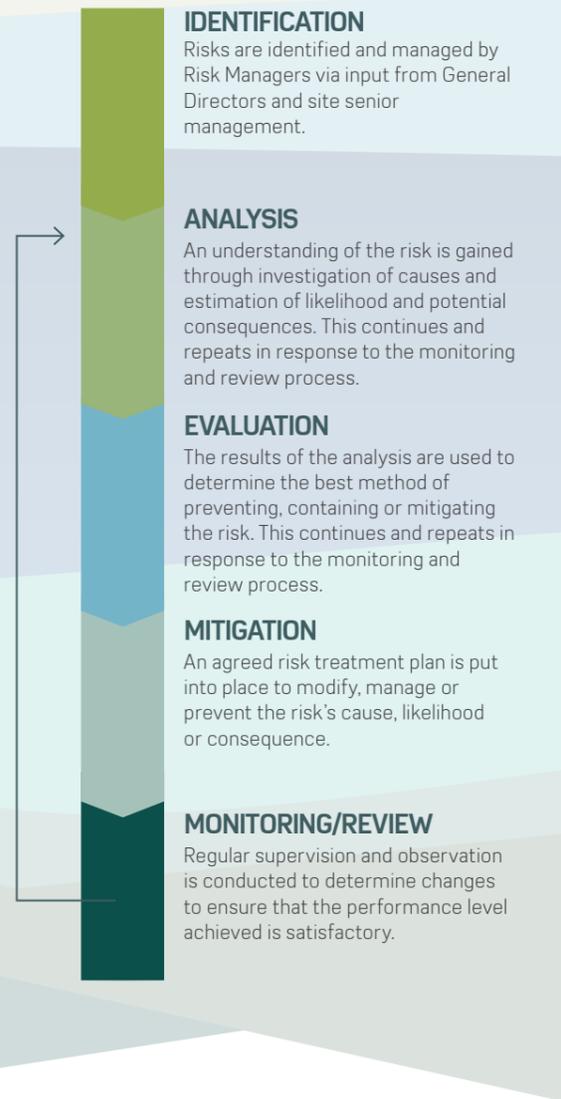
The results of the analysis are used to determine the best method of preventing, containing or mitigating the risk. This continues and repeats in response to the monitoring and review process.

MITIGATION

An agreed risk treatment plan is put into place to modify, manage or prevent the risk's cause, likelihood or consequence.

MONITORING/REVIEW

Regular supervision and observation is conducted to determine changes to ensure that the performance level achieved is satisfactory.



Safety training at Sasa



Being based on site, both at Sasa and Kounrad, I am able to maintain the necessary level of oversight to effectively manage our sustainability activities and initiatives, as well as keeping the Board abreast of all relevant developments, issues and programmes. An important goal of the regular lines of communication with the Sustainability Committee is to provide direction, oversight and feedback from the Committee to the operations, thereby enabling constant improvement of sustainability aspects within the business.

NICK SHIRLEY, SUSTAINABILITY DIRECTOR

2020 initiatives:

→ Further align our reporting with the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB)

MAINTAINING HEALTH AND SAFETY

The safety of our people is our primary priority and we work hard to promote a healthy lifestyle for our employees.

SAFETY

We aim to provide a safe and healthy working environment for our employees, contractors and visitors and determinedly work towards the goal of zero-harm in the workplace.

We have fully integrated and robust health and safety management systems at both sites, which are aimed at ensuring the safety of all personnel working at the operations and receiving feedback from employees for continual improvement and development of working conditions. Inspections of the workplace are systematically carried out on a daily basis, action plans are developed to eliminate workplace hazards, minimise risks and eliminate poor and substandard behavioural issues.

We have identified that the main safety issues facing the Group are as follows:

- effective ownership of safety from the heads of departments;
- establishing effectual lines of communication from heads of departments to the workforce;
- building and maintaining the level of safety awareness throughout the workforce;
- front-of-mind risk identification and mitigation processes;
- contractor management;
- change management in the introduction of new technologies to reduce risk exposure in the workplace; and
- retrofitting existing equipment to ensure they comply with industry best practice.



Safety training at Sasa

Safety teams report to both the site General Directors and the Sustainability Director. Effective procedures and guidelines are in place to manage safety throughout the Group and the Company has clear safety objectives, with related key performance indicators (KPIs), which are measured on a regular basis.

Rigorous health and safety monitoring and control is employed at our operations and fed back to the CEO and the Board through the Sustainability Committee. All relevant national health and safety standards in the countries of operation are adhered to including, where possible, compliance with international standards. Sasa is certified to international OHSAS18001 standards for health, safety and environmental (HSE) and quality management and will be certified to ISO45001 in 2020. Whilst Kounrad currently has no formal certification to international standards, it is aligned with ISO and IFC PS. An independent health and safety review at Kounrad was undertaken in 2018, followed by further internal reviews in 2019 to determine alignment with international standards.

Safety is based on the hierarchy of controls approach. We look to identify risks and assess their level in the workplace, followed wherever possible by the subsequent elimination of those risks. Any incidents are thoroughly investigated to determine the root causes and action plans developed to minimise the risk of a repeat incident.

The Company's approach is also to take remedial action where necessary to prevent harm, providing leadership and training, in order to develop a culture of safe working, respond in a timely manner to any incidents or emergencies and to work towards constantly upgrading the safety management system to minimise the risk of a recurrence of incidents. Where risks cannot be eliminated, they are reduced to an absolute minimum and the appropriate control measures put in place to ensure the safety of employees and contractors.

Safety risk management in practice

A five-step field-level risk assessment is used by the workforce to assess the risks in their workplace prior to starting work. As hazards are identified and documented by the worker, they are either addressed directly if possible, or placed into a register and prioritised for elimination. The shift supervisor sees and signs every risk assessment presented by employees.

Employees are expected to stop work and remove themselves and their colleagues from the area of work if they identify a safety risk. They are required to report all hazards to their line manager who, in turn, must take the appropriate action and report accordingly.

There are other avenues available for hazard registration, including reporting directly to the safety team, using the suggestion boxes located on both sites and/or using the Whistle-blowing hotline. The General Directors also operate an open-door policy such that safety concerns can be reported directly to themselves. See the case study on page 24 for detail on employee feedback mechanisms in place to drive safety improvements.



Breathing apparatus training at Sasa

Safety training

We have high expectations of all our employees and contractors in terms of safety practice and ensure that they are trained accordingly. All employees and contractors are required to adhere strictly to all Company health and safety rules and standards, and to report any safety issues immediately to their line manager or safety representative.

Safety training is undertaken both internally by the safety teams and, where appropriate, externally by health and safety specialists. Training is specifically targeted at ensuring personnel are provided with the skills and knowledge to perform their relevant work tasks as safely and efficiently as possible. By enhancing our team's level of personal safety, hazard awareness and identification, we aim to reduce risk in the workplace.

All personnel are initially provided with a site induction and then re-inducted annually. New employees have up to 20 days to complete competency-based training for their specific job, which includes a comprehensive role-specific safety component. Any new employees who fail to meet the required standards are refused entry to the workplace until such time as they have passed the training programme. In addition to formal training courses, toolbox talks are given on a daily basis at the start of every shift. Any relevant safety issues are discussed during these sessions.

All contractors are inducted prior to commencing work and must provide evidence of competency to undertake the specific task.

SAFETY TRAINING IN 2019

3,277

training course attendees in 60 sessions at Sasa

5,288

safety training course attendees in 26 sessions at Kounrad

Safety initiatives

The Group Safety Manager monitors and provides support for all safety initiatives proposed by both sites, and regularly meets with safety teams at Sasa and Kounrad to discuss issues, challenges and initiatives. A number of safety initiatives have been put in place in 2019, as demonstrated below:

SASA	KOUNRAD
Reformation of the mine rescue team, which comprises 29 employees, all of whom have been externally trained by international experts and equipped with modern apparatus.	Initiation of internal cross-safety audits between operational departments.
Design of six underground rescue chambers, five of which were installed and operational by the end of 2019.	Establishment of an 'Internal Team' that conducts detailed inspections on site on a regular basis.
Purchase of new 'self-rescuers' for all underground miners and provision of the appropriate training.	Purchase and installation of a manifold for acetylene cylinders including a flashback arrestor for the laboratory.
Prioritisation and implementation of safety improvements from a Condition Audit of surface plant equipment.	Installation of GPS tracking systems in all Company-owned vehicles.
In line with the introduction of a zero-tolerance policy for alcohol, amendments have been made to the alcohol testing procedure, with all persons entering the site now being tested at the security gate.	Purchase of two new buses to transport employees to and from work in order to avoid unsafe third-party vehicles.
Reinforcement of high standards of contractor compliance and safety in particularly challenging circumstances during the lining process of tailings storage facility (TSF) 4.	Development of detailed plans for the reconstruction in 2020 of the ventilation system in EW-1 building, to reduce the impact of harmful vapours on employees.

Fire response

Fire response is an integral part of our safety strategy at both operations. This is particularly material at Kounrad due to the volatile nature of some of the reagents used in the solvent extraction process. At Sasa's underground operations, it is essential that personnel are able to respond effectively in the unlikely event of a fire.

Sasa has a fully equipped employee emergency response and firefighting team and has fire detection systems in all buildings on site. There are automatic fire suppression systems in all high-risk areas as well as on all underground mobile plant. During 2019, a strategic review of the firefighting systems was carried out, identifying a requirement for the repositioning of several of the fire hydrants around the site.

Kounrad has an external, fully equipped fire fighting department on site, with full breathing apparatus and a fire engine. The team conducts training and emergency drills with the Fire Department on a regular basis and on a range of topics. When conducting fire training, personnel responses to fire situations are appraised and areas for potential improvements identified.



Fire safety training at Sasa

MATERIAL TOPICS CONTINUED

2019 safety performance

No fatalities have ever occurred at Kounrad, and there have been no fatalities at Sasa under our ownership. The last fatality at Sasa was in 2013.

In 2019, there were two total recordable injuries (‘TRI’) at Sasa, consisting of one lost time injury (‘LTI’) and one medical treatment injury (‘MTI’), and no LTIs or MTIs at Kounrad. In 2018, a total of eight CAML LTIs were recorded, with six of those occurring at Sasa. The Group recorded a 2019 LTIFR of 0.42 and a total recordable injury frequency rate (‘TRIFR’) of 0.85. The LTIFR is down 88% on the previous year.

The significant reduction in 2019 injuries can be largely attributed to the bedding in at Sasa of CAML’s focus on safety in the workplace for both employees and contractors. Key contributing factors in the reduction in LTIs are believed to have been the hiring of a Group Safety Manager in 2018, who is based on site at Sasa but carries out periodic visits to Kounrad, and the implementation of a number of new safety measures, such as greater emphasis on risk and risk training for all employees down to supervisor level.

LTIFR

0.42

(2018: 3.76)

Safety performance

	2019			2018	2017*
	Sasa	Kounrad	CAML	CAML	CAML
LTI	1	0	1	8	0
MTI	1	0	1	0	0
TRI	2	0	2	8	0
Cumulative hours worked***	1,508,100	844,913	2,353,013	2,129,010	2,099,937
LTIFR**	0.66	0.00	0.42	3.76	0.00
TRIFR**	1.33	0.00	0.85	3.76	0.00

* CAML owned Sasa for two months of 2017. The figures above reflect a full-year’s performance for the mine.

** See appendix on page 52 for calculation of LTIFR and TRIFR

*** 2017 and 2018 cumulative hours worked exclude Kounrad contractor hours



Laboratory work at Sasa



Training the mines rescue team at Sasa

CASE STUDY
CREATING A WORLD-CLASS MINES RESCUE TEAM AT SASA

When Sasa was acquired by CAML, the need to improve the underground emergency response capability on site was identified. A dedicated rescue station was therefore constructed, and the necessary new equipment purchased.

A new volunteer team consisting of 29 personnel was selected from the Sasa workforce, and weekly training was provided in the use, testing and maintenance of the equipment, as well as rescue techniques. A dedicated mine rescue station officer was also employed to assist with the organisation, training and maintenance of all the rescue equipment. During 2019, highly skilled external emergency response trainers provided 45 days’ specialised training for the mines rescue team.

We believe we now have the most highly trained and best equipped mines rescue team in North Macedonia. In 2020, a complete radio communications system will be built for the surface and underground operations, which will further enhance the rescue team’s capabilities by enabling a quicker response in the event of an emergency. In addition, the team will continue to be trained twice a month in order to maintain their skills.



Underground refuge chamber



Awards given for the best safety improvement suggestions at Kounrad



CASE STUDY DRIVING SAFETY AT KOUNRAD THROUGH WORKFORCE ENGAGEMENT AND PARTICIPATION

To encourage and reward positive safety contributions by employees, safety awards are given on a quarterly basis to the three individuals who have put forward the best safety suggestion. This initiative has been running since 2014 and a total of 480 proposals from 323 employees have been received since inception.

The safety team is responsible for ensuring that each suggestion put forward is evaluated and, where feasible, implemented. Over the years, this initiative has been instrumental in identifying a range of safety issues which, once rectified, have significantly reduced risks on site.

In addition to this, World Safety Day is celebrated annually at Kounrad by the identification of those employees who have demonstrated an ongoing commitment to safety throughout the year. 10 individuals were selected and presented with awards on 28 April 2019.

OCCUPATIONAL HEALTH AND WELLBEING

We believe that a healthy workforce is paramount in achieving high levels of productivity and have various programmes to monitor the health of our employees and to promote a healthy lifestyle.

Wherever possible, we look to eliminate occupational health risks brought about by our operations and we commit to minimising and mitigating issues through the provision of the most appropriate PPE and healthcare. All employees undergo annual medical tests, which are specifically oriented to their occupation and undertaken by external medical specialists.

Monitoring employee health

Fully equipped medical centres operate 24-hours a day at both sites, with dedicated, trained and qualified medical staff.

In 2019, there were 2,676 referrals across the Group from the site clinics by 711 employees, predominantly relating to minor ailments such as colds, coughs, etc. Whilst we consider the number of referrals to be relatively high, it is important to note that the majority of referrals were unrelated to working activities.

On a periodic basis the medical and safety teams analyse the referral data looking for trends that could signify potential occupational issues. If issues are identified, then options to rectify them are considered and actions taken.

At Kounrad, for instance, it was previously identified that the fleet drivers had particular medical issues due to the nature of their work. As a result, the health and safety team provided an awareness training programme for them to promote increased levels of exercise.

Health and wellbeing initiatives

At Sasa, a survey of the whole workforce was undertaken regarding possible food improvements in the canteen. Personnel requested a healthier diet, so more fruit and vegetable choices have been included, as well as leaner meats.

Sasa also promotes a healthy lifestyle in the local community, having:

- purchased all new equipment in the local gymnasium;
- renovated the table tennis club building and provided new equipment;
- installed street workout facilities; and
- continued the sponsoring of local football and basketball clubs.

At Kounrad, the Safety Manager addresses each operational group and discusses ideas to promote a healthy lifestyle. Sasa currently provides lifestyle advice in the form of posters placed around the site at strategic locations and we will, in 2020, expand our efforts to use Kounrad's approach. Initiatives include alcohol awareness, the effects of smoking, promoting healthy eating and exercise.

2020 initiatives:

- Completion of the last of six underground refuge chambers
- Complete installation and begin utilisation of underground internet-based communication system
- Adapt operations where necessary to changing circumstances with regard to COVID-19 to ensure continued good health of Sasa and Kounrad workforce
- Purchase and begin using two remote loaders

CASE STUDY

REACTING TO THE COVID-19 PANDEMIC

2020 has seen the spread of the COVID-19 pandemic globally, with cases growing in the UK and in both Kazakhstan and North Macedonia. At the time of writing, no CAML employees have been diagnosed with the virus, although there are over 1,100 cases of COVID-19 in Kazakhstan and over 850 cases in North Macedonia.

With a State of Emergency declared in both of our host countries and escalating government measures, we have taken a significant number of actions to try to ensure the continued good health of our team members. Such measures include:

- Established a COVID-19 'Crisis Committee'
- Instructing staff to work from home wherever possible, and enforced closure of the UK head office
- A cessation of all but essential international travel
- A cessation of all but necessary visitors to site (subject to authorisation from General Directors)
- Identification and close monitoring of team members most vulnerable to COVID-19
- The distribution of COVID-19 related PPE to employees and contractors
- The distribution of COVID-19 related PPE to community members in the town close to the Sasa mine
- Undertaken a detailed review of all activities at both operations to ensure that social distancing is at the heart of how we operate during the pandemic
- Changes made to alcohol testing at Sasa to increase social distancing
- Changes made to canteen and transport arrangements at both operations to increase social distancing
- The reinforcement of relevant government guidance and increased hygiene measures on both sites
- Issuing instructions to employees to stay at home if they suffer from any COVID-19 symptoms
- Request for employees to take their temperatures before coming into work
- A review of critical inventory levels to support production in the case of supply disruptions

Our top priority during this time is the welfare of our employees and contractors.



FOCUSING ON OUR PEOPLE

We recognise that a motivated, dedicated and skilled workforce is key to our Company's success.

The CAML team works hard to promote our Company culture, provide a safe, positive, stimulating and productive workplace where the development of employees is encouraged, all people are treated fairly and human rights are upheld. We ensure the cultural values and customs of our employees and local stakeholders are respected and equal opportunities are supported.

Training is integral to the ongoing development of our employees. We have a Human Rights policy in place which promotes equality, fairness and ethical practices. This is reinforced by the Company's Code of Conduct (as referenced on page 14).

The provision of employment opportunities within local communities is one of the primary ways the Company can show a demonstrable benefit to stakeholders and therefore CAML prioritises local hiring. This is particularly pertinent in North Macedonia, where youth unemployment and emigration is high, and therefore the provision of both employment and also training is a vital contributor to economic and social environment.

OUR CULTURE

Since inception of the Company, our culture has been to operate in an open and transparent manner and develop a long-term and sustainable business. CAML as a business has been built embracing technology and continues to operate with an enterprising spirit.

OUR VALUES

Our values inform the behaviour and standards expected of all our colleagues in the business regardless of location or role of that individual. Our employees are the essence of the Company and their conduct affects our work ethic, the decisions we make and our performance.

We encourage our people to take ownership of their work, lead by example, and set achievable goals. Through this we facilitate improvement in our processes and practices, enabling us to meet the targets we set ourselves. Accountability for us means defining our responsibilities and fulfilling our commitments to our partners, employees and stakeholders. This means delivering on our objectives and goals efficiently in respect of time and cost.

OUR VALUES

HEALTH & SAFETY



The safety of our employees is a core value and we are passionate about protecting the health and wellbeing of our people. We work hard to monitor, assess and mitigate all the risks that could potentially cause harm to our employees. We strive to ensure that every individual within the Company understands that safety is their responsibility.

SUSTAINABILITY



Taking responsibility for sustainable development is our core objective and its importance is considered in each decision that we make. We aim to positively affect our employees and local communities, while minimising any adverse impacts on the natural environment.

EFFICIENCY AND INNOVATION



We encourage our team to embrace change and commit to continuing to bring technology and innovation together to improve our operations. This approach helps us to use our resources wisely and efficiently in achieving long-term sustainable production.

RESPECT AND TRUST



We encourage open and constructive communications with team members and value collaborative working. We accomplish transparency through fair and open communication with all key stakeholders built on disclosure, clarity and accuracy. We are open to recognising our faults and improving practices.



Training at Kounrad

EMPLOYEE RETENTION AND DEVELOPMENT

SASA

Sasa is the largest employer in the East Region of North Macedonia. 698 people were employed at the mine by the end of 2019, of which 90% are from the local municipality of Makedonska Kamenica, which is a town with approximately 5,000 residents. 9% of employees are national, with 1% expatriates in the workforce. Of the Sasa direct employees, 213 are on temporary contracts. This is largely a legacy approach from prior to the Company's ownership of the operation and is being reviewed. Many of these temporary employees will be given permanent contracts once their probationary periods are completed in order to ensure that we retain talent, in a region with limited skilled labour.

Sasa actively contributes to the local and national economy by engaging local contractors where possible. There were on average 105 contractors routinely working at Sasa throughout the year, in roles such as security, transport, catering and medical care. 26% of 2019 contractors were from Makedonska Kamenica, 64% were from other areas in North Macedonia and 10% were international.

Employee distribution in 2019

	Age			Gender		Origin		Contract type		Total	
	<30	30 – 50	>50	Male	Female	Local	Expat	Permanent	Temporary	Total employees	Contractors
Sasa	102	418	178	641	57	691	7	485	213	698	105
Kounrad	47	220	64	261	62	323	0	323	0	323	86
Head office	1	10	7	12	6	18	0	18	0	18	0
Total	150	648	249	914	125	1,032	7	826	213	1,039	191



Hosting an analyst visit at Sasa

KOUNRAD

Kounrad has 323 employees and 86 contractors. The operation is close to Kounrad village, with around 1,500 residents, and approximately 15 kilometres from the town of Balkhash, with a population of about 70,000 people. 6% of employees come from Kounrad, 89% from Balkhash and the remaining 5% are national.

Employee retention

Both operations as well as our head office display low staff turnover rates, which we believe demonstrates a high level of employee satisfaction. 2019 employee turnover at Sasa was 10% and was 11% at Kounrad. There was a 0% turnover of permanent staff in London.

OUR WORKFORCE

1,230

employees and contractors in 2019



Training at Kounrad

TRAINING

Skills development is vital to ensuring consistently high operating standards at Sasa and Kounrad. Wherever competencies are identified as lacking, development plans are put in place and annual training programmes provided. In addition to the significant number of health and safety training courses carried out in 2019, CAML held a total of 297 professional development, vocational training, retraining and advanced training courses at both sites.

SASA

- Training at Sasa covered the following topics:
- Specialist training for the Sasa mines rescue team;
 - Equator Principles and IFC PS;
 - GHG inventory;
 - ISO 14001;
 - ISO 45001:2018; and
 - Risk training down to supervisor level.

In terms of educational development, Sasa has awarded scholarships to two employees completing masters degrees abroad and to one employee who has embarked upon an undergraduate degree in mining in North Macedonia.

KOUNRAD

Kounrad provides training courses covering a wide range of topics such as English language training, postgraduate studies, external seminars and retraining or enhanced practical training.



EMPLOYEE ENGAGEMENT AND SATISFACTION

The Group places emphasis on engaging with its employees and has in place a number of avenues through which communication is facilitated and workforce satisfaction is gauged. Both sites place importance on facilitating internal communications and have formal complaint and grievance mechanisms for internal and external use. Sasa and Kounrad issue regular newsletters with specific Company-related information and updates.

Kounrad has an operational website and Sasa's is in the process of development. These websites aim to provide information both for employees and members of the local communities.

Both operations have an open-door policy, meaning that employees can communicate freely with direct supervisors and senior management. Human Resources teams at both sites are also available for employees to discuss issues. Information on Company goals and targets, results achieved, and new rules and procedures implemented are communicated via bulletin boards and recently upgraded screens, placed strategically around site. Both sites have suggestion boxes and comments are reviewed on a regular basis and, where appropriate, implemented.

Regular meetings with union and employee representatives are held at Sasa, which has two unions – SIER (3% of the workforce) and MESO (44%). This proves to be an effective way to understand employee views and work to resolve any issues that have developed. Union membership is not common in Kazakhstan, however Kounrad has employee representatives who communicate issues to management.

Generally, CAML believes that, at both operations, there are clear and effective lines of communication and that employees feel free to express their opinions without fear of retribution.

Diversity and inclusion

We recognise the importance of diversity, specifically when considering the breadth of thought, approach and opinion that can be fostered by a diverse group. We are working hard to bring gender diversity to our teams, specifically in the senior levels of the business, and are delighted to have appointed Dr Gillian Davidson as an independent Non-Executive Director in 2019, meaning that our Board is now 11% female. In our London head office, 33% of our team is female and females hold key roles such as Group Financial Controller, Director of Corporate Relations and Legal Counsel.

In the mining and metallurgical industry, male labour has traditionally prevailed, but in recent years the proportion of women employed in this field has increased. We strongly believe in the benefits of creating an environment in which women want to work and strive to form a diversified team of professionals in all areas of the business.

8% of 2019 Sasa employees were female, and Sasa currently employs 33 people with reduced working ability.

19% of Kounrad's workforce is female and 13 employees at Kounrad are registered with disabilities.

We share the International Labor Organization (ILO) standards for decent and productive work for women and men in an environment of equal opportunity, the provision of social guarantees and respect for human dignity. We have a policy of evaluating all existing and future employees according to their skills and abilities and workplace discrimination on attributes such as age, race, gender identity, physical or mental disability, sexual orientation, religion, political opinion, or pregnancy is strictly prohibited by our Code of Conduct.

12%
of CAML employees and contractors are female



Sasa's best employees of 2019 with the Sasa and CAML management

CASE STUDY

ENCOURAGING WOMEN IN THE WORKFORCE

Both our operations endeavour to attract more female employees and have various strategies to enable this. The majority of scholarship mining students (covered on page 46) are female and most of the applicants for new scholarships are also female. Sasa invests in education for women and has been a supporter of 'Camp GLOW', a group that strives for the empowerment of women in North Macedonia. Two GLOW alumni are currently studying environmental sciences with a scholarship from Sasa and another two other GLOW alumni are already employed in Sasa's sustainability team.

Led by a female Board Director, who is also Chair of the Sustainability Committee, the team is overseen by our male Sustainability Director. Eight of the twelve team members reporting to the Sustainability Director are female.

The laboratory, accounting and general services teams at Sasa all have a majority of female employees and each of these teams is led by a woman.

Kounrad has female heads of the site laboratory, environmental management, procurement and accounts teams, and Kounrad's Finance Director is also a woman.



Sonja Nikolovska – Head of Laboratory & Marija Stojanovska – Head of Environmental Protection Department



Sasa ladies celebrating International Women's Day with management

2020 initiatives:
→ Appoint CAML Group HR Manager
→ Continue programme of sustainability training to continue to increase awareness of this important aspect for employees and contractors

CARING FOR THE ENVIRONMENT

We look to produce our metals in a responsible manner and are focused on mitigating the negative impacts of our operations on the environment.

We take our environmental responsibilities seriously and ensure that we comply with the laws and regulations of the countries of operation. Compliance with legal requirements is constantly monitored.

CAML has environmental departments at both Sasa and Kounrad, staffed by qualified environmental engineers who report directly to the General Directors and the Sustainability Director. Environmental issues are reported on a regular basis to the Sustainability Committee, CEO and Board, and feedback is aimed at generating constant improvement. We look to ensure the internal resources are available to meet our environmental obligations and, as an example of our focus on this area, we employed an additional environmental engineer at Sasa during the year to assist in this goal.

Central to CAML's environmental work is the monitoring, measurement, analysis and evaluation of environmental aspects, such as water, air quality, soils, biodiversity, hazardous material handling, waste generation and recycling, greenhouse gas (GHG) emissions and energy efficiency. Internal audits for environmental performance are undertaken frequently and documenting systems have been implemented at our operations.

Comprehensive environmental management systems (EMS) have been developed for both operations, with ISO14001 standards adhered to at Sasa (as confirmed by a 2019 audit). Leadership and commitment to these systems is demonstrated through our management approach and actions. IFC and Equator Principles are also implemented where feasible at both sites. Adequate emergency response plans are in place for environmental situations at both operations. Although the main aspects of environmental control are fundamentally the same at both operations, the environmental risks and areas of focus at Sasa and Kounrad are very much site specific and are covered in more detail in this section of the report.

Workforce education on environmental issues is considered important across the Group and is carried out via inductions, educational talks and other training sessions. We consider raising awareness of environmental issues important not only for employees but also amongst contractors and visitors. Constant competence and skills improvement for environmental employees is taken seriously.



Planting trees at Sasa

Recycling plastic bottles at Sasa



ENERGY USAGE AND CLIMATE CHANGE

The Company operates a firm policy of strict cost control and energy efficiency is a key contributor to minimising costs. CAML has a Group energy policy which confirms the Company's commitment to achieving the objectives of sustainable development with regard to energy usage and minimising where possible our impacts and footprint on the environment as a result of our business activities.

The implementation and continuous improvement of the EMS for each operation is undertaken in accordance with standards of the countries in which we operate, and in line with international best practice.

We ensure that energy is used responsibly and provide appropriate training to our employees in this regard. We apply energy saving measures and work to improve the energy performance of all our technological processes wherever possible.

We recognise that GHG emissions are a major contributor to climate change and, as a Group, strong focus is placed on the control of GHG emissions and volumes at both operations. Energy efficiency audits have been undertaken at both operations and consideration is being given to determine how further energy saving measures can be identified.

GHG emissions have long been measured at both operations internally and, in 2019, CAML engaged external specialist consultants for both operations to audit and produce GHG emission estimates for the period of 2017–2019.

ENERGY USAGE AND EMISSIONS

SASA

Sasa is an underground mine and ore is transported to the surface by a shaft and by trucks. Scope 1 emissions reflect the site's fuel consumption together with explosives, sewage treatment plant and potential cooler leakage. The processing plant is a standard froth flotation system, operated from grid power.

Sasa buys its electricity from the grid and, in 2019, 6% (2018: 7%) of this power was generated from renewable sources. Most of the available grid power is coal-fired and this is reflected in the Scope 2 emissions. At Sasa, power costs are approximately 6% of the C1 zinc equivalent cash cost. Electricity usage at Sasa increased by 2% to 42,873 MWh in 2019, largely in line with production increases.

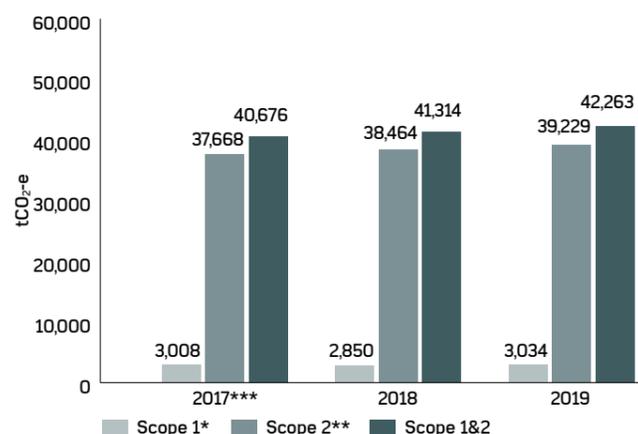
Sasa energy use

		2017*	2018	2019
Total electricity usage	MWh	41,167	42,037	42,873
Fuel, diesel/petroleum (mobile and stationary combustion)	Litre	1,046,568	986,588	1,051,749

* CAML owned Sasa for two months of 2017. These figures reflect a full 12 months' contribution

CAML has committed to reporting its Scope 1 and Scope 2 emissions. Sasa's Scope 1 and Scope 2 emissions, shown in the graph below, reflect broadly steady emissions, with modest increases as a result of incrementally higher ore mined and processed since 2017.

Sasa Scope 1 & 2 GHG emissions (tCO₂-e)



* GHG Scope 1 emissions at Sasa includes static and mobile plant combustion, blasting, refrigeration and air conditioners
 ** GHG Scope 2 emissions at Sasa includes electricity
 *** CAML acquired Sasa in November 2017. These figures reflect a full 12 months' contribution

KOUNRAD

Scope 1 emissions at Kounrad predominantly reflect an essential part of our processing, which requires the heating of leaching and copper-bearing solutions in winter with coal-fired boilers to prevent freezing. However, with no mining operations at Kounrad, we do not use a significant diesel-fuelled mobile fleet to drill, blast or haul.

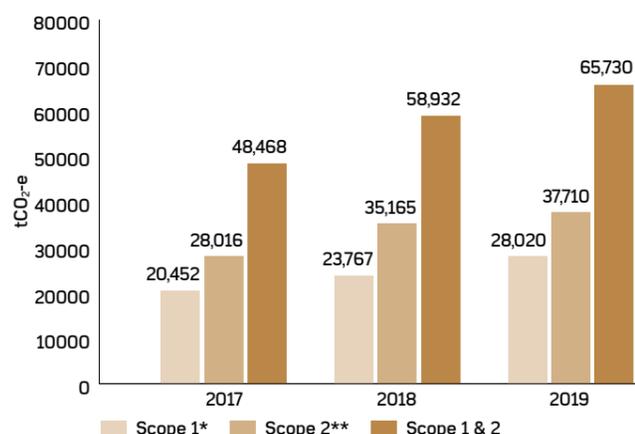
In the Karaganda region of Kazakhstan, most grid power is coal-fired, which is reflected in the Scope 2 emissions. Power costs account for approximately 12% of the site's C1 cash cost of production, demonstrating a relatively light energy usage versus other cost inputs.

Kounrad energy use

		2017	2018	2019
Total coal usage	Tonnes	15,907	18,608	22,067
Total electricity usage	MWh	45,777	57,459	61,618
Fuel, diesel/petroleum (mobile combustion)	Litre	473,315	498,008	522,214

Kounrad's GHG emissions, shown below, have increased by 27% since 2017. This is due to an increase in coal usage and power usage. Coal usage is a direct function of weather, with coal being burned for heating solutions. Power usage increased by 35% since 2017, due in large part to the mineral composition of the Western Dumps, which require more power to process. Total electricity usage in 2019 increased 7% to 61,618 MWh, broadly in line with increases in production from the Western Dumps. Fuel used decreased as a result of significantly higher levels of earth moving in previous years to prepare the Western Dumps for leaching.

Kounrad Scope 1 & 2 GHG emissions (tCO₂-e)

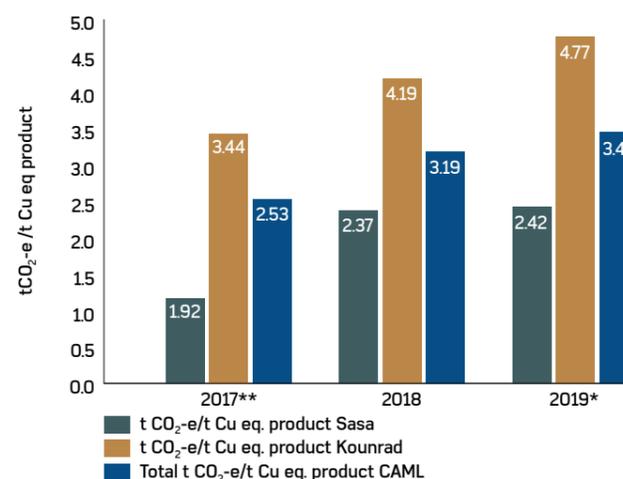


* GHG Scope 1 emissions at Kounrad includes mobile plant combustion, coal burning in boiler houses
 ** GHG Scope 2 emissions at Kounrad includes electricity

EMISSIONS INTENSITY

The graph below shows the carbon emission intensity for Sasa and Kounrad, calculated as the emission rate of CO₂ equivalent tonnes relative to a tonne of copper equivalent production for Kounrad and Sasa.

Carbon emission intensity CAML



* In 2019, CAML produced 31,233 copper equivalent tonnes.
 ** Sasa's contribution is reported for the full 12 months of 2017, although CAML only owned the mine for two months.

Production from Sasa is less intense with respect to carbon emissions than Kounrad. This is related to the fact that:
 → A larger number of copper equivalent tonnes are produced at Sasa than Kounrad;
 → Solvent extraction-electrowinning (SX-EW) is a relatively power-intensive process; and
 → Due to the extreme winter temperatures in Kazakhstan, Kounrad uses coal-fired boilers to heat the copper-bearing solutions in order to ensure year-round production.

2019 CAML CARBON EMISSION INTENSITY

3.46 tCO₂-e
 per tonne of Cu equivalent production
 (2018: 3.19tCO₂-e)

The Kounrad team will in 2020 look into the viability of generating power from renewable sources, with work currently underway researching wind and solar sources.

ENERGY MANAGEMENT

SASA

The team at Sasa works to identify, monitor and minimise emissions by initiatives such as long-term replacement plans for old fleet, energy-saving surveys at the plant, and the introduction of policies for turning off vehicle engines and lights. The implementation of the EMS has been underway since November 2017 and focuses on the following objectives:

- energy performance improvement and a decrease in energy costs;
- strengthening capacities in order to increase energy efficiency and sustainability;
- energy management in accordance with international and national ISO 50001:2011 standards; and
- development and implementation of measures to improve energy performance and projects.

An Energy Saving Opportunities assessment is currently being undertaken to determine possibilities, following which a Resource Efficiency Plan will be developed.

KOUNRAD

Kounrad's EMS includes monitoring the efficiency of boiler treatment plants and the quality of incoming fuel. On-site ecologists carry out monthly calculations and analysis of GHG volumes.

The 2016 and 2018 external energy audits undertaken identified the following areas for improvement. The following measures have now been implemented:

- the use of low-emissions films on windows from the premises side;
- installation of heat-reflecting screens on the walls behind radiators;
- replacement of existing lamps to LEDs;
- replacement of the existing transformer on the water line;
- introduction of a system of control and accounting of motor fuel based on GPS;
- an automatic lighting control system;
- application of frequency regulators for control of asynchronous motors;
- application of transverse devices, harmonic filters; and
- automatic maintenance of a stable voltage of 10 kW at the output of the transformer.

The scrubbers at Kounrad are installed in the electrolysis buildings and purify up to 90% of sulphuric acid vapours. Our 2020 target is to improve the scrubber cleaning system where possible.

MATERIAL TOPICS CONTINUED

AIR QUALITY AND POLLUTION

Mining and processing operations produce air pollution both in the form of gases and dust. CAML is committed to preventing pollution of all environmental receptors, thereby aiming to remove any negative impact on the environment and human health, both for our employees and local communities. The Company adheres to regulatory standards relating to air quality.

SASA

The air quality at Sasa is monitored with two measuring devices for 24-hour monitoring of particulate matter (PM10) and meteorological parameters, and four aerial sediments settlers.

Continuous effective actions are undertaken at Sasa to reduce the impact on air quality, with a focus on dust from the TSFs. In order to manage this, sprinklers have been installed and are operational on a full-time basis. During 2019, there were no exceedances of air quality standards recorded.

KOUNRAD

The Kounrad project conducts a comprehensive study of its impact on ambient air in the workplace and off site. External contractors undertake air monitoring around the site on a quarterly basis and, according to monitoring results, there were no exceedances of air quality in 2019.

Zero

air quality exceedances at each operation in 2019



Collecting water samples at Sasa

WATER USAGE

Water is a valuable and shared resource and one of the most important inputs in CAML's production processes. At our operations, water is used for processing, dust management and domestic water services. The Company is committed to the responsible and efficient use of water and to ensuring that discharges to the natural environment are at the appropriate environmental standards.

SASA

Sasa adheres to sustainable water management, recognising that access to fresh water is essential for human life and wellbeing, and aims to minimise freshwater usage. Our water management strategy is to increase the recycling of technical waters within the operation and to decrease the usage of fresh waters. The focus in 2019 has been to decrease net water consumption by increasing the volume of water recycled.

The net volume of water consumed at Sasa, as presented in the table below, decreased by 43% in 2019 as a result of recycling strategies implemented at the plant during the year (see following case study). Consumption is calculated as the volume of fresh water abstracted minus the discharged water. The water used at Sasa is derived from a combination of freshwater sources – the Crvena and Kozja rivers – as well as from contact and recycled water from our underground mining operation. Recycled water is used for the processing plant, as well as for dust suppression systems installed on the active tailings facilities.

Sasa water use (ML)

	2017	2018	2019
Fresh water	3,153	3,185	2,484
Contact & recycled waters	653	933	1,659
Discharge water	1,261	1,325	1,419
Total net water consumption	1,892	1,860	1,065

43%

decrease in net water consumption at Sasa due to a recycling initiative

Sampling at Sasa



CASE STUDY

IMPLEMENTING SUCCESSFUL WATER RECYCLING STRATEGIES AT SASA

In order to assist in our goal to produce in a sustainable way, ensuring the efficient and effective use of water, Sasa carried out a Water Management Study in 2018, working together with Stip University.

Key recommendations from the study included:

- A reduction in surface water usage (abstraction from local catchments);
- An increase in contact water usage for processing; and
- Always maintaining a biological minimum level of water in rivers from which Sasa withdraws its resources.

During 2019, we managed to significantly increase the percentage of contact and recycled waters used in the flotation plant from 0 to 47%. This equates to a reduction of freshwater abstraction for the flotation plant from 90 litres per second at the start of 2019 to 48 litres per second.

From 2020 onwards, the Sasa team will continue to maximise the use of recycled waters wherever possible.

KOUNRAD

Kounrad is a closed-circuit operation, so there are no significant water losses to the environment except for evaporation and solution held up within the matrix of the dumps. The average percentage of makeup water/water consumption in 2019 was 7%, from Kounrad's two sources – a nearby old mining shaft and abstraction from Lake Balkhash, which is not used in winter. Volumes of water used are presented in the following table.

Total water consumption at Kounrad decreased by 6% in 2019, having risen significantly in 2018. This was due to the Western Dumps coming fully on stream in 2018, which resulted in the amount of water held as inventory increasing markedly.

Kounrad water use (ML)

	2017	2018	2019
Shaft water	63	49	123
Potable water	72	101	80
Purified water	0	0	19
Lake water	344	503	411
Total water consumption	480	653	613

In May 2019, a 5m³/hr lake water purification reverse osmosis system was installed at Kounrad to produce distillate, which is necessary to ensure the high quality of copper. This unit is also expected to reduce the operation's dependence on potable water.

Our water management target at Kounrad is to minimise the volume of makeup water required during the process. However, the volume required is dependent on many factors such as production targets, climatic conditions and height of the dumps. Therefore, the most effective way of managing water is to ensure that the leaching process is designed to be as efficient as possible. This is achieved by:

- using drippers on top of the dumps to distribute leaching solutions, as opposed to spray systems;
- the dumps themselves are levelled and scarified to ensure irrigation pipes lie directly on dump material; and
- the application rate is optimised to ensure that the leaching solution does not pond on the surface of the dumps.

MATERIAL TOPICS CONTINUED

WASTE MANAGEMENT

Waste generated from our mining and processing operations includes both mineral (mainly in the form of tailings, covered further below) and non-mineral waste.

Non-mineral waste

Initiatives to reduce, reuse and recycle non-mineral waste in order to reduce the environmental impact of our operations are included within the site waste management plans and raising waste management awareness amongst employees, contractors and suppliers is a key focus in terms of our environmental practices. Training is regularly undertaken to facilitate appropriate on-site sorting.

Treatment of 2019 waste (t)

	Sasa	Kounrad
Total waste to landfill	155	556
Total waste treated/disposed off-site	480	11
Total non-hazardous waste given to the community	-	2,795
Total waste recycled on site	-	13

The fundamental principles of waste management are as follows:

- our responsibility for ensuring the protection of environmental components (air, groundwater, soil) from pollution by waste production and consumption;
- emphasis on the reuse, recycling, regeneration, cleaning or environmentally acceptable disposal of waste;
- reduction of negative impact on the environment by using new technologies and equipment to reduce waste generation; and
- the prioritisation of preventive measures to eliminate the environmentally negative impacts of waste on the environment.

Hazardous and non-hazardous waste generation per operation (t)

	Sasa	Kounrad
2017	424	2,415
2018	624	2,580
2019	635	3,373

SASA

Sasa complies with national and international industry best practices regarding waste management and the team is continually looking at its waste streams and trying to determine how to reduce waste generation and increase recycling.

The waste streams at Sasa are both hazardous and non-hazardous. The waste is properly sorted, temporarily disposed of at site in appropriate containers and storage locations and then disposed of to a company licensed by the Ministry of Environment and Physical Planning (MoEPP) for further treatment.

Sasa undertakes waste management training for its employees and suppliers to ensure the correct management and separation of waste, as well as to identify and investigate waste management improvement opportunities.

Waste generation has remained relatively stable since 2018, but we are looking at ways of improving its management and the following initiatives were carried out during 2019:

- purchasing containers to improve waste selection;
- reconstruction of the hazardous waste storage facility; and
- reorganisation of the general waste storage facility.

KOUNRAD

At Kounrad, all waste is sorted into a temporary waste storage facility on site and then removed by a reliable and reputable licensed waste disposal company, which has recycling initiatives in place. Kounrad directs several types of waste to a licensed city landfill. Recycling is in its infancy in Kazakhstan and we are working hard to raise awareness at a local level.

Ash slag from the boilers, which is the primary waste stream from the operation, accounting for 94% of all waste generated, is given to the local Kounrad community for use in the manufacture of bricks for construction. In 2019, 2,795 tonnes of ash was donated without charge, which equates to 83% of the total volume of ash slag produced during the year. The only waste disposal on site at Kounrad is that of the ash that is not required by the local community.

In 2020, Kounrad has committed to purchasing equipment for the manufacture of pressed forms of plastic and polyethylene. This is necessary to facilitate the transport and transfer of waste to the next stages of recycling.

Zero

significant spills at Sasa and Kounrad during 2019

Taking water samples at Kounrad



CASE STUDY ENVIRONMENTAL TESTING AT KOUNRAD

Essential and integral to the leaching operation at Kounrad is the monitoring and control of groundwater downgradient of the leached areas. Given the importance of minimising the risk of contamination of groundwater at Kounrad, there is a dedicated hydrogeological department and drilling team with a fully equipped and tailor-made drilling rig imported from Europe.

In total, 233 boreholes have been drilled around the perimeter of the Eastern and Western Dumps. These are set out in three rings radiating out from the edge of the dumps. The first two lines are referred to as 'technical abstraction boreholes' – i.e. these are part of the leaching collection system if any solution is identified in these boreholes. The third line forms a system of 30 official monitoring boreholes.

Groundwater samples are taken on a regular basis from all three lines of boreholes and tested externally in Government-accredited laboratories. In 2019, 540 groundwater samples were analysed in external laboratories and 1,671 samples in Kounrad's own internal laboratory. As a result of the combination of the two sets of analysis and testing, Kounrad has a comprehensive and detailed understanding of the status of the groundwater around the perimeter of the waste dumps.

Regular updates are given to CAML's Sustainability Committee regarding the status of the groundwater results and ongoing site investigations are undertaken in conjunction with SRK Consulting.

TAILINGS MANAGEMENT

Whilst no tailings are produced at Kounrad due to the nature of the leaching operation, mineral waste materials are generated by mining operations at Sasa, which must be effectively and responsibly managed.

SASA

CAML manages five tailings storage facilities (TSF) at Sasa, all of which are constructed using the downstream technique, widely viewed in the industry as the safest design. Construction of the newest dam, TSF4, was completed in 2019.

Following the Brumadinho dam disaster in January 2019, the industry has moved swiftly to improve its disclosure and practices and CAML has kept abreast of these developments. During 2019, the Sustainability Director attended a conference in Almaty, Kazakhstan, where a draft of the proposed Global Tailings Standard was presented. CAML's TSF team has been reviewing the proposed standard internally and the intention in 2020 will be for Sasa to be audited externally relative to this standard.

The Company has published complete tailings disclosure in accordance with the Church of England Pensions Board request and further information can be found on the CAML website <https://www.centralasiametals.com/sustainability/tailings/>.

In 2019, an expert from Golder was commissioned to undertake a third-party review of Sasa's tailings facilities with a particular focus on TSF3.2. No major issues were identified but, as a result of this review, an action plan was developed, which has been implemented by the Sasa TSF management team. We intend to repeat this external expert review on an annual basis.

As part of our management strategy for the tailings dams at Sasa, we have put the following processes in place:

- A dedicated team from the Flotation Department is responsible for the day-to-day management and monitoring of the facility.
- The dam is monitored 24 hours per day by the team, which is led by a highly experienced engineer ('Responsible Tailings Facility Engineer').
- An external Independent Tailings Engineer ('Engineer of Record') is responsible for monitoring, reviewing and reporting on Sasa's TSFs on a monthly basis.
- The Engineer of Record presents the report findings to Sasa's management and TSF Stability Committee, which is chaired by the Sustainability Director.
- The Committee reviews the following monitoring data from the Independent Tailings Engineer:
 - water levels in the piezometers in the dam wall;
 - TSF drainage flow rates and water quality;
 - survey levels;
 - grain size analysis from the cyclones;
 - height of the dam wall relative to pond levels etc; and
 - dam slope angle relative to design.
- The Committee also reviews and implements the actions derived from the Golder stability review which was undertaken in early 2019.

MATERIAL TOPICS CONTINUED

- The Sustainability Director reports any relevant developments with regard to the TSF, as well as progress on the action plan developed by Golder, to CAML's Sustainability Committee on a quarterly basis.
- Feedback from the Sustainability Committee of the Board is then provided to the TSF Stability Committee and to Sasa's Senior Management as necessary.

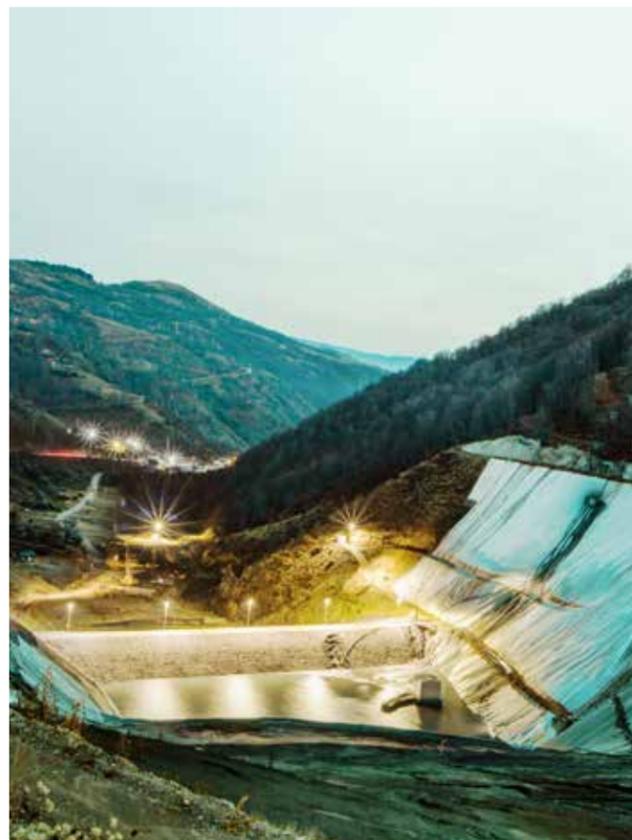
By undertaking these checks, Sasa and CAML considers it has in place the necessary processes and controls to ensure the safe and stable operation and management of the TSFs.

The generation of tailings at Sasa (shown in the table below) has risen modestly over the previous years, in line with an increase in ore mined and processed.

Tailings generation at Sasa (t)

	Tailings deposited
2017	709,989
2018	718,303
2019	733,021

TSF4 at Sasa



Tailings pipelines at Sasa



CASE STUDY FUTURE INITIATIVES TO IMPROVE TAILINGS MANAGEMENT

During 2019, the Sasa operations team completed a Life of Mine study to determine the optimal mining method for the operation going forward. Based on the study, the Board has taken a decision in principle to change the mining method to Cut and Fill stopping, which is deemed more appropriate both in terms of its operational benefits and environmental and social impacts.

In the cut and fill method, voids created by mining are typically filled using a paste comprised, in part, of process plant tailings. Initial estimations suggest that over 40% of Sasa's life of mine tailings could be stored underground. This could mean that the construction of future downstream tailings storage facilities is not required. This would be a positive both environmentally, as it would remove the risks associated with over-ground tailings storage, and socially, as it would avoid the potential purchase of nearby dwellings.



The Kounrad pit (not owned by CAML) with CAML's waste dumps in the foreground

CASE STUDY PRODUCING COPPER FROM WASTE IN KAZAKHSTAN

Our copper operation at Kounrad is not a traditional mine. We leach copper from waste dumps that were formed during mining of the Kounrad deposit, which commenced in the 1930s. The mine was once one of the largest in the world and created over 600 million tonnes of mineralised rock waste that was either too low grade or the wrong chemical composition to process at that time.

However, technological advances made in the USA during the 1960s resulted in the development of a processing technique called solvent extraction electro-winning ('SX-EW'), transforming the treatment of previously uneconomic 'oxidised' copper ores.

CAML constructed a SX-EW processing plant in 2010 and started leaching copper from the Kounrad waste dumps in 2012. The Company expects to produce copper from this waste material until 2034.

Producing copper from waste at Kounrad since 2012 has achieved the following:

- Almost 100,000 tonnes of copper have been produced
- Gross revenue of \$601 million has been generated from copper sales
- Tax to the government of Kazakhstan totalling \$143 million has been paid
- Supported a workforce of 323 people (100% Kazakh) and 86 contractors
- Social donations of over \$2 million have been made, supporting the most vulnerable in the local community

It should be noted that, through time and precipitation, a natural dissolving process of the copper minerals takes place and, prior to the involvement of CAML, a steady stream of copper rich solutions were continually leaching, unchecked, from the dumps directly into the environment. The CAML leaching operations have eliminated this pollution and have enhanced the rate at which the copper is being safely and economically removed from the dumps.

Planting trees at Kounrad



REHABILITATION AND BIODIVERSITY

The Company has mineral rights over 1,789 hectares of land, 73% of which is disturbed by its operations.

CAML is aware of the adverse effects that mining can have on biodiversity and has put in place specific programmes to manage and respond to biodiversity needs in the countries of operation.

These programmes include:

- Mitigating the environmental impacts of our operations by implementing compensation measures, such as the rescue of species, soil conservation, restoration and reforestation;
- Developing detailed closure plans for both operations to restore and recover the environmental conditions after metal production has ceased; and
- Restoring and, wherever possible, improving the conditions of the environment where our operations had been active by monitoring water bodies and flora and fauna, and by implementing ongoing improvement actions in line with local regulations. The teams have ongoing protection programmes for the flora and fauna to preserve native species in the ecosystems close to the operations.

17,000

trees planted at Sasa since 2009

2020 initiatives:

- Completing initial studies regarding viability of generating wind and/or solar power at Kounrad
- Undertake an additional tailings storage facility review with a view to aligning Sasa with the Global Tailings Initiative, once published
- Complete technical studies into transition of mining method at Sasa, which should enable at least 40% of future tailings to be stored underground
- Reconstruction of ventilation system in Kounrad's electro-winning processing plant building

SASA

CAML has mineral rights over 553 hectares at Sasa, of which 12% is classified as disturbed. Since 2009, over 17,000 trees have been planted on the closed TSFs and other areas within the licence. Tree plantation not only remediates degraded areas, making them more attractive, but also has the capacity to significantly reduce soil movement, improve air quality and encourage local biodiversity.

As part of Sasa's commitment to protecting its surrounding environment, as well as gaining a better understanding of the natural habitat, a biodiversity study was commissioned and completed by a specialist NGO and consultant group in 2018. The entire catchment area upstream of the operation, as well as within the concession boundary was studied and a number of species of special interest, including several 'red list' species, were identified – all of which are located in the catchment above Sasa's concession boundary. As a result of the work, an action plan for execution in 2020 has been developed to enhance the biodiversity within the mining licence area where possible.

KOUNRAD

CAML has mineral rights over 1,236 hectares at Kounrad, of which 100% is classified as disturbed. In recent years, Kounrad has conducted various studies as part of its plan for overall closure, including an assessment of the volume of dust being generated from the dumps, the optimal way to remediate areas affected by leaching and therefore the most appropriate method for the reintroduction of biodiversity. The Kounrad environmental team monitors the condition of the soil as well as flora and fauna around the perimeter of the dumps to ensure that any risk to the surrounding biodiversity can be properly managed and mitigated and to demonstrate that activities are not impacting the natural environment.



The Sasa site

UNLOCKING VALUE FOR OUR COMMUNITIES

Our licence to operate is largely dependent on the continued support of our local communities and host countries and we are committed to making a positive contribution and creating shared value.

CAML aims to integrate with and provide real benefits to local communities and host countries through the provision of employment, the payment of taxes and supporting social and economic development in the surrounding areas, both through social investment and local procurement. The Company is committed to assisting communities with sustainable development and helping the youth and most vulnerable members of the community.

Social management systems have been developed and are fully integrated into the operations at both sites. These systems are based predominately on IFC PS and take their lead from CAML's Sustainability Policy. Both operations have Social and Environmental Management plans ('SEMP'), which set out how the policy will be implemented and to which standards. All documents contained within the SEMP are annually updated and reviewed internally and signed off by CAML's Sustainability Director and the relevant General Director.

Sasa has been recognised for its social contributions in 2019. The operation won the 'Best from the East' award, which is given to the company that has been determined to have the best social practice in the eastern region of North Macedonia. Sasa was also recently given the 'Community Support Platform' award by the Ministry for Economy for its well conducted corporate social responsibility programme in 2019.

In Kazakhstan, two awards were given in 2019 for the contribution of the Kounrad Foundation towards improving society in Balkhash and Kounrad village. The awards were in recognition of the Foundation's specific focus towards the more vulnerable members of the community.



Supporting the community close to Sasa

COMMUNITY ENGAGEMENT AND DEVELOPMENT

CAML ensures that the social teams at both Sasa and Kounrad operate to the best national and international standards wherever possible.

Effective, transparent and proactive community stakeholder engagement is essential to the smooth running of the operations and to our acceptance in the local area. Our teams have identified appropriate mechanisms for regular communication and partnership with our regional and national stakeholders and ensure that they are welcome to visit our operations. This engagement is predominately undertaken by our Social Affairs Coordinators (who report directly to the Sustainability Director and to the respective General Directors) together with senior site management. The General Directors at each operation are in constant communication with the local Mayor's offices to ensure open lines of engagement within the community.

Environmental and social impact assessments have been carried out at both operations to ensure a proper understanding of the local issues. Whilst the assessments (and therefore the level of stakeholder communication required) differ from country to country, they both involved engagement with the local community and our actual and potential impacts continue to be monitored on an ongoing basis.

We have developed positive, constructive and professional relationships with host governments and communities close to CAML's operations and have engendered successful two-way lines of communication as well as built public trust. This is demonstrated by the fact that community-based awards were given to both Sasa and Kounrad in 2019. We have raised awareness as to how the Company operates, especially with regards to health, safety, environmental and social matters.

While the social needs of the communities close to our two operations are different, the teams aim for consistency of approach, bringing Sasa in line with CAML's standards and the methods used in Kazakhstan. A Social and Community Relations Department was formally established at Sasa in 2018 with the employment of a Social Affairs Coordinator and a social management system, based on IFC PS, was developed. At Kounrad in 2019, the Company employed a Social Affairs Coordinator to manage all issues of social and community relations associated with the operation. Activities are reported on a regular basis to the Sustainability Committee, with two-way communication to ensure proper feedback to the sites.

We encourage stakeholders to raise any concerns that they have, and they can do so in a number of ways, including:

- directly through the respective Social Affairs Coordinator;
- via the Community Drop-in Centre in Kamenica for Sasa and directly to the head office in Balkhash for Kounrad;
- via links provided on the Kounrad website;
- via the local Mayor's office, close to both operations; and
- in writing to the head office.

The Company takes community matters seriously and commits to addressing them appropriately as quickly as possible. All communication is recorded, and feedback given.

Grievance mechanisms are in place at both operations and there were no official grievances from the local communities submitted to either operation in 2019.

All relevant Company information is available in local languages in both countries to ensure our stakeholders can understand all communications.

COMMUNITY TRAINING PROGRAMMES AT SASA

The Sasa mine is at the heart of the local community which is located in a region of scarce skilled labour availability. Therefore, developing local skills and expertise is a positive way of contributing to social development in host communities as well as providing talent for the Company.

Sasa provides scholarships to local students who have chosen degree courses in the fields of mining, geology or environmental sciences. Sasa currently sponsors seven students, and is likely to sponsor an additional 10 students in 2020.

In addition, for the last four years, Sasa has supported four local mining students at Russian and Bulgarian specialist mining universities. Three of these students are expected to graduate in 2020 and become Sasa employees, and one has already joined the Sasa team.



Local school support in Balkhash



Sasa training centre

**CASE STUDY
ESTABLISHING THE SASA TRAINING CENTRE IN THE LOCAL TOWN, MAKEDONSKA KAMENICA**

To provide potential future employees with practical training, the Sasa team, in partnership with United Nations Development Programme ('UNDP') and the Agency for Employment, and with the support of the Ministry for Labour and Social Policy and the Ministry for Education, opened the Sasa Training Centre in Makedonska Kamenica in October 2019.

The aim of the training centre is to provide local people with practical experience to complement existing theoretical qualifications, through a three-month training course that would prepare them for a professional career at Sasa or elsewhere.

In 2019, two programmes were prepared in the fields of mechanical maintenance and electrical training. The courses were verified by the Ministry of Education and the Sasa training centre is now classed as an educational institution. Currently, 12 students from Kamenica attend training and are being taught by experienced team members from Sasa. They will complete their course in H1 2020.

Sasa has committed to employing at least six people after the training course finishes.



MATERIAL TOPICS CONTINUED

SOCIAL INVESTMENT

CAML is conscious of its responsibility to provide support to the communities close to its operations and is proud of the positive impact made in this regard. Through our investment, we have, in particular, given the children of these communities greater opportunities in the fields of education, sport and cultural activities. We have constructed playgrounds and recreational facilities for the whole community to enjoy, contributed to cultural activities and renovated community centres, sports areas and schools.

Site teams at both operations consult regularly with members of the community to ascertain their needs so that supportive projects can be identified and agreed upon in terms of donations, time and skills required.

In all instances of communication, the Company is careful to respect the values and culture of communities. To date, efforts have mainly focused on education, supporting disabled children and adults, underprivileged children and those with learning difficulties and encouraging sporting activity.

Both operations commit 0.25% of their respective revenue for social development projects. At Kounrad, the Kounrad Foundation charity was set up in 2018 as a vehicle for social donations. It has clear articles which prescribe the donations that can be made and support it can give. At Sasa, the Company has committed to setting up a similar foundation, which is expected to be operational in 2020. Whilst the level of actual spend on social projects fluctuates year to year, the amount committed within the foundation's funds remains as the revenue percentage, enabling the charity to plan and budget for the longer term.

\$0.6m

spent on CAML social projects in 2019 (2018: \$0.6m)



Supporting the local schools in Balkhash

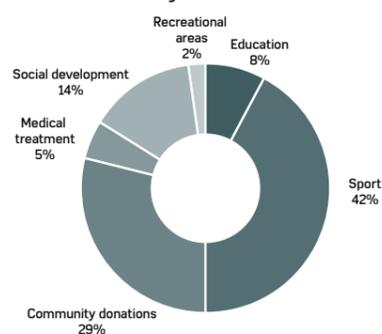
SASA

During 2019, some notable social projects undertaken by Sasa are as follows:

- Installation of heating system for local health centre;
- Purchase and installation of street workout gym facilities;
- Sponsorship of a wide range of children's sporting groups;
- Donations to people in need;
- Supporting Youth Camps GLOW & YMLP; and
- Sponsorship of Kamenica cultural summer festival.

Sasa donations totalling \$0.3 million are categorised as follows.

Sasa community donations



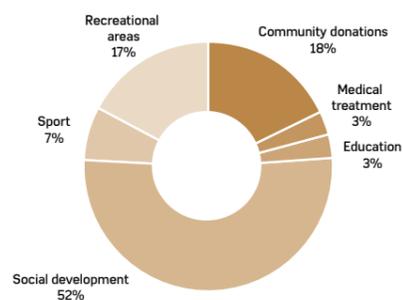
KOUNRAD

During 2019, some notable social projects undertaken by Kounrad are as follows:

- Building purchase and refurbishment for the Kind Heart Centre for disabled children in Balkhash, and construction of a garden and play area.
- Support for the local 'Crisis Centre', providing refuge for women and children in need of a temporary home.
- Repair of a social meeting room for the Kazakh Society of the Blind, purchase of furniture for meetings and events for people with visual impairments.
- Ongoing sponsorship to veterans of the Great Patriotic War and pensioners of the Kounrad and Balkhash region.

Kounrad Foundation donations totalling \$0.2 million are categorised as follows.

Kounrad community donations



In addition to the Kounrad Foundation spending, CAML also made contractual social commitments, as shown in the table below.

Social spending in Kazakhstan

	\$m
Contractual social commitments	0.10
CAML advances to Kounrad Foundation*	0.20
Total Kounrad	0.29

* \$0.17m spent by Kounrad Foundation in 2019



CASE STUDY

KIND HEART CENTRE

The Balkhash Kind Heart Centre is a charity established in 2009 by Lyudmila Denisova to provide assistance for children with disabilities. 115 children with disabilities are registered with the association, but the previous facilities were only able to cater for 75 children.

The centre has long been one of the continued areas of assistance provided by the Kounrad project but, in 2018, the Kounrad Foundation purchased larger premises for the charity and made major repairs to it. In the spring of 2019, the new Kind Heart Centre was officially opened by CAML CEO, Nigel Robinson, which can accommodate increased staff and up to 120 children.

With an increased number of rooms in the larger building, the level of support provided has improved and there is additional space for social rehabilitation, relaxation, speech therapy as well as games and music rooms.

Following the successful opening of the Kind Heart Centre, the Kounrad Foundation then funded a specialist playground for the children.

Opening the Kind Heart Centre in Balkhash



ECONOMIC VALUE ADDED

Being a good corporate citizen

We have an economically robust business that underpins our ability to generate profits and dividends for our shareholders and ensure that our successes are also felt by other important stakeholders. CAML is proud of the value that it brings to the host countries of operation and works hard to be a good corporate citizen. As a relatively small business in terms of scale in Kazakhstan, CAML has paid total taxes in-country of \$143.0 million from the start of the Kounrad project until the end of 2019.

In North Macedonia, Sasa is a large and important business, having generated the third highest profit before tax in the country in 2019. Since CAML acquired the mine, taxes totalling \$36.5 million have been paid.

\$179.5m

paid in taxes to Kazakhstan and North Macedonia under CAML's ownership of its assets

2019	UK (\$m)	Kazakhstan (\$m)	North Macedonia (\$m)	Total (\$m)
Corporate income tax	-	13.3	6.9	20.2
Mineral extraction tax	-	4.7	-	4.7
Concession fees	-	-	2.6	2.6
VAT	-	2.1	-	2.1
Land and property tax	-	0.4	-	0.4
Payroll taxes	2.6	1.3	3.8	7.7
Total	2.6	21.8	13.3	37.7

Neither CAML nor its subsidiary companies have ever made political donations in either country of operation and both operations have firm policies in place prohibiting political donations.



CAML management visiting Sasa

SUPPLY CHAIN

Promoting local economic development is an important way of providing benefits to society and we aim to support local businesses where possible. This is reflected in our preferential procurement practices. Local procurement brings significant benefits to our sites as it helps them to maintain their social licence to operate, strengthens relationships with host governments and improves supply chain efficiency. The procurement strategies at both sites aim to provide a level playing field for suppliers, insisting on good governance, compliance with local laws, respect for human rights, safety and the environment.

As a base metals producer with operations in Kazakhstan producing copper cathode, and in North Macedonia, mining zinc and lead, the Company has a variety of local and international suppliers servicing our subsidiaries, all of which must adhere to the Company's Code of Conduct. Due diligence is conducted in line with that of normal business practices when sourcing and vetting suppliers.

Through the Whistle-blowing Policy, CAML provides staff with a confidential method for alerting management of circumstances where suppliers may be providing services which use slavery, forced labour, or involve human trafficking. See further detail on page 14.

Preferential procurement

SASA

Sasa gives priority to majority owned North Macedonian businesses and, where possible, supports firms that are located close to the mine. Sasa ensures that it does not build new supply capacity at the local or regional level where there are already adequate suppliers. During 2019, 11% of Sasa's goods and services were purchased from local suppliers (from Kamenica and the local communities), and a total of 59% were purchased nationally.

KOUNRAD

In Kazakhstan, we have a local procurement target of 60% and we consider purchases from businesses in the Karaganda region as local. In 2019, 73% of Kounrad's goods purchased were with local suppliers.

2020 initiatives:

- Establish the Sasa Foundation for local charitable donations and social initiatives
- Sponsor an additional 10 students of mining and environmental related studies through tertiary education in North Macedonia



President Pendarovski visits the Sasa mine

CASE STUDY
NORTH MACEDONIAN PRESIDENT VISITS SASA

In 2019, the President of North Macedonia, Stevo Pendarovski, visited the Sasa mine as part of the 28th of August Miner's Day celebrations, and commented:

"In order to continue to contribute to the country's overall development, the domestic mining industry must adhere to the world standards for sustainable development. I'm pleased that there are mines like Sasa that are guided by these standards and that constantly improve the working conditions, care for the wellbeing of their employees, protect the environment, and support community development. I urge all other companies in this sector to follow their example."



GLOSSARY

AIM	Alternative Investment Market
Board	CAML Board of Directors
CAML	Central Asia Metals Plc (the 'Company')
Camp GLOW	'Girls leading our world' – a youth group that strives for the empowerment of women in North Macedonia
CDP	Carbon Disclosure Project
DJSI	Dow Jones Sustainability Indices
EMS	Environmental management systems
EIA	Environmental impact assessment
ESG	Environmental, social and governance
GHG	Greenhouse gas
GRI	Global Reporting Initiative
HSE	Health, safety and environmental
IFC	International Finance Corporation
IIRC	International Integrated Reporting Council
ILO	International Labor Organization – ILO standards is a comprehensive system of instruments on work and social policy, backed by a supervisory system
ISO	International Organization for Standardization
ISO14001	International standard for environmental management
ISO150001	International standard for energy management systems
LED	Light emitting diode
LTI	Lost-time injury
LTIFR	Lost-time injury frequency rate (calculated as the number of work lost-time injuries, divided by the number of hours worked, multiplied by 1,000,000)
MoEPP	Ministry of Environment and Physical Planning
MWh	Megawatt hours
PM10	Particulate matter less than 10mm
QCA code	Quoted Companies Alliance code – the corporate governance code adopted by the majority of companies on the AIM market in the UK
SASB	Sustainability Accounting Standards Board
Scope 1 emissions	Scope 1 emissions are direct emissions from owned or controlled sources
Scope 2 emissions	Scope 2 emissions are indirect emissions from the generation of purchased energy
SEMP	Social and environmental management plans
SX-EW	Solvent extraction electro-winning
TRI	Total recordable injury
TRIFR	Total recordable injury frequency rate (calculated as number of recordable injuries, divided by the number of hours worked, multiplied by 1,000,000)
TSF	Tailings storage facility – a structure made up of dams built for the purposes of storing uneconomical ore
UNDP	United Nations Development Programme
UN SDGs	United Nations Sustainability Development Goals
YMLP	a youth camp in North Macedonia