

# MMG SUSTAINABLE DEVELOPMENT FRAMEWORK

MMG'S APPROACH TO SUSTAINABLE DEVELOPMENT

A member of:





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## CONTEXT

MMG aspires to be the world's most respected diversified base metal company. To achieve this, we ensure that our operations are conducted responsibly and that we effectively manage risks to people and the environment across the unique communities, geographies and environments in which we work.

We recognise that the sustainable development of our host countries and communities is the result of many smaller steps, which over time lead to real and lasting improvements in the quality of lives of those touched by our operations. This transformation of natural resources into societal capital is how we mine for progress.

## INTRODUCTION

#### THE WAY WE WORK

The way we work at MMG is central to enabling us to contribute positively to the shared global goals of sustainable development.

MMG's Board of Directors (Board) is accountable for the Company's sustainability performance, which includes health and safety, security, environment, social performance, human rights and other ESG-related issues and for the MMG Sustainable Development Framework.

The MMG Board regularly reviews and discusses sustainability-related issues at their meetings, including a quarterly Executive SHEC report, and decisions are delegated to the Executive for their execution

The following principles underpin the way we work at MMG:

- WE VALUE THE ROLE OF OUR MAJOR SHAREHOLDER in supporting us with access to international capital, relationships to work in challenging jurisdictions, and a shared commitment to the development of people and communities.
- WE OPERATE IN COMPLEX SOCIAL AND POLITICAL ENVIRONMENTS but despite the differing legislative and social contexts we have the same company aspirations to mine for progress while operating in line with our corporate values.
- LEGAL COMPLIANCE FORMS THE BASIS OF THE WAY WE WORK beyond this our continuous improvement effort is aligned to key business risks and opportunities, and we adopt international frameworks for consistency in our approach.
- WE ALWAYS OPERATE ETHICALLY AND TRANSPARENTLY and encourage others to follow our lead.
- WE TAKE A LIFE OF ASSET APPROACH planning with the end in mind to maximise the value of the development of our natural resources and to secure enduring community benefits.
- WE RECOGNISE THE VALUE OF USING EXISTING BUSINESS DECISIONS TO LEVERAGE BROADER DEVELOPMENT OUTCOMES – this will enable us to ensure that communities and governments see value in our presence on their lands and in their communities, regions and nations.
- WE ARE SUPPORTED BY A 'FEDERATED' ORGANISATIONAL STRUCTURE providing accountability for whole-of-business performance as close as possible to the operations, while maintaining a core of shared values, standards and governance.
- WE SEEK TO PARTNER WITH ORGANISATIONS WHO SHARE OUR VALUES AND COMMITMENT TO HUMAN PROGRESS AND DEVELOPMENT – knowledge, delivery and funding partners enable us to leverage greater outcomes from our investment.

## WE MINE

#### At MMG we are proud to be miners.

We see a mine site as a community of people who work for a common purpose - to provide an opportunity for others to enjoy the benefits of development that rely on the transformation of natural resources into societal capital.

Through our operations, our employees gain wealth and personal development; regions and nations receive economic benefit; and the whole of society is rewarded by the products we produce, and the development benefits these commodities deliver.

## THE PRODUCTS WE MINE

#### PRODUCT RESPONSIBILITY

The commodities we mine at MMG are critical to realising the global Sustainable Development Goals. Many of the minerals and metals we produce are essential building blocks to the technologies, infrastructure and agriculture required to ensure that the world can continue to meet the needs of a growing population and to deliver this in a way that minimises our impacts on future generations.

MMG supplies products that consistently meet our customers' quality expectations and are safe for people and the environment. We operate in accordance with processes and procedures which guide us in identifying and managing significant risks to human health and the environment during the transportation, storage, handling and processing of our products.

We are a member of the International Zinc Association (IZA) and a regional member of the International Copper Association (ICA) through which we contribute to the development of new applications for our products that are safe, efficient and beneficial to society.



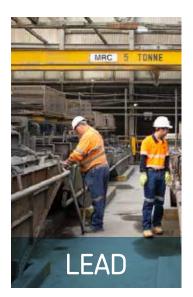
Our transition to a low carbon economy and sustainable societies and communities, relies on the use of Copper. According to the European Copper Institute:

- Products containing copper tend to operate more efficiently because copper is the best non- precious conductor of heat and electricity. Copper use helps reduce CO<sup>2</sup> emissions and lower the amount of energy needed to produce electricity.
- Copper is already an essential ingredient in our most innovative technologies such as smart energy technology, aquaculture and electric cars and its role in electromobility, energy efficiency and renewable energy is growing. McKinsey\* has estimated a 43% potential increase in copper demand by 2035 versus today's demand of 22 million tonnes.
- On average, less than five tonnes of CO2 are emitted to produce one tonne of copper. However, because of copper's inherent high efficiency in conductive applications, between 100 and 7,500 tonnes of CO2 emissions can be reduced a mitigation factor of up to 1,500 to one. By 2030, copper could reduce the world's carbon footprint by 16%.



Zinc, with its key attributes of essentiality, durability, versatility and recyclability, is well positioned as a material of choice for a sustainable society. According to the International Zinc Association:

- Zinc coatings prevent corrosion in transportation and infrastructure, extending the service life of steel in uses such as solar and wind energy applications and in building materials, in turn contributing to global CO2 reduction.
- Zinc deficiency is a major health problem affecting over two billion people worldwide, especially among young children in developing countries. Zinc deficiency weakens their immune system and leaves them vulnerable to conditions such as diarrhea, pneumonia and malaria. Over 800,000 people and 450,000 children are estimated to die each year indirectly from zinc deficiency (Black et al, 2008).
- Zinc is lacking in 50% of the world's soils and is recognized as the most common micronutrient deficiency in crops (FAO, 2006). Zinc deficiency in soils creates reductions in crop yield, crop quality and nutritional value.



Lead is a high-density metal that resists corrosion and generally has a low cost as compared to other materials. These characteristics make it well suited for a variety of purposes, such as in building construction, lead-acid batteries, bullets and shot, weights, and as a component in a variety of products. Unfortunately, lead is also toxic to human health when released to the environment.

Although lead has been phased out of many of its previous uses, this non-corrosive metal is useful in products that hold or touch highly acidic substances. For example, lead is used to line tanks that hold corrosive liquids, such as sulfuric acid. It is also used in lead-acid storage batteries, such as those found in automobiles.

Because of its density and ability to absorb vibration, lead also makes an excellent shield against different types of harmful radiation, such as those found in X-ray machines and nuclear reactors, and in the glass screens of televisions and computers.



MOLYBDENUM

Industrially, molybdenum can withstand extreme temperatures without significantly expanding or softening, making it useful in environments of intense heat, including aircraft parts, electrical contacts, industrial motors, and filaments. Molybdenum is also valued in steel alloys for its high corrosion resistance and weldability. Molybdenum compounds (about 14% of world production of the element) are used in high-pressure and high-temperature applications as pigments and catalysts.

Molybdenum is also an essential catalyst for enzymes to help metabolize fats and carbohydrates and facilitate the breakdown of certain amino acids in your body. Its role is crucial to human health. In areas where there is little access to molybdenum-rich foods, minimal dietary molybdenum is associated with oesophageal and stomach cancer. The addition of ammonium molybdate to the soil in communities affected by molybdenum deficiency is a key strategy in reducing this risk.

## RESPONSIBILITY AND ACCOUNTABILITY IN HOW WE MINE

As a mining company we have an impact – developing a finite resource. How we manage these impacts across the full breadth of industry challenges is what differentiates us as a responsible company.

We recognise that we need to be sustainable ourselves - a viable and growing business - if we are to contribute to the sustainable development of our communities. For this reason, our approach to sustainability puts the fundamentals of our business first.

Our objective is to deliver maximum value to shareholders, host communities, regions and nations through effective use of our business decisions, partnerships with others and strategic investment by sites.

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## OUR MATERIAL ISSUES -IMPACTING PERFORMANCE AND REPUTATION

MMG recognises that our many different stakeholders globally have divergent views on the issues which have the potential to impact most on our business or on the communities and environments in which we work.

Our material issues include those social, economic and environmental risks and opportunities that have the potential to affect our performance or reputation, as well as our ability to create value and deliver progress over the short, medium and longer term.

MMG conducts a full materiality assessment of our business on a three-year cycle to ensure we are focussing on those issues that matter most to our stakeholders.Our assessment is based on extensive stakeholder interviews, review of the considerations of our Executive Committee and Board, investor feedback, community perception surveys, benchmarking with peer companies and a review of media reports. This is reviewed annually to account for relative changes in the importance of social, environmental and governance issues based on changing public sentiment, changes in our business or changes in the industry.

The insights we receive from this process are used to inform our sustainability reporting and communications on wemineforprogress.com, but they are also valuable in guiding our strategy, operational management and capital investment decision making processes.

The issues below represent the current suite of material considerations for MMG.

#### SAFETY AND HEALTH

At MMG, we think safety first. We are working hard to embed a company safety mindset with supporting leadership, behaviours, cultures, and processes in every area of our business. We believe it is possible to have an injury-free workplace.

We have identified four key elements to developing an organisational culture with a strong and effective focus on safety. The four key elements include:

- 1. LEADERSHIP AND CULTURE a focus of sites aligned to common MMG leadership attributes;
- 2. PREVENTION OF FATALITIES (low probability, high consequence events) in line with the requirements of our Fatal Risk Standard;
- 3. ELIMINATION OF INJURIES (high probability events) in line with the requirements of our Safety, Health, Environment and Community (SHEC) Performance Standard; and
- 4. APPLYING LEARNINGS FROM INCIDENTS in line with the requirements of our SHEC Performance Standard.

#### INJURY MANAGEMENT AND REHABILITATION

MMG recognises that helping workers to stay at work or make an early and safe return after an injury minimises the impact of injury on them and their families. MMG supports injured workers by having a system of workplace rehabilitation and providing suitable duties for them while they are recovering. MMG expects that all injured workers will return to work on suitable duties as soon as it is medically safe for them to do so.

#### FATAL RISK MANAGEMENT

MMG's Fatal Risk Standard describes requirements for the identification, assessment and mitigation of specific fatal risks.

The 12 fatal risks identified as common to all MMG Operations are as follows:

- Aviation;
- Carcinogens;
- Clearance to work, isolations and permits;
- Explosives and blasting;
- Ground control;
- Hazardous materials;

- Land transport of personnel;
- Lifting operations;
- Lightning;
- Safe guarding;
- Vehicles and mobile equipment; and
- Work at height.

Site-specific fatal risks not covered by the Fatal Risk Standard are identified and managed using the MMG Risk Management Framework.

#### ATTRIBUTES OF SAFETY LEADERSHIP

ATTRIBUTE	DESCRIPTION	EXAMPLE SAFETY BEHAVIOURS
Integrity	The quality of being honest and having strong moral principles	Being honest and sincere with workers and each other e.g. in individual and group discussions
Empathy	The ability to understand and share the feelings of another	Listening actively e.g. repeating back to person during discussion
Caring	Displaying genuine interest and concern for others	Getting to know people – ask appropriate questions
Courage	To be brave and confident enough to do what you believe in, and what is right	Intervening on safety matters
Accountability	Standing by decisions, actions, and the overall wellbeing of sites – being responsible	Owning responsibility when things go wrong including incidents

#### SAFETY AND HEALTH REPORTING AND INVESTIGATIONS

Effective reporting creates opportunities to make informed decisions, undertake timely intervention/ corrective action and to prevent fatalities, significant events and repeat incidents. Accordingly, the SHEC Performance Standard outlines the minimum requirements to manage safety and health events and achieve accurate and consistent recording and reporting of authorised and meaningful safety and health data.

MMG uses a centralised electronic Incident and Event Management system (IEM) to manage events and corrective actions - including incidents, near misses, high risk hazards, legal non-compliances, inspections and audits.

We use the Incident Cause Analysis Method (ICAM) as our common approach to incident investigation. ICAM enables us to assess the underlying causes of incidents and to look at the latent organisational factors such as communication, training, incompatible objectives and change management processes. As part of the ICAM process, MMG uses a Work as Intended versus Work as Normal versus Work as Done investigation methodology to better understand the causes of significant incidents.

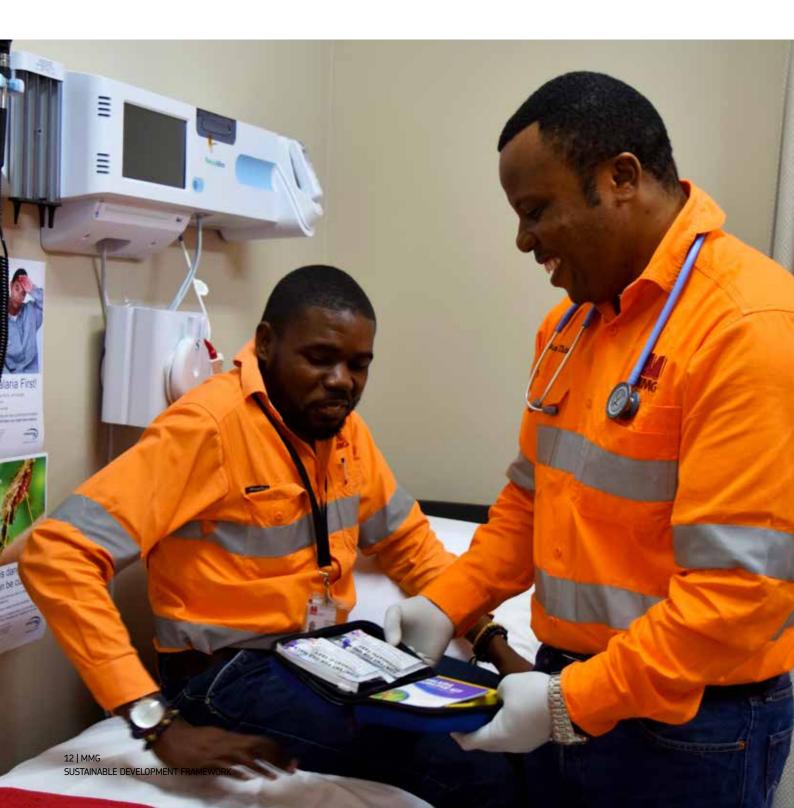
We require the sharing of learnings from incident investigations across all MMG sites to prevent repeat incidents within our business, and to ensure that we continuously challenge the effectiveness of control design and control execution for our fatal risk critical controls.

#### HEALTH EXPOSURE MANAGEMENT

MMG defines the requirements for the management of exposure to harmful agents in the SHEC Performance Standard. Health and hygiene management includes health surveillance and hygiene monitoring.

The key processes for the planning and management of Health Exposure Risk is the annual review and update of the site's and Exposure Assessment (Health Risk Assessment).

Following the annual Exposure Assessment, Similar Exposure Groups (SEGs) are reviewed and the annual Occupational Hygiene Monitoring Plan is developed and executed. In addition, health surveillance requirements are reviewed and updated.



#### MENTAL HEALTH

Mental health and wellbeing are a priority for MMG. A mentally healthy workforce has clear business benefits, and we recognise that we are in control of certain things that can positively and negatively impact on the mental health and wellbeing of our people.

Our mental health framework describes the broad actions that we will take to promote good mental health practices in the workplace and to support employees experiencing mental illness, such as depression and anxiety.

Our approach focuses on three key areas: Awareness and Prevention, Capacity building and Support and Recovery.



#### **OUR PERFORMANCE MEASURES:**

- Lost Time Injury Frequency (LTIF) (GRI 403-2).
- Total Recordable Injury Frequency (TRIF) (GRI 403-2).
- % implementation of fatal risk controls at each site\*.
- 60% of CSA's rate control as effective or higher\*.
- # people potentially exposed to Carcinogens Group 1 above 50% of the OEL yearly.
- Number of Significant Events with energy exchanged per site\*.
- Ratio of Significant Events with energy exchanged to Significant Events with no energy exchanged per site\*.

Note: \* it is proposed that only these measures could be linked to a financial incentive if a safety measure is to be used.



#### LAND ACCESS, RELOCATION AND RESETTLEMENT

MMG requires access to land to conduct exploration and mining activities and recognises the need to ensure that this process is undertaken in a way that supports the orderly search for minerals, while recognising the rights of landholders to conduct their activities free from unreasonable interference or disturbance. Mining projects are developed where commercially viable ore is found and the requirement to access these lands can sometimes lead to development-related displacement of local communities.

MMG recognises that project-related land acquisition, resettlement and relocation of families and communities as well as restrictions on land use, can have adverse social and economic impacts on communities and families. Unless properly managed relocation and resettlement activities, and particularly involuntary resettlement, may result in long-term impoverishment, as well as environmental damage and social stress in the communities to which they have been displaced.

In our land acquisition processes, we anticipate and minimise social and economic impacts resulting from land acquisition and relocation/resettlement. We do this through a land acquisition process that:

- Achieve Free, Prior and Informed Consent from Indigenous populations prior to the development of a major project;
- Provides enough time for relocation/resettlement planning and engagement;
- Involves experienced relocation or resettlement practitioners as early as possible in the process;
- Supports open and transparent engagement of communities throughout the relocation or resettlement process, and enables their effective decision making on relevant issues;
- Provides a culturally appropriate and easily accessible dispute resolution process;
- Engages relevant stakeholders in the process, including local government and other government agencies who have a critical role in supporting community infrastructure and service delivery; and
- Properly resources the relocation or resettlement process, including supporting livelihood restoration and enhancement activities and appropriate monitoring to ensure that displaced communities normalise appropriately over time.



We respect human rights, land tenure rights and the rights of local communities and operate in accordance with national regulations. We recognise the need to protect the specific rights and interests of Indigenous Peoples; ensure the effective engagement of vulnerable and marginalised groups; and account for the gender differentiated impacts in any land acquisition process.

Our operations avoid, and when not possible, minimise the social, physical or economic displacement of families and communities by exploring alternative project designs. In instances when involuntary displacement cannot be avoided, our operations provide displaced communities and families with full and fair compensation, coupled with social and economic assistance packages and programs to restore livelihoods. We ensure that resettlement activities are implemented thoughtfully, through a consultative processes and informed participation of all those affected and operate in line with the ICMM process of Free, Prior and Informed Consultation as outlined in the Indigenous Peoples and Mining Position Statement.

#### **OUR PERFORMANCE MEASURES:**

- Publicly available site land access policy requires avoidance of involuntary physical displacement of communities and families and that in instances where avoidance is not possible a) an assessment of alternatives to prove resettlement is inevitable and b) application of mitigation hierarchy.
- Annual investment on compensation, livelihood restoration and social investment for resettled or relocated communities.
- Number and percentage of sites where artisanal and small-scale mining takes place on or adjacent to site and the associated risks and management actions (GRI MM10).



#### HUMAN RIGHTS

It is widely recognised that governmnts have prime responsibility for protecting human rights. However, a growing body of corporate good practice on human rights has provided clearer indication of what might reasonably be expected from companies beyond the minimum requirement to comply with host governments' laws and regulations. The release of the UN Guiding Principles on Business and Human Rights (the UN Guiding Principles) in 2011, has been a critical document in clarifying the expectations on business and society.

MMG recognises that companies can, and do have, a responsibility to support and respect the protection of international human rights within their 'sphere of influence' and to make sure they are not complicit in human rights abuses. At its most basic level this means to do no harm.

MMG is committed to respecting the human rights in the communities in which we live and operate, and to providing access to effective remedy where we make an impact. Further, MMG is committed to the continuous improvement in the wellbeing of communities surrounding our operations through our commitment to the protection of human rights, the ongoing monitoring and improvement of its grievance management process and our alignment with the United Nations Sustainable Development Goals.

We recognise that human rights cover a broad range of interrelated issues, requiring an integrated approach across numerous business functions. At MMG, our Human Resources, Supply, Community Relations, Stakeholders Relations, Security, Exploration and Project Development functions have specific responsibilities for upholding our commitment to human rights.

Our commitment is outlined in our Human Rights Policy and our approach to managing human rights risk is embedded into our broader risk management framework. We integrate human rights considerations into our Code of Conduct, employment and procurement processes, risk-analysis activities, engagement, social investment, and formal grievance mechanisms. We also seek to ensure that our stakeholders, including employees, are confident to report instances of unacceptable conduct without fear of intimidation or reprisal.

We commit to respecting human rights as outlined in the ICMM Sustainable Development Framework. This commitment has been strengthened through the development of joint industry and civil society guidance on key issues such as FPIC and the Rights of Indigenous Peoples, and with the recent release of a set of performance expectations. We also participate in ICMM convened member discussions and peer learning on a wide range of business and human rights issues, including the role of business with regards to civic freedoms and human rights defenders.



#### SECURITY AND HUMAN RIGHTS

We operate in accordance with the Voluntary Principles on Security and Human Rights (VPSHR) as well as the rules of engagement and the United Nations Basic Principles on the use of Force and Firearms by Law Enforcement Officials.

Since 2016, we have standardised our security management plans, and these plans reference the VPSHR in relation to the deployment and conduct of public and private security. We also ensure public security forces that support our sites are adequately trained in the use and application of the VPSHR. To strengthen our alignment, in October 2018 we formally applied to become a participant of the VPSHR Initiative.

From our experience, we are aware that many issues that can become security incidents have roots in community concerns that have built up over time. Often these issues are well-understood by our social performance teams, who are working on strategies to resolve these issues before they become security incidents. In line with this, we take the opportunity wherever possible to bring our security and social performance teams together to develop strategies around proactive risk identification and mitigation, grievance management and incident identification processes. We also work collaboratively with other stakeholders to review our human rights exposures and potential risks.

#### THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS AND MMG

Through the management of human rights issues as part of our daily operations, we have been able to align our approach to human rights through a targeted subset of the Sustainable Development Goals (SDGs) as the overarching framework for our contribution to human development.

In 2016, MMG decided to align the focus of our social development initiatives with relevant United Nations SDGs. We now publicly report our contribution against these SDGs annually in our sustainability report.

#### LABOUR RIGHTS

MMG recognises the important work of the International Labour Organisation (ILO) in defining through its constituency of governments, employer groups and workers, the basic principles and rights at work. MMG operates in each of its host jurisdictions in line with local labour laws as a minimum and considering the eight core conventions of the ILO focussing on human rights which are directly applicable to business.

MMG's People Policy provides an overview of the core MMG principles in relation to the management of company employees, several of the principles directly support the upholding of basic human rights, specifically:

- People are employed under terms and conditions that are fair, and as a minimum meet all legal requirements;
- People are provided with safe and healthy conditions of work, and where feasible assisted to return to work following illness or injury;
- People are treated equitably in a workplace which values diversity and inclusion in terms of gender, age, cultural and ethnic background, religion, sexual orientation or disability;
- People are provided with a workplace which is free from harassment; and
- People are confident to raise concerns which will be addressed in a timely and fair manner.

We support the right to freedom of association across our business and ensure that all our employees feel empowered to exercise this right. A significant number of our workforce agreements are collective, covering 43% of employees across the company (up from 28% in 2017).



#### CHILD RIGHTS

MMG is committed to the protection of the rights of children and adolescents and does not employ any people under the age of 18 years at our operations globally. We recognise and support the International Labour Organisation (ILO) Convention C182 concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour. We have worked with organisations including UNICEF and Government agencies to ensure children's safe access to health, education, and other essential services to support them to achieve their full potential in childhood and adolescence and their transition into adulthood.

We support young people to fully understand their legal rights and have worked with communities to address areas which restrict the freedoms of children and adolescents including through undertaking child rights assessments and in supporting community education programs on issues such as the impacts of early childhood marriage.

#### **BUSINESS ETHICS**

Our Values and our Code of Conduct underpin our commitment to establishing and maintaining long-term, meaningful relationships with our stakeholders, including governments and employees. We aim to act with integrity in all situations and to provide formal structures to review and respond to any potential behavioural, ethical or cultural issues as they may arise.

The MMG Code of Conduct sets out the standards of behaviour expected from all MMG employees, contractors and suppliers. We expect MMG people to integrate these standards of behaviour into their working practices.

The Code of Conduct covers areas such as conflict of interest, fraud, anti-corruption and legal compliance. Matters relating to the Code are overseen by the Code of Conduct Committee. We also engage an independent confidential whistle-blower service provider which is available to all employees globally in their local language.

We recognise that some of the jurisdictions in which we work present unique challenges with respect to transparency and individual freedoms. Because of this we seek to match good governance with a commitment to transparency initiatives such as the Extractive Industries Transparency Initiative (EITI).

#### OUR PERFORMANCE MEASURES:

- Publicly available human rights policy.
- Statutory reporting in line with the Australian Modern Slavery Act 2018.
- Public reporting of annual human rights grievances and management in line with the UN Guiding Principles on Business and Human Rights (incl GRI MM6/7).
- Acceptance into the Voluntary Principles on Human Rights Initiative and annual disclosure to the initiative of our conformance with the Principles at all sites.
- Number of complaints relating to the International Labour Organisation's four fundamental principles and rights at work, namely freedom of association, forced labour, child labour and discrimination, and annual public disclosure of improvements or action taken where required.



#### TRANSPARENCY AND DISCLOSURE

MMG recognises that mining-related taxes, royalties and other payments made to Governments are instrumental sources of revenue to deliver long-term economic growth and sustainable development. As a major investor, taxpayer, employer and purchaser of goods and services, MMG makes significant economic contributions to the economies of countries where we operate.

MMG is committed to the broad principle of revenue transparency and the shared accountability of industry and governments in ensuring that information on material revenue streams are made publicly available. Transparency on mineral revenues paid to governments is important to regulatory stability and community understanding of the responsible use of taxes and the role they play in supporting the provision of citizenship entitlements.

Our approach to transparency follows international good practice through the disclosure of tax and royalty payments, as well as elements of our broader social contribution in annual and sustainability reporting; and supporting the Extractive Industries Transparency Initiative (EITI) in relevant jurisdictions.

We consider that our transparency regarding such payments reduces the risk of bribery and corruption and alleviates community perceptions about the mining industry and the nature of its relationships to governments.

Accordingly, MMG is committed to the highest levels of governance through its Code of Conduct, Standards and audit and assurance processes which create an enabling framework for transparency (including tax transparency) and rigour in our disclosure.

MMG supports the EITI in its efforts to improve transparency in countries rich in oil, gas and mineral resources. MMG contributes financially to EITI through its membership of the ICMM and is an active participant in the EITI candidacy of the DRC and Peru. MMG publicly reports in line with the requirements of the EITI in these jurisdictions and was an inaugural participant in the Australian EITI pilot project that underpinned Australia's decision to move towards adapted implementation of the EITI.In addition to disclosure of our community and tax contribution, MMG also publicly reports its performance in line with the metrics of the Global Reporting Initiative, where the reporting is subject to a process of annual independent assurance. We transparently disclose our performance and company objectives in line with the reporting requirements of the ICMM and disclose material events related to our operations and its impacts on employees and communities on our company websites (mmg.com and wemineforprogress.com).



MMG also subscribes to the following transparency initiatives:

- An anti-bribery and facilitations payment framework through the company's Code of Conduct and associated training;
- Routine public disclosures in line with Foreign Investment Review Board, Australian Taxation Office and Hong Kong Stock Exchange disclosure requirements, complemented by voluntary disclosure of key payments in our annual sustainable development report; and
- A partnership with Transparency International through membership of Transparency International Australia.

#### OUR PERFORMANCE MEASURES:

- Annual public disclosure of taxes, royalties and other material payments to Governments, by jurisdiction or facility aligned to MMG's audited accounts.
- Participation in all relevant EITI multi stakeholder processes in the jurisdictions in whichwe operate.
- Disclosure of all related party transactions in line with the listing requirements of the HKEx.
- Public disclosure of all material non-compliances by operation.



#### WATER MANAGEMENT

As a user of water in both our mining and extraction processes, we have a clear business need to secure water for the efficient and consistent performance of our operations. In doing so, however, MMG recognises the importance of responsibly managing water resources at and around our mining operations and the associated impacts on surrounding catchment and communities.

We effectively manage our water intake, inventory and discharge to minimise our impacts on other users within the catchment including upstream and downstream communities and the environment.

We have different strategies for managing water, depending upon our site requirements. Some of our operations are in areas with high seasonal rainfall and abundant water resources, and others are in areas where there are competing users and securing water can be more challenge. Targets tailored to site-specific requirements and risks are set against these objectives.

To manage this diversity of requirements and environments, each site has site specific water balance models that predict water inputs, use and outputs to inform out management of water-related risks. We are committed to integrating our water balance models into our Life of Asset Plans to enable us to make structured investment decisions regarding water infrastructure and to align water supply with processing demands and community requirements. We also ensure that there is clear accountability within the business to deliver against these plans.

We support and align to the ICMM Position Statement on Water Stewardship, and report our water inputs, outputs and diversions in line with the ICMM Water Accounting Framework. In line with this Position Statement, we commit to support water stewardship initiatives that promote better water use, effective catchment management and contribute to improve water security and sanitation.

A focus of our social investment at operations is aligned to addressing the objectives of UN Sustainable Development Goal 6: Clean Water and Sanitation. In addition to the provision of community water infrastructure such as hand pumps, water storage tanks and irrigation for agriculture, we have also worked to ensure the sustainability of these investments through the establishment of local water committees with capability to manage the infrastructure.

We have also worked with organisations such as UNICEF to build community understanding of the importance of Water, Sanitation and Hygiene (WASH) and supporting communities to become Open Defecation Free (ODF) through training in the safe construction and location of latrines.



#### **OUR PERFORMANCE MEASURES:**

- Calibrated site-wide water balance model to optimise water management and consumption.
- Total Water Consumption ML.
- Total water withdrawal by source (GRI 303-3).
- Total water discharge by quality and destination (GRI 306-1).



#### **BIODIVERSITY AND LAND MANAGEMENT**

MMG recognises that compared with many other land uses, the direct impacts of mining on biodiversity and ecosystem services are often small due to the relatively small area of land disturbance. At the same time however, we recognise that this disturbance is often very significant on a local scale and may be globally significant where limited populations of threatened or vulnerable endemic species may be exposed to risk of disturbance.

Our operations are managed to identify potential impacts to biodiversity and to implement mitigation strategies to avoid or offset these impacts. This management includes:

- Using environmental assessments and strategic regional assessments prior to the commencement of mining or disturbance activities to identify potential biodiversity impacts;
- Ensuring the effective application of the mitigation hierarchy in relation to any proposed land clearance activities on site, with avoidance being the preferred option where practicable;
- Planning for closure in a way that focuses more broadly than on the reestablishment of vegetation cover, but more broadly on opportunities to develop self-sustaining ecosystems that support the social, cultural, environmental and economic objectives of our host communities and the surrounding landscape.

We actively manage our land holdings over the life of the operation and seek to protect biodiversity and future land use options. Some of the management actions actively used at our operations focus on:

- Implementing low or no disturbance areas which may form future conservation reserves;
- Controlling invasive species;
- Restoring degraded ecosystems; and
- Translocating endangered plants and supporting the breeding requirements of vulnerable animals.

MMG recognises that by consistently evaluating our approach to land use planning at our operations that we can account for the environmental value of ecosystem services and deliver continuous improvements in our management of land and biodiversity. As a member of the ICMM, and in accordance with the ICMM's Mining and Protected Areas Position Statement, we commit to:



- Respect legally designated protected areas and ensure that any new operations or changes to existing operations are not incompatible with the value for which they were designated.
- Not explore or mine in World Heritage properties. All possible steps will be taken to ensure that existing
  operations in World Heritage properties as well as existing and future operations adjacent to World Heritage
  properties are not incompatible with the outstanding universal value for which these properties are listed and
  do not put the integrity of these properties at risk.
- To ensure that potential adverse impacts on biodiversity from new operations or changes to existing operations are adequately addressed throughout the project cycle and that the mitigation hierarchy is applied.
- Through ICMM, work with the International Union of Conservation of Nature (IUCN), governments, intergovernmental organisations, development and conservation NGOs and others to develop transparent, inclusive, informed and equitable decision-making processes and assessment tools that better integrate biodiversity conservation, protected areas and mining into land-use planning and management strategies, including 'No-go' areas.
- Through ICMM, work with IUCN and others in developing best practice guidance to enhance industry's contribution to biodiversity conservation.

#### **OUR PERFORMANCE MEASURES:**

- Peer reviewed biodiversity management plans support the management of all threatened or vulnerable species on every site.
- The mitigation hierarchy is embedded in all site land clearance and disturbance procedures.
- Environmental Compliance (GRI EN 307-1).
- Number and percentage of operations with closure plans (GRI MM10).



#### TAILINGS MANAGEMENT

At MMG, we treat the management of our Tailings Storage Facilities (TSFs) as a material issue that requires ongoing and rigorous risk management. Our management approach specifies mandatory requirements for all sites to ensure the protection of life through a suite of critical controls for the design, inspection, operations, maintenance, management of change and emergency response risks of TSFs.

Our approach to these controls has been developed using internal and external subject matter experts and aligns to the requirements of the Australian National Committee on Large Dams (ANCOLD) and meets or exceeds the regulatory requirements in each of the jurisdictions in which we operate.

MMG applies critical risk design and execution requirements that are based on a risk assessment process which is reviewed annually by a risk control owner. These aspects focus on operating and non-operating TSFs and seek to both minimise environmental and community impacts and to maximise operational efficiency. The risk management and control execution measures are subject to internal, external and independent audit.

There has been increased scrutiny of the integrity of TSFs from both within and external to industry. Recent failures of large upstream constructed dams have been the primary driver for this concern. The majority of MMG's TSFs including Las Bambas are engineered rock and earth fill structures constructed using downstream construction methods.

In December 2016, the International Council of Mining and Metals (ICMM) issued a position statement on preventing catastrophic failure of TSFs. MMG's approach to the governance of TSFs fully aligns to this framework, including the use of an Independent Dam Review Committee and Engineer of Record at each of our TSFs.

MMG has a strong commitment from our Board and Executive Management Team to provide the necessary governance and resources to protect safety and the environment. We work towards continuous improvement to further refine and strengthen our TSF controls, benchmarking them with the input from the dam safety committee reviews and annual performance audits as defined by ANCOLD. We are also engaged in the work of the ICMM, the United Nations Environment Program (UNEP) and the Principles for Responsible Investment (PRI) towards the development of a new international standard on the management of TSFs and are contributing to collaborative efforts towards developing safe and sustainable alternatives to conventional wet TSFs.



#### OUR PERFORMANCE MEASURES:

For each of our TSFs we will disclose the following aspects on an annual basis:

- TSF Name and dam type.
- Dam raising type.
- ANCOLD dam failure consequence rating.
- Total designed height.
- Total designed capacity.
- TSF service life.
- Date of most recent expert review.



#### EMISSIONS MANAGEMENT

MMG is committed to the effective management of emissions to air, land and water from our operations. We always focus on legal compliance as a minimum and ensure comprehensive monitoring networks are in place to understand the potential impact of our operations on airsheds, catchments and the broader environment.

Particulate and various gaseous emissions need to be controlled because they may be harmful to personal health or the health of fauna and flora in the environment, cause concern for local communities, become a hazard to safe operations or, in the case of dust, cause increased wear to moving machinery. Dust and odour can cause annoyance and lead to complaints.

Recognising these impacts can extend beyond the mining lease and into communities adjacent to our operations and along our transport corridors, we engage community members as part of our monitoring network and seek to ensure transparency in the monitoring outcomes with Governments and any potentially impacted stakeholders. In response to monitoring data we then implement a suite of controls in partnership with the community, which may include watering or road pavement for dust suppression; the use of scrubbers and filters in stacks to capture nitrogen oxides (NOx) and sulphur oxides (SOx) emissions; or the use of covered storage sheds and isotainers to store and transport mineral concentrates.

In line with our commitment to ensuring the safety and health of employees, MMG's control framework for respirable emissions, including diesel particulate matter, respirable crystalline silica, welding fumes and acid mist are based on emission control at source wherever practicable, and ensuing that any residual risk is managed using personal protective equipment.

#### HUMAN-INDUCED CLIMATE CHANGE

MMG recognises the impacts of human-induced climate change on the environment, economy and communities and that addressing the impacts of climate change poses significant short and long-term challenges for society. We welcome efforts made by governments to cooperatively reach the global climate agreement and support long-term climate goals that balance greenhouse gas reductions with economic development. Together with other members of the ICMM our principles for climate change policy design are as follows:



Provide clear policies for a predictable, measured transition to a long-term price on greenhouse gas emissions;

- Apply climate change related revenues to manage a transition to a low carbon future;
- Facilitate trade competitiveness across sectors;
- Seek broad-based application;
- Be predictable and gradual;
- Be simple and effective; and
- Support low-emission base-load generation technology development.

MMG is committed to be a part of the global solution by taking appropriate actions that will reduce our emissions intensity, and sourcing the key mineral and metals required to help the global transition to a low-carbon future.

MMG's focus on energy efficiency will reduce our existing power requirements and minimise our greenhouse gas emissions footprint. Our global operations are also working to support extensive reafforestation of our neighbouring lands, which will deliver more carbon abatement outcomes now and into the future.

#### **OUR PERFORMANCE MEASURES:**

- Energy intensity by operation (GRI 302-3).
- Total direct and indirect greenhouse gas emissions by weight CO2 equivalent.
- NOx, SOx, and other significant air emissions by type and weight (GRI 305-7).

## FOR PROGRESS

At MMG we mine for progress. That includes progress for our people, host communities and countries, progress for economic wellbeing via the products and technologies we support and, most importantly for MMG, progress is Human Development.

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Human Development is a concept central to the work of the UN and other global development agencies. In essence, it is defined as "a process of enlarging people's choices. The most critical ones are to lead a long and healthy life, to be educated and to enjoy a decent standard of living."\*

The social and economic benefits we provide through our operations and their supply chains supports our employees, shareholders, communities, regions and host countries to develop and prosper. This contribution comes through our payment of taxes and royalties; wages and employee entitlements; our purchase of goods and services; through community compensation and benefit sharing; and through our direct investment in addressing the United Nations Sustainable Development Goals 1-6, specifically:



In addition to improving access and achievement around core health, education and livelihood indicators, human development recognises the importance of managing vulnerability and building community resilience.

Communities and countries must be able to withstand ongoing pressures around social and economic security, and the impacts of development and political instability. An example of this is poverty eradication - if people remain at risk of slipping back into poverty because of structural factors (such as lack of access to healthcare and housing) and persistent vulnerabilities (such as food and economic insecurity), development progress will remain precarious. For this reason, MMG is also committed to supporting initiatives such as the Extractive Industries Transparency Initiative, which align with UN Sustainable Development Goal 16: Peace, Justice and Strong Institutions.

## SOCIAL PERFORMANCE

Global stakeholder surveys and direct stakeholder engagement, consistently identify social acceptance and resource scarcity as two of the most significant issues facing the minerals industry.

At the same time environmental concerns are decreasing against a background of both better performance and a recognition in communities of a legitimate tradeoff between managed environmental impact and the opportunity of socio-economic development.

The importance of social issues has been recognised by global industry leaders, communities and governments, with the social contribution of the minerals industry now forming the central objective of the ICMM. Given the unique communities, geographies and environments in which we work, we aspire to be a leading mining company in key aspects of social performance, namely:

- Community engagement; and
- Supporting economic livelihoods and community resilience.

This, in addition to a firm commitment to full compliance and continuous improvement in all aspects of our business.

In focussing on these priority areas, MMG:

- Takes a life of asset approach planning with the end in mind, to secure enduring community benefits;
- Specifically acknowledges cultural, age and gender diversity to ensure the engagement and participation of marginalised and vulnerable groups within our host communities;
- Operates ethically, and transparently and encourages others to follow our lead; and
- Seeks to partner with organisations who share our values and commitment to human progress and development.

#### COMMUNITY ENGAGEMENT – ENSURING OUR HOST COMMUNITIES ARE INFORMED AND ENGAGED

At MMG, we recognise that strong community engagement from exploration through to closure is critical to making business decisions that are responsive to the needs and expectations of our host communities and their governments.

MMG aspires to be a trusted member of each of the communities that host our operations. Our ambition is to develop partnerships based on regular and open dialogue; transparency and mutual respect.

Our dialogue with communities varies depending on the nature of the community and the issues being discussed, our aim being to ensure that these conversations are conducted in a way that respects the cultures, languages, values and customs of these communities.

We operate in complex jurisdictions and across numerous cultures and geographies, and often in communities who have emerging or negative experiences with resource development. Our approach to engagement is therefore focussed on openness and transparency, respectful of the human rights, interests, cultures and customs of the communities in which we live and work.



The minerals industry globally is facing increased project risk and conflict, this driven by:

- Power Imbalance between miners and communities, particularly remote communities where the majority of economic resources are now located;
- Differing and, increasingly, escalating expectations regarding benefit sharing from the development of natural resources on or adjacent to community lands, or from the impacts of activities such as transport and logistics operations; and
- Environmental issues where they impact on economic livelihoods this acutely focuses on access to water as a community and environmental resource, and perceptions of human and environmental health impacts from industrial activities.

The challenges we face as an industry in properly managing non-technical risk are significantly eroding projects value, recognised widely as accounting for a double-digit percentage of annual operating profits.

MMG is committed to dialogue as the primary tool for avoiding the high human and economic cost of conflict. We engage with communities early and through all phases of its operations empowering communities to actively participate in the consultative process, to ensure their views are reflected in decision making regarding our operations and in the design and distribution of benefits.

We recognise that as a company there is always more that we can do to listen to the needs, aspirations and opinions of communities; to guarantee their timely engagement on issues that are important to them; and to ensure that at all times they have access to information and open dialogue through direct engagement with our community relations teams, many of whom come from the communities in which they work.

We also recognise that our business has an impact, and that disagreements on the nature and the extent of this impact, as well as our approach to managing it, can occur between ourselves and community members.

Open and transparent dialogue is the best way to manage these disagreements and, if necessary, we involve independent third parties to obtain lasting solutions that are beneficial to all.

To facilitate the timely, culturally appropriate investigation and resolution of these matters, all MMG sites have a site-specific grievance procedure that aligns with the remedy provisions of the United Nations Guiding Principles on Business and Human Rights. This process is non-judicial, complements existing legislative remedies and provides redress for grievances that are related to:

- MMG's impact on stakeholders;
- the conduct of MMG Personnel and Contractors in local communities; and
- allegations of human rights abuses.

At MMG we consider that stakeholder complaints and grievances provide valuable indicators to help our operations to anticipate deeper community concerns and to proactively manage social risks. This is just one of the ways that we live our value "We want to be better" by always looking for opportunities to improve.

MMG recognises the specific rights and interests of Indigenous peoples and that these are tied to their physical, spiritual, cultural and economic well-being. Given the potential vulnerability of these rights in some jurisdictions, MMG is committed operating in accordance with the ICMM Indigenous Peoples and Mining Position Statement, and specifically to:

- Respect the rights, interests, special connections to lands and waters, and perspectives of indigenous peoples, where mining projects are to be located on lands traditionally owned by or under customary use of Indigenous peoples;
- Adopt and apply engagement and consultation processes that ensure the meaningful participation of Indigenous communities in decision making, through a process that is consistent with their traditional decision-making processes and is based on good faith negotiation; and

#### OUR PERFORMANCE MEASURES:

- Operations with local community engagement, impact assessments and development programs (GRI 413-1).
- Total Grievances received, and grievances received by category.
- Extent of alignment of site grievance mechanism with requirements of UN Guiding Principles on Business and Human Rights.
- Achievement of FPIC as defined by the requirements of the ICMM Indigenous Peoples and Mining Position Statement.



#### COMMUNITY INVESTMENT -SUPPORTING ECONOMIC LIVELIHOODS AND COMMUNITY RESILIENCE

Mining's role as an economic catalyst is well understood and there are clear expectations for all stakeholders that the industry will build societal capital in communities.

The argument from communities about whether they are receiving a 'fair share' of benefits has resulted in local communities becoming more and more concerned that they shoulder all the negative impacts of mining but receive few of the benefits.

Given the weakness of many fiscal regimes and the inequity of tax distribution mechanisms, the broader economic contribution of mining operations is in many ways more enduring and more significant than the payment of taxation and royalties to host governments.

At MMG we consider that a proactive company policy of training and employing of locals and of engaging local contractors will yield benefits, in the form of greater local incomes and taxes, that companies with a more passive approach may not generate.

Higher incomes drive up independence and satisfaction (managing social risk), and reduce expectations on MMG, particularly at closure. Our primary aim is to ensure a normalised average household income that:

- Permanently transitions communities out of poverty;
- Represents an enhanced standard of living sustainable in the region; and
- Accounts for increased cost of living pressures resulting from our presence.

To deliver systemic change, it is essential that we work with communities to build strong foundations around essentials for life (water, food, health and wellbeing) and improved livelihood strategies, particularly through the support of maternal and child health. As communities' subsistence needs are progressively met and basic educational foundations are established, communities are better able to access the economic development opportunities associated with the mining project and its related supply chain.



Over time, through building a pipeline of capability; effective market development and contributing to addressing the context, risks and opportunities for enhanced livelihoods, communities can transition to a more sustainable regional economic model which supports post closure community resilience.

#### OUR PERFORMANCE MEASURES:

- Proportion of spending on local suppliers (GRI 204-1).
- Annual social investment by site and Group, and alignment to UNSDGs 1-6.
- Extent to which social investment is aligned to issues identified as part of regional or provincial development plans, and an identification of any partners and leveraged investment outcomes (cash and in-kind).
- Description of social and economic outcomes derived from social investment, e.g. change in average household incomes; participation of girls in schools; change in agricultural yield per ha.

## OUR JOURNEY AHEAD

As we look ahead from MMG's approach to Sustainable Development today – we will base our sustainability journey on three phases of work:

## PHASE

Consolidating our focus on managing the material sustainability risks at our operations and ensuring an effective transition to the implementation of the ICMM Sustainable Development Performance Expectations.

# PHASE 2

A period of focussed activity to identify those areas where MMG needs to improve its performance to close the gaps to meeting the intent of the International Council of Mining and Metals (ICMM) Performance Expectations, and an opportunity to begin to differentiate our way of work on material issues, especially our social performance.

PHASE

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Consolidating our focus on managing the material sustainability risks at our operations and ensuring an effective transition to the implementation of the ICMM Sustainable Development Performance Expectations.

