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Cover: Tomatoes for sale at the MMG-supported local market near Kinsevere.

CHIEF EXECUTIVE OFFICER'S MESSAGE

Dear Stakeholder,

For me, the primary test of sustainability, and our business performance overall, is the safety and security of our people.

I was both saddened and galvanised by two incidents this year that resulted in the tragic deaths of a contractor at our Sepon mine site in Laos, and a Lubumbashi-based policeman patrolling the access road near our Kinsevere mine in the Democratic Republic of Congo.

While the contractor's death at Sepon was reported last year, and both incidents were very different, no harm is acceptable. On behalf of all at MMG, I offer our sincere condolences to the families, friends and colleagues of those involved. I also commit this organisation to redoubling our efforts to achieve our overall health and safety vision – a "zero harm and fatality-free workplace".

As this report shows, in many ways we are making our workplaces safer, day by day. Across the broader sphere of sustainable development, I am also proud of the progress we are making.

MMG's strong production performance helped us to generate and share greater benefits with all our stakeholders – shareholders, employees and the communities in which we operate. Our commitment to the highest standards of sustainability remains, and our overall vision to build the next generation's leading global diversified minerals and metals company guides our efforts.

In 2012 we continued to methodically align our activities to the International Council on Mining and Metals Sustainable Development Framework (including its 10 principles and 7 position statements), a key internal benchmark and a requirement of membership of the organisation.

A focus of this was the deployment of new, centralised policies and standards, and strengthening of our Safety Health Environment and Community Management System. This provides new scalability for our sustainability processes, an important enabler of growth.

We applied this in practice to the integration of the Kinsevere operation following the purchase of Anvil Mining Limited in February 2012. Synergies with our Sepon operation are assisting us to complete the alignment of Kinsevere's processes to MMG's practices, and we are strengthening our local community and broader stakeholder relationships in the Democratic Republic of Congo.

Maintaining our social licence to operate is about engaging our safety, environment, community and governance processes to share benefits. This has been in sharp focus as we continued to progress our Izok Corridor development project in Nunavut, Canada, our Dugald River project in Queensland, Australia, as well as our mine closure community consultation processes across MMG.

Our company name change from Minmetals Resources Limited to MMG Limited in September was part of a larger project to define our company belief and brand. Extensive discussion showed that our workforce shared a belief in "progress". For us, progress extends from the contribution of individual employees, through the progress of our business, to the progress of the communities in which we operate. Ultimately, we believe that the work that we do and the metals that we produce contribute to society's evolution and advancement. This is summed up in our new company positioning: "we mine for progress", and we approach our work with this belief in mind.

Community partnerships are critical to achieving our progress objectives. In November MMG broadened our international partnership with UNICEF, which aims to combat zinc and other micronutrient deficiencies in children. With the Lao Ministry of Health as a critical third partner, we launched the 1000 Day Project to improve early childhood nutrition in Laos. We also became a foundation supporter of Monash University's Mining Engineering School, demonstrating a commitment to training the next generation of international mine managers.

Another critical partnership for us is with China Minmetals Corporations, our major shareholder. We continue to work closely with them to generate value from this unique relationship for all stakeholders.

While we are a relatively young company, I sincerely believe we are building something unique at MMG. On the following pages, you'll read about the challenges, opportunities and approaches that are defining our journey ahead.

On behalf of MMG, I thank our workforce for their continued hard work and belief in our company, and our shareholders and the local communities in which we operate for their ongoing support.



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Andrew MichelmoreChief Executive Officer

ABOUT OUR REPORT

Sustainability is what really matters to us. Our challenge is to deliver the benefits of our operations to all our stakeholders. We believe that it's for humanity's progress that we mine.

MATERIAL ISSUES

This report summarises our annual reporting on MMG's "material sustainability issues", our approach to managing these issues and our performance in addressing them. The 2012 MMG Limited Annual Report provides complementary financial statements and further detail on economic and operating information. Our Sustainability and Annual Reports can also be found on our website: www.mmg.com. We publish a subsequent printed summary of our annual sustainability report, which is translated into French and Lao.

Material sustainability issues are the environmental, social (people, health and safety, and stakeholder issues) and economic issues of most importance to us and our stakeholders (see page 3). Consultants Beca assisted us in our materiality determination process and developing the report from its results.

SCOPE

The MMG group of companies is headquartered in Melbourne, Australia, and MMG Limited, the parent company, is listed on the Stock Exchange of Hong Kong Limited (Stock Code: 1208) with its registered office in Hong Kong. In this report, unless the context otherwise requires, the term "MMG" means MMG Limited and its subsidiaries (with MMG Limited individually referred to as the "Company"). Our report covers MMG's group office operations in Australia and all MMG mining and associated activities. This includes Century (Queensland), Golden Grove (Western Australia), Rosebery – including South Hercules and Avebury (Tasmania), Sepon (Laos), Kinsevere (Democratic Republic of Congo) – acquired in February 2012 - and worldwide mining exploration and development activity (including Dugald River and Izok Corridor projects). Avebury remains on care and maintenance. Our Hong Kong office and Mutoshi site are excluded.

DATA

This report includes data relating to our material sustainability issues (material issues) for the reporting period 1 January to 31 December 2012 (Kinsevere: 1 March onwards). We have included information relating to prior or subsequent periods, where necessary, for context on the material issues. Consolidated data is reported through centralised databases, with additional data collected at a site level. The measures reported on reflect a combination

of leading and lagging performance indicators, which are further discussed in Our Approach.

GRI APPLICATION LEVEL AND ICMM 10 SUSTAINABLE DEVELOPMENT PRINCIPLES

The report is prepared in accordance with the Global Reporting Initiative (GRI) G3 Guidelines and Mining and Minerals Sector Supplement to an A+ level. MMG maintains a watching brief on the draft GRI G4 Guidelines through representation on the International Council on Mining & Metals' (ICMM) G4 Working Group.

The GRI reviewed our assured application of the GRI G3 Guidelines and confirmed our A+ application level.

We are a full council member of the ICMM and continue to work to align our company approach, activities and performance across the organisation to the ICMM Sustainable Development Principles. Please refer to the ICMM Index and GRI Index at the end of the report.

ASSURANCE

Ernst & Young conducted independent limited assurance¹ over elements of this report, guided by the ICMM Assurance Procedure (see page 82). This assurance process focused on seven material issues and agreed with Ernst & Young from the 27 issues identified through our materiality determination process (see Materiality determination on page 12). These were:

- » Water outputs (including tailings and acid rock drainage);
- » Significant and high fatality-potential incidents on MMG sites;
- » Environmental incidents (spills and exceedances);
- » Quality employee attraction and retention;
- » Community support for MMG;
- » Employing local people; and
- » Contribution to local and regional economies.

A limited assurance engagement consists of making enquiries and applying analytical and other limited assurance procedures. Ernst & Young rely on these procedures to form a conclusion as to whether anything has come to their attention to suggest that the agreed subject matter has not been reported in accordance with the published criteria.

The material sustainability issues identified below represent this year's top-ranked issues of most importance to a broad sample of our stakeholders (see page 42).

"Materiality" refers to the measure of an issue's potential effect (positively or negatively) on stakeholders and our business. These issues were identified and ranked through a material issues determination process (see page 12).



OUR PEOPLE

- 1 Employing local people
- 2 Local employee management capability development
- 3 Quality employee attraction and retention
- 4 Workplace and corporate culture
- 5 Employee training and development

HEALTH AND SAFETY

- 1 Safety of our people
- 2 Significant and high fatality-potential incidents on MMG sites
- 3 Road safety in near-mine communities
- 4 Health of employees
- 5 Contractor/supplier selection and management
- 6 Public interaction with operations (safety and security)

WORKING WITH OUR STAKEHOLDERS

- 1 Community support for MMG
- 2 Local community and regional development
- 3 Managing human rights issues
- 4 Managing community cultural heritage around MMG mines
- 5 Managing life of mine/closure and post-closure planning

RESPECTING OUR ENVIRONMENT

- 1 Environmental incidents (including spills and exceedances)
- 2 Energy and greenhouse gas emissions
- 3 Water outputs (including tailings and acid rock drainage)
- 4 Environmental impacts left over after mining
- 5 Biodiversity management
- 6 Air quality, emissions and dust

SUSTAINING OUR ECONOMIC PERFORMANCE

- 1 Contribution to local and regional economies
- 2 Ethics, anti-corruption and business conduct
- 3 Company growth and financial performance
- 4 Investment in new acquisitions and projects
- 5 Legislative change or compliance impacts on operations

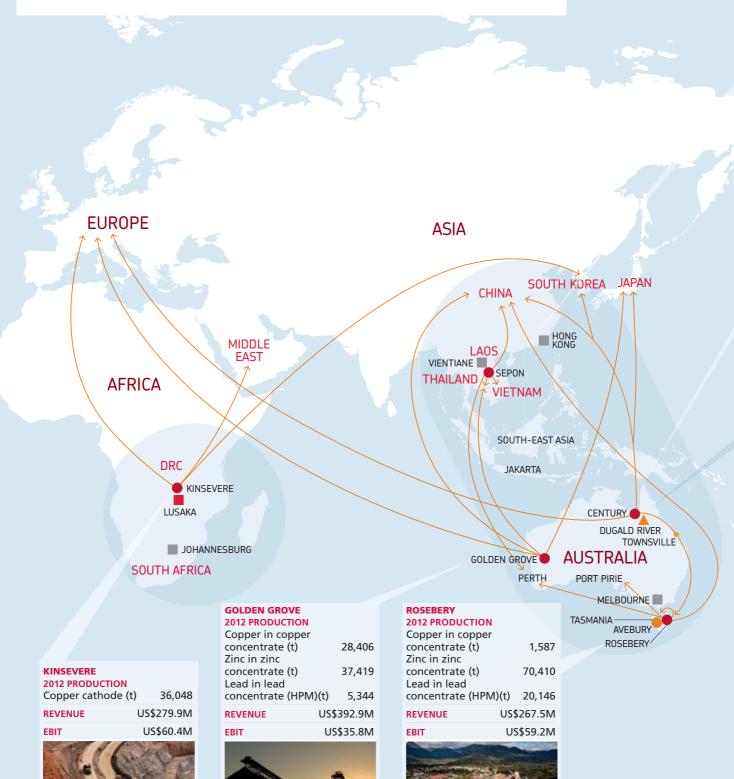
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MATERIAL ISSUE SYMBOL

This symbol identifies our material issue topics as they appear throughout the report's relevant chapters.

ABOUT MMG

MMG is a mid-tier global resources group of companies that explores, develops and mines base metal deposits around the world. MMG's executive management team and head office are located in Melbourne, Australia, and MMG Limited, the parent company, is listed on the Stock Exchange of Hong Kong Limited (Stock Code: 1208) and has its registered office in Hong Kong.





In December 2010, Minerals and Metals Group was acquired by Minmetals Resources Limited (Minmetals Resources), a subsidiary of China Minmetals Corporation (CMC) and listed on the Stock Exchange of Hong Kong Limited (Stock Code: 1208). In September 2012, Minmetals Resources changed its registered English company name to MMG Limited.

Our majority shareholder, with 72% of shares, is China Minmetals Corporation through its subsidiary company China Minmetals Non-Ferrous Metals Company Limited (CMN).

MMG is one of the world's largest producers of zinc and a substantial producer of copper, lead, gold and silver. We currently own and operate the Lane Xang Minerals Limited (LXML) Sepon mine in Laos, the Kinsevere mine and Mutoshi non-operational pit in the Democratic Republic of Congo (DRC) and the Century, Rosebery (including Avebury, on care and maintenance) and Golden Grove mines in Australia. Our development

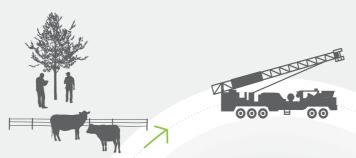
projects include Dugald River, a high-grade zinc-lead-silver deposit in north-west Queensland, Australia, and the Izok Corridor base metals project in Nunavut, northern Canada. We also have significant exploration projects and partnerships in Australia, Africa and the Americas.

MMG stands for progress – from pursuing day-to-day achievements, supporting communities and driving growth, to producing the minerals and metals that advance all humanity. We are committed to achieving long-term sustainable growth and shareholder value. We align ourselves with leading international practice in sustainability and, as an ICMM member, benchmark our performance against the sustainability criteria of the ICMM's Sustainable Development Framework.

MMG is also a member of the Minerals Council of Australia, the Mining Association of Canada, the Chamber of Mines of the DRC and other regional industry organisations.

THE MINING CYCLE

Mining entails operating mine sites where we extract ore, process and sell it. But this is just one of several stages of the mining cycle we manage.



1. EXPLORATION

Exploration is our core growth driver. It involves mine district exploration, new discovery programs and project generation. Aimed at extending mine life, our exploration program is currently focused on sites at Sepon, Century, Golden Grove, Rosebery and Kinsevere. New discovery programs in Australia, the Americas and Africa are actively pursuing new venture opportunities. Project generation identifies new projects for potential inclusion in the exploration portfolio.

5. PASSIVE CLOSURE

This phase includes establishing sequential use agreed with stakeholders and maintenance and monitoring of environmental and social aspects. We then seek regulating authority approval that the mine has satisfactorily met the completion criteria of the authority and stakeholders.



2. PROJECT DEVELOPMENT

Involves studying exploration results, mine design, environmental and social impacts and economics to determine the feasibility of developing a mineral deposit into an operating mine. Our two key development projects are Dugald River in Australia (ongoing – large, high-grade lead-zinc-silver deposits) and Nunavut in the Izok Corridor, Canada (at proposal stage – zinc and copper deposits).

4. ACTIVE CLOSURE

During the life of the mine we prepare for the end of mining activity. This phase includes stakeholder engagement, rehabilitation, revegetation, decommissioning, decontamination, demolition, and more. We are currently making appropriate preparations for the closure of Century Ore Reserve in 2016.



3. OPERATIONS

MMG has five operational mines, Century, Golden Grove, Rosebery, Sepon and Kinsevere. Each mine extracts, crushes and processes mineral deposits to create a saleable product.

Social licence to operate This means achieving stakeholder support for our operations. We are committed to responsibly identifying and managing the environmental and social impacts of our mining activities – from exploration through to post-closure rehabilitation. At all stages of our operations, we consult with our communities, invest in their development and business initiatives, and provide education and training, and sponsorships and donations.

SUSTAINABILITY HIGHLIGHTS AND CHALLENGES

HIGHLIGHTS	CHALLENGES
OVERALL	
Significant progress in aligning our policies, standards and processes to ICMM's Sustainable Development Framework (page 11).	Further gap closure for alignment to ICMM's Sustainable Development Framework (page 11).
Internal, group-wide company belief, identity and brand equity process completed (page 29).	Remaining alignment and management of Kinsevere's safety, environment and community processes to MMG Standards (page 16).
OUR PEOPLE	
Lao national workforce increased to 95%, and 121 Lao and 20 DRC nationals promoted to management roles or achieved certifications (page 24).	Improving female representation in the workforce (19% in 2011 down to 16% in 2012), particularly in senior management and mine roles (page 27).
New Code of Conduct deployed to all Australian, Exploration and Projects sites (page 72).	Finding suitably qualified Congolese and Lao citizens for management roles, particularly during the integration of Kinsevere (page 25).
HEALTH AND SAFETY	
27% reduction to 3.0 in the total recordable injury frequency rate (63% reduction at Rosebery) (page 31).	Preventing fatalities; bringing contractors and partners up to our standards (page 30).
Incident and Event Management software deployed to improve recording and monitoring of incidents and hazards (page 31).	Preventing repeat significant and high fatality-potential incidents and reducing incidents overall (page 32).
WORKING WITH OUR STAKEHOLDERS	
Increased investment of approximately US\$18.5 million in our host communities in a range of targeted social projects (page 44).	Closing the gaps in our sites' alignment to our nine new community relations standards (page 48).
Mine closure planning advanced: community closure consultation at all sites (page 51).	Grievances increased to 82 compared with 37 in 2011. This was partially driven by the inclusion of the Kinsevere site (page 44).
RESPECTING OUR ENVIRONMENT	
Energy efficiency and climate change study concluded; combined energy and operational efficiency program underway (page 55).	Improving energy intensity (higher due to extraction of deeper ore (page 55)).
Environmental reporting module deployed to coordinate data management and reporting (page 53).	Reducing our recordable environmental incidents – up from 39 in 2011 to 97 in 2012 including Kinsevere (page 53).
SUSTAINING OUR ECONOMIC PERFORMANCE	
Successful acquisition and integration of Anvil Mining Limited; nameplate production at Kinsevere mine (page 73).	Underlying profit of US\$217.5 million, down 29% from the full year 2011 amid commodity price and industry cost pressures (page 68).
The Board endorsed the A\$1,488 million Dugald River project, which also received Final Environmental Authority. Development feasibility study commenced for the Izok and High Lake copper-zinc deposits (page 73).	Strengthening MMG Limited's share price (HKEX 1208) against the HSBC Global Base Metals Index (page 69).

<u>SUSTAINABILITY PERFORMANCE</u> THREE-YEAR GOALS

3-YEAR GOALS (2012-2014)

3-YEAR TARGETS

OUR PEOPLE Develop workforce plans building capability and diversity.	90% close-out of actions from staff development plans.
	A capability matrix for all operational staff.
	100% implementation of diversity actions.
Cultivate leadership-inspired teamwork, innovation and discretionary effort.	5% increase on employee perception survey engagement index rating.
	90% close-out on previous year employee perception action plan.
	Innovation rewarded through MMG innovation awards.
Embrace the "MMG way".	Code of Conduct breaches actioned to agreed plan.
HEALTH AND SAFETY	
Achieve a step improvement in health and safety	< 3.4 total recordable injury frequency rate (TRIFR).
performance.	No repeat significant incidents.
	100% close-out of high fatality-potential incidents.
WORKING WITH OUR STAKEHOLDERS	
Social practices consistent with ICMM principles.	Close-out of top 3 social risk register actions identified
	(to be identified in 2012).
	5% annual increase in MMG community perception survey
	Community Trust Index (% level of local community trust).
	Social investment of 1% of net profit after tax.
RESPECTING OUR ENVIRONMENT	
Environmental practices consistent with ICMM principles.	100% close-out of top 3 environmental register actions identified in the 2012 plan.
	Zero ISO 14001 (international standard for environmental management systems) major non-conformances in 2012.
	20% reduction of environmental non-compliances with operating licences in 2012.
SUSTAINING OUR ECONOMIC PERFORMANCE	
Deliver consistent and sustainable earnings growth.	Earnings per share increase year on year.
Be recognised as an industry leader delivering strong financial outcomes.	Total shareholder return comparative to the HSBC Global Base Metals Index.
Be valued for the unique combination of international management and the support of China Minmentals Corporation.	Maintain a minimum 5% of the free float uptake by institutional investors.

^{*} This figure was erroneously reported as 8 in this table in the 2011 report. The correct number of non-compliances (20) was reported elsewhere on page 64 of the report.

BASELINE DATA FROM 2011

2012 PERFORMANCE

OUR PEOPLE	
Development plans and training needs analysis conducted at all sites.	Employee development plans set. Training initiatives implemented in response to group-wide training needs analysis.
SAP-based training and events management system (TEMS) implemented at all sites (except Sepon) to support capability matrices for staff.	All training department staff on Australian sites completed TEMS training. TEMS continued to be developed to support MMG.
Diversity strategy and actions under development.	Unconscious bias sessions provided for all senior managers in response to Diversity and Inclusion survey results.
3.5 rating (out of 5) – or approximately 70% on MMG's employee engagement index.	MMG overall engagement index was 69% (from 2012 engagement results will be reported as %).
Employee perception survey in 2011 and employee consultative forums planned in 2012 at all sites.	Action items from 2011 perception survey addressed and high-level priorities embedded into business plans.
Development of awards program planned for 2012.	Innovation awards merged out of business plans. Improvement and innovation now encouraged through our Continuous Improvement awareness program.
Code of Conduct refinement for implementation in 2012.	Code of Conduct launched in handbook format at all Australian, exploration and project sites and translated into Lao and French for rollout internationally in 2013. Awareness briefings provided to employees.
HEALTH AND SAFETY	
4.1 TRIFR.	3.0 TRIFR.
No repeat significant incidents.	Repeat incidents occured during 2012.
100% close-out of high fatality-potential incidents.	92% of actions closed, 7% open but not past due date, 0.6% (1 action) open and past due date.
WORKING WITH OUR STAKEHOLDERS	
Risks identified as: community opposition to products; community expectations are not met; and MMG loses social licence to operate.	The 3 risks merged into 1 (MMG loses social licence to operate) by the Board SHEC Committee, and all aspects are being managed through MMG's risk management framework.
2011 Community Trust Index baseline: Rosebery – 65.9%, Golden Grove – 50.8%, Century – 38.9%, Sepon – not undertaken in 2011.	Perception survey postponed; to be combined in 2013 with site-based surveys for better coordination across sites and timeframes.
1.9% social investment of net profit after tax.	8.4% social investment of net profit after tax.
RESPECTING OUR ENVIRONMENT	
Risks identified were water management, mine closure and minerals waste.	Estimated 80% progress on these risks being managed to requirements.
Golden Grove, Rosebery and Sepon recertified to ISO 14001, Century certified for the first time in December 2011.	3 non-conformance reports for 2012. All sites maintained ISO 14001 certification; Kinsevere is the only site uncertified.
Baseline total of 20* non-compliances with operating licences.	18 environmental non-compliances in 2012.
SUSTAINING OUR ECONOMIC PERFORMANCE	
Diluted earnings per share of US10.71 cents.	Diluted earnings per share of US3.68 cents
The Index ended the year down 28%, MMG Limited's share price ended the year 44% down.	The Index ended the year 1% higher, MMG Limited's share price ended the year 9% down.
11% of free float held by institutional investors.	30% of free float held by institutional investors.

OUR APPROACH

Our mission is to maximise returns by sustainably discovering, acquiring, developing and operating resource projects around the world. We do this while demonstrating our values of safety, integrity, action and results in all our activities and behaviours.

Supported by positive medium and long-term outlooks for commodity markets, and underpinned by Asia's growth, we plan to continue to achieve strong operational and financial performance led by an international management team and a vigorous growth strategy.

OUR STRATEGY FOR SUSTAINABILITY

Care for the interests of our stakeholders and the environment is of the utmost importance and is integrated with the management of our business.

Our Sustainability Policy and objectives are supported by our values, which underpin the behaviour of all employees and contractors.

OUR SUSTAINABILITY OBJECTIVES

We understand that the following objectives are critical to achieving our vision of becoming a great global resources company:

- » Protect the health, safety and security of our employees and contractors;
- » Minimise our impact on the environment;
- » Ensure that the communities in which we operate receive real benefit from our activities; and
- » Be known for our integrity.

Examining drilling core samples at Sepon in Laos.

OUR SUSTAINABILITY POLICY SUMMARY

To achieve our sustainability objectives, we are striving to:

- » Implement and maintain ethical and transparent business practices and sound systems of corporate governance;
- » Integrate our sustainability objectives with all life-ofasset business planning and decision-making processes;
- » Further develop and implement sound enterprise-wide risk management processes;
- » Seek continual improvement in safety, health and environmental performance through using robust management systems and effective assurance processes;
- » Understand, respect and promote fundamental human rights within our sphere of influence, respecting traditional rights and cultural heritage;
- » Contribute to the long-term economic, social and institutional development of our communities, including Indigenous peoples;
- » Build trusting relationships by engaging clearly, openly and honestly with our host communities and other key stakeholders;
- » Contribute to the conservation of biodiversity and integrated approaches to land use planning in areas where we operate;
- » Ensure the responsible handling and transport of our materials and products from mine site to customer; and
- » Integrate early closure planning into life of asset and ensure adequate financial provisions have been made.

ALIGNMENT WITH THE ICMM SUSTAINABLE DEVELOPMENT PRINCIPLES

As members of the ICMM, we are committed to aligning our practices with the ICMM Sustainable Development Framework. This includes integrating a set of ten principles and seven supporting position statements on sustainability into our corporate policies and standards and benchmarking ourselves against them.

To this end, 2012 was the second year of a three-year program of work to integrate these principles. The first phase, conducted in 2011, involved an executive workshop and alignment analysis to identify areas of responsibility, alignment gaps and key priorities and actions.

Alignment requires incorporating specific wording and references in corporate policies, standards and business management to those guidelines. In 2012 we advanced our program by creating or updating ten policies, including the Sustainability Policy, nine standards, and monitoring performance against these. In 2013 we will complete the policy and standard refinement process and further align our practices with framework guidelines. The following table outlines ICMM's 10 Sustainable Development Principles and our current alignment levels.

	ICMM'S SUSTAINABLE DEVELOPMENT PRINCIPLES	2011 ALIGNMENT	2012 ALIGNMENT
1	Implement and maintain ethical business practices and sound systems of corporate governance. (Position statement: Transparency of mineral revenues.)	•	
2	Integrate sustainable development considerations within the corporate decision-making process.		
3	Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities. (Position statement: Mining and Indigenous people issues.)	•	
4	Implement risk management strategies based on valid data and sound science. (Position statements: Policy on climate change, Mercury risk management.)	•	•
5	Seek continual improvement of our health and safety performance.		
6	Seek continual improvement of our environmental performance.	•	•
7	Contribute to conservation of biodiversity and integrated approaches to land-use planning.		
8	Facilitate and encourage responsible product design, use, reuse, recycling and disposal of our products. (Position statements: Mercury risk management.)	•	•
9	Contribute to the social, economic and institutional development of the communities in which we operate. (Position statement: Mining partnership for development.)		•
10	Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.		

OUR PRIORITIES FOR 2013 ARE TO:

- » Further increase awareness of ICMM requirements across MMG;
- » Continue to align our practices with the ICMM framework;
- » Apply the MMG Management System to add value to the business; and
- » Integrate the ICMM Principles into life-of-asset planning.

OUR APPROACH

CONTINUED

MATERIAL SUSTAINABLE ISSUES DETERMINATION

MMG implemented a broader materiality determination process in 2012 which identified our top material sustainability issues (material issues) to form the basis of this report. We developed the process to satisfy the ICMM Principles on Sustainable Development, our obligations as an ICMM member, and to ensure that this report communicates effectively with our stakeholders on the issues most important to them.

The process drew upon best practice approaches from ICMM, the GRI and AccountAbility². It consisted of the following six key stages:

- 1 MMG corporate and site risk register review;
- 2 Peer reports review;
- 3 Stakeholder mapping and interview program;
- 4 Media coverage review;
- 5 Material issues ranking; and
- 6 A review of material issues discussed in our 2011 Sustainability Report.

The material issues ranking stage involved participating internal and external stakeholders nominating their top three issues. This allowed us to quantify the issues and rate them in priority order.

This process identified the top 27 material issues across our five focus areas, namely our people, health and safety, working with our stakeholders, respecting our environment, and sustaining our economic performance. A number of new material issues for 2012 were identified as part of this process.

This report is based on these top 27 material issues. For each issue, this report provides:

- » A description of the issue;
- » An outline of our approach to addressing it;
- » Our performance in 2012;
- » Case study examples of key initiatives, identifying activities at different sites across MMG; and
- » A description of challenges ahead for 2013, related to our three-year sustainability goals and targets.
- ² AccountAbility is a global organisation that advises on corporate responsibility and sustainable development.

MANAGEMENT APPROACH

Management of sustainability issues and management of the relationship between them are integral to our success. One of the top-level strategic drivers of our business plan is Reputation, equally weighted with Growth, Operations and People. Our goal to be known as socially and environmentally responsible sits under this Reputation driver.

From these drivers, our management team develops a three-year plan and a set of 12-month corporate and operating goals. We report our performance internally against these goals on a quarterly basis. This ensures that our strategic focus and work programs are integrated and aligned.

In 2012, to improve business sustainability, we commenced deployment of the MMG Operating Model, which brings together organisational design principles, standardised core processes with performance data, and authorised, productive systems of work, defined within our standards. It defines clearer lines of accountability, role authorities, and positive service provider/service receiver relationships.

Management systems

Our management approach is articulated in our Sustainability Policy and Safety Health Environment and Community (SHEC) Policy, both of which were deployed in 2012, and via our SHEC strategy and supporting SHEC standards. These elements provide direction and governance for the SHEC Management System, which is part of the MMG Management System. Our sustainability performance is overseen by the SHEC Committee of the Board, which also approved this report.

The MMG SHEC strategy provides direction to all areas of the business on how to work as one SHEC team. An integrated SHEC network made up of SHEC professionals from across the business was established in 2012 to implement the strategy by aligning business plans, driving efficiency in SHEC processes through identifying synergies in the functional areas of Safety, Health, Environment and Community, and more effectively managing priority SHEC risks.

All MMG operations, other than Kinsevere (acquired in February 2012) and Dugald River, are certified to the international standard for environmental management

systems (EMS), ISO 14001. Kinsevere is undergoing review for this certification, and we expect Dugald River to be certified in 2014, closer to commissioning (the first ore feed is expected in 2015).

Commitments

Our commitments are influenced by stakeholder expectations, regulatory requirements, internal policies, standards and procedures and other external factors that relate to our business success. We benchmark our performance against sustainability criteria provided by the ICMM (Sustainable Development Framework), the Minerals Council of Australia (MCA) (Enduring Value), the Mining Association of Canada and Australian state-based organisations.

We are committed to public reporting to meet our obligations under the Australian Government's National Greenhouse and Energy Reporting Scheme (NGERS), the Energy Efficiency Opportunities (EEO) Assessment Program and the National Pollutant Inventory (NPI). Our commitments to sustainability are also reflected in our SHEC standards, which cover the management of our material issues. We have been reviewing and updating these standards to ensure that they align with the ICMM's 10 Sustainable Development Principles.

Sustainable procurement

We are evolving our local procurement strategy, which facilitates local, sustainable participation in the sourcing/ procuring of goods and services to build capacity within our communities and their enterprises. We aim to support these enterprises to endure as part of a resilient community beyond the life of our mines. Our concern when encouraging local participation is that we do not over-promise or cause vulnerability through over-commitment/investment in local businesses in servicing MMG needs.

In 2012 we began updating our procurement standards. In 2013 all supply chain activities, including global procurement for goods and services, are included under the Quality and Materials Stewardship Policy. Supply chain values also embrace the MMG Code of Conduct and our desire to extend MMG safety requirements to all suppliers. We are also updating our Supplier Management Standard to align with existing community relations standards. It guides our suppliers' service performance.

We have a focus on contractors and consultants to ensure strong two-way engagement processes and advice sharing. When engaging outside support we take into account the alignment to MMG's Sustainability Policy requirements (reviewing contractor and consultants' approaches to safety, health, environmental, workforce and community, and Code of Conduct commitments).

In 2013 we will implement a Procurement Management Standard that outlines requirements to evaluate all supplier capabilities including identifying opportunities for local and Indigenous employment and delivery performance of goods and services to the site. The supply chain function (Procurement and Supply Chain) will support each operation's strategic plan to deliver local procurement commitments, including capacity-building through supplier mentoring, training, tendering support and access to finance and micro-credit.

Overall we are transitioning our supply chain support model to enable the implementation of supply category strategies, allowing the business to better understand its position in the market place for the benefit of all participants. We are also developing the use of detailed spend analysis disciplines to segment and assign priority to our supplier portfolio. The development and implementation of a supplier relationship program aims to drive innovation within our supplier base.

Sustainable supply chain

MMG's inbound supply chain is an integrated MMG work stream providing goods and services to a broad range of supply and delivery locations. MMG's outbound supply chain for customer delivery includes rail, road and ocean shipments of our cathode-produced copper and bulk concentrates to many destinations (see Product shipping and logistics on page 74). As part of our alignment to the ICMM 10 Principles, we have commenced a more detailed assessment of our supply chain and procurement processes. We are striving to ensure our suppliers operate to the same standards we do. We deliver to customers meeting our standards for safety and quality, and to our Code of Conduct. In 2013 Supplier Management standards will be developed and implemented for all supplier and contractor procurement.

Product stewardship

MMG is committed to supplying products that consistently meet customer quality expectations and that are safe for people and the environment in their sourcing and intended use. Through our policies and standards, and under our membership of the ICMM, MMG seeks to promote the responsible stewardship of our products from mineral extraction through to customer receipt of metal and concentrate. MMG ensures that its own activities do not

OUR APPROACH

CONTINUED

involve minerals produced through forced labour and human rights abuses (conflict minerals) and strives to ensure that the same applies in dealings with parties involved in such activities. In 2013 our policies and standards will also extend to process inputs from supply chain engagement through to usage at our sites.

MMG employs various methods to distribute products from its mine sites to customers, depending on the product and the locations involved. For example, copper cathode produced at Sepon and Kinsevere is transported from the mine site by truck. Where the end customer is in an overseas location, the product is subsequently containerised for delivery to the customer. The copper, zinc and lead concentrates produced at our mine sites are primarily delivered to customers by bulk shipment after being transported to a loading port by either rail, road or slurry pipeline. In all cases MMG strives to ensure that the transportation and storage processes utilised comply with the latest regulations. Products and inputs are regularly sampled to monitor their quality.

BUSINESS ETHICS AND GOVERNANCE

Sound governance systems seek to protect the interests of investors and ensure that we are a well-managed business. These governance systems guide our people on performance expectations and ethical decision-making that are essential to the preservation of trust in our business and to upholding our value of integrity. We relaunched our Code of Conduct in 2012 with supporting training. It provides guidance to our people on matters relating to conflict of interest, compliance with laws and management of gifts, entertainment and gratuities.

Anti-corruption and transparency

Our new Anti-Bribery and Anti-Corruption Standard, deployed in 2012, sets out the expected behaviour of our people, including for anti-corruption practice, bribery and facilitation payments, and ethical business conduct. Our initial Code of Conduct training program included anti-corruption guidance.

MMG is a supporter and contributes financially to the Extractive Industries Transparency Initiative (EITI) (www.eiti.org) through membership of the ICMM (see page 71). We are working toward comprehensive disclosure of public payments, such as taxes and royalties, across the business.

Details of the taxation and royalty payments we made to governments are available in our Annual Report at www.mmg.com (see pages 116,117). MMG does not make donations to political parties.

Human rights management

Under our alignment to the ICMM 10 Principles (and particularly Principle 3: 'Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities'), MMG's Human Rights Standard has been redrafted and will be deployed in 2013 (see page 48). Site-level assessments of human rights management, including in security management, are being undertaken to ensure the standard is implemented consistently across MMG.

Public policy initiatives

In 2012, we were involved indirectly, through our membership and participation in various industry groups, in several public policy initiatives related to our business. These included:

- » ICMM's involvement in developing leading practice in the areas of environment and climate change, health and safety, resource endowment, human rights and industry contribution;
- » Minerals Council of Australia's (MCA) research into the economic contribution of mining, the impacts of fly-in and fly-out rosters and community contribution. MMG Chief Executive Officer Andrew Michelmore is also current chair of the Sustainable Development Committee and a member of the MCA Board;
- » Business Council of Australia's support for greater economic integration with Asian economies via membership of the Global Engagement and Asian Capability Taskforces;
- » The Chamber of Mines, Congolese Employers' Federation promotion of power and supporting infrastructure in the DRC;
- » Queensland Resources Council, Tasmanian Minerals Council and West Australian Chamber of Energy and Resources, Mining Association of Canada, Australian-Laos Business Association; and
- » International Zinc Association and their partnership with UNICEF's Zinc Saves Kids health initiative, with MMG CFO Andrew Michelmore as chair

Corporate governance

We are committed to maintaining a high standard of corporate governance practices through our Board of Directors, internal controls, transparency and accountability to our shareholders. Our Board-level Audit, Remuneration, SHEC and Disclosure Committees oversee their respective areas.

Our ultimate controlling shareholder is CMC (71.56%), a major Chinese metals and minerals company. Public shareholders (28.44%) include global resources and investment funds. To maintain fair and ethical market transactions, sales and agreements between MMG and CMC entities are conducted on an "arm's-length" basis, under the Hong Kong Stock Exchange (HKSE) Connected Party Transactions laws. Further information can be found in the Corporate Governance statement of our Annual Report available at: www.mmg.com (see page 74).

The Company adheres to the listing rules of the HKSE, which provide clear governance processes and aim to protect the rights of minority and independent shareholders. Listing requirements include:

- » Ensuring an appropriate balance between the number of representatives of majority shareholders appointed to Board positions and independent non-executive Directors;
- » The rules relating to connected party transactions; and
- » The requirements for disclosure of material information. Our governance structure oversees our compliance with our environmental, social and economic commitments.

The following governance policies were delivered in 2012: Corporate Governance Policy, Disclosure Policy, Shareholder Communication Policy and Whistleblower Policy. We also delivered the Connected Transactions Standard, Disclosure Standard and Whistleblower Standard.

Century mine was subject to one incidence of legal action in 2012 with regard to an environmental non-compliance in 2011. This involved the release of water into Page Creek as a result of a single, record rain event, as described in 2011's report. The Queensland Department of Environment and Heritage (DE&HP) advised MMG that it would prosecute Century in relation to this event. Legal proceedings are continuing.

Internal audit

This function provides internal assurance designed to add value and improve operations. It focuses on a broad range of evaluation and improvement activities, namely risk management, control and governance processes.

An annual Internal Audit Plan is developed in conjunction with MMG's senior management and approved by the Audit Committee. Protiviti, an external provider of internal audit services, undertakes our internal auditing under the guidance of our General Manager Enterprise Risk. The internal Audit Committee reviews the outcomes of audits at each audit meeting.

Risk management

The effective management of risk is central to the continued growth, efficient management and ultimate success of MMG.

Our risk management process is based on the international standard for risk management, ISO 3100:2009. It involves achieving an appropriate balance between realising opportunities for gains while minimising adverse enterprise-level impacts, and is an integral part of our management practice and corporate governance.

The process consists of steps that, when undertaken in sequence, enable continuous improvement in both decision-making and performance. These steps include establishing the context, identifying, analysing and evaluating the risks, and developing a risk response.

Throughout the risk management process there is continuous communication and consultation with stakeholders as well as monitoring and review for any changes in risks, controls and response plans.

In 2012 we updated our Enterprise Risks register, assigned management accountability and response plans across our assets, and developed and deployed a new Risk Management Standard. This register, reported to our Audit Committee on an annual, formed a key part of the material issues determination process for 2012 as described in this report.

FEATURE CASE STUDY

THE ACQUISITION AND INTEGRATION

OF ANVIL MINING LIMITED

In February 2012 MMG aquired Anvil Mining Limited (Anvil), and its Kinsevere copper cathode operation in the DRC. Anvil was then listed on the Toronto Stock Exchange and Australian Securities Exchange.

The Anvil acquisition was an important one for MMG as it substantially increases the Group's copper exposure, extends the average life of mine and provides a sound platform for further development, exploration and expansion in the mineral-rich region of Southern Africa.

The acquisition also provided MMG with experience and capabilities for the integration of any future assets as part of our strategy to become a top mid-tier base metals mining company.

The key asset of Anvil was the Kinsevere open-pit copper mine located near Lubumbashi in Katanga Province.

Kinsevere uses simple, low-cost mining methods to produce copper cathode of exceptional quality, which is sold under a life-of-mine sales agreement. Kinsevere's electrowinning and cathode production plant is designed to produce 60,000 tonnes of copper cathode per annum.

Anvil assets also included a 70% equity interest in the Mutoshi project, a non-operational open copper pit site located near Kolwezi in Katanga's west (approximately 320 kilometres from Kinsevere), as well as a 14.5% shareholding in Mawson West Limited (a company listed on the Toronto Stock Exchange). Mawson West has a majority interest in the former Anvil Dikulushi mine on the north-eastern border of Katanga Province.

Integration process

All major mine, operations and business aspects of the integration of Anvil assets into MMG's business were completed within six months. The second phase of the integration process is under way, which includes addressing operational performance improvements and gaps in operating requirements, identified both before and after the acquisition.

Synergies with the Sepon operation and implementation of MMG systems were seen as fundamental in order to improve the plant performance, and to help bring Kinsevere practice into alignment with other MMG operational sites.

Power supply management

In early 2012, Kinsevere's production was impacted by sudden and unexpected network-wide power supply disruptions across Katanga Province. These disruptions resulted in the rescheduling of mining operations and a reduction in ore mining as there was inadequate power to ramp up production to the designed nameplate capacity.

Temporary diesel generators were installed at the end of June 2012 to provide a stable back-up power source, aimed at improving plant reliability and performance. In addition, Kinsevere's electrowinning transformers required upgrade investment in order to operate reliably to full capacity.

Upgrades to plant

An intensive effort was required across many areas of the plant, but especially in the electrowinning and cathode production facility, to ensure all equipment was running close to optimum and that monitoring and appropriate systems were in place. This needed a short-term increase in expatriate employee numbers. There is a 6% expatriate employee quota applicable in Katanga, which has proved a challenge to swiftly securing specific expertise necessary to facilitate the integration process. This has been alleviated to some extent by approved short-term contract or employee secondment arrangements.

Management, workforce and administrative systems The management structure was remodelled to MMG's operational model and a new General Manager recruited and appointed. In addition, new employee workplace,

KATANGA PROVINCE DEMOCRATIC REPUBLIC OF CONGO





Location of Kinsevere Mine



Water quality testing at a village bore pump as a part of baseline environmental monitoring.

shift and remuneration arrangements were negotiated with government and union authorities to bring the site into better alignment with MMG standards.

Relevant human resources systems have been phased in under general implementation of IT and operational systems, with more work continuing in 2013.

Health, safety and security

MMG reviewed the Anvil Health, Safety and Security systems, particularly to identify and rectify gaps in relation to significant and high potential-fatality incidents or exposures. There were a number of gaps in procedures and systems identified against MMG's SHEC Policy and Standards. We are now working to address these concerns and integrate the MMG SHEC requirements into the Kinsevere operation.

Access and power line road

The mine road brings various challenges for MMG. Local villagers use the road alongside mine trucks and employee transport vehicles, presenting public safety challenges. As the local villages grow, drawn by the road access to Lubumbashi town and proximity to the mine infrastructure, there are more pedestrians, bicycles and private vehicles using the road, as well as rising numbers of people and village animals near the road. MMG is working to manage the risk of safety and community incidents.

Environmental management

MMG conducted a review of environmental processes and data against our SHEC management system. A gap closure and action program commenced to address priorities, including further environmental baseline assessment work.

Water management and mineral waste management are now key focus areas, including improved planning for the wet season, developing a site water balance and increasing the understanding of the longer-term risks from acid rock drainage. Current rehabilitation programs and implementation of a Biodiversity Action Plan will advance in 2013.

Environmental support is being provided to Kinsevere in working towards strengthening the capability on the site to meet MMG requirements and ISO 14001 certification.

Community investment and management program

MMG inherited a broad community program that provides support to 26 villages located in a 25km2 circumference of the greater mine area. Approximately six of the villages are currently adjacent to the mine's access road and power line.

Projects undertaken by the Community Relations team focus on agricultural assistance, capacity building, water and sanitation infrastructure, health programs and education infrastructure. Support is also provided via microfinance with some of the projects co-funded by external organisations such as the United Nations Food Program and World Vision.

Government relations

In a new country, MMG had the challenge of establishing effective relationships with national and local government authorities to both smoothly execute the acquisition of Anvil and ensure successful integration of Kinsevere's operations with our systems. MMG added capacity in Kinshasa and maintains engagement at all levels of government.

With national mining enterprise, La Générale des Carrières et des Mines (Gécamines), a stakeholder in the DRC business, the development of these government relationships commenced during the acquisition negotiation phases. The mining titles that underpin the Kinsevere operations are leased from Gécamines in return for a royalty on copper produced at Kinsevere. Gécamines also holds a 30% interest in the Mutoshi project, and MMG has granted to Gécamines an option over its interest in the joint venture entity that holds the Mutoshi assets. At the time of publishing, Gécamines' exercise of this option is the subject of negotiation between the parties.

Mutoshi project

The Mutoshi project represents two tenements covering previous commercial mining operations dating back over 50 years near the town of Kolwezi in Katanga's west. In 2012 a MMG initiated a process to collect baseline environment and social data. Early findings have identified significant challenges with the site posed by previous environmental degradation, groundwater quality and the presence of small-scale and artisanal miners.



Kinsevere pit operations. Synergies with Sepon facilitated the relatively smooth integration of Kinsevere into MMG's systems.



Kinsevere's copper cathode production plant which reached nameplate capacity of 60,000 tonnes at the end of 2012 with the support of auxiliary generator power.

FEATURE CASE STUDY

MMG AND UNICEF PARTNER

FOR CHILD HEALTH

MMG and UNICEF have partnered since late 2011 to raise funds and awareness and provide on-the-ground programs targeting zinc and other micronutrient deficiencies in children worldwide.

During 2012, MMG chose to extend the partnership to support early child health in Laos, where Sepon mine operates.

Experts at UNICEF highlight that under-nutrition contributes to more than a third of child deaths globally, and that combatting it is most effective when focusing on the first 1,000 days of a child's life. In Laos, meeting the nutritional needs of children in the earliest years of life is a particular challenge, with rates of chronic malnutrition affecting more than 40% of Lao children under five years old. Micronutrient deficiencies are persistent and widespread among infants and young children, largely due to a poor diet, which is mostly rice-based.

The "1000 Day" project is a three-way initiative between MMG, UNICEF and the Lao Ministry of Health, launched on 15 November 2012 in Vientiane. The partnership aims to distribute zinc and other micronutrients in Laos to help reduce the high rate of child deaths associated with under-nutrition, and the life-long impacts of micronutrient deficiencies in early childhood development.

With MMG's support of US\$1.4 million over three years, the 1000 Day Project aims to reach an estimated 180,000 Lao children, aged six to 59 months, via the distribution of approximately four million micronutrient sachets. Each contains important vitamins, zinc and other nutrients that are lacking in many infants' diets.

The vital nutritional support will be provided to children in the southern Lao provinces of Saravane and Savannakhet, the latter including communities around our Sepon Mine. Phongsaly province in the north will be assessed later as a potential third target region.

The sachets will be distributed free of charge via health services and the private sector to families with children considered most vulnerable and at highest risk of under-nutrition. Distribution is scheduled to commence in late 2013 after field preparation and coordination with the Lao Ministry of Health. Each child will receive one year's supply of micronutrient sachets.

The private sector will also employ a social marketing strategy to promote and sell the sachets at a subsidised cost to families in areas identified as more likely to be able to afford the supplements.

An investment towards long-term health improvement

While the children who receive the supplements will experience immediate health benefits, the broader objective is for the 1000 Day Project to achieve a generational impact on community health and capability.

In addition, UNICEF will provide technical support to help health workers and community volunteers involved in the distribution process enabling them to educate families about the importance of good nutrition, ensuring longterm sustainable change.

Launching the project, Vice Minister to the Lao Ministry of Health, Dr. Inlavanh, said, "This is a highly important project that will target some of the provinces with the highest rates of anaemia and other nutrition problems".

"We know the damage that a lack of proper nutrients can cause to a young child's health and that this damage is irreversible later in life. Undernourished children will never develop as fully, either physically or cognitively, as when properly nourished early in life," Dr Inlavanh said.

"The first 1,000 days of life represent a window of opportunity," said UNICEF Representative in Lao PDR, Tim Schaffter. "Failing to provide the essential micronutrients for health development can lead to life-long impacts."

"This program will be an important boost to broadening evidence-based nutrition interventions already adopted by the Laos Government, complemented by innovative approaches that aim to reach more remote areas where needs are greatest," he said.



CEO UNICEF Australia Norman Gillespie, UNICEF Representative Julia Rees, MMG CEO Andrew Michelmore and Deputy Minister of Health Dr Inlavanh Keobounphanh celebrate the launch of the 1000 Day Project. (Photo courtesy of Mr Khonesavanh Latsaphao, *Vientiane Times* newspaper, Lao PDR.)

Zinc Saves Kids

We are also continuing our support, commenced in 2011, of the UNICEF and International Zinc Association's (IZA) Zinc Saves Kids initiative, through matching sales of Inspired Gifts made through UNICEF's Matched Giving campaign¹. Run in the period leading up to Christmas, the campaign aims to double the impact of funds raised through the sale of gifts, including micronutrient powder sachets.

To encourage others to contribute to expanding the reach of micronutrient supplements worldwide, in late 2012 MMG extended support to a year-round UNICEF Matched Giving campaign through the Inspired Gifts website.

MMG CEO Andrew Michelmore is current chair of the International Zinc Association, which is conducting a three-year zinc micronutrient trial in remote regions of Nepal and Peru. The program, also supported by MMG, aims to improve the survival, growth and development of undernourished children in these countries, in parallel to the 1000 Day Project in Laos.

"Through our support of UNICEF/IZA's Zinc Saves Kids initiative, we are seeing the difference zinc and other micronutrient supplements can make to early childhood development," said Mr Michelmore. "With the support of the Lao Ministry of Health and UNICEF, we are extending these benefits to Lao children."

MMG contributed A\$20,000 in 2011 and A\$25,000 in 2012 to the Matched Giving campaign, and expects to recommit support in 2013.

Over the last two years, Zinc Saves Kids' funds have helped UNICEF deliver multiple micronutrient supplementation programs, including for zinc, to more than 100,000 children in Nepal and Peru. In addition, thousands of children have received the life-saving zinc and ORS (oral rehydration salts) treatment for diarrhea as part of child health care programs.

¹ See the campaign website at www.unicef.org.au/doubleimpact

ABOUT UNICEF

UNICEF works in over 190 countries to promote and protect the rights of children. The world's largest provider of vaccines for developing countries, UNICEF supports child health and nutrition, clean water and sanitation, quality basic education for all boys and girls, and the protection of children from violence, exploitation and HIV.

For more information please visit www.unicef.org.au



Micronutrient sachets are sprinkled onto a child's meal, daily.



Map of initial target provinces in Laos for the 1000 Day Project.



We aspire to form a partnership with each person at MMG. This engages them to contribute towards achieving our vision and values, as well as developing personally.

OUR APPROACH

Our aspiration is to ensure that our people are:

- » Employed under terms and conditions that are fair, and as a minimum, meet all relevant legal requirements;
- » Provided with safe and healthy conditions of work, and where feasible, assisted to return to work following injury or illness;
- » Treated fairly in a workplace that values diversity and inclusion in terms of gender, age, cultural and ethnic background, religion, sexual orientation or disability;
- » Provided with a workplace that is free from harassment;
- » Provided with challenging and rewarding work;
- » Given access to information and knowledge needed to perform well;
- » Provided with training and development opportunities consistent with the needs of the business;
- » Involved in open communication and regular feedback on work performance and major changes;
- » Recognised when their actions support our vision and values; and
- » Confident to raise concerns that will be addressed in a timely and fair manner.

We aim to deliver on each of these principles through our core human resources activities and programs. We utilise the Success Through Every Person (STEP) program to engage and develop our people so that they can evolve personally and contribute to our vision and mission. STEP tools provide a common MMG language to ensure clarity on task planning, identification of critical issues and solutions, and awareness of how diversity contributes to high-performing teams. A linked approach, called Inflow, supports the development of our business and workplace culture, ensuring that our people are working to their potential.

PERFORMANCE

In 2012 MMG employed a total of 9,376 people (employees and contractors), an increase from the 8,513 employed in 2011, mainly due to the integration of Kinsevere mine. Of these 3,998 were contractors, 367 were casual employees, with the remaining full-time (4,977) and part-time (34) employees.

In 2012 4,907 of our employees and contractors were employed at Sepon (2,543 direct employees and 2,043 contractors), which represents 52% of MMG's total workforce.

At Century and Golden Grove, we support the employment of local Indigenous peoples. In 2012 local Indigenous employees (based on employees' self-nomination as from local Indigenous communities) made up about 22% of the Century workforce and 3% of the Golden Grove workforce. Although MMG has some Indigenous employees working at superintendent level, we have commenced

programs to further raise the level of Indigenous representation at management levels (see Local employee management capability development on page 24).

At Sepon, in 2012, 95% of the workforce were Lao nationals, with the remaining 5% being expatriates. The Kinsevere workforce comprised 97% DRC nationals.

2012 TOTAL WORKFORCE MAKE-UP

FTE EMPLOYEES AND CONTRACTORS	CENTURY	GOLDEN GROVE	ROSEBERY	SEPON	KINSEVERE	EXPLORATION & NEW PROJECTS	CORPORATE	TOTAL MMG
Total workforce	1,069	568	522	4,907	1,680	166	464	9,376
Full time	806	352	271	2543	645	87	273	4,977
Part time	0	0	3	0	0	5	26	34
Casual	10	6	6	321	0	14	10	367
Contractors	253	210	242	2043	1035	60	155	3,998
Female ratio (%)	14.22%	11.45%	12.86%	14.87%	8.22%	38.68%	45.31%	15.90%
Indigenous ratio (%)	22.32%	3.15%	1.43%	N/A	N/A	0.96%	0.17%	4.00%
National employee (vs ex-pat) ratio (%)	N/A	N/A	N/A	95.05%	97.14%	97.59%	N/A%	96.86%
Turnover (%) (Jan-Dec 2012)	11.17%	15.63%	6.57%	11.88%	25.00%	18.48%	7.69%	11.71%

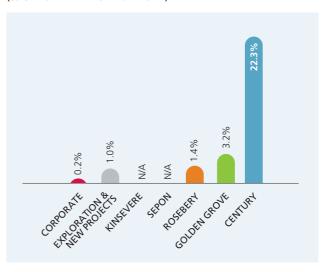
Dugald River employees are part of Exploration & New Projects. Female ratio has been calculated exclusive of contractors. Indigenous employees self-identified as Indigenous Australian. National to Expat ratio based on total workforce (including contractors) in countries outside Australia.

Turnover ratio is not inclusive of contractors or Kinsevere nationals.

PEOPLE PROFILE BY EMPLOYMENT TERM



2012 AUSTRALIAN INDIGENOUS EMPLOYMENT RATIO (% OF TOTAL EMPLOYEES BY SITE)



PEOPLE PROFILE BY SITE



In 2012 we advanced towards achieving all three of our 2011–2014 baseline goals, the first being to develop workforce plans that build capability and diversity. A workforce planning model has been developed and will be deployed to our Dugald River project in 2013. Its effectiveness will be evaluated for rollout at other operations and projects.

We refined MMG's My Performance employee performance and development program and conducted a training needs analysis. We also continued to introduce and implement new technology systems to improve efficiency and productivity and support high-performing teams and competent, satisfied employees. We further embedded the use of our Training Events Management System (TEMS), to improve and monitor the management of employee training. The Standard Operating Environment of Windows 7 and Microsoft Office 2010 were implemented as our general software platform and our people were given relevant training to support transition to the new system.

MMG responded to the results of its 2012 Diversity and Inclusion Survey by conducting unconscious bias¹ workshops for senior managers and using key survey results to inform our diversity and inclusion strategy. The success of our strategy will be measured in part through an index in the 2013 People and Culture Survey.

Our second goal has been to develop a performance culture by cultivating leadership-inspired teamwork, innovation and discretionary effort. In 2012 we completed planning for the rollout of a new leadership capability framework and career development process.

We also launched an internal program to encourage continuous improvement and innovation in the workforce, through the use of team-based problem-solving methodology. This program has been rolled out to Vientiane, Sepon and Rosebery.

Our Employee Perception Survey was deployed to head office, Americas and Exploration employees in 2012. Findings demonstrated an employee engagement index of 69%, which indicates (based on external benchmarks²) a healthy level of satisfaction, commitment, motivation and advocacy amongst employees, and a positive workplace culture.

MMG will report this engagement index annually, expanding on results outlined in the 2011 report, which highlighted employee commitment only.

In 2013 we will rebrand the Perception Survey as the People and Culture Survey, which will be used to measure achievement against the business goal of a 5% increase of employee engagement year on year. We will conduct the survey at all MMG locations annually. Employee consultative forums continued to be utilised to help address survey findings and increase employee engagement.

Towards our third goal – supporting our workforce to embrace the MMG way – our new Code of Conduct was successfully deployed, with related training, to all Australian, Exploration and Projects sites across MMG. It will be rolled out at Sepon and Kinsevere by mid–2013.

Employing local people MI

Assisting local people to transition into mining careers as well as recruiting from nearby communities remains a prime focus. We have invested substantially in training and education and have developed pathways for local community recruitment into MMG. While a portion of our workforce could be classified as Fly-In Fly-Out (FIFO), this method of engagement has not been at the expense of local³ employment prioritisation.

To build and support the capacity of our mines' host communities, we have programs to increase the local Lao and Congolese workforces at Sepon and Kinsevere respectively, local Indigenous participation at Century and Golden Grove and the number of young local people joining the Rosebery workforce. These programs may include numeracy and literacy support, community engagement, training and development assistance and targeted employment opportunities.

This must be a life-of-mine commitment due to the limited nature of the education and training opportunities available in some host communities, particularly in Laos and the DRC. Over time, these programs will reduce the region's dependency on expatriates by establishing and developing capability within the local workforce, as well as build community socio-economic resiliance. MMG benefits from workforce diversity and partnership with our communities.

Providing technical training before, and during, employment is a key part of our localised training programs. At Sepon, 40 local Lao nationals who undertook the mine's apprenticeship program from mid-2006 to 2011 were employed by the mine's maintenance department in 2012. Seventeen graduates from the ongoing trade traineeship program at the Savannakhet Technical School also have roles with the maintenance teams at the site. Six more will complete the program this year.

At Kinsevere, a comprehensive technical training program continued to develop new skills in Congolese employees and prepare local Congolese for positions at the mine (see the Kinsevere Management Transition case study).

Century ran two pre-vocational programs, with 21 of 29 Indigenous participants transitioning into traineeships and apprenticeships at the mine. Similarly, Golden Grove's program resulted in 11 of 12 Indigenous graduates being employed.

We refined our organisational design for the Dugald River project, taking into account our commitment to native title agreements and developing an attraction strategy and talent pool for locals.

^{1 &}quot;Unconscious bias" describes attitudinal biases subconsciously held about diversity in terms of gender, age, race, religion, sexual orientation, or disability. Inequities in the workplace can develop from these biases.

² The benchmarks for these four engagement criteria were compared to MMG's results by Measured Insights, who conducted our survey. Favourable: greater than 60% engagement; Unfavourable: less than 3%.

^{3 &}quot;Local" employees refers to employees living within the district level vicinity of the operation. These are predominately "national" employees, citizens of the country of the MMG operation. Expatriates (expats) are non-national employees.

Century has a high rate of Indigenous workforce participation compared to the Australian mining sector generally¹. A survey in 2012 confirmed that more than 22% of employees and contractors, or more than 240 people, identify as being from local Traditional Owner groups. Century also had an increase in its Indigenous employee retention rate, up 14% from 2007 to 2012.

These outcomes are the result of encouraging active participation, predominately through employment, in the mine's operations. This commitment is underpinned a Gulf Communities Agreement. Signed in 1997 by the mine, the Queensland Government and four Native Title groups of the Lower Gulf, the Gulf Communities Agreement (GCA) provides for employment and business opportunities, cultural and environmental assurances as well as compensation in return for land access.

However, supporting Indigenous workforce participation is much more complex than simply providing access to employment opportunities. Research undertaken in 2012 found that, for about one third of the more than 900 local Indigenous people who have worked at Century since mine operations began, this was their first time in mainstream employment. High unemployment in their home communities, difficulties accessing education, health services and housing and other factors had previously created barriers to entering the workforce.

When mining operations began in 1999, there were few successful models on which Century could draw. The mine pioneered its own approach, which for many years included an on-site pre-vocational program to assist with the transition to a mining career, a team of on-site mentors and community-based liaison officers.

However, alongside these achievements, the mine faces significant challenges in engaging with local communities. Non-Indigenous community members had expressed concern that the mine was focusing engagement on local Indigenous communities rather than across the Gulf region.

Further community concerns have been voiced regarding the focus on training and employment rather than investing in local infrastructure. Training and employment are less tangible than physical infrastructure and the local community is concerned that employment created at the mine will not endure once the mine closes.

In 2012 Century undertook the largest restructure of its training and employment program since the mine

began to address issues such as the unsustainable reliance on the mine for local employment.

To address these challenges, Century made significant changes to its community engagement and development strategy in 2012. Fundamental to this change in approach was a belief that lasting positive change can only be achieved by partnerships between the mine, Traditional Owners, government, community and other stakeholders.

Key changes included:

- » Restructuring the community relations team to ensure a focus on regional rather than communityspecific engagement;
- » Transitioning responsibility for Indigenous training and employment to Century's Human Resources team; and
- » Revamping Century's on-site Indigenous prevocational course to a broader off-site Work Ready, Job Ready program. MMG pays the wages, accommodation, travel and other costs for trainees while the Queensland Government funds the program itself.

Relevant material issues: **Employing local people,** local employee management capability development, contribution to local and regional economies



Through the support of Kelly and Dreamtime Racing teams, a number of Century's apprentices were able to work trackside at V8 Supercar events in 2012.

¹ Based on the Government of Queensland report, 'Work for Queensland: Resources Skills and Employment Plan 2011', which reported that Indigenous people represent only 5% of the mineral sector workforce (Minerals Council of Australia) and 2.3 percent of the 106,893 people employed in the Queensland mining sector were Indigenous.

Local employee management capability development

A central part of MMG's long-term employment localisation programs is a process for building management capacity, skills and experience amongst national employees. This meets our objective to maximise localisation throughout all levels of our mines' operations during their lifetime, and supports the development progression of employees, as well as regional employment capability.

At Sepon there has been an increase in Lao representation in the workforce (95%, up from 87%) and progress in developing more Lao nationals into senior roles. In 2012 87 Lao nationals were promoted to supervisor level and 34 to superintendent level.

Formal training in Front Line Management across Sepon is lifting the capability of Lao supervisors. Sepon is now developing a similar program for the superintendent-level employees. Expatriates take on roles as technical advisors, stepping back from management to coach and mentor their Lao counterparts. There is also a process for identifying, developing and rewarding future talent from our Lao workforce to ensure that the employee and management capability pipeline is maintained.

At Kinsevere, 20 national employees have graduated in the mine's English-speaking certification for Frontline Management. Some have progressed to the next step, the Diploma of Management, with two nationals having since attained their diploma. Forty nationals are now enrolled in the French-speaking versions of these courses. A series of supervisor/management activities training programs support these management courses. These give experience in the specific tasks and responsibilities of supervisors across intended positions and departments.

Supervisor training in Mine Operations at Century will allow potential and current supervisors, including Indigenous employees, to develop formal qualifications.

In 2012 Century began to update its local employment strategy, aiming for completion by the end of 2013.

Quality employee attraction and retention MI

MMG strives to hire and retain capable employees across its diverse operating regions. We have recruitment programs aimed at graduates, expatriates and local candidates. We recruit skilled employees from the broader employment market and we also invest in skills development: in local people and communities adjacent to our mining operations, as well as graduates and tertiary institutions. Through partnerships we directly support the mining education sector – particularly in Laos, the region around Century Mine, and in the Mine Engineering School at Monash University in Melbourne (see page 26).

In addition to standard metrics and other internal performance tracking, a key success measurement for our recruitment is "quality of hire": the percentage of employees that successfully complete at least 12 months of employment. This metric is particularly important for our Australian operations, Exploration department, and our expatriate workforce, as these MMG employment groups are drawn from a competitive labour market.

Of all our employees within these groups hired in 2011 and 2012, approximately 9 out of every 10 hires progressed through to their second year (89.3% employee retention). This demonstrates that MMG has capable recruitment and selection practices for competent employees, and positive hiring outcomes.

In 2012 "time to fill job vacancies" (excluding graduate and vacation positions) averaged 49 days (66 days in 2011). Our annual employee turnover rate increased to 11.7%, up from 8.5% in 2011. While this suggests a greater percentage of employees exited MMG in 2012 than 2011, it is a favourable rate when compared to the Australian mining industry average in 2012 of 16.4% (analysis by Mackie Employer Solutions).

To continue to attract, employ and retain people with great skills and experience we are:

- » Developing a positive corporate culture and articulating our brand positioning and corporate value proposition;
- » Delivering competitive employee benefits and remuneration;
- » Offering flexible work arrangements where possible;
- » Offering training and development tailored to individual employees' needs;
- » Training our leaders in effective people management;
- » Responding to employee Perception Survey results; and
- » Involving employees in issues that concern them.

In 2012 our recruitment operational model matured from one of processing candidates to one that proactively and directly attracts and recruits candidates through better information benchmarking, networks and research tools. The model was further enhanced by our brand refinement project. We now more efficiently source candidates, ensure a positive candidate experience and maintain better control of candidate quality.

Our Employee Perception Survey and related consultative forums provided valuable employee feedback on workplace culture and processes. Refined surveys of new recruits and an updated exit survey process will also help to improve our metrics and processes on retention.

In 2013 the focus will continue to be on maximising the quality of new employees and increasing the diversity of recruits, particularly in regards to gender diversity. We are also improving international recruitment processes.

TOTAL EMPLOYEE TURNOVER



CASE STUDY LAO EMPLOYEES TAKE ON MANAGERIAL POSITIONS AT <u>SEPON</u>

As part of a revised organisational structure for Sepon, expatriates will increasingly move into advisory and coaching roles. The new structure includes just five levels: general manager, manager, superintendent, supervisor and team member. "Each department must have a plan in place for developing local employees. This means making sure people have the necessary skills or the support they need to get them, and have clear roles and responsibilities, so that when they are ready they can move into some of the positions currently held by expatriates," said Rick Watsford, General Manager Sepon.

Viboon Sithimolada, a Lao employee, has made the transition twice: first in April 2012 when he became Electrical and Instrument Superintendent, and then in January 2013 when he was promoted to Maintenance Manager. "I worked closely with Jude Barnes for about two and half years," said Viboon. "When I first met Jude, I told him that my aspiration was to move up within the company. So he put together a development plan that would result in me replacing him," he said.

By the end of December 2012, the number of Lao supervisors, superintendents and managers had all increased. "These numbers will continue to rise, in particular with graduates from the Lao Supervisor Development Program in around a year from now," said Rick Watsford. Almost 50 employees are enrolled in the program.

Relevant material issues: Local employee management capability development, Employing local people



Expatriates at Sepon coach and advise Lao employees taking on managerial positions.

CASE STUDY KINSEVERE MANAGEMENT TRANSITION

When MMG acquired Anvil, the number of local/national employees in management roles at Kinsevere was relatively low. There were only two local/national heads of department, being in human resources and administration. We are committed to maximising local/national employment across the business and building enduring expertise in the country. There is a legislated restriction which caps the percentage of expatriate employees who can be employed at the mine at 6.5%. While this can present a challenge to supporting the integration process and site operations with relevant expertise, we are committed to our objectives and developing solutions.

The Certificate VI in Frontline Management (FLM) was introduced to the site in August 2011 and delivered throughout 2012. Approximately 20 locals/nationals graduated and some progressed to the next stage, the Diploma of Management, with two since attaining their diploma. The FLM course has now been translated into French, with approximately 40 locals/nationals enrolled.

To cement the foundation that FLM has provided, supervisor/management activities training programs are under way. These cover the specific tasks and responsibilities of supervisors across roles and departments. For example, a processing shift supervisor has different supervisory tasks and responsibilities from those of a training superintendent. This program records the completion of tasks and responsibilities

performed through a system of calendar matrices and journals. A portfolio of evidence is gathered to justify and confirm the suitability of a local/national for a supervisory or management position at Kinsevere.

The program is expected to run until 2015 and is aiming for more than 20 locals/nationals with superintendent and other senior roles (currently 14) and to reduce the site expatriate employees ratio to under 5%.

In 2013 Kinsevere will enrol more local/national participants in French-speaking FLM and Diploma of Management courses and aim for a high local/national graduate-to-participant ratio in overall training.

Relevant material issues: **Local employee management capability development**, Employing local people



Kinsevere is strengthening the management capacities of local and national employees.

CASE STUDY SOURCING THE BEST CANDIDATES

In 2012 MMG made a step change in our candidatesourcing model. Building on our recent brand campaign, we focused on raising awareness amongst potential candidates about MMG and the benefits of working with us. Progress included:

- » Direct sourcing of candidates without third-party recruitment agencies;
- » Greater in-house recruitment capability;
- » Using structured internal and external information networks and research; and
- » Strategic partnership with Newcrest to establish the Mining Engineering School at Monash University.

In addition to significant cost savings, achievements included:

- » Greater interaction with candidates;
- » Well-managed candidate experience;
- » Reduced "time-to-fill" vacancies;
- » Improved new hire retention; and
- » Higher offer–acceptance ratios.

We strive for a good performance against these metrics compared to industry norms.

The most significant investment in 2012 was our partnership with Newcrest to establish the Mining Engineering School at Monash University. The mining school creates a pathway into the mining industry while increasing the overall output of mine engineering graduates in Australia.

In 2013 the focus will move to:

» Establishing a more diverse workforce, in particular gender diversity;

- » Continuously improving candidate selection;
- » Optimising quality of hire (new employees); and
- » Optimising recruiter productivity.

MMG aims to establish a streamlined yet highly effective selection process with greater use of technology and candidate referee reporting.

Year 2013 and beyond will focus on a global approach to recruitment. The location, design and outputs of a global recruitment centre, via local hubs or a centralised global centre, will play an important part.

Relevant material issues: Quality employee attraction and retention



Formalising the partnership to establish a new mining school in Melbourne. Left to right: Monash University Dean of the Faculty of Engineering Professor Tam Sridhar, Newcrest CEO Greg Robinson, Victorian Energy Minister and Treasurer Michael O'Brien, Monash University Vice-Chancellor and President Professor Ed Byrne AO and MMG CEO Andrew Michelmore.

Workplace and corporate culture MI

We aim for a workplace and corporate culture that reflects our values of safety, integrity, action and results. We are also committed to building a business-wide culture based on high-performing teams delivering on our business plan.

In 2012 we delivered a wide range of employee communication and education programs. We also continued to improve the way that change is managed across the business. We deployed a change management model with associated toolkits and training sessions.

The People and Culture Survey process and associated Consultative Forums are central to measuring and calibrating our workplace and corporate culture. The Consultative Forums act between the workforce and the site management teams, ensuring that areas of improvement raised in the People and Culture Survey can be addressed.

Gender and workforce diversity

Achieving balanced diversity across workforce levels in order to enhance team performance and workplace culture is a broader mining sector challenge. In 2012 we deployed a General Diversity Survey to inform the development of the diversity and inclusion strategy to increase overall workforce diversity across the business. We have started a work plan to address the survey findings and have run unconscious bias training for senior leaders. Our Australian sites are the first to start engaging the strategy.

Encouraging greater gender diversity across our business is a key focus. Female representation as a proportion of the overall workforce has decreased to 16%, down from 19% in 2011 (see the chart below). Our corporate and exploration business units are now up to 45% and 39% respectively; however, the workforce at our mining sites is now on average below 13% female with Kinsevere's integration. Most work roles held by women fall into the middle manager, specialist/supervisor and support employee categories (see the table below), with few working in the mill/mining/trade (7%), although during 2012 there was an increase in the number of women working in this area to 66 from 51 in 2011.

In 2012 we assessed our process for training women into senior leadership roles. Our graduate program is supporting the industry to develop women in non-traditional roles. Just over 31% (12 out of 38) of graduates at MMG were female. We also partnered with Newcrest and Monash to form the Monash University Mining School where two new female students were awarded Mining Engineering scholarships.

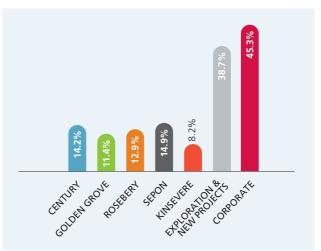
Remuneration balance continues to be reviewed and addressed on an annual and ongoing basis. While the average female salaries in the table below suggest that their salaries are below those of male employees across all work-role categories, closer examination of a like-job for like-job comparison indicates that this is not the case for all roles. Further, testing during the annual salary review process indicates that women achieve the same review adjustments as men. We remain focused on addressing remuneration balance through our diversity approach. Our My Performance process is gender neutral

and focuses on market-rate remuneration for like-for-like roles and experience. We also undertake a gender pay analysis as part of our annual salary review, which is overseen by executive business levels.

Our gender diversity initiatives also include:

- » Paid parental leave:
- » Leadership training for senior high-performing women;
- » Flexible working arrangements;
- » Health room in Melbourne that can be used as a parent room;
- » Unconscious bias workshops with senior leaders; and
- » Further development of the diversity and inclusion strategy.

2012 GENDER DIVERSITY (% FEMALE EMPLOYEES)



DIVERSITY ROLES AND REMUNERATION

WORK GROUP	% MALE	/FEMALE	AVERAGE SA	AVERAGE AGE	
	FEMALE	MALE	FEMALE	MALE	
Executives and General Managers	7.32%	92.68%	\$346,450.00	\$370,727.42	51
Managers Includes department managers and principals	14.81%	85.19%	\$193,740.63	\$206,342.74	46
Superintendents	13.83%	86.17%	\$121,358.69	\$160,829.01	46
Specialists/Supervisors (Level 1 or 2) Includes team leaders, supervisors, seniors and specialist employees	17.10%	82.90%	\$143,799.40	\$146,389.56	42
Support Roles Includes advisors, coordinators and technical roles e.g. Engineers and Geologists	34.96%	65.04%	\$88,572.04	\$113,368.75	38
Mill/Mining/Trade e.g. Includes equipment operators	6.67%	93.33%	\$96,137.81	\$115,801.22	40
Total MMG	17.30%	82.70%	\$165,009.76	\$185,576.45	44

Refer to our Annual Report (page 120) for published senior executive and Board member remuneration (www.mmg.com). Includes all employees, but excludes casual staff, contractors not based in Australia, and employees not paid in A\$.

Employee training and development MI

Assessing and supporting individual employees' training and development needs for their roles and desired career progression, are part of our retention strategy. We have progressed towards establishing a capability matrix for operational employees by the end of 2013, to assess and guide training needs. Some training, such as safety and health inductions, is mandatory for all our people. In response to MMG-wide training needs analysis, we rolled out a number of new training initiatives in 2012.

A review of the My Performance program, which includes My Development (employee development plans), will be completed in 2013. The TEMS training compliance module continued to be embedded across MMG, with Australian training department employees now trained in its use.

In 2012 more than 10,000 employees, contractors and visitors attended training and induction sessions. These training programs included:

- » Health and safety, area specific and other inductions;
- » Cross-cultural awareness programs;
- » Language training;
- » First aid and safety training;
- » Job-specific training;
- » Leadership and supervisor training;
- » Environmental and community training;
- » Operator competency training;
- » Financial management and project investment analysis;
- » Information technology training;
- » Mine rescue training;
- » Support for further tertiary education and training; and
- » Conferences.

Managing fly-in, fly-out workforce effects

We recognise the potential impact that fly-in, fly-out (FIFO) workforce arrangements can have on regional communities. This includes, as just three examples, local housing price inflation, pressure on local services, and changes in local social dynamics.

Given the remote location of many of our current operations, FIFO arrangements have been used where our workforce are housed in on-site village accommodation. This is in combination with employment from local communities where possible. For example, Century employs a FIFO workforce at its mining and processing operation at Lawn Hill and a residential and FIFO-residential workforce at its dewatering and shipping facility at Karumba.

At our Rosebery mine, while many employees reside in the Rosebery township during their shifts in MMG-owned or leased housing, many leave on weekends. We are aware that this can have perceived impacts on the local community's businesses and social dynamics.

Our Dugald River project, currently under development, is likely to utilise a combination of FIFO and residential workforce based in nearby Cloncurry and other townships. We recognise the need to consider the impacts of such arrangements on our current and future operations.

We have an employee assistance program to support FIFO workers who experience difficulty with FIFO arrangements. In addition, we acknowledge some preferences for FIFO arrangements because of the flexibility and benefits they can offer.

2013 CHALLENGES

Key challenges for 2013, related to our threeyear sustainability goals and targets, are to:

- » Measure the success of employment localisation across our sites:
- » Consolidate our central human resources processes and software systems;
- » Improve support for the mobility of our employees between operations;
- » Deliver inclusion training to support the diversity strategy;
- » Develop multiple indices in our People and Culture Survey, including diversity and inclusion;
- » Standardise inductions for new employees and contractors; and
- » Extend our graduate program to all sites.

CASE STUDY DEFINING OUR BELIEF AND STRENGTHENING OUR BRAND

MMG's Brand Equity program sought to build brand value and a strong reputation for our business.

Research showed our brand and company name had low awareness and lacked a clear single identity – this was further compounded by the confusion between the Minmetals Resources and MMG brand names.

Deemed a necessary "foundation" as part of MMG's Three-Year Business Plan, the objective of the Brand Equity program was to develop a unique and consistent identity for our company that was understood both internally and externally.

This began with our employees.

We ran a series of workshops across operational sites, exploration teams and Group Office to understand what defined us as a company, or in other words, our belief.

Our workshops tapped into a universal truth: people seek the benefits that mining brings. People the world over strive to advance, achieve more, better themselves, create and seize opportunities. As miners, we push forward, explore, break new ground and overcome obstacles. Why? So that people can lead better lives – whether that's our employees, our communities or the world more broadly as it benefits from the products created from our metals.

We took these sentiments to create our belief and at the heart of this belief was one word: progress.



Participants in MMG's Graduate Program working at Rosebery.

Our Belief

We believe it's for humanity's progress that we mine. We venture where others wouldn't, courageously exploring, discovering and developing the Earth's opportunities into better lives for the world's communities.

MMG took this belief – expressed in the phrase "we mine for progress" – and shared it with our workforce, as well as with our stakeholders and the broader public.

MMG also sought to resolve the confusion around the company brand names by changing the English company name from Minmetals Resources Limited to MMG Limited in September 2012.

Our belief is intended to unite us and give everyone who comes into contact with us a powerful reason for our existence.

For us progress means many things:

- » It's the everyday progress that employees make each contributing to our ultimate goal.
- It's the opportunities for personal progress diversifying skill sets, attempting new challenges and striving for continuous improvement and development.
- » It's the progress that provides real and lasting benefits to the communities in which we operate. and
- » It's humanity's progress as the world develops and evolves using the metals we produce.

Our People

Our story as a global mining company is built on our people. It is their diverse cultures and experiences, skills and knowledge that deliver success. We work in a positive culture characterised by a commitment to teamwork.

"We mine for progress" informs our approach to work and our relationships with communities, stakeholders and the public.

Our Values

We are proud of how we work and our values of safety, integrity, action and results. These values underpin our Code of Conduct and form the basis of all of MMG's business activities and relationships.

Relevant material issues: **Workplace and corporate culture.** quality employee attraction and retention.



We adopt a continuous improvement approach to health and safety that promotes our vision of a zero-harm and fatality-free business.

OUR APPROACH

Health and safety is a priority for MMG – it is the first of our four values. Our overall health and safety vision is a zero-harm and fatality-free workplace.

We are refining our integrated Safety, Health, Environment and Community (SHEC) Management System based on consultation with our internal SHEC networks and leadership teams to drive a consistent approach across the business. The system is risk based and consists of a SHEC strategy, policy, standards, performance management support systems and tools and reporting. Health and safety performance improvement is driven and tracked through this system.

Our Injury Prevention Principles help to guide thoughts, behaviours and decisions relating to health and safety among our people:

- » All incidents, injuries, fatalities and occupational exposures are preventable;
- » No task is so important that it cannot be done safely;
- » Management is responsible for creating and maintaining a safe work environment;
- » We are all responsible for preventing injuries to ourselves and others;
- » Everyone is empowered to stop unsafe behaviour; and
- » We will promote off-the-job safety for our people.

In 2010 we initiated our Stop and Think safety awareness program as the driver to improve performance. We built on this program to 2012 with a focus on increasing

safety leadership as part of our safety "culture". Our aim is to move MMG to the upper rungs of a health and safety culture ladder, entrenching a proactive, risk-averse state of operation. Developed in 2012, the culture ladder will be deployed in 2013.

PERFORMANCE

Tragically, there were two fatalities in 2012. One was recorded at an MMG site, the other was a community fatality.

As reported in the 2011 Sustainability Report, Sepon recorded a fatality in February 2012. A contractor received fatal injuries following an uncontrolled vehicle movement.

On 4 August 2012, a policeman died as a result of injuries sustained in a Security Road Patrol vehicle accident near the Kinsevere mine in the DRC. The MMG Security Patrol driver was also significantly injured, when their stationary light vehicle was impacted by a local cargo truck while they were off-site patrolling the access road to the mine. The policeman was providing a public service, in his official capacity, and was not subject to the direction of MMG. MMG works in cooperation with local police to monitor traffic and speed measures for the access road.

Both fatalities have been fully investigated and preventative actions strengthened across the business to reduce the chance of any repeat accidents (see Significant and high fatality – potential incidents on MMG sites). These two incidents reinforce our resolve to achieve a fatality-free workplace across MMG, and to prevent off-site incidents.

In 2012 the Kinsevere operation was integrated into MMG's SHEC Management System (see the case study on page 16). This has involved baseline assessments and a gap analysis. We have started to close the gaps for the priorities through a detailed action plan and on-site systems improvements (see Safety observation training at Kinsevere).

Our SHEC Management System has evolved further to support the SHEC Policy. During 2012, we focused on the following actions:

- » Continued the review and development of Safety and Health standards and procedures based on risk. These include a Task Hazard Analysis program and the Take Five safety awareness campaign. We updated our standards for Fatal Risk Control, Aviation, and Contractor Management. New Occupational Health standards will be released and validated in 2013;
- » Sites self-assessed against the Fatal Risk Control and Occupational Hygiene standards and supporting documentation with follow-up verification by the SHEC department in 2013;
- » Reviewed safety and health key performance indicators to ensure an appropriate balance of leading and lagging indicators;
- » Fatigue management reviews were continued at target sites;
- » A new Incident and Event Management (IEM) software module was deployed to Australian sites providing a common SHEC platform for recording incidents and hazards, alongside the management of actions to address them;
- » An external aviation advisor completed 53 aviation audits for the year;
- » The Security Management Standard was developed, incorporating commitment to the Voluntary Principles on Security and Human Rights, and will be deployed in 2013; and
- » Site Qualitative Health Risk Assessments were completed at our operational and major exploration sites.

Safety of our people MI

We are committed to providing a safe workplace and working conditions while supporting the general health and wellbeing of our employees. Our proactive approach to safety is embraced through our corporate values and SHEC Management System.

In 2012 we developed the Step to SHEC process designed to identify precursors to fatalities and develop health and safety leadership at all levels. The MMG Life Saving Rules, which focus awareness on safe behaviour when undertaking high-risk tasks, were deployed.

To support the SHEC Management System we also rolled out an Incident and Event Management (I&EM) module – an incident and event reporting system – to MMG's Australian sites in 2012. The Sepon and Kinsevere mines will follow, providing a single reporting platform across MMG.

Following the acquisition of Anvil in early 2012, we conducted a comprehensive gap analysis against MMG's Health and Safety standards. This resulted in an action plan to align the site with MMG's requirements. Started in 2012, this integration work will continue through 2013 and beyond.

Injury rates and safety incidents

In 2012 our total recordable injury frequency rate (TRIFR) (per million hours worked) was 3.0, a reduction of 27% from 2011 (4.1) and exceeding our MMG-wide year-end target of 3.5. MMG's lost time injury frequency rate (LTIFR) was 0.7, the same as recorded in 2011.¹

INJURY FREQUENCY RATES (12-MONTH MOVING AVERAGE PER MILLION HOURS)



SAFETY INCIDENTS



¹ LTIFR was reported in 2011 as 0.6 but one injury was reclassified after the Sustainability Report was published, increasing the rate to 0.7.

CASE STUDY A RENEWED FOCUS ON SAFETY AT ROSEBERY

Rosebery achieved a significant step change in safety performance during 2012 with a 63% improvement in its total recordable injury frequency rate (TRIFR).

A number of programs have been implemented across the site over the last three years, each having an influence on the 2012 improvement.

In 2010 an overarching strategy was designed to improve the safety culture. Rosebery introduced injury prevention principles and behavioural safety training for every person across site.

Following that, a culture improvement program, Live Safely, was developed. This used a workplace safety cultural ladder (stepped improvement levels) originally developed for the oil and gas industry.

The "hearts" element of the Live Safely program included a revamp of Rosebery's site-specific induction training. It also saw the introduction of an innovations and awards program.

The "minds" element of Live Safely focused on operational-level risk management. This included risk management training for the extended leadership team. Site-wide semi-quantitative risk assessment (SQRA) was also implemented to improve risk management disciplines and prevent unwanted events.

In 2012 Rosebery introduced the Life Saving Rules, based on our Fatal Risk Standard. These are designed

to reinforce mandatory safety actions expected from all employees, contractors and visitors in relation to high-risk tasks.

In 2013 and beyond, we will continue to focus on sustaining and building on our improved safety performance.

Relevant material issues: **Significant and high fatality-potential incidents on MMG sites,** Safety of our people



Employees in Rosebery's mill run through the Life Saving Rules.

Significant and high fatality-potential incidents on MMG sites MI

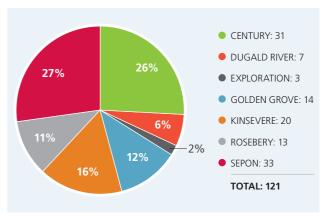
Although total recordable injuries have reduced over the past three years, the number of significant and high fatality-potential incidents has increased. In 2012, 121 significant/high fatality-potential incidents occurred, compared with 104 incidents in 2011 and 98 in 2010. Sixteen per cent (20) of these incidents occurred at the newly integrated Kinsevere site, accounting for the comparative increase in incidents since last year, while 27% occurred at Sepon and 26% at Century.

Reducing high fatality-potential and significant incidents is a major challenge for MMG and a direct focus for improvement.

Vehicle incidents continue to be the leading high fatality-potential incident type, accounting for 23%. Incidents involving vehicles were also the cause of the two fatalities which, tragicially, occurred in 2012. We are addressing this issue by implementing new safety procedures as well as measures to minimise the occurrence of repeat incidents.

A Fatal Risk Control Standard, developed and deployed in 2012, also addresses vehicle standards, driving behaviours, training/competence and traffic-management requirements. The standard is now being implemented across the Group. Site self-assessments will be conducted in consultation with MMG's SHEC department to identify gaps and actions required to meet the standard.

2012 SIGNIFICANT AND HIGH FATALITY-POTENTIAL INCIDENTS BY SITE



An independent review of significant/high fatality-potential incidents identified that the quality of our investigations was poor with inadequate identification of root causes and that the sharing and embedding of learning across other sites could be improved. MMG has since reviewed the deployment of its Incident Cause Analysis Methodology (ICAM) to ensure that our people conduct quality investigations with effective review and follow-up from management. We have been conducting the program on site and will continue to do so into 2013, as well as training ICAM Champions capable of facilitating ICAM investigations.

Our goal to reduce repeat health and safety incidents during 2012 fell short of our target. Historically, limited investigation capability and systems have made it difficult to monitor and prevent the recurrence of incidents. Therefore, there was a significant focus in 2012 on deploying a new SHEC Incident Management Standard and associated guidelines. To facilitate progress we rolled out I&EM software to Australian sites in 2012.

This software platform provides updated and centralised recording and tracking of incidents to support better awareness and prevention of repeat incidents. This is a clear focus of our Short-Term Incentive Program.

We progressed towards our three-year goal to achieve 100% resolution of corrective actions relating to high fatality-potential incidents, with 92.3% of actions closed. 7.1% are open but not past their due date. One action (0.6%) was open and past its due date. Not all corrective actions can be closed within a defined period as completion of corrective actions can depend on the provision of external support and/or equipment.

Fatigue management reviews were completed at Rosebery, Golden Grove and Sepon and a number of recommendations made. We will consider reviews for other sites between 2013 and 2014.

CASE STUDY SAFETY OBSERVATION TRAINING AT KINSEVERE

It is over a year since the team from Kinsevere joined MMG and began integrating. As part of that process, in late 2012, Kinsevere underwent a post-acquisition health and safety review. One of the opportunities identified for focus was to complete health and safety leadership training, in particular on safety observations.

In November 2012, the then Kinsevere Site General Manager, Philippe Bouchart, opened a training session for the site leadership team (heads of department and supervisors) by highlighting that health and safety is a key value for everyone at the site. He also emphasised his expectation that the leadership team would undertake at least one safety observation per week. Safety observations involve walking around site workplaces, looking for health and safety improvement opportunities and encouraging our people to work safely.

Feedback on the training was positive, notably the practical aspects. "It was good to hear how people were looking at their workplaces with a new set of eyes and having good discussions with each other about health and safety. We need to build our focus on health and safety into everything we do and this is just the start of that," commented Dean Young, Group Health, Safety & Security Manager.

ICAM training

Incident Cause Analysis Methodology (ICAM) training was provided in August and December 2012 as part of Kinsevere's health, safety and environment integration into MMG. It was also part of the overall drive on incident investigation improvement across MMG.

Training was focused on ICAM lead investigator and ICAM basic investigator roles. Two senior Kinsevere employees were certified as trainers to roll out the ICAM basic investigator course in French. Management was given an ICAM awareness and quality review session. By December 2012, five employees were trained as ICAM Champions for Kinsevere.

There will be further rollout of safety observation and ICAM investigator training in French in 2013. This will bring renewed focus on ICAM quality, leadership and prevention of repeat incidents.

Relevant material issues: **Safety of our people,** Significant and high fatality-potential incidents on MMG sites



Former Kinsevere General Manager Philippe Bouchart (left) speaks with site staff during a safety observation walk.

CASE STUDY MICROSLEEP ACTION AT SEPON

Breaking new ground for safety communications, a short animated film in the Lao language was developed at Sepon to create awareness about the potential impacts of microsleep episodes.

A microsleep is a lack of consciousness that may last anywhere between a fraction of a second and 30 seconds. It can be caused by lack of sleep, and may have serious consequences for those who experience it while driving or operating machinery.

The film's main message is that employees (including contractors) won't get into trouble if they tell their supervisors that they are exhausted and feel sleepy at work. It relates to Sepon's "safety is a value" creed, and MMG's Injury Prevention Principles. MMG wants everyone to return home safely at the end of every shift.

The film was screened on 25 June 2012 at Sepon's Hinsom and Padan messes, and the Vientiane and Savannakhet offices, followed by a question and answer session. It is available online and all Sepon employees and contractors have received a copy to take home to their families and friends.

At Sepon, cases of microsleep tend to involve nightshift workers and those involved in operating mobile equipment. "This campaign tells our workforce that it is alright to tell their supervisors if they are tired and sleepy," Kongsamay said. However, Kongsamay added, "this cannot be used as an excuse for employees to ask for breaks if they are tired as a result of irresponsible behaviour, such as staying awake all day or night partying or talking on the phone".

The microsleep campaign will continue across 2013.

Relevant material issues: Safety of our people



Sepon's microsleep campaign was aimed at strong cultural engagement.

Road safety in near-mine communities MI

As well as the risk of vehicle incidents on site, the roads around our mines present safety concerns. Our mines are located in remote areas, with MMG contributing to the maintenance, and in some cases, development of mine access roads, such as at Kinsevere and Sepon.

In addition to providing transport access for MMG equipment, suppliers and products, these roads are used by local communities. The combination of heavy mining traffic and a variety of local traffic including buses, private vehicles, bicycles and pedestrians, poses a significant risk to local communities and MMG employees alike. This was tragically illustrated with the death of a policeman this year in a vehicle accident on the mine access road into Kinsevere. We therefore continue to refine our local site-specific approaches to road safety in communities with targeted measures to raise awareness, educate and monitor road safety behaviour. This includes signage deployment and community awareness projects, as well as partnership with local community groups and authorities.

Health of employees MI

Health and fitness for work is a key component of safety management and injury prevention. We encourage all employees and contractors to be fit for work, both physically and mentally. This is guided by our standards on drug and alcohol use in the workplace, fatigue management and our workplace support programs for general health and wellbeing.

We conduct drug and alcohol testing of all employees, contractors and visitors at sites and offices. Employees must have a blood alcohol content of 0.00 and be free of illicit drugs at all times. Positive readings are assessed and may result in disciplinary consequences.

We also undertake health surveillance and monitoring of employees and contractors with the aim of assessing potential exposure to substances including lead, cadmium and respirable silica. These are present in some of the ore bodies that we mine. Surveillance takes place as appropriate to work location. See the table opposite for screening results in 2012.

2012 HEAVY METALS BIOLOGICAL SCREENING

SITE	NUMBER OF TESTS CONDUCTED	NUMBER ABOVE ACTION LEVEL	NUMBER ABOVE TRANSFER LEVEL	
	LEAD			
Century	833	2	2	
Dugald River	32	-	_	
Golden Grove	205	1	2	
Kinsevere	-	_	_	
Rosebery	1,173	1	7	
Sepon	96	4	5	
MMG Total	2,339	8	16	
		CADMIUM		
Sepon	60	_	4	
		MERCURY		
Sepon	18	_		

CASE STUDY MANAGING A NEW COMMUNITY ROAD AT KINSEVERE

The current main road and power line into Kinsevere mine was built in partnership with the district government, local engineering contractors and Anvil Mining in 2008. While it is the main mine access, it is also a community road. Previous road access was much less direct and safe, running to the south east through small subsistence villages.

The new road provides a safer and more efficient route to the mine and a service and security avenue for the power line. It also represents a significant infrastructure investment as a shared public road servicing local villages.

The mine road, however, brings various challenges for MMG. Local villagers use the road together with mine trucks and employee transport vehicles, presenting public safety challenges. As the local villages grow, drawn by the road access to Lubumbashi town and proximity to the mine infrastructure, there are more pedestrians, bicycles, and private vehicles using the road, as well as rising numbers of people and loose village animals near the road. These factors mean a high risk of accidents, as evidenced by the fatal security vehicle accident on the road earlier in the year in which a policeman died from injuries.

The increasing local population in road-side villages also heightens security issues and community development pressures for MMG.

In 2012 sealing of the first 6 kilometres of road by local contractors commenced, and should be complete in mid-2013. An entry and monitoring gate at the start of the sealed section of the road has also been established. The project will improve safety and security control through better monitoring and recording of road traffic.

MMG is working with the local road police to manage road usage outside the mine site gate. This includes managing speed control, general vehicle safety, and road safety habits.

Benefits from the new road and power line are also being realised. In addition to better monitoring and maintenance access to the power line, our mine employees can now live in Lubumbashi and commute easily, and new partnerships have developed with provincial administration and local village communities.

Relevant material issues: **Road safety in near-mine communities,** Safety of our people, Community support for MMG, Local community and regional development



Kinsevere's power-line road is a public route used in various modes by the local community.

In addition, the use of reagents, chemicals and diesel fuel can create hazardous environments. We therefore test airborne exposure to these contaminants.

Qualitative Health Risk Assessments were completed at all MMG mine sites and major exploration sites in 2012.

In response to diesel exhaust being classified as a Class 1 Confirmed Carcinogen by the World Health Organization during 2012, we commenced and completed a qualitative health risk assessment for diesel particulate matter exposure at each underground mine site and developed action plans.

A detailed campaign and monitoring program for occupational hygiene exposures was completed at Rosebery mine in 2012, with a specific focus on the underground environment.

We also completed an occupational hygiene resource and capability review across MMG, and developed a training plan to start increasing capability with a key focus on our Sepon operation and the local workforce.

Malaria is a recognised health risk at the Kinsevere site. In 2012 we undertook a vector survey to inform the design of an effective malaria program (see the case study below).

We encourage our people to maintain healthy lifestyles through workplace health assessments, gym facilities or memberships, supporting other sporting programs, and facilitating a 24-hour employee assistance program providing confidential counselling services to employees and their families.

CASE STUDY REDUCING MALARIA AT KINSEVERE

Work is under way at Kinsevere to reduce malaria infection in employees and contractors.

Malaria is one of the major causes of death in the DRC, caused by parasites transmitted to people through bites by infected mosquitos. Early diagnosis and treatment prevent deaths and reduce disease malaria transmission. In 2010 90% of all malaria deaths, out of an estimated total of 655,000, occurred in the World Health Organization (WHO) African Region.

In 2012, Kinsevere started a malaria risk assessment, including a review of:

- » Studies undertaken to date;
- » Camp layout and design;
- » Malaria management in place, including education, treatment and vector control; and
- » Mosquito species analysis, on site and in surrounding villages, to establish the mosquito types and check for resistance to the chemicals planned for spraying.

The resulting Malaria program involves:

- » People (including contractors) sleeping under insecticide-treated mosquito nets (2,000 nets purchased);
- » Concentrated fogging program, on site and within a 2-kilometre radius of the mine, using the new vehicle fogging machine;
- » People recruited from local villages to undertake spraying with appropriate training;

- » A long-sleeved clothing policy on site;
- » Access to anti-malarial medication;
- » Access to mosquito-repellent lotion on site;
- » Additional laboratory equipment for the microscopic diagnoses of malaria from blood smears. We are training clinic employees in analysis techniques;
- » Refurbishment of the on-site laboratory; and
- » Information flipcharts and pamphlets on malaria prevention at the site in town and at community clinics.

The program will be deployed in 2013 with an outcome-monitoring process.

Relevant material issues: **Health of employees**, Employing local people, Employee training and development



The Anopheles mosquito, a common malaria vector.

CASE STUDY MUSCULOSKELETAL PROGRAM AT GOLDEN GROVE

In 2012 Golden Grove focused on identifying and assessing potential musculoskeletal injuries and areas of weakness within high-risk roles across the site. We then developed a tailored injury-prevention program to reduce the number of musculoskeletal injuries across the site.

Job Risk Assessments (JRAs) are used to determine physical capability requirements for high-risk positions and the potential risk of musculoskeletal injuries. A musculoskeletal assessment is then designed to determine the strengths and weaknesses of people in these positions.

These people then receive tailored exercise and stretching programs to increase their flexibility and strength where their physical capabilities don't meet the requirements of their positions.

The project began with the site drilling contractors in 2012. They have been identified as the highest-risk work group based on historic injury data. On completion of the intervention programs, a 40% reduction in musculoskeletal injuries is expected within this group.

More broadly, we are analysing general work performance data for trends to highlight common physical capability risks. We are using this information to design a daily stretching program for our people across the site. This program will enhance the current "warm-up for work" programs.

MMG will apply the intervention programs across other work groups at Golden Grove, building on the success of the work with the site drilling contractors.

Relevant material issues: Safety of our people



A musculoskeletal assessment in progress.

Contractor/supplier selection and management MI

Contractors make up a significant part of our workforce. They are MMG's responsibility while on site. Therefore, the selection of contractors with a good safety culture who are prepared to implement safety management systems consistent with ours is an important consideration in our contractor selection process.

We are developing formal systems that will require consistent assessment and management of contractors. We closely monitor and record contractor performance, and health and safety incidents, which are detailed in our performance statistics. Contractors are also included in our safety improvement and cultural change processes and we expect their management to demonstrate strong safety leadership in line with MMG's management.

In 2012 we developed a SHEC Contractor Management Standard and supporting documentation, which will be incorporated into MMG's supply management processes. These will enable improved contractor management through:

- » A robust assessment and selection process;
- » Application of MMG Health and Safety standards;
- » Provision of MMG safety and health requirements at tender stage;
- » Regular auditing throughout the contract with monitoring to ensure close-out of actions; and
- » Provision of support and coaching to meet our standards.

CASE STUDY SAFETY IS A VALUE ZERO IS POSSIBLE

After the fatality in February 2012, Sepon has placed a greater focus on contractor management and visible leadership. Driven from the top, the Sepon creed: Safety is a Value – Zero is Possible, and three key pillars for safety – visible leadership, visible workplace and visible behaviour – have been central to this approach.

Workplaces have become more controlled, with the following initiatives:

- » Engagement and training of contractors;
- » Setting standards and expectations for employees and contractors;
- » Setting up work areas to be safe and functional, with increased supervision;
- » Separation and delineation in work areas, critical for a visible workplace that is safe;
- » Ensuring that Safety is a Value is believed and an inherent part of working at Sepon;
- » Consistent and correct behaviours and leadership;
- » Visible leadership from all line managers on a daily basis, built into My Commitments and short-term incentive payments;
- » Quarterly Safety Action Meetings where people are removed from their workplace to focus on key safety issues and receive information and training;
- » Contractor Management Steering Committee to drive changes through Sepon's contract partners;
- » Planned task observations and layered audits for visible leadership; and
- » Encouragement of safety observations.

As a result, there has been a significant increase in safety observations, and a 30% improvement in total recordable incident frequency rate (TRIFR) and significant incident frequency rate (SIFR). There has also been better engagement with employees, contractors and the workplace.

However, we continue to focus on the engagement of contractors in our safety standards, and strengthening the Safety is a Value program across our operations in Laos.

Relevant material issues: **Significant and high fatality-potential incidents on MMG sites,** Safety of our people, Contractor/supplier selection and management, Workplace and corporate culture



Through the Safety is a value – zero is possible program, an even greater emphasis was placed on safety at Sepon in 2012.

Aviation risk management - update

Air travel is necessary to transport people and supplies to our remote mining, exploration and project sites, bringing with it the risk of serious injury and fatalities.

To assess and manage aviation risk, we engaged HART Aviation, specialist aviation safety advisors and auditors, to undertake risk assessment audits of the service providers and facilities utilised for air travel. Throughout 2012 we worked very closely with HART Aviation to update our Aviation Standard and supporting documentation. The revised standard and documentation will be rolled out in 2013, with clear responsibilities for chartering aircraft and approving commercial flights for medium and high-risk airlines. The types of aircraft able to be chartered, and the prerequisites for pilot experience, are clearly defined.

Major improvements incorporated into the updated aviation standard and documentation include:

- » Two pilots and twin-engine aircraft are specified for passenger flights;
- » Risk-based escalation of approval for commencing or continuing an activity that does not meet the new standard. For example, Sepon's use of single-engine aircraft for passenger travel will require Executive General Management approval;
- » Expanding the minimum standard operating procedures required by the aircraft operator; and
- » Line management accountability for all aviation activities.

Public interaction with operations MI

Public interaction with our mining operations poses safety and security risks to both local communities and MMG. The right measures are required to minimise and manage these risks. Managing public access and interaction with our operations includes the use of community roads near our sites, and management of artisanal mining activity. We recognise the human rights

and other concerns around the employment of private security personnel to protect the safety and security of our people and operations. In 2012 we developed the Security Standard, incorporating our commitment to the Voluntary Principles on Security and Human Rights (United Nations Global Compact). The standard will be deployed in 2013.



New gates at Sepon in Laos are assisting management of the public's interaction with mine activity. A market in the immediate vicinity draws people who use various modes of public and private transport.

2013 CHALLENGES

In 2013 we will continue to improve our SHEC Management System and our safety culture as we strive to improve our performance and grow our business. Key challenges, related to our three-year sustainability goals and targets, are:

- » Improving and implementing Safety and Health standards;
- » Embedding MMG processes and culture into newly acquired operations;
- » Reducing repeat incidents: improving the investigation of significant incidents to prevent recurrence;

- » Strengthening our contractor management and monitoring program;
- » Improving hazard identification and awareness;
- » Implementing the Occupational Health Standard;
- » Increasing the occupational health and hygiene capability in our developing country operations; and
- » Reducing fatality risk, implementing and validating the Fatal Risk Control Standard and implementing the MMG Life Saving Rules.



We aim to secure MMG's social licence to operate through strong and responsive relationships.

OUR APPROACH

We believe that we contribute to progress through fostering sustainable partnerships, social development and self-sustaining healthy communities beyond the life of our mines. MMG is building relationships based on trust by engaging clearly, openly and honestly with our host communities. Our stakeholders include internal and external people and organisations with an interest in our activities.

Building relationships with stakeholders is essential to maintaining our social licence to operate and the sustainability of our business. We manage these relationships on many levels and through each employee, operational site and functional manager.

PERFORMANCE

As part of a three-year goal to benchmark our social practices to the ICMM Principles, we have strengthened our approach to stakeholder relations, community development and social investment.

The launch of the refined community relations strategy and Management System in 2012 included a revised vision and mission, as well as policies, standards and guidelines. Supporting these are management tools, and site self-assessment and gap closure processes. This involves building capacity within our teams and undertaking reviews and audits. In 2012 activities to embed the system were under way at operational sites, and will continue in 2013.

Our new Community Stakeholder Engagement Standard provides clear expectations and requirements around

stakeholder identification, engagement and management. The standard is linked through to our business strategy under the Reputation pillar. This linkage guides our approach to stakeholder relationships and is supported by a new MMG-wide stakeholder engagement software tool. The tool helps plan, manage and track our engagement processes, and will be adopted by all sites in 2013.

These developments take us toward a key three-year target: to resolve our top social risk register actions as far as possible, all of which have been consolidated under one risk – to maintain MMG's social licence to operate.

In 2012 we developed nine community relations standards, as well as associated guidelines, internal assessment tools and resources. The Executive Committee endorsed six of the nine standards, which we then deployed. The final three standards will be deployed in 2013. Internal assessments, validation and subsequent development of gap closure plans were completed for four of these six endorsed standards, across our five operational sites and Dugald River. Two internal assessments were also completed for the Izok Corridor project.

Community support for MMG MI

The importance of MMG's community reputation was reinforced in 2012 with the integration of Kinsevere, the project development of Dugald River mine and the submission of the project proposal for our Izok Corridor project. The value that we place on integrity continues to guide our planning and performance as a trusted partner.

We monitor and respond to community sentiment regarding MMG's operations and behaviours. Our Community Perception Survey (Community Trust Index) process changed in 2012. Key response elements and indices have evolved to be conducted as part of other site-related surveys, streamlining our internal and external survey process for the sake of efficiency and minimising disruption to stakeholders. We will run the refined process again in 2013. In the meantime, pulse surveys – smaller localised surveys – have captured relevant information at Sepon and Kinsevere.

All sites are required to register, investigate and resolve community complaints. Eighty-two grievances were recorded in 2012, including the operational impact on farming land, dust, noise, traffic speed and congestion, the impact of road work on farming, large-scale tree cutting, artisanal mining and a borehole drying up. This is an increase over the 37 grievances recorded in 2011.

At Sepon, a new grievance process was developed and implemented with local communities. As expected, we saw a rise in community grievances as awareness and adoption of this system progressed. The addition of Kinsevere into our portfolio has also increased the overall number of grievances received.

We continue to tailor our facilities for grievance management to the communities at each site. The new system at Sepon includes trained village-level grievance committees and a hotline for community members. In 2012 48% of cases were reported using the new hotline.

In Rosebery, the Community Liaison Office is open on weekdays to provide an avenue for information and to hear locals' concerns. A verbal response is given to any concerns with a phone call or personal visit within 24 hours.

Kinsevere has started formalising its grievance system, tailored to the surrounding village community.

In 2012 Century restructured its Community and Stakeholder Partnerships team to be more responsive to community concerns and grievances. Supporting this restructure was the establishment of a Freecall enquiries line to ensure appropriate logging and quick follow-up of enquiries and requests.

CASE STUDY IZOK TRANSITION FROM EXPLORATION TO PROJECT DEVELOPMENT

The High and Izok Lake deposits are in the Kitikmeot region of the Slave Geological Province of Nunavut, in northern Canada. Izok Lake is a significant deposit with a mineral resource of 14.8 million tonnes with 12.8% zinc and 2.5% copper. High Lake, north of Izok, has 17.2 million tonnes with 3.4% zinc and 2.3% copper.

With a long history of exploration and engineering studies, High Lake was first discovered in 1954 by Kennarctic Exploration and Izok Lake by Texasgulf Sulphur in 1974. The name Izok comes from it being deemed "Is OK" when the potential was realised.

Mine development in this region is in challenging conditions and a sensitive environment.

In September 2012, we submitted an Izok Corridor Project Proposal to the Nunavut Impact Review Board (NIRB) and key authorising agencies, commencing the environmental assessment and regulatory review process.

MMG's access to land is governed by the Canadian Government, through the *Territorial Lands Act* (1985), and the Kitikmeot Inuit Association (KIA), through the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada* (1993), referred to as the *Nunavut Land Claim Agreement*. We work closely with both parties to meet all legal obligations and facilitate their inspection of activities. Visits to the five Kitikmeot communities take place a few times a year, including open houses, answering questions, meeting with local hunters and trappers associations and local government.

Construction and operation of a mine road on the western edge of the Bathurst caribou herd calving grounds present a sensitive biodiversity issue. The herd provides food security and economic support for several Northwest Territories First Nations. In recent years, the herd has undergone a dramatic reduction in number, resulting in harvesting restrictions.

We are now awaiting instructions to complete the environmental assessment and regulatory process, alongside local stakeholder consultation.

Relevant material issues: **Community support for MMG**, Biodiversity management, Investment in new acquisitions and projects



Izok Lake exploration camp.

Below is a matrix of our current broad stakeholder groups, their areas of interest and our engagement strategies, including those pursued in 2011:

STAKEHOLDER	STAKEHOLDER GROUPS	AREAS OF INTEREST	ENGAGEMENT STRATEGIES
For employees	MMG employees and contractors at: » Mine sites; » Development projects; » Exploration projects; and » All offices including Group head office in Melbourne.	Staff safety and wellbeing – safety management and performance. Sustaining our economic performance – business strategy. Talent attraction and retention – values and behavious, working conditions, work plans, remuneration and benefits, career opportunities. Diversity – equal opportunity	 » Safety meetings; » Shift change meetings; » Management and CEO presentations; » Emailed and written updates; » Corporate and individual site intranets; » Quarterly employee magazine; » Cultural and people development programs and training; and » Annual employee perception surveys and consultative forums.
Communities	 » Host and regional communities; and » Local villages and towns near our operations. 	Post-closure community expectations and community and regional development – impacts on local communities, community investment and development, local amenity and housing. Stakeholder relationships – local business support. Environmental management and compliance – environmental impacts and management. Public interaction with operations – health and safety impacts. Economic sustainability – future financial viability. Community and regional development – sutainable employment post mine life.	 » Community investment projects; » Quarterly and monthly newsletters; » Meetings; » Written communications; and » Local media.
Suppliers	» Businesses from which to purchase products and services.	Sustaining our economic performance – economic security of the business, supply opportunities, payment processes. Contractor selection – health and safety, contractor management procedures, supplier contractual conditions.	» Tender and contract documents;» Direct communications; and» Induction and training.
Government	 Regulators and government authorities with responsibilities for the areas where we operate; and Local, state and federal government in countries including Australia, Lao PDR, DRC and Canada. 	Government relations – compliance with permits and licences, social policy and fiscal regimes applicable to the resources sector. Community and regional development – engagement with host and local communities, community investment and development, market access. Environmental management and compliance – environmental impact management, product stewardship.	 Statutory and licence reporting, regular meetings; and Written communication.

STAKEHOLDER	STAKEHOLDER GROUPS	AREAS OF INTEREST	ENGAGEMENT STRATEGIES
For investors	 » Retail investors in Hong Kong; » Global institutional investors; » Analysts and brokers; » Stock commentators; and » China Minmetals Corporation (majority shareholder). 	Company performance. Growth strategy including acquisitions, projects and exploration. Commodity and market outlook. Board and governance. Corporate responsibility and sustainable development.	 » Announcements to the Stock Exchange of Hong Kong in accordance with the Listing Rules; » Quarterly production reports, interim and Annual reports; » Investor roadshows, meetings, teleconferences and site visits; » Attendance at major global mining conferences; » Shareholder communications; and » Monthly and quarterly shareholder reports to the Board.
Non- government organisations	 » Non-government organisations; and » Special interest groups. 	Community and regional development – impacts on local communities, community investment and development, community health, local infrastructure development and investment. Public interaction with operations – interactions with local communities. Human rights. Bribery and facilitation payments. Workforce localisation. Environmental management and compliance – environmental impacts and management. Post-closure community expectations. Management decision-making – governance, risk management, Board composition and operation.	 » Sustainability report; » Meetings; » Media releases; » Website content; and » Site visits.
Media	 » Local and regional media in the areas of our operations; and » Finance and resources media internationally. 	Potential for interest in all areas of material issues, particularly those of current interest to other stakeholders.	» Media releases;» Website content; and» Media tours, interviews.
Industry	 Other mining businesses; Industry associations; and University and technical training providers. 	MMG share price – earnings and production results, share price performance against industry peers. Acquisition investment – project announcements, merger and acquisition programs. Management decision-making – governance, risk management, Board composition and operation. Stakeholder relationships and government relations – support for industry initiatives, involvement in industry forums, support for industry-specific training and development.	 » Membership of international, national and regional industry groups; » Representation on executive and working group committees; » Sustainability reporting against GRI and ICMM benchmarks; and » Sponsorship and support of technical training institutions and organisations.

Government relations

We develop and maintain relationships with the governments of the countries, states and provinces in which we operate to understand local issues, demonstrate contribution to regional social and economic development and ensure compliance. Understanding the priorities of governments, in particular when moving into a new jurisdiction, is critical to sustainable business success.

MMG ensures that government representatives at all levels are informed of our activities and operations in the areas where we have operating mines, development and exploration projects. In Queensland, we have a tripartite agreement with the state government and local Native Title holders, called the Gulf Communities Agreement, under which the Century mine is operated. In Laos, we are joint owners of the Sepon mine with the Government of Laos, which holds a 10% equity investment in the operation.

Each of our mines has a Stakeholder Engagement and Government Relations Plan that aims to build awareness of operations and recognition of the site's economic and social contributions at a local, state and national level.

Managing our reputation

With Reputation as one of MMG's four strategic drivers, the Reputation Management Plan was identified as a key work program in our business planning process during 2012. It incorporates government, investor and external stakeholder relations strategies, as well as brand management and corporate positioning.

The development and launch of our Code of Conduct during 2012 was a significant part of this work program. It encompasses employees, contractors and other agents.

During 2012, MMG also conducted a branding, positioning and reputation project, leading to a restatement of our core beliefs. We developed a new positioning statement: "We mine for progress", along with refreshed design livery and rollout of an associated work culture program. This project extends into 2013.

Working with Shareholders

MMG's shareholders include individuals, institutional investment funds and corporate shareholders, including our majority shareholder, Chinas Minmetals Non-Ferrous Metals Company Ltd (CMN). Beyond compliance requirements, MMG aims to ensure that effective communication is maintained, and that ready, equal and timely access to clear and balanced information about the Company (including its financial performance, strategic plans, material developments, governance and risk profile) is available to the shareholders to enable them to exercise their rights in an informed manner.

The relationship with our majority shareholder, CMN, is an important partnership and represents a strategic asset for MMG. While respecting the rights of independent shareholders, MMG cooperates closely with its major shareholder to share technologies, inform strategy, raise finance for business activities and promote sustainable business practices. Three CMN employees occupy non-executive positions on the MMG Limited Board

of Directors offering counsel and insight to strategic direction and business governance. Close cooperation also exists at many functional levels to advance the interests of each organisation to drive best practice across operational and support areas, develop sustainable development programs and establish mutual benefit. MMG's unique position with respect to State Ownership of its major shareholder, allows the Company to more freely access finance in the attractive Chinese market with the support of CMN and State-controlled banks.

MMG also maintains an active briefing and conference program involving senior management and Investor Relations team members to inform all shareholders of business strategy and performance. MMG publications, website and stock exchange releases offer an opportunity for shareholders to further understand the MMG business.

Local community and regional development MI

Our social licence to operate is related to the contribution that we make to our communities and wider society beyond the life of our mines. Strong economic performance underpins our ability to make these investments.

Our social investment activity must consist of transparent, measurable and sustainable contributions, whether that be through direct investment, sponsorships, donations or in-kind contributions. These are often facilitated through partnerships with government and non-governmental organisations to support local business development and educational, employment and health programs.

In determining our social investment activity, we rely on three things:

- Baseline studies and social impact assessment and management – health and safety impacts, traffic, noise, dust, environmental disturbance, quality of life and economic impacts;
- 2. Understanding societal issues directly or indirectly related to our operations health and education standards, infrastructure, corruption, security, conflict, revenue transparency, human rights and poverty; and
- 3. Direct social benefits and opportunities for local communities and broader society to benefit from operations jobs and local suppliers, infrastructure developments, spend in local economy, taxes and royalties.

We adopt the ICMM definition of community development as the process of contributing to the long-term strengthening of community viability, improving people's quality and control of life. Community sustainability can be supported by mining practices that help convert one local asset: non-renewable natural resource capital, into another local asset: sustainable human and social capital.

We strive to tailor our social investment to the needs of the communities around each of our sites to support sustainable growth initiatives, the development of local enterprises, stronger relationships with our stakeholders and enable greater participation of local communities in their own development. However, we must ensure that we have a clear, transparent social investment strategy

supported by management systems to prevent reactionary responses to stakeholder issues or create a dependency culture in our host communities. The recent development of the Community Relations Management System provides an additional framework for a uniform and consistent approach to social investment initiatives.

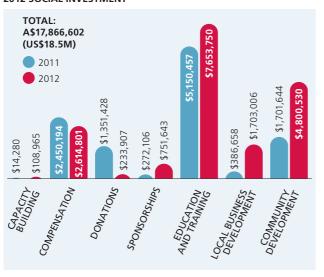
The graph below provides a breakdown of our social investment across local host communities in various investment areas. In 2012 a total of A\$17.8 million (US\$ 18.5 million) – approximately 8.4% of net profit after tax (or 7.2% excluding compensation, which forms part of sites' community expenditure budget) – was invested in our local host communities, with nearly half of this sum going into local (non-employee) training and education initiatives. This compares with the 2011 investment reported (A\$11.3m), due primarily to two key factors: firstly, the inclusion this year of investment from Kinsevere, MMG headquarters, and Izok Corridor projects, and secondly, a 55% reduction in MMG's net profit after tax. This investment commitment compares to an industry norm of around 1% of net profit after tax.

In 2012 we developed and approved new guidelines for sponsorships, donations and partnerships. Social Impact Assessments were also undertaken at Golden Grove, Rosebery and Century.

Local business development and procurement

More than A\$1.7 million (US\$1.75) was invested directly into the development of local businesses and market demand that can endure beyond the life our mines. The process includes technical and business management training. Most investment occurred at Sepon and Kinsevere, with local procurement programs also in place at the Australian sites. In 2012 local enterprises in the Savannakhet province in Laos generated more than US\$2.4 million in revenue from goods and services supplied to the mine. Seventeen businesses and more than 200 people earn their living from this market. Since the local program began in 2003, the combined total income of these local businesses is more than US\$13 million.

2012 SOCIAL INVESTMENT



CASE STUDY LOCAL SCHOOL DEVELOPMENT AT SEPON

The children of Latdengyai village, near Sepon, walk 2.5 kilometres every day to nearby Latdengnoi village to attend school. While children in Years 3 to 5 can make the journey, those in Years 1 to 2 are too young to do so.

Back in 2009, the Latdengyai village community requested that the District Education Office build a school in the village. Unfortunately, this request was denied due to lack of budget for school construction and provision of a teacher.

In 2011 Latdengnyai received LAK56,000,000 from the Sepon Village Development Fund (VDF). MMG LXML Sepon established the VDF and continues to invest in maintaining it. While this was not enough for the construction of the school, based on the feasibility study, the villagers did not give up. They organised a village meeting and came up with the following ideas:

- » Supplementing the VDF budget by supplying wood for construction of the school; and
- » Based on this contribution from the village, approaching the District Education Office again to provide a teacher.

The District Office subsequently accepted this proposal and construction began. The school was completed in May 2012, with the sawn wood contribution valued at LAK 38,869,000.

The school has one teacher for 43 students, of which 13 are girls. The children are attending school and now benefit from a safe local education option.

Relevant material issues: **Local community and regional development**, Community support for MMG





Top: The Latdengyai village school completed in May 2012. Bottom: Children from Latdengyai village in class at the new school.

MMG SITES' TAILORED INITIATIVES FOR LOCAL COMMUNITY ENGAGEMENT AND SUPPORT

SITE	SOCIAL INVESTMENT INITIATIVES
Century	Century commissioned a Social Impact Assessment (SIA) to better understand the social and economic contribution of the mine since operations began and the impact of the end of production on the Lower Gulf region;
	Restructure of the Community and Stakeholder Partnerships (CSP) team;
	Yippi Gulf Indigenous Health Council support to investigate improvements in service;
	Comprehensive training and employment program, which includes ongoing mentoring, support and after-hours social activities to help Indigenous employees transition into mining careers and gain skills and qualifications;
	More than A\$1 million for Aboriginal Development Benefits Trust (ADBT) to assist with the development of local Indigenous businesses, in accordance with the Gulf Communities Agreement;
	Pre-vocational programs for young Indigenous people, with 21 participants transitioning into traineeships and apprenticeships in 2012. These programs are funded in partnership with the Queensland Government; and
	Support for local schools through the Cairns to Karumba Bike Ride, ongoing in-kind and financial support for Karumba State School, the Doomdagee State School Exchange and the MMG Century Living Leadership School Awards Program
Golden	Yalgoo Community and Youth Development Officer appointed in 2012;
Grove	Bayalgu Pre-employment Training Program continued in 2012 with two courses delivered and 12 graduates, of which 11 have found work;
	Geraldton Mining Scholarship awarded to Geraldton high school student; and
	Geraldton University Research Centre funded employees to attend the world Indigenous housing conference.
Kinsevere	Built Kifita village school with six equipped classrooms, offices, a community boardroom and ablution block;
	Rehabilitated the Kiswishi bridge at Kandulwe village;
	Equipped Kinsevere community clinic and supported Ministry of Health employees;
	Drilled five new boreholes and installed water pumps in the villages along the power-line and mine-access road;
	Supported over 580 community members through the Farmers Assistance Program for maize and legume crops;
	Vegetable growing project involves 153 farmers in 16 villages. Produce grown for the site kitchen, purchased for US\$46,512 in 2012;
	Power-line grass cutting by 60 young people from six villages;
	24 young men from Kilongo village received rock crushers to produce aggregates, purchased by the mine for US\$41,800 in 2012;
	Water-quality monitoring and pump maintenance with 110 trained local technicians from 17 villages;
	Womens' health education sessions on HIV, breast feeding, hygiene and cooking;
	Teacher support, with 42 teachers funded in four schools;
	Community Cinema includes video equipment and satellite dishes; and
	Soccer tournament, with sportswear and equipment for ten village teams.
Rosebery	Traineeships, scholarships and excellence awards for local children;
	A Schools Fruit Program to educate local children on the value of a daily piece of fruit in their diet;
	Men's Health Night entitled "Handball Stress – It Will Kill You";
	Local radio shows to let the community know what MMG does; and
	Purchase of Rosebery's historic Band Hall Building for use as the Rosebery Heritage Centre.
Sepon	2012 Household Survey highlighted trends in health, education and livelihoods/food security and community perceptions of the mine site;
	Village Development Fund (VDF) has increased from 13 to 29 villages;
	Four bridges were constructed along road number 10;
	UNICEF Child Nutrition Project to reduce nutrient deficiencies in children under five;
	Small and Medium Enterprise Promotion and Development Office (SMEPDO);
	Lao-Indian Entrepreneurship Development Centre (LIEDC);
	Rice milling survey into local potential for rice milling businesses;
	17 local business groups supported to supply the mine site;
	Scholarships and traineeships, with 17 graduate trade trainees and 10 graduate data entry clerks in 2012; and
	Sponsorship for the Annual Conference of Lao Paediatricians, World Water Day, Asia Europe Business Forum, and Lao Ministerial visits to Rosebery mine.
Group	Broadened the MMG-UNICEF partnership with a 3-year commitment to the 1000 Day Project supporting child nutrition in Laos
Office	Strategic partnership with Newcrest to establish the Monash University Mining Engineering School;
	Annual sponsor of the Chinese Museum, Melbourne;
	Water category sponsor, Banksia Awards, Australia; and

When MMG acquired the Kinsevere mine in February 2012, we inherited a vibrant community development program that provides a diversity of support to local people, relating to agriculture, water and civil infrastructure, education and health.

Maize production

Under a 2008 provincial government decree, mining companies were required to support local food supply by directly contributing to the availability of maize in their employees' communities. Kinsevere assists through a scheme where small-scale farmers apply to the Community Department for a starting allocation of fertiliser and maize seeds. These are specifically developed for local conditions by agronomists at the University of Lubumbashi. The high-potential seeds are accompanied by a planting and growing tutorial, which results in a better-than-usual grain return. The farmers are then able to pay back this in-kind loan of maize seed, plus an addition for "interest", after successive crops.

Thereafter, as crops develop, they are able to lease or buy more land to further improve their output. Their learning is shared with other farmers. To supplement the provision of maize seeds, and support maize's high demand for nitrogen from the local soil, different nitrogen-fixing ground nut crops, including peanuts, are also allocated upfront to farmers. These also provide variety in both diet and the local market.

The Community Department manages the warehousing of the crop seed inventories and distributions as well as acting as a control on local maize market stability, which can reduce in price with over-supply.

In 2012 589 farmers received 200 tons of fertiliser and 12.5 tons of maize seeds, and 370 farmers received 10 tons of ground nut seeds. Farmers' harvests yielded 304 tons of maize grain.

Vegetable growing

Vegetable-growing "starter packs" are provided to local village farmers, with a preference for women, to encourage a diversity of crop produce, nutrition and income support. Packs consist of vegetable seedlings, pots, watering cans and tools, all delivered to teaching circles in local villages. One hundred and fifty-three farmers in 16 villages have received packs so far. The mine purchases and uses the produce from the farmers to provide foundation demand beyond the local village market. In 2012 farmers earned US\$46,512 from MMG. Once growers are established, there is further market support for them to expand their volume of produce and enterprise size.

Crop fields and fish ponds from mine water

During 2012, piloting commenced of co-farming field vegetable crops and Tilapia fish in ponds on mine land, using treated water from the mine's dewatering

channel. The project aims to supplement the mine's kitchen, provide fish and fish farm teaching to the local villages, and allay any local concerns about water quality.

Village water bores

Expansion of the village bore program continued, where the closest 18 villages to the mine receive bore holes to local aquifers and manual pump heads. Twenty-eight bores are in place (5 drilled in 2012), with ten to be constructed over the next two years. These bores allow villagers to extract a treated and safe supply of water, and are managed by locally trained monitors.

School building and teacher support program

Kinsevere is funding new schools in centrally located villages around the mine. Four have been built so far, with Kifita village school facilities, including a community cinema hall, completed in 2012. Forty-two teachers were funded to work in the four schools.

Women's health education

Basic health education training continued for women in local villages, supported by MMG and delivered by local non-governmental organisation (NGO) consultants.

Village clinic

Built under Anvil's tenure to serve villages to the western side of the mine, the clinic was equipped by MMG in 2012 and is awaiting formal agreements to be signed with the provincial health department authorities.

Rock crushers and aggregate purchasing

MMG has supplied rock crushers to young men in Kilongo village and in 2012 purchased US\$41,800 worth of the gravel they produce, for mine use.

Plant nursery

A plant nursery, run by the Community Department, grows a variety of both local and non-indigenous species. These are used for local village and mine rehabilitation and plantation. The department distributed 8,700 saplings to nine villages in December 2012.

These programs will all evolve during 2013.

Relevant material issues: Local community and regional development, Local employee management capability development



Local farmers learn about mechanised crop sowing at one of Kinsevere's agricultural education sessions.

CASE STUDY STANDARDS FOR HUMAN RIGHTS AND SECURITY

Progress was made in 2012 on human rights and security, including:

- » Developing two important standards on human rights and security;
- » Updating of the Anvil protocol for working with security forces;
- » Rolling out guidance on anti-bribery and anticorruption, including manager training; and
- » Participating in the Extractive Industries Transparency Initiative process at Kinsevere and an Australian pilot.

The draft standards on human rights and security were developed in 2012 for deployment in 2013, alongside consultation with the sites and building awareness of the requirements. We now need to review current practice to identify any gaps against the new standards.

Human rights

At priority sites, Kinsevere and Sepon, where there is a higher likelihood of local community conflict, human rights risk assessments will be undertaken, alongside an audit against the Voluntary Principles on Security and Human Rights. These will result in an action plan to close any gaps identified.

The standard will require that all sites recognise and manage human rights and security risks relating to their activities, including:

- » Annual process to identify and assess human rights, including risks of conflict around, or associated with the site;
- » Human rights impact assessment where significant human rights risks have been identified;
- » Plan to minimise identified risks and potential human rights abuses;
- » Process for reporting and investigating allegations of human rights abuses by sites, their contractors or suppliers; and

» System for tracking and monitoring the responses to allegations of human rights abuses.

Security

The standard will also require all sites to assess security risks and appropriately manage them to protect people and property, including:

- » Security management, such as systems with the capacity to obtain early warning of security threats, where possible cooperating with local authorities and law enforcement to identify and address potential threats to minimise their impact should they occur;
- » Advancing alignment to the Voluntary Principles on Security and Human Rights;
- » Weapons management, including that people involved in the carriage and use of weapons must be authorised, trained, certified competent and licensed;
- » Unexploded ordinance (UXO) management; and
- » Prevention of crime against MMG.

The standards on human rights and security are yet to be approved for implementation in early 2013.

Relevant material issues: **Managing human rights issues**, Ethics, anti-corruption and business conduct



Human rights risk assessment is a focus at Kinsevere in 2013.

Managing human rights issues MI

We respect fundamental human rights and cultures, customs and values in our dealings with employees and others involved in our activities. We strive to address human rights issues through our values, community relations strategy and Management System and related programs.

Managing the impacts of our activities on host communities, their homes and land through effective land management, open consultation processes and, where appropriate, resettlement, is an important element of our human rights management.

Under our ICMM alignment program (addressing Principle 3 – "Uphold fundamental human rights and respect cultures, customs and values in dealings with

employees and others who are affected by our activities"), we recognised a need to further develop our policies, principles and standards. In 2012 a Human Rights Standard, Guidelines and Internal Assessment Tool were drafted, involving site consultations. These will be reviewed by the executive team and then deployed in 2013.

MMG has developed a broader human rights education and risk assessment program for launch in 2013 at priority sites (particularly Kinsevere and Sepon, where there is a higher recorded likelihood of local community conflict). A schedule has also been established for moving towards alignment to the Voluntary Principles on Security and Human Rights (United Nations Global Compact) during 2013–2014, including an audit against the principles for priority sites.

During the integration of Kinsevere mine and its associated assets in 2012, we integrated our new standards, experiences and approaches to human rights management into the site's operation. Through our integrated MMG-wide approach, risk assessments for SHEC areas were completed at Kinsevere and plans for the mitigation of key risks developed.

No resettlements occurred in relation to our sites within the 2012 reporting period.

Managing community cultural heritage around MMG sites MI

We are working with host communities to preserve cultural heritage, both tangible (e.g. historical artefacts found during mining) and intangible (e.g. customs, beliefs, songs and stories).

As new members of the communities in which we operate, we encourage and foster cultural heritage preservation where there were not resources to do so before. We seek to understand community concerns, customs, beliefs and traditions, alongside transparent and open dialogue about heritage priorities in the regions in which we operate.

A Cultural Awareness and Heritage Standard, Guidelines and Internal Assessment Tool were developed, endorsed by the executive team and deployed in 2012. Internal assessments and gap closure plans for alignment to the standard were completed at all operational sites and projects.

In 2012 at Sepon, site-specific Cultural Heritage Management Plans were engaged. These plans outline monitoring and management guidelines for identified cultural heritage sites. The baseline research on intangible cultural heritage undertaken during plan development has led to the MMG-funded construction of a district Cultural Heritage Centre. It will open in 2013. The centre houses and protects cultural heritage for public viewing.

Golden Grove made progress with heritage surveys on the southern and northern proposed exploration areas, involving Traditional Owner groups. MMG developed a Cultural Heritage Management Agreement, which was endorsed by the local Indigenous group, the Badimia people, with the Widi people engaged in initial discussions.

Century continues to engage with the Waanyi people on heritage management relevant to exploration work on tenements.

CASE STUDY ANCIENT BOATS FOUND AT SEPON

Mining work undertaken at Thengkham South D area of Sepon mine in October 2012 uncovered some exceptional cultural heritage finds. The latest of many exciting archaeological discoveries at Sepon are 1,500-year-old wooden boats and ancient mine shafts.

"Two boats were recovered intact, with a third boat recovered in pieces. The longest boat is four metres long and was lying 15 metres below the surface. All are carved from a single piece of wood, with the chisel marks still visible on the surface," says Alichit Phommahack, Sepon's Senior Officer Cultural Heritage.

"Since the boats were lying on a hillside, not very close to water, it is presumed, pending further research, that they were used as ceremonial coffins," says Marion Ravenscroft, an archaeological conservator who works with the Department of National Heritage.

The mine shafts appear to be similar to those discovered in 2009 in the Khanong pit. The wooden buttresses used to reinforce the shafts have survived, showing sophisticated joinery and rattan lashings.

When the discovery was made, mining work stopped and Sepon's Cultural Heritage Unit was called in to investigate. Additional assistance was available as Sepon's annual archaeological dig was happening at the same time. The team included Dr Nigel Chang of James Cook University in Australia, experts from the Department of Cultural Heritage, employees from the Lao National and Savannakhet Museums, employees

from the District Office in Vilabouly and students from the National University of Laos.

As well as removing the items found at Thengkham, Dr Chang and his team continued excavations at the Peun Baolo site, where there is evidence of mining activity occurring up to 2,300 years ago. This year's excavations uncovered stone crucibles (used to extract copper from the ore), copper ingots, ceramics, jade beads and what may have been a furnace used for smelting.

Excavation work is continuing in these areas of significance.

Relevant material issues: Managing community cultural heritage around MMG sites



Excavation of the ancient boats found at Thengkham South D. Photo © Dr Nigel Chang

CASE STUDY CLOSURE CONSULTATION ACROSS MMG

In 2012 closure consultation was conducted across MMG.

Kinsevere

Kinsevere is expected to have a mine life until 2024. In October/November 2012, MMG undertook community consultation to discuss and plan the mine's closure. This was not undertaken before acquiring the mine in March 2012. The plan followed our Closure Standard, under the Group Community Relations Management Plan.

The community's preferences for the closure process, final land rehabilitation and post-closure community support were identified. Village heads and representatives, local business and social development organisations and local, state and national government and departmental representatives were involved. We are assessing consultation responses and integrating them into the early-stage technical mine closure process. This includes setting aside a budget for the closure process. Secondary consultation forums are planned in forthcoming years as part of the ongoing planning and staging process.

Century

Century commissioned a social impact assessment (SIA) to help clarify and quantify the social and economic impacts of the end of open-cut zinc production at Century in 2016. Study findings will be used to assist the mine to partner with government, Traditional Owners, community and other organisations to build a positive lasting legacy from the mine's operations.

Other activities included developing landform visualisations to assist with community engagement and meetings with Traditional Owners and other key stakeholders. Community consultation will increase markedly from 2013 as the mine approaches the end of open-cut zinc production.

Sepon

Sepon is expected to have a mine life until 2020. The Government of Lao and other local stakeholders are engaged in the Sepon closure planning process via the Sepon Mine Closure Sub-Committee. Workshops are held to encourage participation in closure planning. Workshops in 2012 focused on outlining the closure planning and provisioning process, as well as beginning to develop draft closure criteria. We have also pursued capacity-building activities. For example, a number of study trips have been coordinated (2010 and 2012) to a successfully closed mine site in Borneo.

Golden Grove

Golden Grove is expected to cease operation in 2022. Between October and December 2012, Golden Grove undertook a social impact and community needs assessment. This assessment incorporated the social aspects of preparing for consultation and engagement for mine closure. The community was consulted about options for closure of the Muralgurra area.

Rosebery

Rosebery is expected to have a mine life until 2025. As part of Rosebery's first social impact assessment, completed between November 2012 and January 2013, MMG asked stakeholders about the site's relationship with the community, as well as gauging their understanding of closure and related impacts, opportunities and challenges. Stakeholders included individuals, community groups and local, state and federal government. Stakeholder concerns regarding mine closure were the focus. We are planning a Community Perception Survey for February 2013.

Community consultation and technical and financial planning for closure continue into 2013.

Relevant material issues: **Managing the life of mine/closure and post-closure planning,** Community support for MMG, Environmental impacts left over after mining, Contribution to local and regional economies



Community closure consultation at Sepon involved local stakeholders as well as the Lao Government.

Managing life of mine/closure and post-closure planning MI

We engage local communities at the commencement of operations to help build a future beyond mine closure, including developing sustainable local economies and managing rehabilitation and maintenance of the former mine site. This is a life-of-mine process now coordinated through corporate-to-site management levels.

Responsibility for our mine sites reaches beyond extraction operations to include closure, care and maintenance, and rehabilitation. Mitigating post-closure host-community impacts and including the local economic and livelihood impacts are important in our long-term strategy and planning.

In 2012 we finalised and deployed a multi-disciplinary and risk-based Closure Standard, Guidelines and Internal Assessment Tool. A gap analysis was conducted against the standard for each site and action plans developed to close the gaps. We will carry out an annual review of progress with these action plans in the third quarter of 2013. All sites have closure plans in different stages of development, with further work required as these continue to be refined through community consultation. All sites have life of asset (LOA) plans, except Kinsevere, which will have an LOA developed in 2013.

The MMG Closure Steering Committee and Century Mine Closure Working Group were also established. The committee met four times in 2012, focusing on:

- » Understanding the Century Closure Work Plan for 2012, setting up a project focus for Century closure and sharing learning across MMG;
- » Understanding Sepon, Rosebery and Kinsevere Closure Work Programs;
- » Completing the first assessment against the Closure Standard across MMG to understand the level of compliance and actions required; and
- » Communicating raw closure costs and 2012 closure provisions.

Mine closure planning includes landform design and rehabilitation. MMG's environmental management standards refer to the need to identify and carry out progressive rehabilitation as soon as practicable, with the Closure Standard providing the overarching requirements.

MMG recognises that if legacy risks are not appropriately managed there may be:

- » Negative impacts on environment and public health;
- » Exposure to legal liability or financial loss in the form of a statutory liability to remediate or otherwise clean up legacy sites, or claims by third parties alleging property damage or personal injury;
- » Impact on the reputation of MMG in local communities and/or more broadly;
- » Continued impacts to the bottom line, where financial provision for known legacy risk must continue;
- » Continued reaction rather than proactive initiative and awareness of potential risks; and
- » Delays in future development approvals until regulators are satisfied that surrounding legacy sites are being managed effectively.

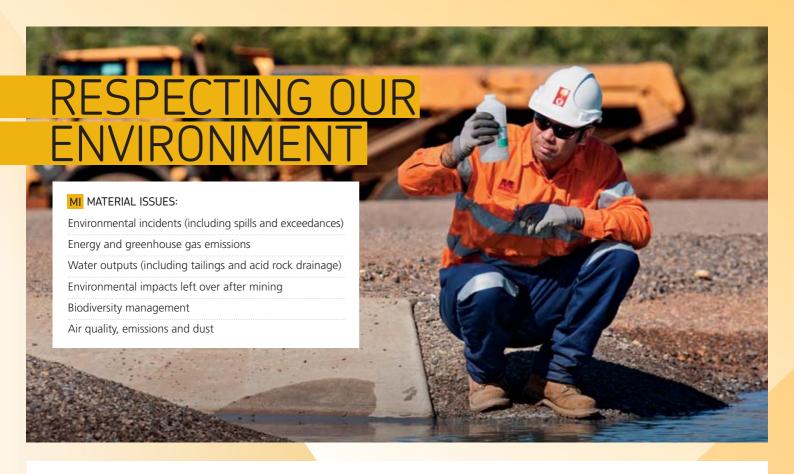
The MMG Legacy Risk Management Framework Committee identifies potential legacy risk sites within MMG operations and helps prioritise work programs to address the risks. Work in 2013 will focus on those with the highest priority and associated risk.

2013 CHALLENGES

Key challenges for 2013, related to our three-year sustainability goals and targets, are to:

- » Advance our ICMM alignment project consistent with our three-year plan;
- » Embed reputation management structures and supporting systems and reporting;
- » Complete human rights education and risk assessments at priority sites and identify steps required to align and join the Voluntary Principles for Security and Human Rights;
- » Gain executive committee endorsement for the final three community relations standards, guidelines and internal assessment tools.

- » Complete the External Communications Standard;
- » Continue site-based internal assessments against applicable standards and the development and implementation of action plans to close identified gaps;
- » Implement a comprehensive Community Perception Survey for each site delivering 5% increase on our established index;
- » Act on the findings of the assessment of social impacts from the closure of Century's open-cut zinc production, and progress the closure plan; and
- » Assess the impact of the Group-wide branding, positioning and reputation project.



We recognise that building excellence in managing environmental responsibilities is essential to our long-term success.

OUR APPROACH

MMG aims to minimise our impact on the environment, actively manage known environmental risks, and comply with legal requirements through continuous improvement. We equip our people with environmental standards, in alignment with relevant ICMM Principles, to effectively manage the environmental aspects of our operations.

In prioritising our issues we take a risk-based approach and aim to put in place response plans.

Our key environmental management priorities are:

- » Avoiding adverse environmental impacts and incidents;
- » Energy-use efficiency and greenhouse gas emissions;
- » Water management, including security and water discharges;
- » Mine closure, rehabilitation and post-mining impacts;
- » Biodiversity management;
- » Air quality, emissions and dust management;
- » Mineral waste management; and
- » Product stewardship.

These priorities naturally correspond to most of the material issues identified by stakeholders during our material issues determination process.

These priorities are managed through the SHEC Policy and associated SHEC Management System that includes performance standards, consultation and reporting. We have advanced the development of our integrated SHEC Management System that incorporates ISO 14001

environmental management system requirements. It includes formal, risk-based development and implementation of our new SHEC Policy, standards and a supporting internal assessment program to measure operational performance against environmental standards.

All established MMG sites (Avebury excluded) operated an ISO 14001 environmental management system in 2012, with certified systems at Sepon, Rosebery and Golden Grove, and Century. Kinsevere is working towards certification.

Dugald River received full environmental approval from authorities in late 2012. Environmental plans and an environmental management system (to ISO 14001 criteria) are now being developed for the site to meet requirements under the next stage of development.

As part of integrating the Kinsevere mine into our business (see the case study on page 16), MMG conducted a review of environmental processes and data against our SHEC Management System. A gap closure and action program is now under way to address the resultant priorities, including further environmental baseline assessment work. Ongoing environmental support will be provided to Kinsevere as we work towards strengthening the capability on the site to meet MMG requirements. Site visits to other MMG mines and ongoing participation within the MMG environmental network will assist with addressing Kinsevere's capability needs and improving the mine's understanding of company requirements. Water management and mineral waste management

will be key focus areas. This will include improved planning for the wet season, preparing a site water balance and increasing the understanding of the longer-term risks from acid rock drainage. Existing on-site rehabilitation programs and the ongoing implementation of the Biodiversity Action Plan will continue.

Water Management, Closure, Mineral Waste Management and Biodiversity Management standards were deployed in 2012. MMG reviewed and updated the existing Energy and Greenhouse Gas Standard, which is due for release in early 2013. We also developed a draft Social and Environment Impact Assessment and Management Standard and a draft Product Stewardship Standard for deployment in 2013. New standards will be developed in 2013 for land stewardship, air quality, non-mineral waste and management of hazardous substances.

A new centralised environmental data capture and reporting system, the Environmental Reporting Information and Knowledge (ERIK) module, was rolled out in 2012. Training was provided at all sites except Kinsevere, where the software cannot yet be supported. Beyond initial integration challenges, ERIK reporting will link with MMG's new Incident and Event Management module, also deployed in 2012, to display environmental incidents.

As part of a business-wide energy efficiency and climate change study commenced in 2011, our Energy Efficiency Opportunity Program progressed in 2012, with further sites assessed and priority projects identified for Executive Committee consideration in 2013.

PERFORMANCE

Under our ICMM alignment program, 80% progress was made on the three-year baseline goal (2011–2014) to have 100% resolution of the top three environmental and social risk register actions identified in our 2012 plan. The risks identified were water management, mine closure and mineral waste management. Ongoing work in 2013 will complete the actions.

Environmental incidents (including spills and exceedances) MI

MMG recognises both the risks of environmental incidents occurring during mining activity, and the central importance of comprehensively managing these risks, and any incidents, in order to safeguard community and ecological safety, our social licence to operate and our performance as a company.

In 2012 MMG had a total of 97 recordable¹ environmental incidents, of which 18 represented a non-compliance² with site licence conditions (see the associated table on page 54). None of these incidents was considered by the regulator to have caused any environmental harm.

Twelve of the 18 licence exceedances were recorded at Avebury (which continues to be in care and maintenance) over licensed discharge levels. The Tasmanian Environment Protection Authority has acknowledged that current discharge water quality at Avebury caused no measurable harm to the receiving waters.

Forty-two of the 97 recordable environmental incidents occurred at Sepon and 34 at Kinsevere.

In comparison to 2012, there were 39 recordable incidents in 2011 of which 20 were non-compliances. In 2010, there were 32 recordable incidents of which 14 were non-compliances. While the total number of recordable incidents increased significantly in 2012, a substantial proportion of the increase was attributable to both Sepon's improvement in reporting culture due to training and awareness campaigns, and the integration of Kinsevere into MMG. Kinsevere's incident data is represented for the first time via an established system to report and investigate incidents.

Rosebery reported one incident that we considered as significant against our own Incident Management classification system (it was not an exceedance of licence conditions). The incident was as a result of transferring tailings along the flume (tailings channel) to the Bobadil Tailings facility where there was a blockage of high solid tailings within the flume structure. This caused a significant overflow of tailings to occur at the head of the flume. Most of the spill was within an existing bunded area on the uphill side of the flume. Some minor quantities of tailings entered a nearby culvert draining into Assay Creek and the nearby access road. The spilt tailings did not enter Assay Creek or leave the site. MMG actually is taking action, based on the outcomes of the incident investigation, to reduce the chance of a similar incident from recurring.

Incident reporting and investigation are carried out at sites under the SHEC Management System, which includes the requirement for each site to have a process in place that aims to prevent repeat incidents.

A A\$40,000 fine for Century's spill incident in 2009, described in last year's report, was paid in 2012. Century also made a \$40,000 donation to Southern Gulf Catchments, a regional environmental management organisation, in accordance with the sentence relating to, the incident. There were no new fines incurred in 2012.

¹ Any incident that is low-level or high level (triggers site licence conditions) and is reported to a government department/regulator.

² A higher-level incident that breaches our licence conditions threshold (an exceedance) for potential to cause environmental harm, and that is reported to a Government Department/Regulator for assessment.

2012 ENVIRONMENTAL INCIDENTS

	TOTAL NUMBER OF RECORDABLE INCIDENTS		NUMBER OF INCIDENTS BREACHING LICENCE CONDITIONS			FINES (\$1000s)	
SITE	2010	2011	2012	2010	2011	2012	2010-2012
Century	8	32	5	0	5	2	2012: A\$40
Dugald River	0	0	0	0	0	0	
Exploration	0	0	0	0	0	0	
Golden Grove	9	1	4	4	0	3	
Kinsevere	DID NOT REPORT	DID NOT REPORT	34	0	1	0	
Izok Corridor	1	0	3	1	0	1	
Rosebery	3	6	9	1	2	0	
Avebury	8	0	0	8	12	12	
Sepon	3	0	42	0	0	0	
MMG Total	32	39	97	14	20	18	

CASE STUDY

MANAGING AND PREVENTING ENVIRONMENTAL INCIDENTS AT CENTURY

Concentrate transfer pipeline refurbishment

In 2012 Century invested more than A\$14 million to refurbish its concentrate transfer pipeline to ensure that it could be operated safely and reliably until the end of open-cut zinc production. The 304-kilometre underground pipeline, running from the mine to the port of Karumba, is located within a dedicated transport corridor which traverses pastoral properties.

Greater focus was also placed on improving how the mine notified and engaged with stakeholders, including pastoralists, local councils and Traditional Owners, in relation to the operation and maintenance of the concentrate pipeline.

While permitted to undertake maintenance within the corridor, Century works to minimise the impact of its operations on neighbouring pastoralists. The mine also aims to ensure that pastoralists and other stakeholders are aware of maintenance activities within the pipeline corridor as well as the approach to pipeline operations.

This led to more than 500 individual communications – including face-to-face meetings, telephone updates, emails and other activities – with pastoralists, Traditional Owners, local councils and others in relation to our 2012 pipeline refurbishment and maintenance program.

While four grievances were raised in relation to the project (the grievances related to road damage (1), the notification process (1), speed of maintenance vehicles (1) and delays to the works program (1)), feedback from the majority of stakeholders about our communications activities has been very positive.

Century will seek further detailed feedback from stakeholders in 2013 to refine its approach to engagement on issues relating to the pipeline.

A stakeholder review meeting planned for 2013 to discuss completed works and ongoing maintenance

activities has been restructured due to stakeholder availability and preference.

Karumba storage shed refurbishment

In line with MMG's commitment to ensure safe and sound environmental practices, Century completed a three-year A\$32 million refurbishment of its concentrate storage shed in Karumba in 2012.

A key driver of the upgrade was the risk of significant environmental incidents in the event of severe weather, which is common in the Gulf region during summer months.

The refurbishment works restored the shed to a Category Four Cyclone Rating, significantly reducing environmental risks associated with Century's port operations.

Despite challenges associated with working at heights and the shed remaining in operation throughout the works, high safety standards were met during the final year of the refurbishment.

Relevant material issues: **Environmental incidents (including spills, exceedances),** Community support for MMG



Century's concentrate storage shed in Karumba.

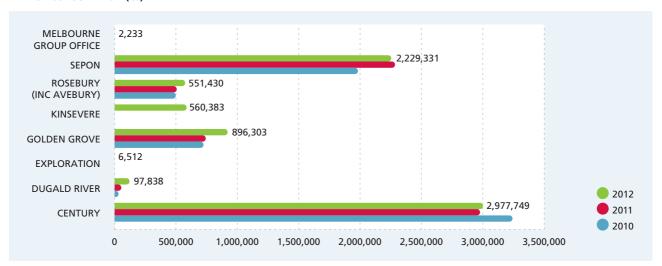
Energy and greenhouse gas emissions MI

As a significant energy user, we aim to reduce our carbon footprint through energy efficiency projects. Across our operations and offices, the efficient use of energy is important to minimise greenhouse gas emissions and other associated environmental impacts, as well as improving business efficiency. Our Energy and Greenhouse Gas Standard requires site-specific energy and greenhouse gas performance and efficiency targets to be developed, implemented and reviewed annually. MMG's Energy and Climate Change Committee meets quarterly with an agenda to reduce the risks and maximise opportunities associated with MMG's energy consumption and greenhouse gas emissions.

In line with applicable legislation, and to fully understand and act upon opportunities to further reduce our energy use and emissions profile, in late 2010 we commissioned a two-year Energy Efficiency and Climate Change Study. It reported its opportunity findings in late 2012. Corresponding energy and emissions reduction and operational efficiency programs are under way to meet our Energy Efficiency Opportunities (EEO) commitments (see the case study that follows). MMG completed the planned EEO assessments and reporting for its Australian sites in 2012 and prepared a Marginal Abatement Cost Curve to guide decision-making on project priorities. The study highlights that the most significant benefits are linked to efficiency and productivity improvement.

In 2012 MMG used a total of 7,267,617 gigajoules (GJ) of energy (compared to 6,452,901 GJ in 2011), of which 3,606,245 GJ were energy sourced from electricity, and 3,661,372 GJ were direct consumption of diesel and other fuels.

ENERGY CONSUMPTION (GJ)



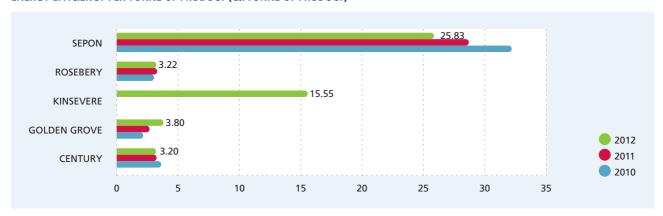
2012 energy efficiency

The term "energy efficiency" describes the amount of energy that we consume per unit of production. Energy efficiency indicators, such as gigajoules per tonne of product (e.g. concentrate or cathode), are used to measure the effectiveness of our energy-use reduction projects and strategies within our growing and changing business.

In 2012 we improved our energy efficiency at the Sepon operation. However, efficiency increased at our other sites. This was mainly due to increasing energy use per tonne of ore milled as underground mines get deeper,

and varying ore body characteristics requiring differing levels of processing. For example, energy efficiency has increased at Golden Grove due to: limited availability of Zinc ore, which is more efficient than Copper ore due to the addition of the high precious metal concentrate; underground ore increasing in hardiness and decreasing in grade; Copper oxide open-pit mining commenced, including 6 months mining waste overburden; and commissioning of the copper oxide ore encountering difficulties resulting in very little concentrate produced.

ENERGY EFFICIENCY PER TONNE OF PRODUCT (GJ/TONNE OF PRODUCT)



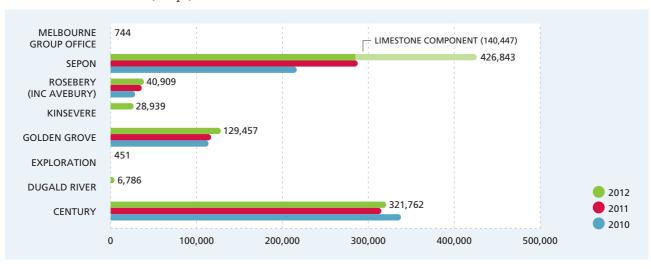
Greenhouse gas emissions

In 2012 MMG emitted a total of 955,891 tonnes of carbon dioxide equivalent (CO_2 -e) (compared to 765,418 tonnes CO_2 -e in 2011). This consisted of 561,632 tonnes of Scope 2 emissions from indirect electricity use and 394,259 tonnes of Scope 1 emissions from our direct consumption of diesel and other fuels.

GREENHOUSE GAS EMISSIONS (T CO₂-e) (SCOPES 1 AND 2)

SITE	SCOPE 1	SCOPE 2
Century	117,073	204,689
Dugald River	6,786	_
Exploration	451	_
Golden Grove	26,520	102,937
Kinsevere	28,780	158
Rosebery (inc Avebury)	13,417	27,493
Sepon	201,232	225,610
Melbourne Group Office	_	744
MMG Total	394,259	561,631

GREENHOUSE GAS EMISSIONS (T CO,-e)



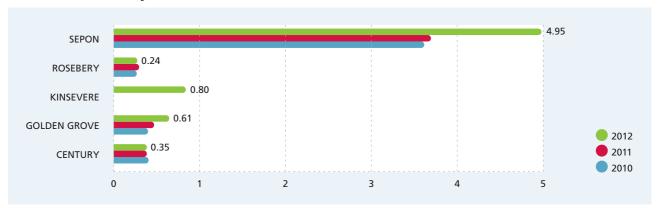
2012 greenhouse gas emissions intensity

"Emissions intensity" describes the tonnes of greenhouse gas emissions produced per tonne of product (e.g. concentrate or cathode). Emissions intensity has increased across our sites in 2012. This was mainly due to increasing energy use and resultant emissions as underground mines get deeper, and varying ore body characteristics require differing levels of processing. For the first time, Sepon's

emissions included those resulting from the consumption of limestone during processing (140,447 TCO₂-e), which accounts for the large increase in the site's emission profile.

Kinsevere uses a high proportion of renewable (hydro) energy in conjunction with installed temporary diesel generators, and thus has a relatively low emissions profile.

EMISSIONS INTENSITY (T CO,-e/TONNE OF PRODUCT)



CASE STUDY BETTER ENERGY EFFICIENCY THROUGH ASSET UTILISATION

Activity on energy efficiency continued in 2012 with assessments undertaken at Century in April 2012 and Sepon in May 2012. Assessments were undertaken at Rosebery and Golden Grove in 2011. These assessments form part of the MMG-wide Energy Efficiency and Climate Change Project and Energy Efficiency Opportunity (EEO) Program.

Across Century, Rosebery, Golden Grove and Sepon, MMG has identified more than 100 individual energy efficiency opportunities through the study. We have analysed these projects to check that a four-year payback can be achieved and that they are technically feasible. Overall, 59 opportunities satisfied these criteria, with a combined potential energy saving of 317,605 GJ per annum.

Many of these EEO projects relate to productivity improvement, which leads to improved asset utilisation, production optimisation and consequently energy efficiency. The cost savings not only reflect the reduction in spend on energy, but also the potential additional revenue generated from optimised production efficiency.

Rosebery has progressed several of its opportunities since the initial assessment in June 2011. The number of projects "under investigation" has fallen from 12 to nine, three projects are waiting to be implemented, three have been completed and one has been rejected. Implementation has commenced on a project to install a new core crusher which, once operational, is anticipated to yield approximately 50 GJ energy savings per year.

Golden Grove has 11 opportunities that are under investigation. Examples include:

- » Flotation Pump Upgrade: approximately 3,500 GJ energy savings per year;
- » Variable Speed Drives for Flotation Blowers: approximately 2,337 GJ energy savings per year; and
- » LED Lighting at Tip Points and Refuge Chambers: approximately 1,079 GJ energy savings per year.

The Century assessment identified 14 opportunities, all of which are currently under investigation. Examples include:

- » Workshop and Processing Plant Lighting: approximately 1,939 GJ energy savings per year;
- » Secondary Power for Vehicle Air Conditioners: approximately 9,535 GJ energy savings per year; and
- Waste Heat Recovery from Dryer: approximately 2,702 GJ energy savings per year.

Sepon Mine underwent an energy assessment in May 2012 as part of an integrated energy and climate change study undertaken by MMG. Numerous opportunities were identified. Preliminary analysis of these opportunities with regard to potential energy and emissions abatement, financial payback and viability, was undertaken. Work is ongoing to further assess, and where appropriate, progress these initiatives. One example is to increase the effective payload of haul trucks operating in the mine.

The next phase, applicable to all MMG sites, involves the implementation of the energy efficiency opportunities selected for payback period, technical feasibility, magnitude of energy savings and potential cost savings to MMG.

Relevant material issues: **Energy use and greenhouse gas emissions**, Company growth and financial performance



Energy efficiency opportunity projects are being considered as part of MMG's broader asset utilisation assessments program.

Water management

Water is used across every part of the mining lifecycle and therefore security of water supply is critical to maintaining operations, particularly in dry climates. In addition, local communities and ecosystems may be affected by mine use and discharge of water.

Each of our operations and projects experiences different water challenges and we need to work with our local communities and other stakeholders to manage any impacts and maintain our social licence to operate. We identify opportunities to provide outcomes from this process that are at the same time beneficial to the communities.

While a number of our sites need to manage excess water from tropical and high rainfalls, our Golden Grove site is situated in an arid region of Western Australia. Managing the differing challenges of both extremely dry and wet climates is key for MMG.

We acknowledge the general importance of water access management across the mining sector and as we grow and acquire or develop operations in different countries, we expect this to become more of a challenge for us.

Mining creates mineral waste residues, typically stored in tailings storage facilities. Heavy metals and other contaminant levels in water associated with mining facilities are monitored and managed through water treatment controls and retention strategies to ensure all water discharged complies with the relevant water-quality guidelines.

While there has been a drier wet season in 2012 across most of the Australian sites and at Sepon, some of the operations have had to work through challenges related to excess water held at their active tailings facilities. As a direct result of accumulation of water at the Golden Grove tailings facility, and tailings production above tailings facility design criteria, the available capacity for storage was constrained and the operation had to focus on reutilising and removing the excess water. A tailings facility lift will be completed in 2013 to increase capacity. Water management within the tailings facility will remain a focus of the operation to avoid a repeat of this situation in future.

Sepon's Western Tailings Storage Facility also holds excess water. MMG has recently completed a prefeasibility study to consider available technology to remove sulphate. This would form part of treating the tailings decant water to allow increased volumes of treated water to be discharged into the Namkok River. We are evaluating an upgrade of the existing water treatment plant in 2014.

We are monitoring our water management and mineral waste liabilities and are working to resolve them through these new storage projects and expansions. We need to improve our understanding of site water balances, which will enable us to refine our management of these facilities.

MMG recognises water efficiency measures are most effective when incorporated in the early planning and design phases of an operation. Water efficiency initiatives have been incorporated into our most recent mining project under development, the Dugald River project in North West Queensland. Dugald River will be an underground mining operation utilising paste backfill of stopes on an ongoing basis, and the disposal of conventional thickened tailings to a valley constructed tailings facility.

The Water Management Standard was deployed in 2012, guiding our programs for the efficient management of water resources and the protection of human health and the environment. Sites have undertaken a gap analysis against the requirements of this new standard and identified actions to close any gaps.

Key requirements of the standard include understanding site water-related risks, addressing risks using response plans, preparing and using site water balances and implementing water management plans. It also requires reporting against the Minerals Council Australia (MCA) Water Accounting Framework (WAF).

2012 water inputs

In 2012 our mine operations managed a total of 44,022 megalitres (ML) of water, significantly less than the 2011 total of 53,445 ML, even with the addition of the Kinsevere site (which managed 9,593 ML in 2012). This was because 2012 was a much drier year at our sites than 2011, during which the Century site experienced a one-in-150-years rainfall event. Sepon experienced one of its driest seasons on record (15 years).

Most of the water managed by sites in 2012 came from increased bore fields extraction (16,349 ML), mainly at Century and Kinsevere, and through precipitation and run-off (15,494 ML).

The water data presented here is aligned with the MCA WAF. Water inputs shown include all water managed by the site, including water extracted for use and managed water from other sources entering the site, such as rain, run-off, groundwater and river or creek water.

Water outputs (including tailings and acid rock drainage)

Water management, treatment processes and infrastructure are in place at all of our operational sites. We are working to effectively manage our output water quality in line with local licence conditions. As the output data in the following chart shows, most of our water outputs, 14,731 ML, are to surface water discharge, with a significant water loss via evaporation at most sites (13,932 ML in 2012).

2012 water output quality

MMG monitors water output quality at all sites to meet our licence and reporting conditions. We present it here in line with the MCA WAF categories (Category 1 is high or near drinking quality, 2 is medium quality, requiring some treatment for consumption, and 3 is lowest quality, having high salinity or pH and requiring extensive treatment). As charted, around 50% of our water outputs or 23,093 ML are classified as Category 1 (including evaporation), with 9,635 ML of Category 2 and 7,486 ML of Category 3.

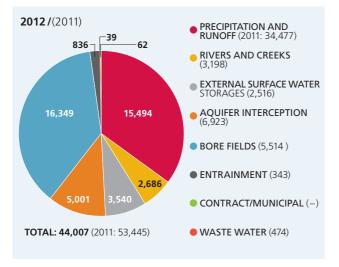
The proportion of Category 3 outputs has increased since 2011 because of the reclassification of the water discharged

to Lake Wownaminya at Golden Grove from Category 2 to Category 3 (due to its salinity, in accordance with the water-quality framework recommended by the MCA WAF). Water discharged to the lake meets all regulatory requirements and Lake Wownaminya has a naturally elevated salinity.

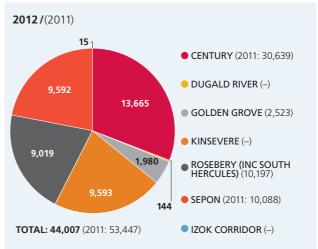
Similarly, the water discharged into the Namkok River at Sepon has elevated salinity and has also been reclassified.

Evaporation outputs are now reclassified as Category 1 (from Category 2) in accordance with the MCA WAF framework.

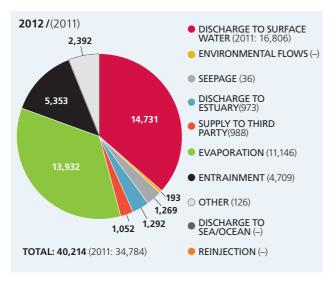
TOTAL WATER INPUTS MANAGED BY SOURCE (ML)



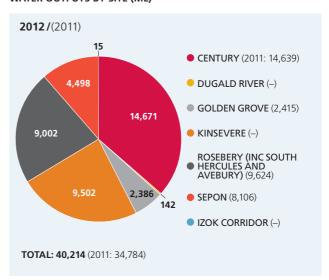
TOTAL WATER INPUTS MANAGED BY SITE (ML)



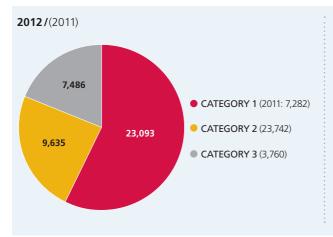
WATER OUTPUTS BY DESTINATION (ML)



WATER OUTPUTS BY SITE (ML)



WATER OUTPUTS BY WATER QUALITY (ML)



Key:

Category 1 – Close to the drinking water standards, only requires minimum treatment (disinfection) to be safe for human consumption.

Category 2 – Suitable for some purposes. Treatment will be required to remove total dissolved solids and/or to adjust other parameters to be safe for human consumption and more sensitive agricultural and recreational purposes.

Category 3 – Water unsuitable for most purposes due to the high salinity (>5000mg/L TDS) or high pH (<4 and >10). Requires significant treatment.

1 ML = 1000m³

CASE STUDY TAILINGS FACILITY REDESIGN AT ROSEBERY

There has been a long-term issue with suspended zinc levels at the Bobadil licensed water discharge point at Rosebery. We have taken a multi-layered approach to close information gaps and improve performance of the discharge infrastructure.

Effective redesign of the discharge system, particularly the settling pond, required a number of data gaps to be addressed. An onsite metal analyser was installed, which allowed the site to investigate the discharge system in the detail needed to facilitate an effective design.

Several investigations were commissioned, providing a clear insight into the reasons for the lack of performance. It was then possible to investigate redesign options to address these design deficiencies.

We then commissioned redesign options and used hydrodynamic modelling to determine the efficiencies of each one. A preferred redesign option was selected and project managers brought in to begin the process.

Engineering design has now been completed, risk reviews have begun and planning is under way for construction to commence in mid to late 2013.

The redesign of the discharge system is expected to be finished in early 2014.

Once complete, the newly engineered Bobadil settling pond will significantly lower the level of zinc released into the environment from Rosebery.

Relevant material issues: Water management (including tailings and acid rock drainage)



The settling pond at the Bobadil licensed water discharge point at Rosebery.

Environmental impacts left over after mining MI

In 2012 mine closure planning and rehabilitation were our focus in operational planning. Mine closure and associated legacy risk are now managed at a corporate level, rather than just at site level. Identifying closure risks and associated mitigation measures are a key requirement for closure planning, which provides the basis of the closure work programs. Our challenge is to ensure that closure is addressed as early as possible within any new projects to inform key decision-making.

We are committed to minimising and mitigating the legacy impacts of our operations on the environment and related communities. We adopt a life-of-asset (LOA) approach that includes technical assessment, forecasting and planning and stakeholder consultation, to identify impacts and manage appropriate risk management or mitigation. Much of this occurs in our long-range closure planning and consultation process.

In 2012 a multi-disciplinary and risk-based Closure Standard, Guidelines and Internal Assessment Tool were developed and deployed. Internal assessments to identify gaps against the requirements of the standard were completed for all mine sites, and Dugald River and Izok and High Lake projects. Kinsevere will complete their internal assessment in mid-2013. Each site has prepared an action plan to address any gaps. MMG will carry out an annual review of progress in the third quarter of 2013.

Century, which is due to exhaust its current Ore Reserve in 2016, continued to progress its mine closure planning activities and undertake decommissioning and rehabilitation activities. Throughout 2012, the focus of the MMG Closure Steering Committee was to ensure that Century closure planning was supported and progressed. As a result, the Century closure will be treated as a project with the same level of discipline given to study options, scheduling, design and cost management.

Within MMG in 2012, consultation with stakeholders regarding closure took place at Golden Grove, Rosebery, Kinsevere, Sepon and Century.

During 2012, the MMG Legacy Risk Framework Committee commenced work to identify and where possible start to confirm what mining legacies exist within MMG, with the aim of putting in place a process, to identify those requiring attention.

Hercules decommissioning and rehabilitation

In 2012 a review of the current status of decommissioning and rehabilitation at our Hercules site in Tasmania completed and work advanced to manage it to completion. The project is required to manage the risks associated with this legacy site and to satisfy the requirements of the Tasmanian Environment Protection Authority (EPA). The MMG Legacy Risk Framework Committee appointed the General Manager SHEC as project sponsor in 2013.

Land disturbance and rehabilitation

At the beginning of 2012 a total of 6,155 hectares of land was in use and classified as "disturbed" (as detailed below). During 2012 a further 711 hectares were newly disturbed and 59 hectares rehabilitated, resulting in a

2012 closing balance of 5,795 hectares of disturbed land. This compares with 2011 where the opening balance was 5,298 hectares.

2012 TOTAL LAND DISTURBANCE AND REHABILITATION BY SITE (Ha)

SITE	TOTAL MINE LAND LEASE AREA	TOTAL LAND DISTURBED	TOTAL LAND REHABILITATED	TOTAL LAND DISTURBED AND NOT YET REHABILITATED
Century	23,500	2,533	33	2,500
Dugald River	4,221	87	_	87
Izok Corridor	Not available	2	_	2
Exploration	2,530,410	317	_	317
Golden Grove	13,094	1,126	177	949
Kinsevere	5,345	449	4	445
Rosebery	4,944	220	_	220
Sepon	1,250,000	1,421	146	1,274
MMG Total	3,831,514	6,155	360	5,795

Note: this table format is updated from the 2011 report presentation due to changes in recording process. Numbers are rounded down.

Biodiversity management MI

Mining activity can impact the habitats of native flora and fauna. MMG aims to avoid and minimise these impacts, and where they are unavoidable, balance the impacts with rehabilitation measures and biodiversity offset projects.

During 2012, our Biodiversity Management Standard was reviewed to align with ICMM Principle 7, which prioritises biodiversity conservation, and the International Finance Corporation (IFC) Performance Standard 6: biodiversity conservation and sustainable management of living natural resources. The Biodiversity Management Standard, Guidelines and Internal Assessment Tool were also deployed in 2012. Sites are completing an analysis to identify and plan for actions to close any gaps against the standard during the first quarter of 2013.

The land area held by MMG fluctuates regularly. At the end of 2012, total land area managed globally was approximately 3,831,514 hectares. Some of this land is adjacent to areas of high biodiversity value and high-use value for local communities. Effective and sensitive management of this land and our impacts on surrounding ecosystems are, therefore, a high priority for us.

Biodiversity Management Plans are in place at Sepon, Golden Grove, Rosebery, Century, Kinsevere and Dugald River.

While Sepon undertook planned rehabilitation work in 2012, it has not made any progress on its main biodiversity offset project objectives. This was due to discussions needing to be broadened with partners, Wildlife Conservation Society (WCS), over the scope, specific area designations, and multi-year budget commitment for the program. We expect these discussions to be concluded by mid-2013.

Supported by Sepon mine, a program commenced in 2008 with WCS to rear 19 critically endangered Siamese crocodile (*Crocodylus siamensis*) hatchings at Vientiane

Zoo advanced with the juveniles maturing in captivity during 2012 to release stage. The project celebrated the return of the crocodiles to their wild habitat in early March 2013. Only about 100 crocodiles remain in Laos.

Also in 2012, a committee from Sepon's local community was formed to drive solutions to human–elephant conflict in the near-mine area and provide advice to MMG on the community's support needs.

Kinsevere commenced work to manage the relocation of nine flora species³ classified under the International Union for Conservation of Nature (IUCN) as vulnerable, endangered and critically endangered, from its Kinsevere Hill area. There will be ongoing implementation of the site's Biodiversity Action Plan in 2013.

A Deed of Agreement on biodiversity offsets for the Dugald River project has been finalised with the State of Queensland. This covers the anticipated life-of-mine biodiversity offset requirements, including the identification and protection of approximately 66.8 hectares of regional ecosystem and fauna habitat that triggered State Significant Factors during the planning and design process. Dugald River also developed a Purple-Necked Rock Wallaby Monitoring Program⁴, which began in February 2013.

³ The species are Crotalaria peschiana, Gladiolus robiliartianus, Ocimum ericoïdes, Haumaniastrum katangense, Haumaniastrum praelatum, Thesium quarrei, Lapeirousia welwitschii, Acalypha cf. cupricola and Ocimum centraliafricanum.

⁴ The Purple-Necked Rock Wallaby is listed as Vulnerable under the *Nature Conservation Act 1992*, due to its restricted range and patchy distribution. Dugald River is located in the middle of this species' known distribution and as such has a licence condition to monitor the impacts of the project on the local populations. The first round of monitoring recorded several scattered groups, and indicated healthy numbers and normal behaviours. Monitoring will continue twice a year.

CASE STUDY REHABILITATION INITIATIVES ACROSS THE GROUP

Sepon's closure consultation and rehabilitation program

One of the main objectives of the closure and rehabilitation program at Sepon is to provide useful and productive end uses for the land, as opposed to solely revegetated landscapes.

A trial program, including ongoing rehabilitation monitoring, is under way to identify the best ways to achieve the site's rehabilitation objectives. This formed part of Sepon's 2012 rehabilitation plan involving 15.6 hectares of new rehabilitation and 37.8 hectares of maintenance rehabilitation work.

As an example of rehabilitation treatment, small exploration drill pad sites are stabilised. This is done using a combination of bamboo silt fencing and returned vegetation debris, to reduce the velocity of water run-off. Returned topsoil contains a high density of viable seed and vigorous regrowth is initiated under high rainfall conditions. Consequently, most rehabilitation activities are designed to take advantage of the high rainfall at Sepon.

A key legacy issue for Sepon is the very large, steep, highly eroded landforms, often including exposed potentially acid-forming rock. Work is under way to understand how best to achieve safe and stable slopes. A number of possibilities are being investigated, including relandforming with surface mining equipment, blasting and treatment options.

The rehabilitation plan in 2012 was a success, with approximately 67,000 seedlings planted. In the site's plant nursery plants are either grown from seed or raised from cuttings, all collected from forested areas on site. Sepon's nursery raises 53 different plant species, including fruit trees and those that have commercial value as timber. The site also produces its own compost, fertiliser and insect repellent from fermented natural waste products and molasses.

To address the issue of building understanding of the closure processes within government, Sepon ran educational site trips during 2012. Sepon also translated the ICMM Mine Closure Tool Kit and the executive summary of its site closure plan into Lao and distributed them to relevant government officials.

The process of negotiating end land uses and closure criteria with the local communities and government in Lao began in 2012 and will continue during 2013. This will be done through the Sepon Mine Closure Sub-Committee, comprising representatives from all levels of government as well as community leaders.

Meanwhile, a demonstration project supporting agricultural end land use options will continue. In the near future, one of the two tailings storage facilities will become available for rehabilitation. Therefore, trials are currently under way to work out a capping depth to best separate the tailings from the vegetated surface.

Progressive rehabilitation of the Golden Grove waste rock dump

The Golden Grove open pit commenced operations in early 2012. Benign, non-acid-forming waste rock from the open pit is removed to the adjacent waste rock dump. The waste rock dump was designed by external engineers with key parameters around foot print, dump height, outer batter angles and material characterisation.

The MMG open-pit team and contractors, Alliance, developed a construction methodology based around the engineering parameters that allows for progressive rehabilitation during construction. The waste rock dump is built from the outside in, enabling outer batters to be profiled, topsoiled and revegetated as early as possible.



Lao employees work on the demonstration project supporting agricultural end land use options.



Bamboo matting is used to protect seedlings when they are first planted at Sepon.

The benefits of this approach to dump construction include:

- » Earlier revegetation and stabilisation of soils;
- » Earlier usage of topsoil;
- » Reduced need for stockpiling of topsoil;
- » Reduced dust emissions as less area needs to be cleared at any one time;
- » Better utilisation of machinery; and
- » Reduced closure liability during and after completion of the open-pit operations.

Century closure and rehabilitation planning

While MMG is currently investigating a number of options to utilise our extensive infrastructure in the Gulf of Carpentaria post-2016, open-cut zinc production is currently planned to end that year.

The site's closure consultation plan was updated in 2012. Consultation and education regarding the mine closure process are underway. This includes discussions with the Century Environment Committee (CEC), which represents Traditional Owner groups on environmental issues relating to the mine, visits to local communities and, now, engagement with local councils through a regional industry organisation.

A series of landform visualisations – graphics showing what the mine area is expected to look five, ten and 20 years after the end of production – was also developed and will be used to help with community consultation in 2013.

Land rehabilitation and end-of-production planning Substantial work was undertaken in 2012 as part of the mine closure planning process. This included:

» Rehabilitation and seeding of available disturbed areas;

- » Relocation of the historic bulk sample tailing storage facility to the operational tailings facility. The facility was used for trial work as part of mine development activities in late 1990s;
- » Upgrade of the groundwater monitoring model for the site post 2016;
- » Decommissioning of the old construction camp and other structures not required for current production or growth options; and
- » Development and implementation of an innovative system for monitoring progress against plans in relation to the seven key aspects of closure.

Relevant material issues: **Environmental impacts left over after mining,** Managing life of mine/closure and post-closure planning



Inspecting land rehabilitation at Century.



A panoramic view of the waste rock dump profiled, and with topsoiled batters ready for revegetation.

CASE STUDY DUGALD RIVER BIODIVERSITY OFFSET PROJECT

Since the introduction of the Queensland Biodiversity Offsets Policy – Version 1 (2011), all development projects have an obligation to protect, and minimise their impact on, State Significant Biodiversity Values. The focus is on the offsetting of any unavoidable impacts, which involves the permanent protection of other areas with the same ecological values as the area to be disturbed.

In October 2012, a Biodiversity Offset Strategy was developed for the Dugald River project. This strategy identified the State Significant Biodiversity Values potentially impacted by the development, and identified possible offsets in the surrounding region.

Although every effort was made in the design process to minimise the impact of the project on the natural vegetation of the site, the project will require the disturbance of some areas (approximately 67 hectares) containing the State Significant Value – Vegetation Associated with Watercourses. This is comprised of Regional Ecosystems with a Vegetation Management Status of Least Concern. The project is not considered to have a significant impact on any species of conservation significance, as all such species and identified Regional Ecosystems are well represented in the wider region.

A Deed of Agreement has been finalised with the Department of Environment and Heritage Protection (DEHP), allowing the Project to move forward with provisions for the offsetting of all disturbed vegetation identified in the Biodiversity Offset Strategy.

The required offsets cannot be located on MMG's mining leases, as the vegetation has already been mapped and classified as Remnant under the *Vegetation Management Act (1999)*. Discussions with the neighbouring landholders are continuing, with the aim to locate the offsets for the Project on their land surrounding the Project.

Relevant material issues: Biodiversity management



River Red Gum (*Eucalyptus camaldulensis*) Riparian Woodland, representative of many of the creeks within and surrounding the Project site.

Air quality, emissions and dust MI

MMG recognises the importance of identifying and understanding potential impacts associated with air quality, emissions and dust management, and has particular strategies in place at sites to manage related impacts.

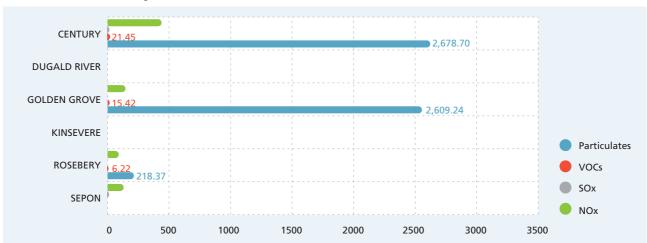
We monitor a range of air emissions specific to site impacts, licence requirements and for Australian sites' National Pollutant Inventory (NPI) requirements. These include particulates, volatile organic compounds (VOCs), sulphur oxides (SOx) and nitrous oxides (NOx). Kinsevere did not measure these for 2012 but will do so in 2013.

Dugald River will also measure air emissions in 2013 and has commenced an air-monitoring program.

Dust at mining activity sites is managed by regular monitoring, road maintenance and wetting down as required.

For more information on MMG's workplace air quality monitoring and outcomes, including the specific monitoring and management of diesel particulate matter, please refer to the Health and Safety section, page 34.

2012 EMISSIONS TO AIR (T CO,e)



CASE STUDY GERALDTON COMMUNITY AIR QUALITY MONITORING AT GOLDEN GROVE

In March 2012, the installation of four air-quality monitoring stations around Geraldton was completed as part of a partnership agreement between MMG Golden Grove and the Geraldton Port Authority (GPA).

The monitoring stations form part of a broader community air quality monitoring program that is designed to collect information and data on the air quality and particulate dust in the atmosphere within the Geraldton area, specifically in relation to potential impacts related to the Geraldton Port's operations.

Community monitoring sites were chosen to cover all wind directions, north-east, south-east and south-west, from the port and one control or background site. The monitoring program is designed to replicate what is required by the licence within the GPA boundary to allow for effective data analysis and interpretation.

Monthly monitoring results have been placed on a website for all stakeholders to access. So far, all results have been well below the limit for the lead Total Suspended Particle (TSP) three-month rolling average. This limit is $0.5~\mu g/m^3$ at the GPA boundary. All results have been consistent with the control/background site.

MMG and the GPA have developed a strong working relationship over the years and have worked closely together on this project. They understand the importance of a safe and healthy environment, as well as the importance of ongoing operations at the port for the Greater City of Geraldton.

In addition to the air-quality monitoring stations, MMG is continuing to review ship-loading procedures at the port and is undertaking a range of measures together with the GPA to improve management of dust levels.

MMG and the GPA are also in constant consultation with the Department of Health, Department of Environment and Conservation, Department of Transport, and the Geraldton community. They will continue to work closely with them to identify measures to minimise emissions and ensure the people of Geraldton reside in a safe and healthy environment.

Relevant material issues: Air quality, emissions and dust



Air-quality monitoring at Geraldton Port.

Mineral waste management

During our mining and processing we generate mineral (such as tailings and waste rock) and non-mineral wastes (such as oils and general refuse) requiring management. Understanding the characteristics of the waste streams, and planning and managing them, assist in reducing the potential long-term environmental impacts that can result.

Mineral waste facilities contribute towards MMG's current disturbance area with some facilities remaining as long-term landforms post-closure. Some – such as tailings storage – are chemically reactive, resulting in acid and metalliferous drainage (AMD) and requiring appropriate management.

A key requirement for all new projects is that waste streams are identified with associated physical and geochemical characterisation completed to inform the designs of the storage facilities. This allows MMG to provide for long-term safe storage and disposal of waste to protect human health, safety and environment (see the Rosebery case study on page 60). The significant

flume tailings spill at Rosebery in 2012 has refocused our efforts on management of waste streams and technical facilities.

Effectively managing mineral wastes is important for MMG both during operations and to reduce risks beyond the life of the asset. We are striving to integrate mineral waste management within life-of-asset planning to manage our waste facilities consistent with established final landform designs. This will promote beneficial post-mining land uses and minimise post-mining rehabilitation and closure liability.

Our previous Tailings Management and Waste Rock Management standards were combined into one standard in 2012 – the Mineral Waste Management Standard. This standard covers tailings, waste rock and low-grade stockpiles until such a time as they are processed. The consolidated standard and associated Guidelines and Internal Assessment Tool were deployed in 2012.

Dugald River has constructed and started to use non-acidforming and potentially acid-forming (PAF) stockpile facilities based on the requirements of their approved environmental authority. Golden Grove completed the design and construction of the PAF cell required for the copper open pit, opened in 2012. Properly engineered and constructed facilities will reduce the amount of leachate⁵ requiring long-term management and treatment. During 2012 additional sampling and geochemical characterisation testing was undertaken to increase the understanding of potential for acid rock drainage at Kinsevere. Further testing (leach and kinetics tests) will be required to understand long-term risks and identify and implement appropriate management measures.

2012 MINERAL WASTE MANAGEMENT

	WASTE ROCK MINED (T)		TAILINGS GENERATED (T)	
SITE	2011	2012	2011	2012
Century	34,580,000	41,630,516	4,390,000	2,358,698
Dugald River	_	390,571	_	_
Exploration	not recorded	not recorded	not recorded	not recorded
Golden Grove	456,000	8,082,032	1,300,000	1,444,052
Kinsevere	not recorded	2,047,585	not recorded	887,801
Izok Corridor	not recorded	_	not recorded	0.00
Rosebery	376,000	666,388	595,000	643,597
Sepon	14,899,000	12,187,778	3,651,000	5,270,731
MMG Total	50,311,000	65,004,870	9,936,000	10,604,879

^{*}Exploration and Izok Corridor projects did not produce waste rock or tailings in 2012 given they are not mining operations.

South Hercules mining

As stated in the 2011 Sustainability Report, MMG embarked on a trial satellite mining project at South Hercules in Tasmania to demonstrate that:

- 1. Economic mining activities can be responsibly undertaken in proximity to a sensitive environment; and
- 2. Rehabilitation synergies with the nearby and historic Hercules Mining operation can be realised.

Phase one mining development for South Hercules was permitted by the Tasmanian EPA and completed during 2012. These mining activities resulted in:

- 1. The upgrade of an existing road to minimise disturbance and provide safe access to the historical Hercules site for rehabilitation; and
- 2. A small open pit developed to extract ore for processing at the nearby Rosebery Mine.

Phase two mining development for South Hercules was evaluated during 2012 and determined not to be economically viable. Therefore, the South Hercules project was placed into care and maintenance, with its economic viability to be re-assessed late in 2013 for a possible resumption of mining activities in 2014. The site continues to comply with its environmental protection notice.

Dugald River Project

The Dugald River Environmental Management Plan has been accepted by the Queensland Government's Department of Environment and Heritage Protection. The final Environmental Authority, which sets out licence conditions for the Dugald River project, was issued in August 2012, which enabled MMG to proceed to the next stage of project development.

Izok Corridor Project

In September 2012, an Izok Corridor Project Proposal was submitted to the Nunavut Impact Review Board and key authorising agencies in Canada, commencing the environmental assessment and regulatory review process.

⁵ Leachate is the solution resulting from the leaching of soluable constituents from soil and rock due to the downward percolation of water.

CASE STUDY CENTURY HISTORIC TAILINGS REMEDIATION

The Century Bulk Sample Tailings Storage Facility (BSTSF) was constructed in the late 1990s as part of the Century feasibility study. Due to its age (where decommissioning and encapsulation of the facility took place in the late 1990s), the facility does not meet current standards and acid mine drainage had been occurring.

The site was remediated in 2012 to address these issues. This remediation process involved:

- » Defining the extent of the old tailings facility through interviews with long-term employees, reviewing historical records and surveying of the site;
- » Identifying the optimal location within the operational tailings storage facility for placement of relocated tailings and contaminated soil;
- » Developing the scope of works and engaging a specialist earthmoving contractor; and
- » Reclamation, relocation and encapsulation of the historic tailings and potentially contaminated cover material to the operational tailings facility. Sampling and analysis of old tailings material were also conducted to assist in the design of a permanent encapsulation system for the operational tailing storage facility.

Some of the challenges faced by the Century team included:

- » Unknown condition of the tailings material that had been in long-term storage (e.g. was it saturated, self-heating or dusty?);
- » Operating an excavator in proximity to high-voltage transmission lines;
- » Traffic management on a predominantly single-lane access road;

- » Unseasonal wet conditions experienced during the project;
- » Material that was difficult to handle, with some very wet material requiring blending with dry cover material; and
- » Understanding the failure of the original encapsulation system.

Once remediation has been verified, the site will be cultivated and seeded with native plant species.

The project was undertaken safely, with no injuries sustained. The historic tailings were recovered, relocated and encapsulated and the original site remediated.

Relevant material issues: **Environmental impacts left over after mining**



Remediation work at Century Bulk Sample Tailings Storage Facility.

2013 CHALLENGES

In 2013 our key environmental management challenges, related to our three-year sustainability goals and targets, are to:

- » Embed the new standards and track gap closure against them, and develop remaining environmental standards as part of the SHEC three-year strategy;
- » Focus on environmental reporting and closure planning within MMG's Operational Model;
- » Identify and roll out MMG performance targets focusing on key environmental issues to drive performance improvements and increase efficiencies;
- » Deliver continual improvement in water and mineral waste management across MMG to reduce longterm risks and capitalise on opportunities through efficiencies and improved operating performance;
- » Strengthen capability on site, through the integration process, to meet MMG requirements at Kinsevere; and
- » Continue the deployment of the ERIK system and site support.



Our aim is to expand our position as a leading internationally diversified base metals group, and our objective is to become one of the world's top three mid-tier mining companies. We aim to achieve this through a considered approach to growth and development.

OUR APPROACH

We operate and develop our upstream, diversified base metals assets and grow through organic opportunities, exploration, discovery and acquisition. Our growth strategy aims to meet the following objectives:

- » Commit to leading practices in corporate governance, production standards, safety, operational excellence and environmental protection;
- » Support our social licence to operate through ensuring that local economies and communities continue to receive tangible benefits from our operations;
- » Continue to leverage the expertise and experience of our major shareholder, China Minmetals Corporation;
- » Pursue available organic growth opportunities through our project pipeline and exploration strategy; and
- » Target value-focused acquisitions.

PERFORMANCE

MMG Limited reported our financial performance for the full year 2012 with an underlying profit of US\$217.5 million, down 29% from the full year 2011, as shown in the table, right. Earnings before interest and tax (EBIT) from continuing operations were US\$405.6 million, down 25% from the full year 2011. Underlying earnings before interest, taxes, depreciation and amortisation (EBITDA) for the Company's continuing operations, excluding one-off items, were US\$853.2 million, a 1% increase on 2011.

Operating costs remain a focus across our business and were generally well managed in 2012 amid industry-wide cost pressures, particularly in Australia.

The period saw an increased focus on asset utilisation and productivity improvements aimed at maximising the efficiency of operating assets.

The majority of the Company's revenue was received from sales of copper and zinc, accounting for 83% of sales revenue.

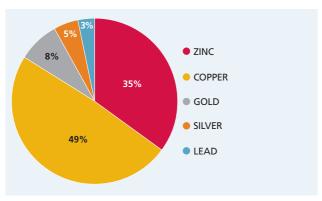
Our largest customer region, by revenue, continues to be Australia, followed by Asia (namely Thailand and Vietnam, with sales of copper cathode from Sepon), as shown in the chart, right. Sales to China continue to account for approximately 19% of our revenue. Of this, approximately 6% of sales were to the Company's majority shareholder China Minmetals Corporation, on arms-length agreements with commercial terms.

FINANCIAL HIGHLIGHTS (US\$ MILLION)

YEAR ENDED 31 DECEMBER (CONTINUING OPERATIONS)	2012	2011	CHANGE %
Revenue	2,499.4	2,228.3	12
Underlying EBITDA ⁽ⁱ⁾	853.2	847.9	1
Underlying EBIT ⁽ⁱ⁾	405.6	539.4	(25)
Underlying profit ⁽ⁱⁱ⁾	217.5	305.0	(29)
Reported profit	217.5	574.5	(62)
Net cash generated from operating activities	655.3	699.7	(6)
Underlying diluted earnings per share(iii)	US 3.64 cents	US 5.46 cents	(33)
Underlying EBITDA margin	34%	38%	

- (i) Underlying measures of earnings before interest and tax (EBIT) and earnings before interest, tax, depreciation and amortisation (EBITDA) exclude the impact (before tax) of significant non-recurring items. EBITDA is reconciled to underlying EBITDA on page 7 of our Annual Report.
- (ii) Underlying measures of profit exclude the impact (after tax) of significant non-recurring items. Profit is reconciled to underlying profit on page 7 of our Annual Report.
- (iii) Underlying diluted earnings per share represents diluted earnings per share adjusted for significant non-recurring items (after tax). A reconciliation of underlying diluted earnings per share is provided in Note 9 of our Annual Report.

2012 REVENUE BY METAL



MMG Limited's share price performance

In 2012, MMG Limited's share price (HKEX 1208) performance slightly underperformed against the HSBC Global Base Metals Index, down 9% over the year. The Company's share price also closely follows the movements of global commodity prices, namely copper and zinc, our major products.

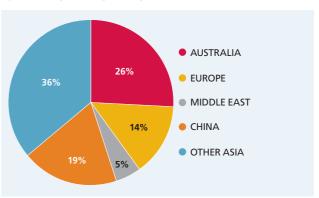
We continue to proactively communicate with the financial community to improve the understanding and subsequent market valuation of the Company.

Contribution to local and regional economies $\[\mathbf{M}\]$

MMG contributes to local and regional economies, not only to fulfil our vision and mission to mine for progress, but also to maintain and grow our social licence to operate. This in turn allows us to pursue our business strategy to enable ongoing economic contribution.

We face many challenges, particularly in developing economies and communities, after acquisition, or when developing a project. We balance reputational and financial risks through a clearly implemented and communicated strategy to provide targeted contributions to communities and their local and national economies. Our business strategy and plans are driven by a commitment to make meaningful contributions to economies of the countries and communities in which we operate.

2012 REVENUE BY DESTINATION



In 2012 MMG's operations contributed significantly to our local and regional economies directly through taxation and royalty contributions, but also indirectly through supply chain and procurement revenues, and the flow-down benefits to local employment and services. Sponsorships, donations and in-kind support for community activities also provided direct community benefit. MMG's localisation and local procurement practices aligned to the ICMM Sustainable Development Framework – directly drive this distributed benefit. The communities around Sepon and now Kinsevere are receiving financial and other secondary benefits from the mines' operations, which contribute to greater self-sufficiency.

The economic and social contribution of mining is important to us and our stakeholders and will continue to be a focus for future development. Mining and exploration businesses pay taxes, royalties and other fees to governments in order to explore for and extract minerals resources. The investment and long-term focus required to bring these projects to production are significant. We must ensure that they strike an effective balance between the benefits of our operations to external stakeholders such as employees and local communities, while providing a long-term economic return on investment to debt providers and shareholders. This is an increasingly challenging balance as governments around the world assess their expectations of the minerals industry.

CASE STUDY LOCAL PROCUREMENT AT SEPON

Business groups in Vilabouly district, Savannakhet province, where Sepon mine is based, generated more than US\$2.4 million in revenue from goods and services supplied to the mine in 2012.

When the Sepon mine started production in 2003, it helped local people to set up small business groups that could supply goods, such as food items and uniforms, and services, such as cleaning and laundry. This was done to ensure that business opportunities created by the mine could directly benefit local communities.

Last year, 17 different business groups supplied the mine with more than 200 people from Vilabouly, now earning their living from those groups. "When a business group is first set up, we provide the members with technical and business management training, building skills that can be used long after the mine has gone. As their businesses grow, we help them with product improvement, business innovation and market expansion," said Ms Niddavone Douangphonexay, Senior Officer Community Development for the mine. "For example, during 2012 we took the members of the vegetable group to see modern agricultural enterprises in Champasack province, to learn about best practices and product improvement," she said. "Now the vegetable group has 12 greenhouses and is doing very well." The greenhouses enable better vegetable production during the rainy season.

In 2012 the equipment supply group was a Village Development Committee priority. The group rents out tents, tables and chairs for events such as weddings, funerals and other traditional celebrations, at a lower cost than local people previously had to pay.

Since 2003, when the mine started operations, total local enterprise income has reached US\$12.7 million.

MMG is committed to supporting continued business development in local villages after the mine has closed.

Relevant material issues: **Contributing to local and regional economies**



Ms Laikham Keomany, a member of the vegetable group from Namkhip village, tends to the vegetables in her greenhouse in Vilabouly District, Savannakhet province.

CASE STUDY EXPLORATION IN ZAMBIA

Our new discovery programs in Zambia are at an early stage with exploration for mineral reserves being undertaken from a number of mobile camps. While community engagement is only recent, local employment, training and procurement opportunities are already being realised.

Approximately ten local villagers are employed on daily contracts at each camp. Longer-term contracts are not yet possible due to seasonality. Often the only formal private sector employment in the area, this is an important part of MMG's social licence to operate. Local involvement helps to mitigate local community concerns regarding the exploitation of local mineral resources.

Procuring fresh vegetables from neighbouring communities is another benefit, with seeds given to farmers to grow a wider variety of crops.

All temporary employees receive an induction outlining MMG's core values, job knowledge and safe working practices. For many employees, this is the first time that they have interacted with people from outside their local

villages. Skills learnt include sampling, line cutting, use of GPS, camp maintenance and sample preparation.

Participation in daily team meetings has also helped employees to understand how projects are planned and what MMG is doing.

Relevant material issues: **Employing local people**, Employee training and development, Contribution to local and regional economies



Local villagers in Zambia have been trained to conduct soil sampling surveys.

An ongoing focus on regional procurement and support for the establishment of Indigenous businesses are helping to ensure the benefits of Century's operations stay in local communities.

Between 2008 and 2012, Century purchased more than A\$56 million of goods and services from Gulf-based suppliers. The range of goods and services purchased was wide, including, accommodation for employees and contractors, plant hire, food and beverages, and vehicle hire.

This local procurement provides flow-on employment and contracting opportunities – we estimate that wages by Century suppliers accounted secondarily for almost A\$9 million in wages for Gulf residents in 2012.

In accordance with a Native Title Agreement between the mine, the Queensland Government and four Traditional Owner groups, Century also contributes more than A\$1 million annually to the Aboriginal Development Benefits Trust (ADBT). ABDT distributes these funds as loans and grants to assist with the establishment and development of local Indigenous businesses. The Board of ADBT includes representatives from each of the four Traditional Owner groups, an accountant and a representative from Century.

More than 30 start-up and growing businesses have received support for ABDT, with 23 of these businesses still in operation. These businesses include a roadhouse and care hire firm in Doomadgee, a fishing tackle shop

and butcher on Mornington Island and a general store in Normanton through a joint venture with Bynoe.

In 2013 the focus will be on educating local businesses about supply opportunities associated with mine closure and various options at Century post 2016.

Relevant material issues: Contributing to local and regional economies



The Waanyi people (51%) and Century (49%) share ownership of Lawn Hill Riversleigh Pastoral Holding Company (LHRPHC), a pastoral property adjacent to the mining operation. Century takes an active role in that company with members of its management team on the LHRPHC Board. Here (left to right) Barry Riddiford and Julie Hilder of MMG discuss progress with Craig Young (centre) of LHRPHC.

Ethics, anti-corruption and business conduct MI

Integrity is one of our four core values, reflecting our commitment to sustainable business development. Our business can only perform successfully and contribute to progress in communities if we behave ethically, with integrity, and maintain the highest levels of corporate governance.

This requires, from ourselves and our business partners, a consistently strong performance in corporate social responsibility in and across the countries in which we operate. This is guided by our Code of Conduct, which sets out the expected behaviour of our people, including anti-corruption, anti-bribery, facilitation payments and ethical business conduct, and is aligned to the ICMM Sustainable Development Framework (Principle 1). The code extends to contractors we engage.

MMG is a supporter and contributes financially to the Extractive Industries Transparency Initiative (EITI) (www.eiti.org) through membership of the ICMM (see page 11). The EITI aims to set a global standard for transparency in oil, gas and mining (the extractives sector). MMG supports the principle that natural resource wealth should be an important driver of a nation's economic growth, sustainable development and poverty reduction. We participate in EITI processes in the countries in which we operate. MMG is a participant in the Australian EITI pilot and the DRC applicant process.

We are working toward comprehensive disclosure of public payments, such as taxes and royalties, across the business and are an active participant in initiatives such as ICMM's research programs on mining industry contributions to developing economies. Details of the income tax and royalty payments we made to governments are available in our Annual Report at www.mmg.com (see pages 116, 117). MMG does not make donations to political parties (no political donations were made in 2012).

The Code of Conduct, along with MMG's Values, was identified as a priority during the business planning process in 2010–2011. A "living and breathing" document was needed to help MMG people make the right choices in the workplace.

Key stakeholders from across the business were identified and consulted on the content of the Code of Conduct to ensure its accessibility to all MMG people. It includes a summary of MMG's position on each subject matter, such as bribery and corruption, with case study examples, definitions and frequently asked questions. An accompanying video shows the CEO and General Manager Human Resources (HR) explaining the code and the importance of compliance. Here is an extract from the Code of Conduct handbook:

Bribery and corruption

MMG has zero tolerance of bribery and corruption. Bribes, pay-offs or unlawful commissions are prohibited and our People should never give or accept, or agree to give or accept, such benefits. It is prohibited for any of our People, in connection with MMG business, to offer or provide or promise to provide, either directly or indirectly (for example, through a third-party representative or agent) a "benefit" to a government official or to any other person:

- » Where that benefit is not legitimately due to that person;
- » With the intention of inappropriately influencing the decision-making of that government official or person or to otherwise encourage them to exercise their obligations or duties improperly or in order to obtain or retain business or a business advantage.

The rollout commenced in September 2012 at the Australian, exploration and project sites. This will continue in 2013 at Sepon and Kinsevere, with the Code of Conduct handbook also translated into French and Lao. All employees are expected to attend an

awareness session, held during their daily pre-shift meeting. At these sessions, a member of their human resources or management team takes them through the new Code and the video.

Information on the Code of Conduct and MMG's Core Values is now incorporated into all offers of employment and employee and contractor inductions. MMG has forged a partnership with Transparency International (Australian chapter) to work on aligning training in corporate governance, anti-bribery and anti-corruption with global standards. A Code of Conduct Advisory Committee has been established with representatives from across MMG providing input into its rollout and ongoing reinforcement. The committee meets twice a year and is currently chaired by the Chief Operating Officer.

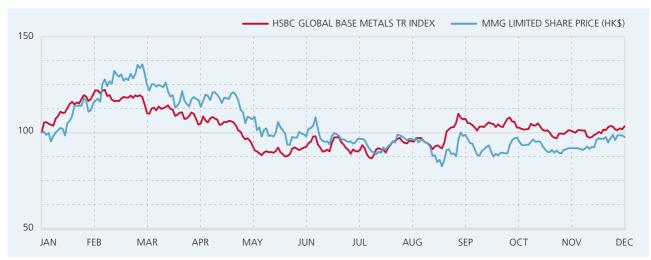
We are developing more targeted training on topics such as bribery, corruption and equitable treatment for relevant parts of the business.

Relevant material issues: **Ethics, anti-corruption and business conduct**



Security clearance at an entrance gate at Sepon. Entrance gates are also a point for checking the workforce has zero blood alcohol or illicit substance content.

2012 MMG LIMITED'S SHARE PRICES PERFORMANCE AGAINST THE HSBC MINING INDEX



Company growth and financial performance MI

Extracting the maximum value from our current assets is a key driver for delivering sustainable economic performance.

Operational performance across our sites was pleasing with 2012 production of 152,336 tonnes of copper, a 49% increase on 2011. This increase was driven by consistent strong performance at Sepon and the ramp-up of Kinsevere. While Century achieved an MMG annual record production, total zinc production for MMG was 622,536 tonnes of zinc in 2012. This was 4% below 2011 mainly due to lower planned zinc production at Golden Grove.

MMG is currently investigating a number of options to utilise its extensive infrastructure at Century post the completion of open-cut zinc production at the mine in about 2016.

Century's 2013 program of growth studies includes the second phase of a scoping study considering the potential for a phosphate business, a A\$5 million drilling campaign to further evaluate zinc-lead-silver targets on the Century mine lease and adjacent exploration tenements, and an ongoing investigation to determine the viability of tailings retreatment.

Investment in new acquisitions and projects MI

We are investing in new project assets and pursuing business and asset acquisitions to create long-term, sustainable shareholder value. We aim to ensure the smooth integration of current and future acquisitions into business activities to achieve synergies and maximise opportunities.

When MMG was formed in 2009, we established a clear vision for the business: to build the next generation's leading global diversified minerals and metals group. At 31 December 2012 our market cap was US\$2.18 billion. Our objective is to be recognised as one of the top three mid-tier global base metal mining companies, measured by enterprise value. This would require significant growth through discovering, acquiring, developing and sustainably operating base metals projects around the world.

Our most recent material acquisition was the takeover of the Anvil Mining group of companies. MMG acquired Anvil in February 2012 for US\$1.3 billion. The key asset acquired was the Kinsevere mine, an open-cut copper mine located in the Katanga Province of the DRC (see the feature case study on page 16). Further details of the acquisition are disclosed in Note 26 of our 2012 Financial Statements (see our Annual Report, page 137).

Also supporting our growth aspirations is the development of two important projects, Dugald River and the Izok Corridor. The development and construction of the Dugald River project were endorsed by the Board on 19 December 2012 with a final investment decision by the Board subject to the finalisation of financing.

In 2012 MMG began a feasibility study for the integrated development of the Izok and High Lake copper-zinc deposits.

Volatility in commodity prices

The price of metals, such as copper, gold, lead and zinc, fluctuates on the market as a result of changes in demand and currency exchange rates. This directly affects the profit attainable from our products, our ability to invest in organic growth, the financial viability of operating individual mines, the ability to retain key employees and, ultimately, the economic sustainability of our business.

Commodity markets remained volatile in 2012 reacting to global fiscal stimulus initiatives and short-term indicators of economic stability. Cautious market sentiment was exacerbated by sovereign debt issues in Europe and uncertainty surrounding future levels of the USA's budget deficit.

However, China's imports of copper cathode and copper concentrate increased significantly during 2012 despite the prevailing slower rate of growth in copper demand. Refined copper imports of 3.4 million tonnes in 2012 were 20% higher than 2011, the largest quantity ever imported by China.

Construction of social housing in China and the move toward a consumption-based economy is anticipated to support long-term copper demand growth. However, declining grade and cost inflation of existing mines will remain a challenge for the industry over the longer term.

London Metal Exchange stocks of zinc increased during 2012. However, not all metal on deposit was promptly available for use to end consumers, which influenced metal premiums. China's zinc metal production in 2012 was below the previous year, as smelters reduced output in response to adverse market conditions that prevailed for much of the year.

Shareholders are set to benefit from MMG's strong leadership, growing portfolio of base metal assets and a solid long-term outlook on market fundamentals. The Company remains confident in sustainable levels of economic growth, driven by the industrialisation and modernisation of developing economies, in particular in Asia.

Legislative change or compliance impacts on operations MI

MMG regularly monitors and must adapt efficiently to changes in legislative or compliance requirements. These changes can have significant impacts on our results and the planning of our operations, as discussed below.

Australia's Clean Energy Legislation

In July 2011, the Australian Government announced a carbon pricing mechanism on selected businesses of AUD\$23.00 per tonne of carbon dioxide equivalent ($\mathrm{CO_2}$ -e) emissions. The carbon pricing mechanism came into effect on 1 July 2012 and the carbon price will increase at a rate of 5% annually until 1 July 2015.

Under the new legislation, entities responsible for operational control of facilities that produce $\geq 25,000$ tonnes of Scope 1 CO₂-e emissions per annum will generally be liable to purchase and surrender carbon units for each tonne of carbon pollution they emit, unless those emissions are mainly due to diesel fuel usage. Where the emissions are mainly due to diesel fuel usage, the entities are subject to an equivalent carbon price through the fuel excise and tax system.

MMG's Australian operations contribute greenhouse gas emissions both directly, mainly via on-site consumption of diesel fuel, and indirectly, mainly through grid-sourced electricity. Given MMG's current CO₂-e emissions profile, we are not required to purchase and surrender carbon units in respect of its greenhouse gas emissions at our Australian operations. However, this is an area that requires continuous monitoring to ensure compliance.

MMG expects to see increased fuel costs due to a reduction in the fuel tax credit of approximately AUD\$0.06 per litre. In addition, further indirect costs from the carbon pricing mechanism are likely to arise through increased costs passed on by suppliers.

The total cost impact to MMG associated with the introduction of an Australian carbon pricing mechanism is estimated to be approximately AUD\$18 million per annum during the initial three years (i.e. the Fixed Price Period ending on 30 June 2015). Thereafter, the carbon price will reflect an international market price for carbon.

Closure requirements

Changes in requirements relating to the closure of Century mine under the Queensland (Australia) Department of Heritage and Environment Protection affect the relative costs and returns of operations at the end-of-mine life, and of the closure process itself.

OHADA law in DRC

On October 1993, 16 African States signed a treaty known as the Organization for the Harmonization of Business Law in Africa, or the OHADA Treaty. The effective application of the OHADA Treaty in the DRC currently will bring significant immediate improvements to a number of fields of DRC business law. These were often outdated, for example: corporate law, security interests, recognition and enforcement of foreign arbitral awards. The effect may be advantageous for regional business, with improved business efficiency for our operations.

Product shipping and logistics

Access to markets for our products is essential to the sustainability of the business. We work with infrastructure service providers and regulators to maintain access responsibly.

We use a combination of logistics channels to transport product from our mines to customers. This is different at each mine site depending on its location and that of its customers. For example, at Century, concentrates are transported in slurry form in a 304-kilometre underground pipeline to our port facility in Karumba. Here they are dewatered and loaded onto a transfer vessel which delivers the concentrates to larger vessels for shipment to customers. At Sepon, located in Laos, a land-locked country, copper cathode is transported by truck to customers in our largest market of Thailand. Product delivered to customers in other regions is loaded into sea containers and shipped through Bangkok port. Product stewardship and material-handling challenges are present along all logistics chains as outlined in the Product stewardship section on page 13 of this report.



Metal concentrate from Golden Grove is loaded onto ships at Geraldton Port.

Customer economic sustainability

Our customers are smelting businesses that on-sell our product after refining it further, for consumption in a range of end uses, such as construction materials or automotive vehicles. When global demand for these end uses falls, our customers may respond by reducing their demand for our product.

While we have life-of-mine contracts in place for a large portion of our current production, we negotiate annual treatment and refining charges. We also sell product to customers on short-term, spot-market contracts.

To maintain our economic sustainability, we must be able to sell our products to market, and therefore the demand for our products from customers is pivotal to our economic sustainability. Through the IZA, the ICMM and the MCA, we are working on various initiatives to promote our products to the global market for established and new uses. We believe that access to growing economies, such as China, provides our products with strong customer markets.

As with commodity prices, we monitor customer demand for our products and adjust our internal forecasts and operational plans accordingly.

Management reporting and decision-making

Good management reporting is necessary to facilitate effective decision-making, execute our Sustainability Policy and improve our ability to integrate future acquisitions smoothly.

In 2012 we significantly advanced our program to review and upgrade information technology (IT) systems in order to eliminate reliance on legacy systems and support management reporting and decision-making. This transformational program aims to improve management responsiveness and overall operational efficiency.

There was significant further investment in standardising our business processes and deploying a common SAP¹ platform in 2012. Under our Integrated Business Management Program (IBM), key management systems are being transformed to provide a foundation for MMG's streamlining and growth, including essential infrastructure. The system is underpinned by common global processes and a standard SAP mining platform. Linking into this now are further IT modules developed over 2012, and planned for 2013. These include standardised reporting and costing models, improved master data integrity to support sound decision making, and common HR systems and processes. This transformational program aims to improve management responsiveness and overall operational efficiency.

¹ SAP AG is a global inter-enterprise software company.



Business systems training at Sepon in Laos.

2013 CHALLENGES

In 2013, as we pursue our strategic and three-year sustainability goals, MMG aims to develop a number of the opportunities in our project pipeline. We will focus on:

- » Development and construction of the Dugald River project;
- » The continuing transition and integration of Anvil's business processes, systems and standards into MMG;
- » Continuing the feasibility study of the Izok Corridor project;
- » Pursuing external growth through value-focused acquisitions; and
- » Extending and applying MMG processes and standards bullet to achieve measurable community economic contribution.

GLOBAL REPORTING INITIATIVE INDEX

This table identifies the Global Reporting Initiative G3.1 indicators addressed in this Sustainability Report and where to find the relevant content. Where an indicator is addressed directly in the table, relevant text appears in italics.

GRI CATEGORY	GRI INDICATOR NUMBER	GRI INDICATOR DESCRIPTION	SUSTAINABILITY REPORT REFERENCE	PAGE
STANDARD DISCLOSU	IRES: STRATEGY	AND PROFILE	'	
Strategy and Analysis	1.1	CEO Message.	Message from the Chief Executive Officer. Chief Executive Officer's Report, 2012 Annual Report (pp. 16–17): www.mmg.com	1
	1.2	Sustainability impacts, risks and opportunities.	About our report (2012 Material sustainability issues; 2012 Sustainability highlights and challenges; across individual chapters).	2
Organisational Profile	2.1–2.9	Company, products, operational structure, organisational footprint and scale, significant changes during the reporting period.	About our report; Message from the Chief Executive Officer; About MMG – Map of operations; Our people (Performance); Sustaining our economic performance (Performance; Investment in new acquisitions and projects; Customer economic sustainability).	2, 1, 4 20, 68
	2.10	Awards.	MMG Limited was selected as a constituent stock in the 2012 Hang Seng Corporate Sustainability Benchmark Index (HSSUSB).	
Report parameters	3.1–3.4, 3.6–3.11	Report profile and contact point for this report; report scope and boundary.	About our report; Inside back cover; Our approach (Material sustainability issues determination); GRI Index; ICMM Principles Index.	2, Inside back cover, 10
	3.5	Process for defining report content.	About our report; 2012 Material sustainability issues; Our approach (Material sustainability issues determination). Working with our stakeholders (Stakeholder Table).	2, 3, 10, 42
	3.12	Standard disclosures.	GRI Index.	76
	3.13	Assurance.	About our report; Independent limited assurance report.	2, 82
Governance, commitments and engagement	4.1–4.10	Governance.	About MMG – Map of operations; Our approach (Ethics anti-corruption and business conduct). Corporate Governance in 2012 Annual Report (pp. 74-82): www.mmg.com	4, 10
	4.12-4.13	Commitments and engagements.	Our approach (Alignment with the ICMM Sustainable Development Principles; Management approach – Public policy initiatives); Working with our stakeholders; Respecting our environment (Biodiversity management); Sustaining our economic performance (Ethics, anti-corruption and business conduct); Case study – MMG and UNICEF partner for child health.	10, 40 52, 68 18
	4.14-4.17	Stakeholder engagement.	Our approach – Material sustainability issues determination; Working with our stakeholders (incl Stakeholder matrix).	10
Economic	EC1, EC4	Direct economic value generated and distributed.	2012 Sustainability highlights and challenges; Our people (Gender and workforce diversity – Diversity roles and remuneration table); Working with our stakeholders (Local community and regional development; Social investment in 2012 (graph); – Social investment initiatives (table)); Sustaining our economic performance (Performance). No direct assistance was received from governments. 2012 Annual Report: www.mmg.com	7, 27, 40, 68
	EC2	Financial implications due to climate change.	Respecting our environment – Energy and greenhouse gas emissions; Sustaining our economic performance – Legislative change or compliance impacts on operations; MMG tracks and coordinates with sector responses to climate change impacts under membership of the ICMM.	52

GRI CATEGORY	GRI INDICATOR NUMBER	GRI INDICATOR DESCRIPTION	SUSTAINABILITY REPORT REFERENCE	PAGE
Economic	EC3	Coverage of the organisation's defined benefit plan obligations.	Our people (Performance). 2012 Annual Report (pp. 78,119): www.mmg.com	
Market presence	EC6	Policy, practices, and proportion of spending on locally based suppliers at significant locations of operation.	Our approach (Sustainable procurement; Sustainable supply chain); Working with our stakeholders (Local business development and procurement); Sustaining our economic performance (Contribution to local and regional economies; Case study – Local procurement at Sepon; Case study – Supporting local businesses at Century). MMG's definition of local is the region of lowest governmental jurisdiction (district).	10, 40, 68
	EC7	Procedures for local hiring and proportion of senior management and workforce hired from the local community at significant locations of operation.	Our people (Employing local people; Case study – Indigenous workforce participation at Century; Local employee management capability development; Case study – Lao employees take on positions of responsibility at Sepon; Case study – Kinsevere management transition).	20
Indirect Economic Impacts	EC8	Infrastructure and services provided primarily for public benefit.	Working with our stakeholders (Local community and regional development; Social investment in 2012 (table); Social investment initiatives (table)); Sustaining our economic performance (Contribution to local and regional economies).	40
Materials	EN1, EN2	Materials.	About MMG – Map of operations; Respecting our environment (Mineral waste management). MMG does not use recycled input materials.	4, 52
Energy	EN3, EN4, EN5, EN7	Direct and indirect energy consumption, energy savings/efficiency.	Respecting our environment (Energy and greenhouse gas emissions; 2012 energy intensity; 2012 greenhouse gas emissions intensity; Case study – Asset utilisation through energy efficiency across MMG).	
Water	EN8, EN9, EN10, EN25, EN15	Water withdrawal, water source, recycling and re-use.	Respecting our environment (Water management; 2012 water inputs; Total Water Inputs By Source (pie chart); Water outputs (tailings, acid rock drainage); 2012 water output quality (graph); Case study – Tailings facility redesign at Rosebery).	52
Biodiversity	EN11, EN12, EN13, EN14, EN15	Location and size of land in or adjacent to protected areas, description of impacts, habitats protected, biodiversity management strategies.	Respecting our environment (Land disturbance and rehabilitation; Case study – Rehabilitation initiatives across the Group; Biodiversity management; Case study – Dugald River biodiversity offset project).	52
	MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	Respecting our environment (Land disturbance and rehabilitation; Case study – Rehabilitation initiatives across the Group; Biodiversity management; Case study – Dugald River biodiversity offset project).	52
	MM2	Sites identified as requiring biodiversity management plans and the number (%) of those sites with plans in place.	Respecting our environment (Land disturbance and rehabilitation; Case study – Rehabilitation initiatives across the Group; Biodiversity management; Case study – Dugald River biodiversity offset project).	52

GRI CATEGORY	GRI INDICATOR NUMBER	GRI INDICATOR DESCRIPTION	SUSTAINABILITY REPORT REFERENCE	PAGE
Emissions, effluents and waste	EN16, EN17, EN18	Greenhouse gas emissions.	Respecting our environment (Energy and greenhouse gas emissions; 2012 greenhouse gas emissions intensity).	52
Emissions, effluents and waste	EN21	Total water discharge.	Respecting our environment (Water management; Water outputs (tailings, acid rock drainage); 2012 water output quality (graph); Case study – Tailings facility redesign at Rosebery).	52
	EN22	Total weight of waste.	Respecting our environment (Mineral waste management).	52
	EN23	Number and volume of significant spills.	Respecting our environment (Environmental incidents (spills and exceedances)).	52
	MM3	Total amounts of overburden, rock, tailings and sludges, and their associated risks.	Respecting our environment (Mineral waste management; Water outputs (tailings, acid rock drainage); 2012 water output quality (graph); Case study – Tailings facility redesign at Rosebery).	52
Products and services	EN26	Initiatives to mitigate environmental impacts.	Our approach (Product stewardship).	10
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	This is not applicable to MMG as concentrates are sold in bulk and not packaged for the end consumer.	
Compliance	EN28	Monetary value of fines.	Respecting our environment (Environmental incidents (spills and exceedances)).	52
	501	Due see see that	Washing with a material to the control of the contr	40.0
Local communities	SO1	Programs that assess and manage the impacts of operations on communities.	Working with our stakeholders (Local community and regional development; Social investment in 2012 (graph); Case study – Community capacity building at Kinsevere; Case study – Local school development at Sepon; Social investment initiatives (table)); Sustaining our economic performance (Contribution to local and regional economies).	40, 68
	MM6	Significant disputes relating to land use, customary rights of local communities and Indigenous peoples.	Working with our stakeholders (Managing human rights issues; Case study – Standards for human rights and security).	40
	MM7	Use of grievance mechanisms to resolve disputes relating to land use, customary rights of local communities and Indigenous peoples.	Working with our stakeholders (Managing human rights issues; Case study – Standards for human rights and security).	40
Artisanal and small-scale mining	MM8	Company operating sites where artisanal and small-scale mining takes place on, or adjacent to, the site, associated risks and actions taken.	Health and safety (Public interaction with operations).	39
Resettlement	MM9	Sites where resettlement takes place, the number of households resettled and how livelihoods were affected.	No resettlements occurred during the reporting period.	
Closure planning	MM10	Operations with closure plans.	Working with our stakeholders (Managing life of mines/ closure and post-closure planning; Case study – Closure consultation across MMG).	10
Corruption	SO2	Analysis for risks.	Our approach (Anti-corruption and transparency; Risk management).	10
	SO3	Employee training.	Our approach (Anti-corruption and transparency). 0 in the reporting period.	10
	SO4	Actions taken in response to corruption.	Our approach (Anti-corruption and transparency). <i>0 in the reporting period</i> .	10

GRI CATEGORY	GRI INDICATOR NUMBER	GRI INDICATOR DESCRIPTION	SUSTAINABILITY REPORT REFERENCE	PAG
Public Policy	SO5, SO6	Participation in public policy development, contributions to political parties.	Our approach (Anti-corruption and transparency; Public policy initiatives).	10
Compliance	SO8	Fines for non-compliance with laws and regulations.	Our approach (Anti-corruption and transparency). Zero fines in the reporting period.	10
stewardshiprelating to materialsMMG works withstewardship.ICMM and the Min		Our approach (Product stewardship). MMG works with our International Zinc Association (IZA), the ICMM and the Minerals Council of Australia (MCA) on materials stewardship programs.	10	
Customer health and safety	PR1, PR2	Health and safety impacts of products and services, non-compliances.	Our approach (Product stewardship). MMG works with our trade and smelter customers on correct product handling and movement, using Material Data Safety Sheets. Zero noncompliances in the reporting period.	10
Product and service labelling	PR3, PR4, PR5	Product and service information, non-compliances and customer satisfaction surveys.	MMG's products are sold as concentrates in bulk, not to the end consumer, thus customer satisfaction data is not collected. MMG follows product handling, safety and labelling requirements for the transport of our product. Zero non-compliances in the reporting period.	
Marketing communications	PR6, PR7	Adherence to laws, standards and voluntary codes related to marketing communications, non-compliances.	MMG does not undertake marketing communications for our product as they are sold as bulk concentrates on the global metals market. Zero non-compliances in the reporting period.	
Compliance	PR8, PR9	Fines concerning the provision and use of products and services, non-compliances re: customer privacy.	MMG does not collect or store customer data. Zero non-compliances or fines in the reporting period.	
Employment	LA1, LA2	Workforce by employment type, region and employee turnover	Our people (Performance; Total workforce make-up 2012 (table); People profile by employment term (graph); People profile by site (graph); Gender and workforce diversity; 2012 gender diversity (% female employees) (graph); Diversity roles and remuneration).	21
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Our people (Performance). Part-time employees have same entitlements as full-time. Temporary employees do not have access to St Luke's healthcare, novated leasing, paternity leave or site STI unless specifically outlined in their contract or when they have been with MMG for 12 months.	20
Labour/ management relations	LA4	Employees covered by collective agreements.	Kinsevere – 100% "blue collar" employees covered by collective agreement; Century – 60.7% of employees are covered by the MMG Century Mine Employee Certified Agreement 2010; Rosebery – 45% of employees are covered by Enterprise Bargain Agreement for the underground workforce.	
	LA5	Minimum notice periods regarding operational changes	There is no specific minimum notice period however, once MMG has made a definite decision to pursue a specific course of action then we would notify all relevant parties.	
Labour/ MM4 Number of strikes and lock-outs exceeding one week's duration, by country.		lock-outs exceeding one week's duration, by	There were no strikes or lock-outs during the reporting period.	

GRI CATEGORY	GRI INDICATOR NUMBER	GRI INDICATOR DESCRIPTION	SUSTAINABILITY REPORT REFERENCE	PAGE
Occupational health and safety health and safety LA7, LA8 Health and safety committees and rates of injury and work-related fatalities.		Health and safety committees and rates of injury and work-related	Health and safety (Performance; Safety of our people; Injury rates and safety incidents; Safety incidents (graph); Case study – Renewed focus on safety at Rosebery; Occupational health of employees; 2012 Heavy metals biological screening (table); Case study – Reducing malaria at Kinsevere).	
Training and	LA10	Staff training.	Our people (Employee training and development).	28
education	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Our people (Local employee management capability development; Case study – Lao employees take on positions of responsibility at Sepon; Case study – Kinsevere management transition; Quality employee attraction and retention; Employee training and development).	20
Diversity and equal opportunity	LA13	Composition of governance bodies and employee categories.	Our people (Performance; Total workforce make-up 2012 (table); People profile by employment term (table); People profile by site (graph); Gender and workforce diversity; 2012 gender diversity (% female employees) (graph); Diversity roles and remuneration). Board and Corporate Governance – 2012 Annual Report (pp. 8, 74): www.mmg.com	21
	LA14	Salary ratio of men to women by employee category.	Our people (2012 gender diversity (% female employees) (graph); Diversity roles and remuneration (table)).	21
Investment and procurement practices	HR1, HR2, HR3	Significant investment agreements that include human rights and suppliers and contractors who have undergone screening. Employee training on policies and procedures concerning human rights.	Human rights screening is not currently part of investment and procurement processes. Code of conduct application and training occurred across MMG, including contractors, and links to Human Rights management and related internal MMG standards. See also Our approach (Sustainable procurement; Sustainable supply chain).	10
Non-discrimination	HR4	Incidents of discrimination and actions taken.	Zero reported incidents of discrimination in the reporting period.	
Freedom of association and collective bargaining	HR5, HR6, HR7	The right to exercise freedom of association and collective bargaining. Child labour, compulsory labour.	Zero incidents or situations identified in the reporting period.	
Security practices	HR8	Security personnel trained in relevant human rights policies or procedures.	Health and Safety (Public interaction with operations); Working with Our Stakeholders (Standards for Human Rights and Security). Sepon security personnel are trained in how to manage security issues and the rights of people involved.	39, 48
Indigenous rights	MM5, HR9	Operations taking place in or adjacent to Indigenous peoples' territories, and operations where there are formal agreements with Indigenous peoples' communities, incidents relating to Indigenous rights.	Our people (Case study – Indigenous workforce participation at Century); Working with our stakeholders (Case study – Izok transition from exploration to project development; Managing human rights issues; Case study – Standards for human rights and security; Managing community cultural heritage around MMG sites; Case study – Ancient boats found at Sepon). Zero incidents or situations identified in the reporting period.	21, 48

ICMM SUSTAINABLE DEVELOPMENT PRINCIPLES INDEX

	ICMM PRINCIPLE	REPORT SECTION	PAGE
01	Implement and maintain ethical business practices and sound systems of corporate governance	Our approach (Management approach; Business ethics and governance; Anti-corruption and transparency; Governance). Sustaining our economic performance (Ethics, anti-corruption and business conduct; Code of conduct roll-out across MMG). Corporate Governance in 2012 Annual Report (p74): www.mmg.com	
02	Integrate sustainable development considerations within the corporate decision-making process	About our report (Material issues). 2012 Material sustainability issues. Our approach (Alignment with the ICMM Sustainable Development Principles; Material sustainability issues determination; Management approach).	
03	Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities	Our people (Case study – Indigenous workforce participation at Century). Working with our stakeholders (Case study – Izok transition from exploration to project development; Managing human rights issues; Standards for human rights and security; Managing community cultural heritage around MMG sites; Case study – Ancient boats found at Sepon).	
04	Implement risk management strategies based on valid data and sound science	Message from the Chief Executive Officer. Chief Executive Officer's Report in 2012 Annual Report (p 16): www.mmg.com. Our approach (Risk management). Our people (Managing fly-in, fly-out workforce effects). Health and safety (Significant and high fatality-potential incidents on MMG sites; Road safety in near-mine communities; Case study – Musculoskeletal program at Golden Grove; Aviation risk management – update). Working with our stakeholders (Managing human rights issues; Case study – Standards for human rights and security; Managing life of mine/closure and post-closure planning; Closure consultation across MMG). Respecting our environment (Environmental incidents (spills and exceedences); Managing and preventing environmental incidents at Century; Mineral waste management; Case study – Century historic tailings remediation). Sustaining our economic performance (Legislative change or compliance impacts on operations).	
05	Seek continual improvement of our health and safety performance	Sustainability performance – three-year goals. Our approach (Our strategy for sustainability; Management systems). Health and safety (Our approach; Performance; 2013 challenges).	8, 10, 40
06	Seek continual improvement of our environmental performance	Sustainability performance – three-year goals. Our approach (Our strategy for sustainability; Management systems). Respecting our environment (Our approach; Performance; 2013 challenges).	8, 10, 52
07	Contribute to conservation of biodiversity and integrated approaches to land use planning	Respecting our environment (Land disturbance and rehabilitation; Case study – Rehabilitation initiatives across the Group; Biodiversity management; Case study – Dugald River biodiversity offset project).	52
80	Facilitate and encourage responsible product design, use, re-use, recycling and disposal of products	Our approach (Product stewardship).	10
09	Contribute to the social, economic and institutional development of the communities in which we operate	Our approach (Sustainable procurement; Sustainable supply chain). Working with our stakeholders (Local community and regional development; Local business development and procurement; Social investment in 2012 (graph); Social investment initiatives (table); Case study – Community capacity building at Kinsevere; Case study – Local school development at Sepon; Managing life of mine/closure and post-closure planning; Case study – Closure consultation across MMG). Sustaining our economic performance (Contribution to local and regional economies; Case study – Local procurement at Sepon; Case study – Supporting local businesses at Century).	10, 40, 68
10	Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders	Our approach (Material sustainability issues determination). Our people (Our approach; Quality employee attraction and retention). Working with our stakeholders (Our approach; Community support for MMG – social licence to operate; Government relations; Case study – Closure consultation across MMG; 2013 challenges).	10, 20, 40



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Independent Limited Assurance Report to the Directors of MMG

We have performed a limited assurance engagement in relation to selected subject matter contained in MMG's 2012 Sustainability Report ('the Report') in order to state whether anything has come to our attention that would cause us to believe that the Subject Matter has not been performed or presented in accordance with the criteria described below, including the application of elements of International Council on Mining and Metals ('ICMM') Sustainable Development ('SD') Framework.

Subject Matter and Criteria

The Subject Matter and Criteria for our assurance engagement for the year ended 31 December 2012 for the reported boundary included:

- Whether MMG has disclosed its material sustainability risks and opportunities within the Report in line with the AA1000 Principles Standard ('AA1000 APS') definition of materiality
- ▶ ICMM Subject Matters 1 to 4, as described in the table below

For the purposes of this engagement, the Subject Matter and Criteria were defined as follows:

Area	Subject Matter	Criteria
ICMM Subject Matter 1	The alignment of MMG's sustainability policies to ICMM's 10 SD Principles and mandatory requirements set out in ICMM Position Statements	MMG's reported alignment of its sustainability policies to ICMM's 10 SD Principles and mandatory requirements set out in ICMM Position Statements (p11)
ICMM Subject Matter 2	MMG's material sustainability risks and opportunities based on its own review of the business and the views and expectations of stakeholders	MMG's description of its process for identifying material issues and the Global Reporting Initiative ('GRI') definition of completeness and AA1000 APS definition of materiality (p12)
ICMM Subject Matter 3	The existence and status of implementation of systems and approaches used by MMG to manage a selection of material sustainability risks and opportunities (selected by MMG) including: Employing local people (national employee vs ex-patriate ratio) (pp21-23) Quality staff attraction and retention (average time to fill position, twelve month new hire retention rate, employee turnover) (p21, p24) Significant and potentially fatal incidents on MMG sites (number of Significant and High Fatality Potential Incidents (pp32-32)) Community support (number of community grievances) (pp40-41) Environmental incidents (number of recordable environmental incidents) (pp53-54) Wastewater - (water outputs by destination and site (ML)) (pp58-59) Contribution to local and regional economies (total social investment (\$)) (p45, p69) MMG's process for identifying the material sustainability risks and opportunities selected for review is recorded in the 'Materiality Determination' section of the Report.	MMG's description of the systems and approaches to manage the selected material sustainability risks and opportunities
ICMM Subject Matter 4	MMG's reported performance during the reporting period for the material sustainability risks and opportunities identified in Subject Matter 3 above	 Performance information criteria disclosed by MMG for each indicator including: Employing local people (national employee vs ex-patriate ratio) (pp21-23) Quality staff attraction and retention (average time to fill position, twelve month new hire retention rate, employee turnover) (p21, p24) Significant and potentially fatal incidents on MMG sites (number of Significant and High Fatality Potential Incidents (pp32-32)) Community support (number of community grievances) (pp40-41) Environmental incidents (number of recordable environmental incidents) (pp53-54) Wastewater - (water outputs by destination and site (ML)) (pp58-59) Contribution to local and regional economies (total social investment (\$)) (p45, p69)



The scope of our work did not include:

- Any assessment of MMG's management's process for selecting the areas for our limited assurance engagement or the materiality or relative significance of the Subject Matter
- Assessing the accuracy, fairness or balance of data sets, statements, information, systems or approaches relating to areas other than the Subject Matter
- Management's forward looking statements
- Any comparisons made against historical data
- Any assessment of MMG's IT environment and related controls

Management Responsibility

The management of MMG ('Management') are responsible for the collection, preparation and presentation of the Subject Matter in accordance with the criteria and for maintaining adequate records and internal controls that are designed to support the sustainability reporting process.

Auditor's Responsibility

Our responsibility is to express a limited assurance conclusion on whether the Subject Matter is presented in accordance with the criteria. Our limited assurance engagement has been planned and performed in accordance with the International Federation of Accountants' International Standard on Assurance Engagements 3000: Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ISAE 3000'), with regard to ICMM's SD Framework: Assurance Procedure.

Level of Assurance

A limited assurance engagement consists of making enquiries and applying analytical and other limited assurance procedures. Our procedures were designed to provide a limited level of assurance and as such do not provide all the evidence that would be required to provide a reasonable level of assurance. While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our review was not designed to provide assurance on internal controls. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Our Approach

Our procedures performed included, but were not limited to

- Interviewing a selection of MMG staff and management at both a site and corporate level responsible for the Subject Matter and the preparation of the Report
- Determining whether material topics and performance issues relevant to the Subject Matter identified during our procedures had been adequately disclosed
- Sample testing of reported data, performance statements, claims and case studies included in the Subject Matter against supporting source information, MMG's reported boundary and GRI's principles of balance and completeness
- Sample testing as to whether the methods used for calculating data were aligned with the stated criteria
- ▶ Checking selected management information and documentation supporting assertions made in the Subject Matter
- Checking MMG policies and standards and assessing alignment with ICMM's 10 Sustainable Development Principles and other mandatory requirements as set out in ICMM's Position Statements

Inherent Limitations

There are inherent limitations of any assurance engagement arising from the evidence on which the auditor draws conclusions upon being persuasive, as it relies on selected data to be representative, rather than conclusive. There are additional inherent risks associated with assurance over non-financial information including reporting against standards which require information to be assured against source data compiled using definitions that are developed by the reporting entity. Finally, principles of materiality and responsiveness are subjective and will be interpreted differently by different stakeholder groups.

Use of Our Report

Our limited assurance report has been prepared for distribution to the management and directors of MMG. We disclaim any assumption of responsibility for any reliance on this assurance statement or on the Subject Matter to which it relates, to any person other than management and directors of MMG, or for any purpose other than that for which it was prepared.

Our Independence and Assurance Team

In conducting our assurance engagement we have met the independence requirements of the APES 110 Code of Ethics for Professional Accountants. We have the required competencies and experience to conduct this assurance engagement.

Matters relating to electronic presentation of the Sustainability Report

Our review was of the web-based information that was available via web links as of the date of this statement. We provide no assurance over changes to the content of this web-based information after the date of this assurance statement.

Assurance conclusion

Frast & Youna

On the basis of our procedures for this limited assurance engagement, nothing has come to our attention that causes us to believe that the Subject Matter has not been performed or presented in accordance with criteria.

Ernst & Young Melbourne 13 May 2013



Statement GRI Application Level Check

GRI hereby states that **MMG** has presented its report "2012 Sustainability Report for MMG" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 10 May 2013

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative



The "+" has been added to this Application Level because MMG has submitted (part of) this report for external assurance. GRI accepts the reporter's own criteria for choosing the relevant assurance provider.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 24 April 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

GLOSSARY

REGULARLY OCCURRING ACRONYMS

CEO Chief Executive Officer Lao PDR Lao People's Democratic Republic DRC Democratic Republic of Congo **LTIFR** Lost Time Injury Frequency Rate CMC China Minmetals Corporation Minerals Council of Australia MCA **CMN**

China Minmetals Non-Ferrous Metals MMG MMG Limited Company Limited SHEC Safety health environment and community

EBIT Earnings before interest and tax Training Events Management System **TEMS EBITDA** Total Recordable Injury Frequency Rate Earnings before interest, tax depreciation **TRIFR**

and amortisation UNICEF United Nations Children's Fund **VDF**

Energy Efficiency Opportunity EEO Village Development Fund EITI **Extractive Industries Transparency Initiative** WAF Water Accounting Framework

Environmental Protection Authority EPA

REGULARLY OCCURRING UNITS OF MEASURE and Knowledge Australian dollar(s) Α\$

FIFO "Fly-In, fly-Out" US\$ US dollar(s) GRI Global Reporting Initiative LAK Lao Kip Geraldton Port Authority **GPA**

GJ Gigajoules (of energy) **ICAM** Incident Cause Analysis Methodology

ML Megalitre (of water or other liquid) Hong Kong Exchanges and Clearing Limited **HKEX** Т **Tonnes**

ICMM International Council on Mining & Metals ISO International Standards Organisation

Environmental Reporting Information

EY CONTACTS

International Zinc Association

We welcome your comments on this report. Please contact James Porteous, Communications Advisor via james.porteous@mmg.com with your feedback or suggestions.

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