A global approach to collaboration

Annual Review 2015
Who we are
The International Council on Mining and Metals (ICMM) is a CEO-led organisation of mining and metals companies that collaborate to promote responsible business practices, with a shared commitment to respect people and the environment.

Together, ICMM’s 23 member companies are responsible for a significant proportion of the world’s major metal commodities’ mining and production. They operate at over 900 sites in around 58 countries across the globe, with exploration extending this reach significantly.

ICMM’s vision
Mining and metals is a respected industry, trusted to operate responsibly and to contribute to sustainable development.

ICMM’s mission
ICMM and its members, in collaboration with others, strengthen the social and environmental performance of the mining and metals industry and build recognition of its contributions to local communities and society at large.

ICMM’s values
Care for the safety, health and well-being of workers, contractors, communities and consumers.

Respect for the safety, health and well-being of workers, contractors, communities and consumers.

Integrity in dealings with employees, communities, governments and others.

Accountable to do what we say we will do and uphold our commitments.

Collaborate as a preferred means of working with others in an open, transparent and inclusive manner.

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Governments, communities and industries also pledged to work together to address the dual global challenges of inequality and development, and climate change. Pledges to support the United Nations Sustainable Development Goals (SDGs) and the transition to a low carbon economy will shape and transform the future of the societies in which we live.

Our 2016 plan builds on ICMM’s historical progress in improving the social and environmental performance of our industry. As a major catalyst for economic development, the mining and metals industry is in a unique position to work with communities, governments, global agencies and other development partners to support the achievement of these critical and interlinked goals.

In an increasing emphasis for the organisation, we must also better listen, understand and demonstrate the role of mining to, and within, society. ICMM’s work programme in 2016 underpins this renewed focus and with 23 of the world’s leading mining and metals companies and 35 national mining and commodity associations committed to the task we intend to make a difference.

While significant economic headwinds continue for our industry, I strongly believe we do our very best work in tough times, through a strengthened focus on partnerships and collaboration – and we share some of these in this report.

As the new Chair of ICMM, I look forward to working with leading mining companies, national mining and commodity associations and other partners to responsibly deliver shared benefit from the development of mineral resources.

Andrew Michelmore
ICMM Chairman
Focused on collaboration

ICMM translates complex issues into meaningful and actionable activities, collaborating with stakeholders to promote and enable responsible mining and metals production.
How we work

We engage with stakeholders to understand the sustainable development and responsible production challenges of mining and metals, and support continuous improvements in members' social and environmental performance.

**Members**
We work with our 23 member companies to implement best practice initiatives to improve their sustainability performance and share learnings.

**Member associations**
We engage with national mining and international commodity associations to strengthen performance across the industry.

**Broader stakeholders**
We actively engage with a broad range of stakeholders to share learnings, explore best practice, understand perspectives and trends and promote sustainable mining and metals operations.

**Partnerships**
We build relationships with organisations that have a common interest in sustainable business operations.

For more information about how we work see www.icmm.com
Members’ commitment

ICMM member companies commit to implementing the ICMM Sustainable Development Framework. This means integrating a set of 10 principles, six position statements and transparent reporting into their business practices to improve sustainability performance.

The 10 principles of the Sustainable Development Framework

1. Apply ethical business practices and sound systems of corporate governance and transparency in support of sustainable development.

2. Integrate sustainable development considerations within corporate strategy and decision-making processes.

3. Respect human rights and the interests, cultures, customs and values of employees and others affected by our activities.

4. Implement effective risk management strategies and systems which are based on sound science and account for stakeholder perceptions of risks.

5. Pursue zero harm and continual improvement in our health and safety performance.

6. Pursue continual improvement in our environmental performance, on issues such as water stewardship and energy and climate change.

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

8. Facilitate and support the knowledge-base and systems for responsible design, use, re-use, recycling and disposal of products containing metals and minerals.

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

10. Proactively engage key stakeholders in sustainable development challenges and opportunities in an open and transparent manner and effectively report and independently verify progress and performance.
ICMM’s Assurance Procedure addresses:
- The alignment of the member company’s sustainability policies to ICMM’s Sustainable Development Framework and any mandatory requirements set out in ICMM Position Statements.
- The company’s material sustainable development risks and opportunities based on its own review of the business and the views and expectations of its stakeholders.
- The existence and status of implementation of systems and approaches that the company is using to manage the identified material sustainable development risks and opportunities.
- The company’s reported performance during the given period for a selection of identified material sustainable development risks and opportunities.

Assurance

Membership rigour
To become an ICMM member, a company must undertake a rigorous admissions process. Prospective members must provide information about their businesses and undertake a gap analysis against ICMM membership requirements. Once this self-assessment is complete, independent assurance and review by an expert panel is undertaken. This determines the prospective member’s capacity and commitment to meet ICMM’s sustainability requirements and its support for continuous improvement in social and environmental performance.

Annual assurance
ICMM members are required to obtain annual independent third party assurance of their sustainability performance. This reinforces their commitment to transparency and ensures the credibility of reported progress in social and environmental performance.

In practice, this means an independent assurer must review and assess the integrity of ICMM member policy frameworks, processes for identifying material risks, systems and processes that underpin performance, and rigour of reported information in line with ICMM’s Assurance Procedure.¹

¹ The Assurance Procedure was designed to be compatible with member companies’ assurance of their own sustainability reports. Most members assure their sustainability reports and any ICMM-specific assurance requirements in an integrated manner.

Member assurance data is reported on page 24.
Our members

Making a difference

ICMM brings together 23 mining companies and 34 associations. Together, they span the globe and deliver governments and industry the essential resources they need to enable societies to develop and prosper.

- Mining represents more than 50% of national exports in 16 developing and emerging countries.
- In some developing countries, mining and metals can account for up to 90% of foreign direct investment and up to 60% of total exports. When transparency and appropriate governance are embraced, this income can be used to improve citizens’ quality of life through developing fundamental infrastructure and services.
- Each mining-generated job can lead to the creation of 3-5 additional jobs outside the mining sector.

The significant global presence of ICMM’s members means that their activities and processes are regarded as a benchmark for the broader industry. By helping members execute their operations in accordance with our Sustainable Development Framework, we are able to support wider industry-led operational performance and processes for ongoing improvements.

ICMM members recognise the economic, environmental and socio-cultural implications of their activities through the full mine project lifecycle. They also seek to catalyse improvements in quality of life and the environment through partnerships based on mutual respect with governments and local communities.

View more about our members see www.icmm.com
Social and economic development

The mining and metals industry has the potential to help societies develop and stimulate economic activity, particularly in non-OECD countries. It can do this in the way it supports learning, and contributes to economic and social progress and the realisation of rights, as well as bringing economic opportunity beyond the direct jobs it creates and the taxes it pays.

May/August/November

**Workshops on managing community relations**

ICMM resources were adapted into training materials to support front-line staff in the management of complex operational issues relating to host communities. Three regional workshops were held in Toronto, Johannesburg and Santiago. Over three days, operational staff from member companies explored common issues and concerns, with the emphasis on fostering constructive relationships with host communities.

October

**Updated guide on Indigenous Peoples and mining**

With input from more than 20 external individuals, agencies and NGOs, the Indigenous Peoples and mining good practice guide helps mining companies build mutually beneficial relationships with Indigenous Peoples. It outlines principles for positive engagement in order to foster respect for their rights, interests, aspirations, cultures and livelihoods.

November

**Workshop to support development in mineral-driven countries**

ICMM brought together member company representatives and stakeholders looking to strengthen mining’s contribution to development in their respective regions. It focused on training in ICMM’s Mining: partnerships for development (MPD) toolkit, which seeks to facilitate collaboration among multiple stakeholders in mineral-driven countries.

December

**Published a toolkit to help understand community relations**

The Understanding company-community relations toolkit helps mining companies understand the factors that influence community support and measure it at a particular project or operation. A pilot version of the toolkit was tested by ICMM member companies Barrick and Teck, which provided valuable insights to ensure its practical application.
Environment
Mining and metals operations, host communities and other stakeholders all depend on water, land and energy. Companies are increasingly expected to demonstrate responsible stewardship in order to secure access to these shared resources. Many companies are also involved in reducing emissions, supporting low-emission technologies and helping host communities adapt to the effects of climate change.

February
Published a guide to catchment-based water management
A practical guide to catchment-based water management sets out a collaborative approach to water management that considers the needs, concerns and priorities of other water users and promotes inclusive and ongoing engagement with all stakeholders. It enables miners and operators to detail the priorities of all water users throughout the water catchment, as well as the water usage of the operation itself (see case study on page 16).

September
Cross-sector collaboration on biodiversity management
The Cross-Sector Biodiversity Initiative (CSBI) is a partnership between ICMM, IPIECA (representing the global oil and gas industry) and the Equator Principles Association (representing financial institutions). It released a Cross-sector guide to managing biodiversity and Good practices for the collection of biodiversity baseline data.

October
Issued a member endorsed statement on climate change
Leading up to COP21 in Paris, ICMM offered its support to the efforts of the UNCCC and issued a statement on climate change, endorsed by the CEOs of all 23 member companies. It outlined the industry’s role and commitment to engage with peers, governments and society on effective climate change policies (see case study on page 23).

December
Water catchment pilot
ICMM commenced a pilot trial of A practical guide to catchment-based water management in collaboration with member Anglo American and stakeholders at the Minas-Rio iron ore mine in Brazil (see case study on page 16).
Health and safety
Responsible mining and metals production puts people first, with an unwavering commitment to health, safety and well-being. Despite the hazards of the industry, accidents and occupational diseases are preventable through effective risk management – with zero fatalities being ICMM’s primary focus.

April
Critical control management guide published
ICMM published Health and safety critical control management: good practice guide – a first-of-its-kind guide, designed to improve critical controls over rare but potentially catastrophic events. The approach identifies what controls are needed and ensures that supervisors and managers monitor critical controls to assure that they are providing in practice what they are presumed to in theory.

March/October
Cross sectoral health forum
ICMM organised two Health and Safety Forums to provide members with a space for sharing experiences, learning lessons, and discovering cutting edge practices advocated by international experts and used in other sectors. These forums were valuable in helping ICMM shape projects to improve health and safety performance within the mining and metals industry.

December
Implementing critical control management
ICMM’s expanded Critical control management implementation guide describes the history, benefits and challenges of critical control management, and how to prepare and plan for implementation of the approach. It includes a step-by-step guide that uses health and safety case studies to demonstrate the approach and provides the actions needed to achieve the target outcomes with each step.

December
Global tailings management review commenced
ICMM announced the commissioning of a global review of tailings storage facility standards and critical controls. This was a response to the Samarco tailings disaster, and seeks to enhance members’ risk management approach to tailings facilities. It will encompass inputs from multiple stakeholders and members and make recommendations for future action.
Materials stewardship
To enable shared responsibility for materials that are produced and used responsibly, ICMM works to understand risks, encourage collaboration through the value chain and promote efficiency and waste reduction. ICMM shares these learnings with trade bodies, other industry sectors and regulators across the world and engages deeply in regulatory debates.

August
Workshop on effective assessment of risks of metals
Through a workshop for Asia Pacific Economic Cooperation, ICMM helped governments and industry to assess the risks of metals and design appropriate policy responses. It formed part of a year-long partnership between ICMM and the Australian government to train authorities and the mining and metals industry to improve application of metals-science in policy making (see case study on page 22).

September
Demonstrated progress on chemicals management
Published a Minerals and metals management 2020 status report in clear alignment with the societal expectations reflected in the objectives of the United Nations’ Strategic Approach to International Chemicals Management (SAICM). The status report outlines progress along with illustrative case studies.

October
Hosted a round table on materials stewardship
The round table brought together over 30 representatives of industry, government and civil society to consider which policies, strategies and actions best advance the role of mining and metals in the circular economy (see page 18).

December
Published a responsible sourcing guide
Demonstrating value: a guide to responsible sourcing is the first ever comprehensive guide on responsible sourcing for the mining and metals industry. The guide builds on work undertaken by ICMM to ensure that sustainable development challenges are considered not only at the mine or metal production facility but throughout the value chain.
I am pleased to welcome you to my first report since joining ICMM in July.

The mining and metals industry provides immense economic opportunities across entire countries – from the national level enabling governments to meet the needs of their society to the skills and economic opportunities operations can offer local people and their communities. Over the many years I worked in our industry sector with the International Finance Corporation (IFC), I saw first-hand the positive, transformative impact the mining and metals industry can have on society – particularly in developing nations.

It was for this reason that I joined ICMM, which since 2001 has been equipping our members to lead by example in best practice, to maximise the sustainability of metals and mining operations.

A new strategy for an evolving landscape

Since its inception, ICMM has been proactive in evolving industry practices to enable and promote a sustainable mining and metals industry that enjoys the genuine support of its host communities. ICMM has been assisting its members to achieve best practice across the complex landscape of some of the world’s biggest projects for well over a decade.

ICMM also helps to ensure that achievements in best practice are both shared with our members and communicated across the wider industry. It is this communication and dialogue imperative – as an advocate for sustainable practices – that has particularly informed our new three-year Strategy and Action Plan. Launched this year, it will guide us through to 2018.

ICMM’s new strategic plan encompasses three core themes that will shape all of ICMM’s activities: environmental stewardship; the role of mining and metals in society; and human well-being. Importantly, the plan also encompasses an enhanced focus on outcomes, and our approach is illustrated on pages 16 to 23. It is my aim that, when we enter our next strategy planning cycle in 2018, society will have a better understanding of the positive impact our industry can have – in partnership with governments, civil society and local communities. By executing our new strategy, not only will our members continue to help lift standards across the entire industry, they will also ensure they maintain their own access to capital, markets and deposits.

Importantly, although our new strategy drives the majority of our activities, we retain the ability to respond to our evolving operating environment. In particular, this year this meant announcing the commissioning of a global review of tailings storage facility standards and critical controls, following the tragic loss of life that resulted from the Samarco tailings dam collapse in Brazil. I extend my deepest sympathies to all those affected by the disaster. I am also very determined that we support our industry to ensure that such an event does not recur.

Practical guidance and proactive messages

Throughout 2015, ICMM released a wide range of guidance documents and practical tools to help the industry achieve its goal of responsible operations. It also presented the mining and metals industry’s sustainability perspective in a diverse range of forums. A particular achievement was having all 23 member CEOs endorse a statement on climate change, which we were able to deliver before COP21 in December. This enabled ICMM to make a positive contribution to the climate change debate, and clearly put forward our industry’s perspective.

Water was a particular focus this year. We promoted a ‘beyond the fence’ approach to its stewardship, which encompassed looking at water at the catchment level.
The complexity and importance of water requires a collective, multi-stakeholder approach and our Practical guide to catchment-based water management supports companies to define and deliver their own catchment-based water risk management strategies within this context. The first pilot is currently being conducted with Anglo American and other stakeholders at the Minas-Rio iron ore project in Brazil, from which we will share learnings with our members.

In line with ICMM’s many years of work in helping the industry reduce fatalities and life changing injuries, this year we also released our Health and safety critical control management: good practice guide and a supporting implementation guide – to assist our members and the broader industry achieve ICMM’s goal of zero fatalities. In line with all our guides, it provides practical case studies to aid implementation and, with a take up of around 80% of our membership to date, it has clearly responded to a need.

Adding to our membership
I am pleased to report that we have added two new members this year.

South32, the globally diversified metals and mining company, was formed following a decision to separate BHP Billiton into two distinct companies. It brings a proud heritage of responsible social and environmental performance which it acquired prior to the demerger.

We also gained our first Russian member in Polyus Gold International Ltd, Russia’s foremost gold producer and one of the 10 biggest gold miners in the world. Listed on the Moscow Stock Exchange, it operates in the abundant gold regions of Siberia and the Far East of Russia. Both companies were accepted as members following our rigorous assurance process.

Looking to a sustainable future
Companies that proactively manage the complex array of sustainability challenges will do better. ICMM is helping our members and the wider industry navigate these both for their long-term success and for the betterment of society. Over the coming years, ICMM will be working to help our members achieve measurable, tangible success in achieving excellence in their operations. We will do this through a wide range of practical assistance, underpinned by enhanced stakeholder dialogue. By doing so, ICMM will help better integrate our members and the broader industry into society while also achieving a deeper understanding of mining and metals transformative potential – something I deeply believe in.

Acknowledgment
I would like to thank all of ICMM’s hard-working employees and our members’ personnel who contributed to the many practical guides, workshops, pilot studies and policy contributions we made this year. Finally, I would like to close by acknowledging my predecessor, Tony Hodge, who was responsible for guiding the team through many of the achievements outlined in this review, and who facilitated my arrival so smoothly.

Tom Butler
ICMM CEO

Key trends and issues
Environmental concerns, social licence to operate, and regulation continue to be top-of-mind issues that the industry will face over the next five years.

- Stakeholders continue to prioritise reduction of environmental impacts as the most important issue for the industry to address, followed closely by improvement in community relations.
- Climate change is of greatest concern among NGOs, and for stakeholders in Oceania and Asia.
- Water usage and management is the most important concern among all stakeholder groups in Europe and Latin America.
- Coal continues to be a major issue amongst NGOs.
- Lower commodity prices and increased pressure to reduce costs are an on-going concern, reflecting current market expectations. Stakeholders expect that the need for investment and use of new technology will increasingly challenge the industry over the next five years.
- As a result of the Mount Polley mine disaster in Canada (and reinforced by the Samarco disaster), tailings issues and management have become a leading industry concern. Tailings issues are interlinked with concerns related to water usage and waste water management.
Focused on outcomes

ICMM’s new Strategy and Action Plan encompasses an enhanced focus on outcomes. The case studies that follow illustrate how ICMM’s approach is embedded in the way we work.
# Strategy and Action Plan 2016-2018

Our vision is one where mining and metals is a respected industry, trusted to operate responsibly and contribute to sustainable development. If this vision is to be realised, societal acceptance of the mining and metals industry needs to improve. This can only be achieved through sustained performance by ICMM member companies that engenders trust and respect, by openly engaging with society in an inclusive manner, and by ICMM members demonstrating leadership within the industry.

ICMM’s 10 principles for sustainable development encompass three inter-related priorities

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<tr>
<th>Environmental stewardship</th>
<th>Role of mining and metals in society</th>
<th>Human well-being</th>
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<tr>
<td>Mining and metals operations depend on water, land and energy. Securing access to these shared resources increasingly depends on demonstrating responsible stewardship and recognising the needs of local communities, conservation interests and other stakeholders. Leadership also involves committing to being part of the solution to climate change.</td>
<td>The industry is essential to help societies develop. Beyond job creation and payment of taxes, responsible companies help strengthen governance and enhance expectations of transparency and accountability. Recognition of the essential contribution of metals and minerals to modern life requires confidence that they are produced responsibly and can be used safely.</td>
<td>A responsible mining and metals industry puts people first. It provides safe and healthy work environments that protect against accidents and occupational diseases. It respects the rights of employees and local communities and contributes to economic and social progress. This requires the meaningful involvement of people in decisions that affect their future.</td>
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We adopt a collaborative approach to strengthen the social and environmental performance of the mining and metals industry

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<th>Leadership through performance</th>
<th>Listen and engage</th>
<th>Enhance understanding</th>
<th>Shape the policy environment</th>
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<tr>
<td>Demonstrate and promote leading environmental and social practices that will encourage better industry-wide performance.</td>
<td>Listen to society’s views and expectations of the mining and metals industry, and engage openly in order to anticipate and respond to emerging issues.</td>
<td>Promote the contribution of mining and metals to society, and advocate for the values of a responsible, sustainable mining and metals industry.</td>
<td>Bring evidence-based perspectives and considered thought leadership to inform the development of policies and standards that support sustainable development outcomes.</td>
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We undertake activities that support positive engagement with host communities and build trust in the mining and metals industry

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<th>Water and land stewardship</th>
<th>Climate change and energy</th>
<th>Responsible supply and use of materials</th>
<th>Contribution of mining and metals</th>
<th>Transparency and governance</th>
<th>Economic and social progress</th>
<th>Health and safety</th>
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We want the mining and metals industry to be a positive catalyst for social and economic development

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<th>Outcomes</th>
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<tr>
<td>Members ensure operations have a minimal impact on biodiversity and include robust catchment-based approaches to water risk management.</td>
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<tr>
<td>Member operations develop and deploy low-emission technologies, and support vulnerable local communities to adapt to the effects of climate change.</td>
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<td>Members lead in promoting shared responsibility across the value chain by understanding risks, enhancing materials traceability and promoting efficiency and waste reduction.</td>
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<tr>
<td>Members lead in engaging with stakeholders to fully understand societal concerns, and respond with sensitivity to build trust and acceptance in a responsible mining and metals industry.</td>
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<tr>
<td>Members support initiatives that improve transparency and enhance the quality of governance so that countries and communities benefit from the development of natural resources.</td>
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<tr>
<td>Members lead in effectively managing operational social risks. And collaborate to realise the potential for mining to benefit society and the economy.</td>
</tr>
<tr>
<td>Members lead the industry by an unwavering commitment to ZERO fatalities, the prevention of accidents through effective risk management and employee well-being.</td>
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www.icmm.com For more information and our publications
Leadership through performance:

To demonstrate and promote leading environmental and social practices that will encourage better industry-wide performance.

In 2015, the World Economic Forum ranked water crises as the number one risk facing business and society. With water integral to each and every process of the mine lifecycle, managing industry’s demands while meeting the water needs of multiple stakeholders is a complex challenge. Effective water management in sensitive areas demands collective action underpinned by a mutual understanding of local water issues. This can only be achieved through collaborative partnerships with other companies, local communities, NGOs and regulators. ICMM is assisting members to meet this challenge through collaborative partnerships in local catchments to enable joint approaches for positive stewardship.

Water stewardship

Industry has learned first-hand that inadequate consideration of other water users can result in costly delays to projects, cancellation of licences, community conflicts and reputational damage. In response to these factors, ICMM developed its Water stewardship framework in 2014, to promote a common understanding of water challenges in the industry. In support of this framework ICMM has launched A practical guide to catchment-based water management for the mining and metals industry, which advocates moving the management of water from ‘inside the fence’, to an ‘outside the fence’, catchment-based approach. A methodology that reorients focus beyond operational water supply to broader considerations of user water priorities across an entire river basin.

Piloting for practical application

In September, ICMM commenced a pilot to test and trial the practical application of a catchment-based approach to water management at Anglo American’s Minas-Rio iron ore mine, located in the Brazilian state of Minas Gerais. Expected to be completed mid-2016, the pilot will enable ICMM to share learnings with the broader membership and wider industry.

The pilot is in keeping with Anglo American’s 10-year water strategy, now in its fifth year of roll-out. This includes improving water efficiency in the context of water catchment restrictions and community needs at each individual operation.
Creating shared value for business and communities
Freeport-McMoRan operates the Cerro Verde copper and molybdenum mining complex in an arid region on the west side of the Andes mountain range – 30km southwest of Arequipa, Peru. Water for Cerro Verde’s processing operations comes from the regulated Chili River system, a limited water resource shared with both industrial and domestic stakeholders in the catchment.
Consistent access to clean water is a critical concern for all stakeholders, and essential for Cerro Verde’s plans for expanded operations. To address deficits in supply, an innovative public-private partnership between Cerro Verde, civil society representatives, the local water utility company, local authorities and the central government has secured the sustainable delivery of water. The partnership includes developing a potable water treatment plant (which now provides water to over 300,000 people and is projected to expand to 750,000 people), a water storage and distribution network and a wastewater treatment plant.

Supporting sexual health
Since 2002, Anglo American has provided free HIV testing and treatment to all employees. In areas local to its operations, it also partners with NGOs and governments to support sexual health education for employees and their families. For example, in Brazil, they partnered with Reprolatina – a local NGO that focuses on sexual and reproductive health education in Latin America. Since 2010, its public awareness and education activities have reached more than 150,000 people in the communities around their operations – including 23,000 employees and community members in 2015 alone.

Good practice in action

Human rights awareness
Rio Tinto’s Simandou iron ore project in Guinea established a human rights awareness programme to improve employees’ ability to identify, understand and manage human rights risks. The training gave the company an opportunity to review its performance and consider the implementation of improvements.

Enabling Aboriginal business development
The Olympic Dam copper mine is located in South Australia. It is the world’s fourth largest copper deposit. Owned by BHP Billiton Olympic Dam Corporation, it is situated on land to which the Kokatha people have long held a cultural and spiritual connection.
In 2009, the Kokatha, along with the Barngarla and Kuyani peoples, entered into a business arrangement with BHP Billiton through the Olympic Dam Agreement (ODA). The ODA ensures that Aboriginal people benefit from the Olympic Dam operation. One success of the agreement was the launch of local Aboriginal businesses through Olympic Dam’s Tier 1 sponsorship model. In 2015, three years after its implementation, three Aboriginal enterprises are now directly contracted across various scopes of work with a further Aboriginal enterprise working through the sponsorship model.

“ICMM’s plan to develop clear guidance on water management that extends beyond the operational boundary will compose a formula for action – a baseline approach that others would do well to emulate.”
Stuart Orr, Head of Water Stewardship at WWF
Listen and engage:

To listen to society’s views and expectations of the mining and metals industry, and engage openly in order to anticipate and respond to emerging issues.

Building positive relationships
ICMM companies recognise that the long-term success of their operations critically depends on building and maintaining positive relationships with communities. Faith groups often play a leading role in advocating for, and delivering, services at the community level but have also been among the industry’s most vocal critics. By engaging with these groups, a number of mining companies have sought to balance the conversation, while listening and working together constructively to address genuine concerns. Building on the 2014 Ecumenical Day of Reflection, in September 2015 mining company executives met with the Pontifical Council for Justice and Peace in Rome for a second Day of Reflection on mining. Both events were convened at the instigation of Anglo American’s Chief Executive Mark Cutifani with the active participation of a number of member company representatives. These engagements provided an opportunity to explore different perspectives, find common ground and build a shared understanding of what mining’s role could and should be.

Sharing insights
ICMM encourages the sharing of best practice across the industry, and participates at international and national events, conferences and workshops to promote its good practice guidance.

In leading by example, ICMM members seek to improve standards across the industry and foster constructive relationships with stakeholders. Of particular importance is the relationship with communities, and in its Understanding company-community relations toolkit, ICMM outlines a structured approach to ensure constructive dialogue (see further detail on page 21).

Engaging on the circular economy
The concept of the circular economy describes production within a circular model where markets, regulations and industrial systems are optimised to design high performance products, minimise impacts, restore or regenerate environments, and optimise material use. As metals are largely infinitely recyclable, the industry has an opportunity to be at the forefront of the debate and incorporate the concept across the whole mining value chain.

To this end, in 2015 ICMM hosted the eighth meeting of the Materials Stewardship Round Table. Attended by over 30 industry, government and civil society representatives, the round table explored the circular economy concept; practical experiences of companies and associations engaging in the circular economy; and policies, strategies and actions that can advance the role of mining and metals in the circular economy.
“Thanks to these workshops and the people that have given us this information, we can now recognise risks from climate change and prepare prevention strategies.”

Genaro Perez, Farmer, La Iraca community

**Good practice in action**

**Assessing community resilience to climate change**

With Peru predicted to experience some of the greatest temperature rises from climate change, Rio Tinto Minera Peru (RTMP) and ICMM came together with local communities to pilot a project assessing the current and future environmental vulnerabilities of communities in La Granja.

Applying the International Institute for Sustainable Development’s (IISD) Community-based Risk Screening Tool – Adaptation & Livelihoods (CRISTAL) and CARE International’s Climate Vulnerability and Capacity Analysis (CVCA) framework, the pilot was able to identify key environmental risks, including increasing risk and/or frequency of drought, cold snaps, floods and landslides. This information has enabled communities to gain a better understanding of climate change impacts and improve their resilience to these risks.

**Raglan Mine: company–community committee**

A six-member committee governs the agreement on profit-sharing and operational expectations at Glencore’s Raglan Mine – a nickel ore mine in Northern Quebec, Canada. The Raglan Committee is an official forum for Raglan’s Inuit partners to express their concerns about the company’s past, current and future activities. It meets four times a year and provides a clear, transparent forum for engagement that enables mutual understanding.

**Cultivating mutual understanding and learning**

Rio Tinto’s Argyle diamond mine in Western Australia is located in an area of major spiritual significance to the traditional landowners of the region. In 2004, the Argyle Diamond Mine Participation Agreement was signed to enshrine a more formal relationship between Rio Tinto and a wide set of indigenous communities. The agreement has been fundamental in creating relationships built on openness, mutual respect and partnership: with outcomes including site tours for community members, discussions on the impact of mining activity on the surrounding area (with translators used to ensure that everyone is able to follow and participate in the negotiations) and information sharing on traditional customs. This mutual engagement continues to date, helping ensure effective communication.

**AWG partnership to monitor water quality**

The Athabasca Working Group (AWG) partnership was established to implement an impact management agreement between local communities and ICMM member company Areva and its partner Cameco. The programme allows community members to collect environmental samples from the locations that are of most concern to them around uranium mining operations in the Athabasca Basin in northern Saskatchewan, Canada, to encourage data acceptance and promote environmental protection. Quarterly meetings are held where AWG community representatives engage with personnel from the companies to review reports, discuss concerns and update communities on exploration and mining activities in the area.

“Thanks to these workshops and the people that have given us this information, we can now recognise risks from climate change and prepare prevention strategies.”

Genaro Perez, Farmer, La Iraca community
Ghana plans the role of mining in its future

Based on an in-depth economic analysis applying ICMM’s Mining: partnerships for development (MPD) toolkit and commissioned by ICMM and the Ghana Chamber of Mines, Ghana launched a process to draw the greatest possible benefit from its gold mining industry, leveraging the strong macroeconomic contribution of mining to increase prosperity throughout Ghanaian society. The process brought together mining companies, government, and diverse parts of civil society to plan for ways to increase the jobs and revenues that mining can bring, directly and indirectly.

New analysis to inform the debate estimated the social-economic impact of the large-scale gold mining sector in Ghana from 2010 to 2022. It provided robust data on the industry as a basis for informed discussion, policy making and operational planning.

The report is available for download at www.icmm.com
“While mining has been a key driver in our strong economic growth, the industry has even greater potential to improve the well-being of all Ghanaians. The best way to make that a reality is for all segments of society to be part of planning a definite future for mining in Ghana and seeing to its implementation.”

Ghanaian Minister for Lands and Natural Resources, Nii Osah Mills

Good practice in action

Sharing lessons on resettlement
ICMM published Land acquisition and resettlement: Lessons learned, which synthesised lessons learned from a benchmarking study into 41 resettlement projects worldwide. The report was released to illustrate how well-managed activities can make a significant contribution to development in the areas surrounding mining projects. Where resettlement activities are not managed properly, communities can face poverty and social exclusion, and companies can face disruption of projects and run legal or reputational risks. Structured around 10 modules covering planning, stakeholder engagement, compensation, livelihood restoration and monitoring impacts, among other topics, the modules are based on material originally generated through research for a benchmarking report supported by ICMM members Gold Fields, Rio Tinto and Glencore.

Understanding stakeholder perspectives
In March, ICMM launched a Stakeholder research toolkit which provides guidance on how companies can measure and monitor their reputation among stakeholders, including local communities. By implementing the toolkit, companies are supported to better understand key drivers of reputation and how to best reflect stakeholder perspectives in planning.

Understanding company-community relationships
In December, ICMM launched its Understanding company-community relations toolkit, informed by the results of pilot testing a draft version of the toolkit in two countries/operations, and three regional training workshops for operational staff. The toolkit allows companies to gain an insight into levels of community support, based on the perceptions of the company and the context within which it operates. This provides a basis for a reflective look at how levels of community support may be improved.

Supporting development in mineral-driven countries
In November, ICMM brought together stakeholders looking to strengthen and enhance their understanding of mining and metals’ contribution to development. Focusing on the implementation of ICMM’s Mining: partnerships for development (MPD) toolkit, the workshop equipped participants with the knowledge to facilitate collaboration among multiple stakeholders in mineral-driven countries.

The workshop followed a 2013 independent evaluation of the effectiveness and impact of ICMM’s MPD toolkit, which recommended that ICMM adopt an operating model that prioritised the building of capacity in regions. As a result of the training course, inception phase conversations are beginning in a number of mineral-driven countries.

Re-establishing livelihoods
The Newmont Ahafo gold mine in Western Ghana identified livelihood initiatives to help people and households impacted by resettlement – with community development initiatives targeting the wider district a priority. Committed to employing local people to ensure maximum local economic benefits from the project, Newmont introduced a proactive local recruitment policy, with a complementary skills training programme.
Globalising tools and assessment methods

Driven by the needs of REACH (a European Union regulation, adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals – a definition which includes metals), great progress has been made in understanding mechanisms related to the interaction of metals with humans and the environment.

The metals sector has developed state-of-the-art guidance to ensure high quality environmental hazard and risk assessments for chemicals management, environmental quality standards setting and other purposes – including the ICMM/Eurometaux Metals Environment Risk Assessment Guidance (MERAG) project.

The industry is now actively engaging inter-governmental bodies such as the United Nations Environment Programme (UNEP), Organisation for Economic Co-operation and Development (OECD) and Asia-Pacific Economic Cooperation (APEC) to build awareness and capacity for its implementation. This year, in conjunction with the Australian Government, ICMM sought to build capacity for improved assessment of metals through the APEC Chemicals Dialogue. A workshop held in the Philippines in August provided training to over 60 regulatory and industry personnel from 15 APEC economies. It provided an interactive environment to document and discuss approaches to addressing specific challenges in the risk assessment of metals and metal compounds, and will feed into regulatory considerations across the region. ICMM also conducted a chemicals management workshop in Korea with the aim of raising awareness of MERAG and Health risk assessment guidance for metals.

Shape the policy environment:
To bring evidence-based perspectives and considered thought leadership to inform the development of policies and standards that support sustainable development outcomes.
“We recognise that risk assessment for metals poses some unique challenges and the MERAG project has proved a valuable foundation for the OECD in building our guidance and approaches.”

Bob Diderich, Head of Division, Environment, Health and Safety – OECD

Good practice in action

Active participation in the Climate Change debate
Endorsed by the CEOs of all 23 ICMM member companies, ICMM’s statement on climate change was issued in October. It offered support for the efforts of UNFCCC to secure an international climate change agreement at COP21 and outlined the industry’s role in climate change. It made a commitment to engage with industry peers, governments and society on effective climate change policy – and offered support to the securing of practical solutions for climate change as part of the world’s transition to a low carbon future.

Evolving maritime policy
ICMM is a member of the International Maritime Organisation’s (IMO) NGO/observer network – providing input into the development of policies and codes.

ICMM has identified the necessary tools and guidance to ensure that mining companies are able to identify hazards and risks associated with their cargoes. This has aided the IMO to ensure that this is accounted for in their Convention on the Prevention of Pollution from Ships (MARPOL).

A respected voice on water management
The value of ICMM’s A practical guide to catchment-based water management for the mining and metals industry, and related guidance, has been recognised by stakeholders. ICMM and its members’ efforts around this key issue have led to invitations to external platforms as a leading industry and business voice in water stewardship. These have included invitations to present at both the UN Water Conference and the WWF Water Summit.

The next stage of ICMM’s water stewardship journey is achieving alignment across members on water reporting and disclosure.

Policy Dialogue at the OECD
The OECD’s Policy Dialogue on Natural Resource-based Development (PD-NR) process is an intergovernmental platform for peer-learning and knowledge sharing. It enables OECD and non-OECD producing countries, in consultation with extractive industries and civil society organisations, to craft collaborative solutions for resource-based development.

At PD-NR’s June 2015 meeting, ICMM presented its mapping of opportunities along the mining value chain. This has been incorporated into the Operational Framework on Public-Private Collaboration for Shared Resource-based Value Creation. The Framework offers practical guidance on how host governments and extractive industries can work together to leverage extractives to support sustainable development – contributing to the achievement of the Sustainable Development Goals.
A breakdown of 2015 operational income and expenditure and 2016 forecast income and expenditure is shown below. The figures are broken down in the way illustrated to provide a transparent overview of the source of our income and how we spend that money to achieve the outcomes described throughout this review. Company fees are split proportionately between the 23 member companies with 25 per cent based on sales revenue and 75 per cent based on operating profit. Minimum and maximum fee levels are set to balance the range of fees applied and ensure that no one company contributes more than 12 per cent of total revenues.

### Income

<table>
<thead>
<tr>
<th></th>
<th>2015 £m</th>
<th>2016 forecast £m</th>
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</thead>
<tbody>
<tr>
<td>Company member fees</td>
<td>6.15</td>
<td>6.05</td>
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<tr>
<td>Association member fees</td>
<td>0.10</td>
<td>0.10</td>
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<tr>
<td>Unspent income (prior years)</td>
<td>0.16</td>
<td>0.12</td>
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<tr>
<td>Interest received</td>
<td>0.01</td>
<td>0.01</td>
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<tr>
<td><strong>Total revenue</strong></td>
<td>6.42</td>
<td>6.28</td>
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### Work expenditure *

<table>
<thead>
<tr>
<th>Category</th>
<th>2015 £m</th>
<th>2016 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and Economic Development</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td>Environment and Climate Change</td>
<td>0.20</td>
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<tr>
<td>Health and Safety</td>
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<tr>
<td>Materials Stewardship</td>
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<tr>
<td>Environmental Stewardship</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Role of Mining and Metals in Society</td>
<td>0.40</td>
<td></td>
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<tr>
<td>Human well-being</td>
<td>0.33</td>
<td></td>
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<tr>
<td>Core services</td>
<td>0.75</td>
<td>0.93</td>
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<tr>
<td>Salaries and benefits (programme)</td>
<td>3.00</td>
<td>2.85</td>
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<tr>
<td><strong>Sub-total</strong></td>
<td>4.75</td>
<td>4.81</td>
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</table>

### Overheads

<table>
<thead>
<tr>
<th>Category</th>
<th>2015 £m</th>
<th>2016 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating costs and overheads</td>
<td>0.98</td>
<td>1.11</td>
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<tr>
<td>Salaries and benefits (admin/support)</td>
<td>0.54</td>
<td>0.36</td>
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<tr>
<td><strong>Sub-total</strong></td>
<td>1.52</td>
<td>1.47</td>
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<tr>
<td><strong>Total expenditure</strong></td>
<td>6.27</td>
<td>6.28</td>
</tr>
<tr>
<td><strong>Balance</strong></td>
<td>0.15</td>
<td>0.00</td>
</tr>
</tbody>
</table>

* The Strategy and Action Plan 2016-2018 re-organised the 2015 programme areas (Social and economic development, Environment and climate change, Health and safety, and Materials stewardship) into three thematic areas (Environmental stewardship, Role of mining and metals in society, and Human well-being).

### NOTES ON FINANCIALS

i) The 2015 figures are based on unaudited accounts – audited figures are reviewed by ICMM’s Council in May of each year and can be obtained from ICMM on request. The audited figures differ from those shown here, in their treatment of capitalised programme expenditure, unspent prior-year income and some long-term reserves.

ii) Association members pay a flat membership fee of £3,000.

iii) Expenditure on salaries and benefits has been distributed between work programmes and secretariat expenditure proportionately in line with the job responsibilities of each ICMM staff member.
The table lists our 23 member companies and the progress that each company is making against the performance commitments they have made through their ICMM membership. For reports produced in 2015 which cover the previous year’s performance, members were required to report in line with the GRI G3 Guidelines, the Mining and Metals Sector Supplement, and declare an application level of A. In addition, they were required to obtain independent external assurance of subject matters 1 – 5 (www.icmm.com/our-work/sustainable-development-framework/assurance). For 2015 reports, members will be required to report in accordance with the ‘core’ option of the GRI G4 Guidelines and the Mining and Metals Sector Disclosures. 13 members have already completed the transition from G3 to G4.

<table>
<thead>
<tr>
<th>Company</th>
<th>Date</th>
<th>Subject Matter 1</th>
<th>Subject Matter 2</th>
<th>Subject Matter 3</th>
<th>Subject Matter 4</th>
<th>Subject Matter 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>JX Nippon Mining</td>
<td>31 December 2014</td>
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<tr>
<td>Areva</td>
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<td>Antofagasta Minerals</td>
<td>31 December 2014</td>
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<tr>
<td>** Glencore</td>
<td>31 December 2014</td>
<td></td>
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<td>Codelco</td>
<td>31 December 2014</td>
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<tr>
<td>** Rio Tinto</td>
<td>31 December 2014</td>
<td></td>
<td></td>
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<tr>
<td>** Polyus Gold</td>
<td>31 December 2014</td>
<td></td>
<td></td>
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<td>Mitsubishi Materials</td>
<td>31 March 2015</td>
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<td>Lonmin</td>
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<td>Hydro</td>
<td>31 December 2014</td>
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<td>Freeport-McMoRan</td>
<td>31 December 2014</td>
<td></td>
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<td>BHP Billiton</td>
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<td>Barrick</td>
<td>31 December 2014</td>
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<tr>
<td>South32</td>
<td>n/a</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>** BHP Billiton Minerals</td>
<td>31 March 2014</td>
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<td></td>
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</tbody>
</table>

**FOOTNOTES:**
- There is still some ambiguity about whether all applicable requirements of ICMM’s position statements are fully addressed. This aspect will be clarified in the updating of ICMM’s Assurance Procedure during 2016.
- Antofagasta Minerals and Glencore became ICMM members in 2014. Full membership requirements will come into effect within two years of joining ICMM.
- Polyus Gold and South32 became ICMM members in 2015. Full membership requirements will come into effect within two years of joining ICMM. As South32 was newly created in mid-2015 the company has not yet published an SD report.

Column 1: a dot in this column indicates that members have reported on the alignment of their policies with ICMM’s 10 principles (ie subject matter 1) and any mandatory requirements set out in ICMM’s position statements. In some cases this has included a tabular summary of the 10 principles and position statements mapped against a company’s policies.

Column 2: a dot in this column indicates that members have sought independent third party assurance on subject matter 1.

Column 3: a dot in this column indicates that members have reported on processes to identify and prioritise the SD risks and opportunities faced by the business during the reporting period and the outcome (ie its list of material issues, subject matter 2).

Column 4: a dot in this column indicates that members have sought independent third party assurance on subject matter 2.

Column 5: a dot in this column indicates that members have reported on the systems and approaches that the company is using to manage each (or a selection) of the material SD risks and opportunities (ie subject matter 3).

Column 6: a dot in this column indicates that members have sought independent third party assurance on subject matter 3.

Column 7: a dot in this column indicates that members have reported on their performance during the given reporting period for each (or a selection) of the identified material SD risks and opportunities (ie subject matter 4).

Column 8: a dot in this column indicates that members have sought independent third party assurance on subject matter 4.

Column 9: the letter in this column indicates a company’s self-declared application level of the GRI G3 Guidelines (ranging from A to C, ie subject matter 5). The ‘ +’ in this column indicates that members have sought independent third party assurance on subject matter 5.

Column 10: for 2014 reports, members were required to report in line with the GRI G3 Guidelines, the Mining and Metals Sector Supplement and to declare an application level of A. For 2015 reports, members will be required to report in accordance with the ‘core’ option of the GRI G4 Guidelines and the Mining and Metals Sector Disclosures. More than half of the members have already made the transition to G4 for their 2014 reports (as indicated in the right hand column).

**Key:**
- = Full
- = Partial
○ = None