For further reading on the topics included in this report as well as other sustainability-related information, please visit our website: www.glencorexstrata.com/sustainability
Who we are

Glencore Xstrata is one of the world’s largest diversified natural resource companies. With over 200,000 people in 50 countries, we are a globally integrated producer and marketer of commodities.

Continued growth in developing economies, urbanisation and a growing global population are all driving higher demand for natural resources.

Our vision for operating as a sustainable business involves meeting global challenges while focusing on health and safety, our employees, and the environments and communities in which we work.
Our approach

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1. Ivan Glasenberg
Chief Executive Officer

THIS SUSTAINABILITY REPORT HAS BEEN WRITTEN IN THE CONTEXT OF GLENCORE’S ACQUISITION OF XSTRATA IN MAY 2013. THE NEWLY INTEGRATED GROUP COMBINES A DIVERSE AND WELL ESTABLISHED INDUSTRIAL BASE WITH AN EXPERIENCED MARKETING BUSINESS OF GLOBAL REPUTE.

As Chief Executive Officer and a member of our Board committee for Health, Safety, Environment and Communities (HSEC), I recognise the solid progress we have made in sustainability performance so far, while understanding the challenges that remain ahead of us. We believe that conducting our business safely and sustainably is our responsibility to society as well as a commercial imperative.

This report shows how we performed as a combined company in 2013. We hope you find it of interest and welcome any feedback you may have.

Group developments
Our 2013 statement of values and Code of Conduct form the basis of our approach to sustainability, as well as our general business conduct. Our statement of values publicly states the principles by which we operate, while the Code of Conduct provides guidance as to how we expect these principles to be applied on a daily basis.

The most recent phase of integration for our sustainability activities was the finalisation of Group policies on HSEC and human rights that reflect the nature of the new merged entity. These were issued during the first quarter of 2014 and will be progressively rolled out during the year. They are supported by a Group-wide internal assurance process, developed to complement the asset-driven assurance activities, which began in 2013 and will be fully deployed by 2015. This process incorporates the material aspects of our HSEC management procedures.

Our continuing integration of sustainability considerations also included our application for membership of the International Council on Mining and Metals (ICMM) in 2013. In April 2014 we were passed by ICMM’s independent expert review panel; by the time of publication, we will have become a full member of ICMM.

Health and safety
Our highest priority remains the safety and wellbeing of our workers. We regret to report 26 deaths at our operations during 2013. This is of great concern to our Board and management team; it underlines that there is a lot of hard work ahead of us.

During the first quarter of 2014, we hosted a global fatality reduction summit for Glencore Xstrata senior management and safety leaders. Together, we shared best practice from within the Group and our learnings on improving safety performance. We also reinforced our strategy to prevent fatalities and serious injuries.

Foremost among our improvement initiatives is the SafeWork programme, which aims to change our people’s attitudes to safety and achieving long-term changes in behaviour. This initiative focuses on 6 fatal hazards that we have identified as causing the majority of fatalities at our operations, and the protocols and life-saving behaviours specifically developed by internal and external safety experts to target these hazards. SafeWork was introduced at 5 key sites in 2013 and will be rolled out across the Group by the end of 2014.

We are making great efforts to increase transparency around high potential risk incidents (HPRIs). We wish to improve the reporting of HPRIs throughout the business, as they are one of our most important sources of learning for making continual improvements. We actively encourage the reporting and investigation of all HPRIs.
**Human rights**
As part of our application for admission to the Plenary of the Voluntary Principles Initiative (the organisation responsible for the Voluntary Principles on Security and Human Rights), we are conducting implementation programmes at our operations in the Democratic Republic of Congo (DRC), Bolivia and Colombia. We submitted our formal membership application in March 2014, which included the requirement to issue a Group human rights policy.

**Communities**
In 2013 we continued with our strong commitment to community development and supporting the communities in which we operate. We invested almost $180 million, primarily on supporting initiatives that fulfil fundamental needs, such as education and health, as well as those that address long-term community requirements with a view to helping communities support themselves in the future.

Our Group policy on community and stakeholder engagement was also issued in 2013. It addresses the potential social impact of our activities and the concerns of the communities living close to our assets. It also encourages internal awareness of our stakeholder engagement strategy. We will continue to engage with local communities in a constructive and transparent manner and work together to address any concerns that may arise.

We continue to actively engage with many NGOs at the corporate, regional and local level. These conversations provide us with additional insight and help to shape our stakeholder engagement strategy.

**Environment**
2013 and early 2014 saw the final stages of one of our most significant environmental projects: the $500 million, 3-stage upgrading of the Mopani copper smelter at Mufulira in Zambia.

Completion of this project allows us to capture 97% of all SO₂ produced by the smelter, meeting international best practice standards and bringing Mopani’s SO₂ emissions down to 3%. When we assumed control in 2000, no emissions were captured, having been emitted unconstrained since the construction of the Mufulira smelter in 1937. Our primary consideration, when determining the extended timescales for this programme, was the need to protect the livelihoods of the 9,000 people employed at the smelter while improvements were made.

Along with our new shaft projects, the improvements we are making are designed to extend the life of Mopani’s copper operations, and the employment that comes with them, for decades to come. We believe that this demonstrates our commitment to Zambia and its people.

**Going forward**
We will continue to find ways in which to improve our processes, systems and performance in the coming years; our goal remains to be continual improvement in all of our activities while continuing to support and protect the communities in which we work.

We will focus on our short-term targets while always keeping our ultimate aims in mind: zero fatalities, zero new occupational diseases and zero major environmental incidents.

None of this is possible without the hard work, dedication and commitment shown by the talented people throughout our Group.

We welcome feedback on this report. This can be sent to global.gcp@glencore.com or through the contact details that can be found in Chapter 15 of this report.

Ivan Glasenberg  
Chief Executive Officer
Our assets are located in over 50 countries.
2. Glencore Xstrata – an overview

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

We are a leading integrated producer and marketer of over 90 commodities; these products encompass metals, minerals, coal, oil and agricultural commodities.

Our wide-ranging portfolio of industrial assets includes interests in producing, refining, processing, storing and transportation assets. Our unique business model enables us to capture value at every stage of the supply chain from sourcing raw materials deep underground to delivering products to an international customer base.

The commodities we produce and market are used in everyday life, forming components of cars and automotive parts, home appliances, batteries and catalysts for environmentally-friendly technologies. We supply customers in industries ranging from automotive to food processing and power.
Our values

Our values (published in our statement of values) reflect our purpose, our priorities and the fundamental beliefs by which we conduct ourselves and our business. Together with our Code of Conduct and underlying supporting policies, our 5 values represent our commitment to uphold good business practices.

Our values define what it means to work at Glencore Xstrata across our global business, regardless of location or role. They set out our commitments to one another and to our stakeholders regarding how we intend to fulfil our strategy of creating and delivering value.

Safety
Our first priority in the workplace is to protect the health and wellbeing of all our workers. We take a proactive approach to health and safety; our goal is continuous improvement in preventing fatalities, occupational disease and injuries.

Entrepreneurialism
Our approach fosters the highest level of professionalism, personal ownership and entrepreneurial spirit in all our employees while never compromising on the safety and wellbeing of our people. This is important to our success and the superior returns we aim to achieve for all our stakeholders.

Simplicity
We aim to achieve our key deliverables as a path to industry-leading returns, while maintaining a clear focus on excellence, quality, sustainability and continuous improvement in everything we do.

Responsibility
We recognise that our work can have an impact on our society and the environment. We care profoundly about our performance in compliance, environmental protection, human rights and health and safety.

Openness
We value relationships and communication based on integrity, co-operation, transparency and mutual benefit, with our people, our customers, our suppliers, investors, governments and with society in general.
2. Glencore Xstrata – an overview

The Glencore Xstrata business model
We are one of the world’s largest producers and marketers of natural resources. Our presence at every stage of the commodity chain means we are uniquely positioned to create sustainable value. From the extraction and processing of commodities to their freight, storage and marketing, we supply our customers with many of the essential products used in everyday life.

Our business is structured into three distinct business segments. Each segment is responsible for managing the marketing, sourcing, logistics and industrial investment activities of the commodities it covers.

Metals and minerals
Our metals and minerals assets include mining, smelting, refining and warehousing operations. There are 6 major commodity departments within this segment: copper, zinc and lead, nickel, alloys, alumina and aluminium and iron ore.

Energy products
The commodity departments within this segment are coal and oil; they encompass coal mining and oil production operations, with investments in strategic handling, storage and freight carriers and facilities.

Agricultural products
Our agricultural interests include grains, edible oils and oilseeds, rice, cotton and sugar. We have both controlled and non-controlled storage, with handling and processing facilities in strategic locations.
**Our approach | Our focus areas | Additional information**

**Explore/Acquire/Develop**
- Multiple brownfield growth options
- Disciplined capital allocation
- Ongoing exploration

**Optimise**
- Focus on operational excellence
- Track record of cost improvement
- Maximising operational efficiencies

**Marketing/Blending**
- Presence at each stage of the commodity chain allows us to provide a superior service to customers
- Optimisation of marketing interfaces
- Reliable supply of quality product

**Logistics/Delivery**
- Global distribution capabilities
- Strategic handling, storage and freight equipment and facilities
- Access to a large fleet of vessels
- Strategically located logistical infrastructure
Where we operate
Our assets are located in over 50 countries, supported by a global network of over 90 offices. They include interests in more than 150 mining and metallurgical sites, offshore oil production assets, farms and agricultural facilities, with approximately 200,000 employees and contractors worldwide.
2. Glencore Xstrata – an overview

Corporate governance
We are committed to achieving high standards of corporate governance, a key ingredient in creating shareholder value and integral to ensuring that Our Values and Code of Conduct are upheld.

Our highest governing body is our Board of Directors. Our Board is headed by our Non-Executive Chairman and also includes, as of publication of this document, 5 non-executive directors and 1 executive director.

Our commodity departments undertake both “industrial” and “marketing” activities; in some larger departments these are managed separately, with the rest managed jointly.

We have separate Board committees responsible for overseeing our audit, remuneration, nominations and HSEC activities. Further information on the purposes and activities of these Board committees is available on our website: www.glencore.com.

Our Board HSEC committee sets the strategic direction of our sustainability activities. It regularly evaluates the effectiveness of our systems for identifying and managing HSEC-related risks, and considers our overall performance. The committee also assesses our ability to comply with relevant regulatory requirements and the impact of our sustainability decisions and actions on the reputation of our business. It reviews the results of internal assurance of sustainability performance and the strategies and action plans developed by management.

On behalf of the Board, the HSEC committee meets regularly to review and evaluate key aspects of sustainability performance throughout the Group. In the event of a fatality or serious incident, the members receive detailed reports on the event, actions taken and the results of investigations.

The HSEC committee also receives regular updates on long-term strategic sustainability projects, trends and developments. As with all our Board members, HSEC committee members have access to any training and external technical expertise they might need to carry out their duties.

The HSEC committee’s work is supplemented by input from our business ethics committee (BEC), risk management team, internal auditors and group compliance function.

In 2013, we began developing a Group internal HSEC assurance process designed specifically to address our sustainability activities. This will replace the local and regional assurance activities we had in place until now as part of our general internal audit procedures. We are piloting and rolling out the process during 2014, with the first full assurance cycle beginning in 2015.

1 See Glossary (Chapter 16) for definitions of these terms.
3. Our approach to sustainability

Our corporate responsibility management system is called Glencore Xstrata Corporate Practice (GCP) and has 2 elements. The GCP framework encompasses our sustainability principles, guidance and policies. We use the GCP programme to implement the framework, set targets and instruct our people on how we wish to uphold our values and achieve our sustainability objectives.

GCP represents our commitment to upholding good business practices and to meeting or exceeding applicable laws and other external requirements. It provides our people with clear guidance on the societal, environmental and compliance standards we expect our operations to meet. Regular GCP performance reporting gives the Board and senior management continuous feedback on the key indicators of sustainability performance. This allows us to determine which areas need more proactive management and how to improve our processes.

The GCP framework

Our statement of values is the most fundamental element of GCP and is the apex of the GCP framework’s document hierarchy. These values are the principles by which we conduct our business; they are incorporated into all areas of GCP.

Our Code of Conduct gives practical guidance on how to work in accordance with our values. Everyone working for Glencore Xstrata, regardless of location or role, must comply with the Code of Conduct and encourage those around them to meet its requirements.

Our corporate policies lay out our expectations for management processes, procedures and achievements in detail. We issued the Glencore Xstrata HSEC policies early in 2014; these comprise a policy for our HSEC management framework and one for HSEC assurance. In addition there are specific subject matter policies for:

- Health and safety
- Crisis management and emergency preparedness
- Management of catastrophic and fatal hazards
- Environmental management
- Communities and stakeholder engagement
- Human rights

In 2013, we revised our Group risk management framework for the identification and management of sustainability risks. The revised risk management framework supports our new Group HSEC policies, and helps us identify material matters, focusing on what matters most to our business and our stakeholders.

Our internal HSEC assurance process has also been designed to target material HSEC subjects, with criteria formed by best practice as well as high local and international standards. We believe that a wide pool of subject matter experts is vital to the system’s success; we are gathering them from both internal and external sources of excellence. We will plan the HSEC assurance cycle at Group level, each year, including Board approval, in collaboration with departmental management. The Board approves the annual plan and receives regular reports on progress and outcomes. Our corporate sustainability team is responsible for deployment and management of this programme.

Our operational policies address activities specific to each commodity, asset or business segment. They are developed and implemented by each operation, in alignment with the GCP framework and our corporate policies.

We seek to ensure that our customers, suppliers, agents, service providers and contractors maintain business practices and workplaces that comply with GCP. We also use our influence to raise awareness and consideration of the basic GCP principles within our joint ventures and entities in which we have non-controlling stakes.
Our process for assessing materiality for our business has not altered substantially since our 2012 report. It reflects our actual and potential impact on our stakeholders, including our people, local communities, host governments and customers.

Our approach incorporates international and sector-specific standards and guidelines. It takes input from our reporting and risk management systems, community and investor relations programmes, feedback from our external stakeholders and regular dialogue between our corporate management and operational staff. We determine the major areas on which we will focus based on their potential risk to our compliance, reputation, stakeholder relationships and financial performance. We ensure these focus areas are aligned with Group strategy.

The focus areas are reflected in our Code of Conduct and our corporate and operational policies (see Chapter 2 for policy details). If our focus areas change, we revise the Code of Conduct and related policies accordingly.

Our Group sustainability targets are linked to the major focus areas and implemented within our business segments. The major KPIs are used to measure the Group's performance and act as a dashboard for our senior management and Board.

We recognise that material issues vary in importance; their significance for the Group as a whole may differ from their impact on individual industrial and marketing activities.

We confirm our materiality assessment via regular ongoing meetings and discussions with employees, investors, politicians, NGOs and other members of society. While health and safety is invariably the main concern for our employees, we continue to see strong interest in our human rights and environmental performance from external stakeholders. There is particular interest in our contributions to the development of the nations and people who host our African operations. As part of the ICMM application process we conducted a gap analysis against the ICMM commitments and position statements, which reconfirmed the relevance and completeness of our materiality assessments, and demonstrated that the consequent projects address the issues most relevant to our internal and external stakeholders.
**Group-wide material issues**

- **Safety**: our number one priority across the organisation is to provide a safe working environment and safe operational processes.

- **Environment**: we recognise the impact our activities have on the environment and seek to minimise this.

- **Human rights**: we respect and uphold the human rights of our stakeholders. Our commitment to human rights is integrated into our dealings with our employees, contractors, business partners and local communities.

- **License to operate**: as an organisation with a worldwide reach and geographically diverse assets, we are a major contributor to both the global economy and the communities in which we operate. Our stakeholder engagement involves working with a wide range of organisations and people; this is fundamental to maintain the local goodwill and acceptance necessary to operate successfully in these regions.

- **Compliance**: in addition to the matters above, having a consistent compliance management process in all areas is of great importance to us.

**Industrial activities**

Our industrial activities encompass mining, metallurgical smelting and refining, upstream oil production, exploration of deposits of natural resources, processing agricultural products, agricultural production, and agricultural storage and logistics. The diversity of these processes results in a variety of environmental, occupational health and industrial safety challenges.

- **Safety**: our assets foster a safety-focused culture, as we recognise the right of our people to work in a safe workplace.

- **Environment**: we seek to minimise our impact on the environment through careful management of air emissions, waste, use of fresh and waste water, and our impact on biodiversity.

- **License to operate**: providing local employment opportunities and investing in local infrastructure initiatives, including health and education services, generates goodwill in the communities in which we operate and underpins our continued ability to work in these areas.

The topics that we determine as being material for our industrial activities are actively managed and mitigated.

**Marketing activities**

Our marketing activities include storing and moving large quantities of materials over land, across the open sea and through inland waterways.

The safety, compliance, reliability and quality of our sales and logistics are fundamental to our success, and necessary to safeguard the health and safety of our customers, people, local communities and the environment.

As we source from countries around the world, the integrity of our supply chains is also material. We believe that a strong ethical commitment throughout our purchase and sales supply chains is vital, both for our own GCP requirements and for regulatory compliance. We are also aware that supply chain sustainability is of increasing importance to our customers, regulators and other stakeholders.
5. Performance and targets

The Glencore Xstrata Corporate Practice (GCP) programme contains our short-term targets and longer-term objectives for improving our sustainability performance indicators.

2013 performance

<table>
<thead>
<tr>
<th>Group objectives for 2013</th>
<th>Results</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GCP framework</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainability standards</strong></td>
<td>Group HSEC policies developed</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Policies currently being rolled out across the Group</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Assurance process</strong></td>
<td>Internal HSEC assurance policy for the Group finalised</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Piloting and testing currently in progress</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Rollout scheduled for 2015</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Zero fatalities</strong></td>
<td>26 fatalities</td>
<td>✔</td>
</tr>
<tr>
<td><strong>50% reduction in LTIFR by 2016, taking 2010 figures as a baseline</strong></td>
<td>Group LTIFR for 2013 was 1.93, down from 2.73 in 2010: a 29% improvement</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Establishment of a Group TRIFR reduction target for 2015</strong></td>
<td>Individual reduction targets in place for assets that have reported on TRIFR previously</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Assets that have not previously reported on TRIFR to establish a baseline during 2014</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>TRIFR reporting to be aligned across the Group during 2014</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Development of a standard group methodology to harmonise identification and assessment of material health risks</strong></td>
<td>Alignment of reporting for former Glencore and Xstrata operations completed; to activate during data capture during 2014</td>
<td>✔</td>
</tr>
<tr>
<td><strong>Establishment of action plans to prevent occurrence of new occupational illnesses (OI)</strong></td>
<td>Assets reporting the majority of new cases of OIs identified; OI reduction strategy in development</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>Ongoing identification, monitoring and addressing of site-specific OI issues</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td>OI summit in February 2014 to gather Group best practice, identify expertise and provide input for group OI strategy development in 2014</td>
<td>✔</td>
</tr>
<tr>
<td><strong>In areas where significant health risks have been identified, operations must continue to support and promote major community health programmes, eg HIV/AIDS, malaria, TB</strong></td>
<td>Continued support of health programmes, including those targeting HIV/AIDS and malaria, by relevant assets</td>
<td>✔</td>
</tr>
</tbody>
</table>
### Environment

<table>
<thead>
<tr>
<th>Group objectives for 2013</th>
<th>Results</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No major environmental incidents</td>
<td>1 major environmental incident involving severe air emissions, following an arson incident at an agricultural asset, which resulted in a large part of our sugar cane yield in Brazil being destroyed</td>
<td>📐</td>
</tr>
<tr>
<td>Completion of the Mopani smelter upgrade to achieve a SO₂ capture rate of 97%, which will have a significant impact on Group emissions figures</td>
<td>The smelter upgrade began ramping up to full production in April 2014</td>
<td>📐</td>
</tr>
</tbody>
</table>

### Social

<table>
<thead>
<tr>
<th>Group objectives for 2013</th>
<th>Results</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social performance scorecards for major operations, demonstrating contributions to each host country’s economic development and wellbeing</td>
<td>Scorecards to be reassessed and aligned to the new group community and stakeholder engagement policy</td>
<td>📐</td>
</tr>
<tr>
<td>Continue to set aside 1% of annual Group profit for community investment activities</td>
<td>Over 2.5% of annual Group profit before tax was set aside for community investment activities</td>
<td>📐</td>
</tr>
</tbody>
</table>

### Human rights

<table>
<thead>
<tr>
<th>Group objectives for 2013</th>
<th>Results</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate membership of the Plenary Group for Voluntary Principles on Security and Human Rights</td>
<td>Membership application process undertaken and submission made</td>
<td>📐</td>
</tr>
<tr>
<td>Align all guidance for engagement with private security providers with the Voluntary Principles (VPs), in areas at high risk for human rights violations</td>
<td>Risk assessments, contracts with private security providers and strategies for engagement with public security for operations in the DRC, Bolivia, Peru and Colombia reviewed for alignment with the VPs</td>
<td>📐</td>
</tr>
<tr>
<td>Development and rollout of a new Group human rights policy</td>
<td>Group human rights policy developed; implementation currently in progress</td>
<td>📐</td>
</tr>
</tbody>
</table>

### Product safety

<table>
<thead>
<tr>
<th>Group objectives for 2013</th>
<th>Results</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of substances produced/imported in medium volumes</td>
<td>Deadline for registration of substances produced/imported in medium volumes</td>
<td>📐</td>
</tr>
<tr>
<td>Registration of substances produced/imported in low volumes</td>
<td>Work in progress on registration of substances produced/imported in low volumes in progress, in line with 2018 deadline</td>
<td>📐</td>
</tr>
<tr>
<td>Extension of automated SDS distribution to US customers</td>
<td>Automated SDS system successfully rolled out to US office</td>
<td>📐</td>
</tr>
<tr>
<td>Assess feasibility of expanding the automated SDS distribution system globally</td>
<td></td>
<td>📐</td>
</tr>
</tbody>
</table>
5. Performance and targets

Going forward
The GCP programme addresses our key sustainability targets for the next 3 to 5 years. This report presents the current GCP programme, which we are continually developing.

Our Group sustainability team defines the strategic objectives that drive improvements in Group performance over the medium to long term. The objectives are informed by materiality assessment and linked to major focus areas and major KPIs, plus key risks and opportunities for improvement across our business.

<table>
<thead>
<tr>
<th>Group objectives for 2014</th>
</tr>
</thead>
</table>
| **GCP framework**        | • Implement Group HSEC policies, with implementation checked via our internal assurance programme. Full implementation by the end of 2015  
• Conduct material assurance pilots in line with our HSEC assurance policy  
• Implement necessary procedures to allow the first full assurance cycle in 2015 |
| **Safety**               | • Zero fatalities  
• Group and divisional/departmental LTIFR figures to reduce by 20% compared to 2010 baseline figures |
| **Health**               | • Zero new cases of occupational illnesses from current exposure  
• Continue to support major public health initiatives, eg HIV/AIDS, TB, malaria, in areas where material community health concerns have been identified  
• Develop local reporting of appropriate indicators in regions where material public health risks have been identified (end 2014) |
| **Environment**          | • No major environmental incidents  
• Develop a Group water management strategy |
| **Social**               | • Continue to set aside 1% of annual Group profits for community investment activities |
| **Human rights**         | • Achieve corporate membership of the Voluntary Principles on Security and Human Rights plenary group  
• Integrate Voluntary Principles requirements into our guidance documents for security framework arrangements and risk assessment processes |
| **Product safety**       | • Register substances produced/imported in low volumes with REACH (deadline 2018)  
• Assess the feasibility of expanding the automated SDS system globally  
• Develop product safety policy |
Our focus areas

In this section

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6. Health and safety

From our Code of Conduct:

Glencore Xstrata believes in the possibility of a zero-harm operation. We believe that all occupational diseases and injuries can be prevented and that therefore, we must all take responsibility for avoiding occupational diseases and injuries.

Our approach

Our most important responsibility is to protect our people from injury. We believe that we can make Glencore Xstrata a zero-harm business in the future; our immediate goal is to eliminate fatalities and serious injuries.

The diversity of the geographical locations, workplaces and workforces encompassed by our operations provides us with both challenges and opportunities.

We are committed to continuous improvement in all areas of health and safety management. We continually assess our workplaces to ensure they are as safe as possible, and we collect and share best practice across the Group. This may come from our assets, from across the industry or from externally recognised leaders in health and safety.

We take a proactive, preventative approach towards health and safety. Our aim is a positive safety culture in which everyone fully integrates these values into their working lives.

We work with our people, including contractors and suppliers, to ensure they fully understand that they have the authority to leave a situation that they feel is unsafe. We encourage our stakeholders to report conditions that are dangerous to them or to others. We have processes to ensure that the knowledge of individuals is retained by the Group.

In the latter half of 2013 we built on our previous introduction of risk-based activities and honed in further on the key factors for injury prevention. A risk management framework was signed off by the Glencore Xstrata Board in August 2013. We also continued to focus on reporting and recording high potential risk incidents (HPRIs) as a vital factor in preventing fatalities and improving our operational safety.

We seek to influence safety management within our joint ventures through representation at Board level, and through sitting on the relevant committees at individual joint ventures.
lost time injuries per million hours worked, down from 2.04 in 2012
## 6. Health and safety

### Ongoing health and safety programme

<table>
<thead>
<tr>
<th>Objective</th>
<th>Supporting action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zero fatalities</strong></td>
<td></td>
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</tbody>
</table>
SafeWork, our Group initiative to foster a safety culture based on behaviour and consequences at all levels, has been initiated at pilot sites, prioritising those with the highest number of fatalities, and will be implemented at all assets.  
As of 2012, our incident investigation process has been reviewed and improved to include 24-hour notification for senior management of fatal incidents; a mandatory on-site fatality investigation process following any fatal incident has been launched. Revised corporate policies and procedures reflect this procedure.  
Independent third party assistance is now on site within 72 hours of a fatal incident, also as of 2012.  
Learnings and corrective actions are shared across the Group and with the Board HSEC committee after each fatal incident. This includes virtual reality reconstructions of recent fatalities, clarifying the causes and key learnings for training across the Group.  
Fatal hazard protocols and life-saving behaviours are being rolled out across the Group as part of SafeWork.  
Assets completed self-assessments against the fatal hazard protocols during the first quarter of 2014 and are developing action plans for improvement where current processes and activities fall short.  
Promotion of reporting, investigation and sharing learnings from High Potential Risk Incidents (HPRIs) across the Group. |
| **Reduce LTIFR 50% by 2016, compared to baseline figures from 2010** | Interim target of 20% reduction set for 2014. |
| **2015 TRIFR targets to be set in 2014** | 2014 will be used to align reporting of TRIFR; assets that have not reported on TRIFR before (which currently report on LTIFR) will establish a baseline.  
Assets already measuring TRIFR have individual reduction targets based on existing guidelines for 2014. |
| **Zero new cases of occupational illness** | Occupational illness summit held February 2014 to gather Group best practice and identify expertise.  
Health strategy materiality assessment and review during 2014.  
Alignment of former Glencore and Xstrata reporting to be completed during 2014 using the GCP database. |
| **Implement a risk-based approach to safety across the Group** | Risk management framework approved in 2013.  
Departments to align their individual risk management strategies with the group framework during 2014.  
All potentially catastrophic hazards to be reviewed and updated across the Group in 2014. |
Case study: Safety leadership

Over 7,000 employees and contractors work at Glencore Nickel. In 2013, this division experienced zero fatalities and finished the year with a TRIFR of 5.65: almost 15% lower than 2012. Improved safety performance at 2 Canadian operations was central to this result.

Safety

We continually assess our workplaces to ensure that we are best able to protect the health and wellbeing of our people, both employees and contractors.

Our long-term goal of reducing employee and contractor injuries continues to deliver year-on-year reductions in our lost time injury frequency rate (LTIFR). Across the Group, the LTIFR has fallen from 2.51 in 2011 to 1.93 in 2013 (a 23% improvement).

We have set a consolidated Group safety target of zero fatalities and a 20% reduction in LTIFR for 2014. Each individual operation’s objectives and targets are aligned with these overall goals.

Sudbury INO in Ontario achieved a new record this year: 5 million hours worked without an LTI. It also reduced its TRIFR by almost 60%. During the same period, the Raglan Mine in northern Quebec decreased its TRIFR by over 40%.

The key factors that contributed to the improved safety performance were:

- Establishing health and safety as a core value and embedding a safety culture at all levels of the organisation
- Instituting behavioural-based safety systems, which require time and patience to produce measurable results
- Instituting management systems and processes to track negative trends, conduct root cause analysis, and identify and remove hazards before they cause an injury

Our operations will use their 2014 results as a baseline to align their reporting with each other. Once this has been completed, we will set a Group total recordable injury frequency rate (TRIFR) target for 2015.

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2 Former Glencore assets record the lost days associated with lost time injuries (LTIs) from the next calendar day after the incident, while former Xstrata assets record from the next rostered day after the incident. Therefore the combined LTI figures reported in this publication are not based on data of consistent definition.
Case study:
Using simulators to improve safety

Historically, approximately half the incidents at our coal operations involve mobile equipment. In 2013, we implemented a mobile equipment simulator programme across our open-cut mining operations. The equipment simulators are shared between the business units to help our operators maintain the skills and competencies they need to effectively manage emergency situations when using mobile equipment.

The simulated environment allows us to test operators on specific equipment (track dozers, front end loaders, face shovels, excavators, dump trucks, graders and draglines) without using actual mobile equipment or exposing our people to unnecessary hazards.

The simulators are programmed to replicate emergency situations, including tyre fires, fires in engine bays, engine failure, loss of steering and loss of braking. We measure each operator’s reaction times against specific performance criteria, allowing us to assess training and development needs.

The training programme begins with a pre-assessment of hand-eye co-ordination to determine each potential candidate’s capabilities. Successful candidates go forward to learning the controls and their operation on a generalised simulator. Once they have demonstrated the appropriate knowledge, they are trained on a simulator for the specific equipment that they will use and be licensed for. This takes around 6 days, finishing with a test before on-site training begins.

Next, candidates begin practice on actual equipment on-site, under the guidance of an experienced operator. Once they have had a successful assessment, they are licensed to operate the equipment.

Our alloys division makes extensive use of simulator training. Mopani, our copper asset in Zambia has also started using simulator training and Kazzinc in Kazakhstan has ordered simulators.
Focus on fatality prevention
We regret to report 26 fatalities across the Group during 2013, compared to 27 in 2012. The loss of any life is unacceptable and we are committed to making further improvements.

24 of these fatalities were related to the 6 fatal hazards we have determined to be the most common causes of fatalities within our operations:
- Mobile equipment
- Ground/strata failure
- Working at height
- Electrical safety
- Energy isolation
- Confined spaces

As a matter of urgency, we are piloting our Group-wide fatal hazard control initiative, SafeWork at the assets that have seen most fatalities. We ensure that lessons learned are shared across the Group; programmes and tools that prove successful at 1 site are adapted for other regions and activities.

The Board approved 12 fatal hazard protocols in October 2013, after which our operations began assessing their current procedures for addressing these fatal hazards. Of those 12 protocols, the 6 fatal hazards listed above have been prioritised.

Completed during 2014, these assessments of procedure against protocols will allow operations to identify areas for improvement, in terms of meeting the intent of the 12 fatal hazard protocols.

The Glencore Xstrata Board and senior management are jointly driving fatality prevention activities, providing clear leadership and support from the top. All fatalities must be reported to senior management and the corporate sustainability team within 24 hours. The senior management for the relevant department must then report to the Board HSEC committee on fatalities and the subsequent independent investigations (called “72 hour investigations”) in person. Any lessons learned that could further improve the prevention of fatalities are shared across the Group.
6. Health and safety

SafeWork: an update

SafeWork is a Glencore Xstrata programme designed to foster a culture of safety. The programme focuses on eliminating fatalities and serious injuries by following specific protocols when working with fatal hazards, as well as learning life-saving behaviours. It focuses on appropriate behaviour and consequences at all levels; its key message is: “We expect safe work: if it is not safe, stop work.”

SafeWork’s objective is “No more fatalities,” with the aim of achieving a long-term, permanent change in the Glencore Xstrata safety culture.

Implementation began in August 2013 with pilots at 5 sites. The full programme was then approved by the Board HSEC committee in October 2013. Rollout of the final concept across the Group has commenced.

The fundamental components of SafeWork are:

1. Fatal hazard protocols: these address the most common causes of fatalities and serious injuries within the industry. They will be implemented in order of priority.

2. Life-saving behaviours: these encourage workers to focus on those hazards with the highest potential for serious injury or fatalities and the critical safety behaviours which must be followed.

3. Supporting tools that include universal risk awareness training, virtual reality training materials on each fatal hazard and other training aids.

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

Contractor management

Our operations rely extensively on contractors to provide additional labour and for specialised skills and services.

We expect the same standards and procedures from contractors as we do from our employees. They are included in our safety performance data and we make no distinctions with regard to their safety. Our contractors are required to undergo the same training as our employees, especially with regard to safety; they are made aware of the SafeWork programme through an induction process, where their specific responsibilities are outlined.

Our robust HSEC management systems have resulted in a remarkable figure of 8 million working hours without any Lost Time Injuries (LTIs) during the recent expansion of the Lion ferrochrome complex in South Africa. The building work saw approximately 3,000 contractors working on site, with the 360,000 tonne per annum smelter being commissioned on budget and on schedule. The learnings from this project are being shared across the Group and will be embedded into future projects.
Case study: Identifying high-risk tasks and implementing controls

Following a fatal accident in the underground workings of a South African mining operation in 2008, external investigators conducted an extensive investigation. One of their findings was that a potentially hazardous task (mining into an old mining area) was conducted without the knowledge of senior management.

Over the following years, our South African coal business carried out a review of the work planning processes at all their operations, which indicated the need for a process to identify high-risk tasks before they are undertaken and led to the development of a high-risk work process.

The process can be divided into 7 key activities:

1. **Identification of tasks**: Operation managers identify potentially high-risk tasks a week in advance and record these on a high-risk work sheet.

2. **Identification of associated risk and controls**: For each task, potential risks are identified (considering relevant fatal hazards) along with the existing controls.

3. **Risk rating**: The tasks are ranked against a risk matrix that considers potential consequences and likelihood of an incident occurring.

4. **Completion of the risk work report**

5. **Allocating control verifiers**: Tasks are discussed during the weekly management meeting; individuals are given responsibility for verifying the implementation of required controls for each task.

6. **Verification of the task**: Use of the verification guide to confirm the critical aspects of each type of risk control:
   - Appropriateness to task
   - Communication processes
   - Knowledge and behaviour of the task owners
   - How the control compares to requirements of relevant standards or safe operating procedures.

7. **Data consolidation and reporting**: A report on findings from the verification activity is collated and discussed during the weekly management meeting with the Operations Director. Group-level inspections ensure the integrity of the process.

Since we introduced this process we have had no incidents during the execution of high-risk tasks. It has raised awareness and the understanding of existing risk controls, and contributed to a significant reduction in incidents arising from high-risk activities.
6. Health and safety

**Occupational health**

Occupational health challenges vary across our operations, as we encompass a great diversity of industrial sectors and geographical locations. We thus undertake a wide range of occupational healthcare programmes, mostly tailored to fit the specific circumstances of each operation.

We normally base each programme on a workplace and working environment assessment, to determine the specific requirements for each site. We use appropriate equipment and engineering controls to minimise our people’s exposure to hazards in the first instance. This is supplemented where necessary with personal protective equipment.

Our GCP database shows that the most common health hazards in our workplaces are working with heavy loads, noise, silica, diesel exhaust particles, acid mist and particulate matter containing heavy metals.

In addition to occupational health measures, we continue to supply our people, their families and the local communities with general preventative healthcare and medical support appropriate to the region where they live and work.

Our health and safety officers and the medical staff of our clinics and hospitals use their experience and local knowledge to identify the appropriate programmes and initiatives for development. In regions without public healthcare provision, or where this is scarce, our assistance can significantly affect the general health of our people and their families.

During 2013 we integrated the disease definitions used by the former Xstrata and Glencore operations and reviewed their consistency with those used by the ICMM and the US’s Occupational Safety & Health Administration (OSHA). We also carried out an analysis of our assets with the greatest number of new cases, as the next step in our process of identifying and eliminating/mitigating the root causes. 88% of our sites reported no new occupational illnesses in 2013.

Based on this work, we held a global Group-wide occupational illness summit in February 2014. This summit shared best practices from our centres of excellence and consolidated individual departmental occupational illness strategies into one Group strategy.
Case study: Risk reduction strategy

In 2010, our coal operations in Australia implemented a risk reduction strategy for occupational health. It targets occupational health risks and hygiene exposures, with the aim of identifying, assessing and controlling hazards.

The strategy has been implemented in stages, each with a clearly defined outcome. Stages include operational profiling, to establish each site’s specific potential occupational exposure categories and similar exposure groups (SEGs). Other stages are baseline exposure monitoring; qualitative and quantitative risk assessment; and developing standardised occupational health and hygiene management plans.

This process identifies, assesses and establishes effective control plans for relevant hazards. Applying it systematically has helped us reduce new workplace illnesses; reduce the aggravation of existing conditions; improve our ability to control exposures to chemical, physical and biological hazards in the workplace; and meet our legislative and moral obligations.
From our Code of Conduct:

Our people are fundamental to our success. Glencore Xstrata believes that a diverse workforce is essential for sustainable business growth. We treat our people fairly and with respect and ensure they have the opportunity to develop their careers to match their potential.

Our approach

We recognise and uphold the rights of our workforce to a safe workplace, collective representation, just compensation, job security and opportunities for development.

We are committed to upholding the UN Universal Declaration of Human Rights and the International Labour Organisation (ILO) Declaration on Fundamental Principles and Rights at Work. These commitments are reflected in both our Code of Conduct and the Group human rights policy which follows from it.

We value diversity and treat our employees and contractors fairly, providing equal opportunity at all levels without regard to race, nationality, religion, gender, age, sexual orientation, disability, political or other opinion, or any other bias. Our people are hired, promoted and offered development opportunities on the basis of their overall qualification for, and success in, their specific jobs.

Our remuneration structures are based on each person’s knowledge, experience and ability; we reward performance and self-improvement. We undertake regular reviews of remuneration and incentive practices. We also assess skills and competencies regularly, recognising talent, performance and potential, and providing appropriate support and development opportunities.

We follow due process for grievances to ensure that any serious issues about conduct, performance or treatment are dealt with fairly. This includes giving individuals the opportunity to tell their side of the story before any final disciplinary decision is made.

We do not condone any form of child, forced or bonded labour at any of our operations. In line with our human rights policy, we are working with our key suppliers to identify and address the risk of child labour in the supply chain.
200,000 people
employed worldwide
Whenever there are significant organisational changes, such as closures, acquisitions, mergers and divestitures, we consult, communicate and provide appropriate support to our employees. Minimum notice periods vary across the Group, ranging from 1 week to 6 months.

As of 31 December 2013, Glencore Xstrata employed over 200,000 employees and contractors worldwide.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>40%</td>
</tr>
<tr>
<td>North America</td>
<td>6%</td>
</tr>
<tr>
<td>South/Latin America</td>
<td>27%</td>
</tr>
<tr>
<td>Australasia</td>
<td>4%</td>
</tr>
<tr>
<td>Europe</td>
<td>23%</td>
</tr>
</tbody>
</table>

* Australasia includes Australia, Azerbaijan, China, India, Indonesia, Japan, Kazakhstan, New Caledonia, New Zealand, Papua New Guinea, Philippines, Russia, Singapore, South Korea, Taiwan, Turkey, UAE and Vietnam.

Local employment
We believe that employing local workers is an important part of our economic contribution to the communities among which we work, and to our people. We give preference to employing people who live near to our operations. We also provide training and mentoring to our mostly local employees to help them advance their career and progress to management positions. We work hard to identify any cultural barriers to retention, and seek to address these.

Our commitment to offering local employees career development is illustrated by the proportion of our managers who originate from the areas close to our operations. In 2013, 85% of Glencore Xstrata employees and 57% of senior operational managers were local people.

Turnover
We are committed to retaining our employees over the long term; our agricultural products division tends to be the one exception due to the seasonal nature of the work.

There was a significant increase in turnover during 2013, particularly in the North American region. This related to consolidation, arising primarily from the acquisition of Xstrata and Viterra. A number of greenfield and expansion projects in commission, such as Koniambo and Katanga, also led us to replace some contractor construction teams with smaller operational teams, generally formed of employees.

Glencore Xstrata turnover by region (% of employees)

<table>
<thead>
<tr>
<th>Region</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>15</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>North America</td>
<td>17</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>South/Latin America</td>
<td>19</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Australasia</td>
<td>21</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Europe</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

* Includes marketing activities.
Our approach | Our focus areas | Additional information

Case study: 
Investing in skills development

The Eastern Limb region is in the Limpopo province of South Africa; it comprises 7 municipalities and around 37 mines, including our Mototolo, Thorncliff, Helena and Magareng mines and the Lion and Lydenburg smelters: these form a significant part of our ferroalloys operations.

Members of this community have not previously had the opportunity to develop the skills sought by the mining industry. The resulting skill shortages caused some problems for the mines required to recruit from the community. This led to unrest, instability and operational interruptions.

In 2005, Glencore Ferroalloys (then Xstrata Alloys) committed ZAR60 million in immediate and ongoing funding to build and operate the Eastern Limb Training Centre, which offers engineering training for mining and construction. The centre offers vocational training, and engineering and specialist skills courses, as well as assisting school graduates in entering tertiary education.

Between 2011 and 2013, over 700 people have completed training at the centre. Of these, 411 have found either permanent or temporary employment. They completed training courses in civil works, shuttering (creating templates for support structures), bricklaying, and as engineering assistants in electrics, fitting or boiler-making. 52 of our engineering learners completed their programmes to qualify as artisans, and 15 have gone on to further education.

The training is based on our operational safety standards, ensuring that students can start employment with a sound knowledge of safety requirements and best practice.

The centre has been recognised by the government for its success in providing high quality, cost-effective education that promotes employment and supports the development of an internationally competitive skilled labour force in South Africa.
Our approach | Our focus areas | Additional information

7. Our people

Diversity
We do not tolerate any form of discrimination, harassment or bullying at our operations, or by our suppliers or contractors. All our assets operate grievance mechanisms to enable employees to communicate any allegations of unfair treatment or discrimination.

In 2013, 17% of Glencore Xstrata employees were female (similar to the figure of 16% for both 2011 and 2012), while the same percentage of women were found in management roles (compared with 16% in 2011 and 17% in 2012).

Training and development
Employee development and training is a key aspect of the opportunities we offer to both new and existing employees. It is also an essential vehicle for delivering and maintaining our standards, for instance on compliance, safety and human rights; training in these areas is mandatory for employees and contractors.

All our employees receive regular performance reviews; for managers, these are conducted at least annually. Other employee engagement initiatives include regular meetings, suggestion boxes and intranet feedback mechanisms.

### Glencore Xstrata % of training hours by role

<table>
<thead>
<tr>
<th>Role</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management (executive management, senior management and management)</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Operational (production and maintenance)</td>
<td>60%</td>
<td>64%</td>
<td>65%</td>
</tr>
<tr>
<td>Supervisors, administration and technical</td>
<td>11%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Contractors</td>
<td>27%</td>
<td>25%</td>
<td>26%</td>
</tr>
</tbody>
</table>

The average number of training hours per worker in 2013 was 39; this compares to 51 hours in 2012 and 56 in 2011.

Child and forced labour
In accordance with our Code of Conduct and our human rights policy, we do not condone any form of child, forced or bonded labour at any of our operations. We comply with local regulations with regard to the minimum age for our employees.

In 2013, the youngest employees at our assets were 15. They were part of local trainee programmes in administrative roles in Brazil and Australia, and were under close supervision at all times to ensure they did not perform any hazardous tasks.

Freedom of association
We uphold the rights of all our workers to freedom of association and collective representation. We are committed to working honestly and openly with labour unions at all our locations and treating all employees with respect. In 2013, around 72% of the employees working in our industrial operations were covered by collective bargaining agreements, although due to privacy laws, we cannot collect exact information on union membership in Australia.

In 2013, there were 4 strikes at our operations that exceeded 1 week in duration, with no lock-outs.
Case study: 
Assisting employees after a facility closure

In 2013, our Prodeco coal operation in Colombia completed a huge undertaking: constructing a new port. This was necessary to comply with new government requirements for a direct loading system to minimise dust. Construction complied with international standards; we supported this with a detailed action plan for the social and environmental impact of the project. Our new port was officially inaugurated on 29 May 2013.

One of the challenges of a direct loading port is that significantly fewer employees are required than for a traditional port facility. We were able to employ 68 employees from the old port at the new facility, and provided compensation, at greater levels than required by local labour legislation, to all those we could not. We also launched a number of efforts to help former employees find new employment or an alternative income source.

We primarily sought to relocate the affected employees into our other operations. We were able to redeploy 56 employees immediately and, after providing training in diesel motor repair and maintenance, coal truck operation, and marine operations, employ a further 129 employees elsewhere.

Employees who we could not redeploy were enrolled in a programme, led by a local university, that provided counselling and tools to help find future employment, such as assistance with CV preparation. The university also helped these individuals identify alternative income sources, including guidance on the generation of ideas, support with marketing strategies, and technical and legal support for independent start-ups.

As a result, three cooperatives, comprising 35 former employees and their families, have been established. They work on the maintenance of green zones and roads and wholesale marketing of fresh produce and dairy products. We are working with these cooperatives to help them meet the quality requirements needed to become official Prodeco vendors.
8. Human rights

From our Code of Conduct:

Respecting human rights is fundamental to our activities. This means acting reasonably to avoid infringing on the rights of others and addressing any potential or actual adverse impacts of our operations.

Our approach
Respect for human rights is core to our approach to business. We are committed to the United Nations’ Universal Declaration of Human Rights. We support the UN Guiding Principles on Business and Human Rights as a framework for the responsibilities of governments and corporations to protect the rights of individuals and groups and ensure that redress is available if any of these rights are infringed.

Our Group human rights policy is based on this framework. We developed the policy in 2013 to strengthen our approach to protecting the human rights and fundamental freedoms of our people and our stakeholders. The policy addresses the key risks to human rights faced by our operations, including such topics as labour practices, resettlement activities, use of security, and engagement with communities, particularly vulnerable groups such as indigenous peoples. It also reinforces our commitment to integrating human rights considerations into all business processes, and to protecting our stakeholders’ right to remedy by reviewing and strengthening the complaints and grievance mechanisms in place.

The policy will be rolled out and implemented across the organisation in 2014.
Our approach | Our focus areas | Additional information

Group human rights
policy developed in 2013
8. Human rights

Security
We are committed to ensuring the security of our assets and our workforce. However, we recognise the potential for human rights risks associated with the use of security, especially in challenging environments.

In 2013, we initiated a review of security practices at operations located in regions with a high risk of human rights abuses. This was to ensure alignment with the Voluntary Principles on Security and Human Rights and formed part of our commitment to formally request admission to the Plenary of the Voluntary Principles.

The review process identified and examined key performance indicators that underpin responsible security management. These include integrating security concerns with general risk assessments, as well as specific training and a commitment to performance monitoring and incident investigation. It is also vital to actively engage with public security forces (in regions where these are deployed) to promote respect for human rights and engage with private security providers to ensure our standards of conduct are met consistently.

As part of our participation with the Voluntary Principles, we seek to promote respect for human rights by third parties connected to us. This can be challenging; for example, the Tampakan copper-gold project in the Philippines is based in a region with a long-standing Philippine military presence, due to ongoing violence and tensions in the area.

As part of our agreement with the local communities, we have previously provided subsistence support and operational training to public security providers in the area, as well as training on human rights and the Voluntary Principles.

An escalation of violence in the area in 2013 precipitated a number of incidents involving the military and local population, which led to fatalities. While we had no involvement with these incidents, we were deeply concerned, and in October 2013 stopped all support of the public security providers in the area. We continue to use our presence in the area to promote access to justice and conflict mediation for all stakeholders.

Indigenous communities
We operate in remote areas of the world, where indigenous people have lived for centuries. We recognise that they play a unique role in global culture, and respect the customs, interests and rights of all communities with whom we interact.

For some years, we have committed to actively seeking broad-based, ongoing support from our host communities. We make sure our dialogue is conducted in a culturally-appropriate manner that respects traditional decision making processes. We support the ICMM Position Statement on Indigenous Peoples and Free, Prior and Informed Consent, which is reflected by our new Group human rights policy.

In 2013, 32 sites were located on or near territories inhabited by indigenous peoples. Of these, 24 operations have formal agreements in place, or are following local regulations, while the rest engage with these communities through ongoing dialogue.

We seek to reach lasting, mutually beneficial agreements that formalise our relationships with these communities, provide training and specify socio-economic opportunities. These agreements form the foundation for ongoing dialogue conducted through regular meetings and joint initiatives.

At our nickel operations in northern Canada, representatives of the indigenous community near our Sudbury mine participate in environmental sampling and monitoring at our mine areas. We are helping the community to establish an environmental team that can offer these services elsewhere.

McArthur River Mine in Northern Territory, Australia, is providing funding and mentoring support to the nearby Yanyuwa people to establish commercial enterprises that support environmental conservation and the preservation of their culture.

Finally, we seek to build programmes that will create a legacy beyond the life of the mine. To this end, our Murrin Murrin nickel mine in Western Australia has provided targeted funding to programmes that support the retention and enhancement of Aboriginal culture, and for strengthening early childhood and youth programmes in the region.
The agreement emphasises employment, training, local procurement and environmental management. It considers mitigation measures associated with traditional practices and ensures that the Inuit directly benefit from social and economic opportunities throughout the mine’s active life. It also established the Raglan Committee, which meets at least twice a year to review progress on the agreement and its commitments. In 2013, we introduced the Rapid Inuit Development and Employment (RIDE) programme, a new component of Raglan’s Tamatumani programme for Inuit recruitment and retention, which has been in place since 2008. RIDE focuses on career progression planning for qualified, committed Inuit employees, partnering with key educational institutions to encourage our Inuit workers to value academic development. RIDE has two components:

- The Individual Career Development Plan, which aims to promote the talents of the Inuit community by building awareness of skills they already have and producing role models to motivate and encourage other Inuit employees at the mine
- Our educational partnerships demonstrate the relevance of academic development and influence young Inuit to join a training programme that interests them, making the possibility of promotion and career progression more likely

Outside of RIDE activities, Raglan is also implementing the Kautaapikkut strategy: partnering with government, community and other industry leaders to develop innovative employment and training strategies across the Nunavik region.

Case study: The Raglan Agreement

The Raglan mine in northern Quebec operates in a settled land claim area. In 1995, the Raglan Agreement was signed by Société Minière Raglan du Québec Ltée (Raglan Mine) and a number of Inuit partners: the Makivik Corporation (which represents 14 villages in Nunavik) and the Inuit communities Salluit and Kangiqsujuaq, supported by their respective landholding corporations. This was the first impact and benefit agreement signed in Canada between a mining company and a First Nations population. It contains our commitments to communicate mine updates and share benefits, and to identify concerns and opportunities raised by the community.

Access to remedy

As part of the implementation of our new Group human rights policy, we will be reviewing grievance mechanisms at our operations and projects, to promote accessibility, transparency and accountability to all stakeholders.

In addition, a confidential reporting facility allows our employees, contractors, suppliers, business partners, customers and community members to report any breaches of our Code of Conduct, policies, or prevailing legislation. The details of the mechanism are included in the Code of Conduct and are made available to internal and external stakeholders.
9. Community

From our Code of Conduct:

We believe that Glencore Xstrata’s global presence and economic strength have a predominantly positive impact on the communities in which we operate. We seek out, undertake and contribute to activities and programmes designed to improve quality of life for the people in these communities.

Our approach

We interact with many diverse communities around the world. We recognise that engaging in dialogue with those communities is an essential part of our approach to managing not only sustainability but business risk.

The communities close to our operations represent our future workforce, our business partners and our neighbours. Working closely with them, we can maximise the positive impacts of our activities and avoid or minimise any potential negative effects. Engagement with them will help generate a broad level of goodwill for Glencore Xstrata among the local people and secure our ongoing licence to operate.

Our approach to community engagement derives from our overall commitment to respecting human rights and fundamental freedoms (see Chapter 8). We are committed to the UN Universal Declaration on Human Rights, and support the UN Guiding Principles on Business and Human Rights.

Our new Group policy on community and stakeholder engagement, to be implemented in 2014, requires our operations to draw up individual stakeholder engagement strategies. These will identify the most significant stakeholders, local challenges and opportunities, as well as documenting our agreements on expected outcomes and the approach to monitoring progress. The strategies will also include plans to support community development programmes to promote growth and help reduce dependency on us. These might include supporting education and training initiatives, developing local suppliers or investing in public health improvements.

In 2013, we worked to strengthen our approach through active partnerships with NGOs. These partnerships included providing targeted aid to local communities, performing training and capacity building, and gaining specialist insight on our approach to community engagement and other sustainability topics.
We are committed to the UN Universal Declaration on Human Rights, and support the UN Guiding Principles on Business and Human Rights
9. Community

**Working with communities and resolving complaints**
We seek to understand our potential positive and negative impacts on our host communities as part of initial assessments of our environmental and social impact. We work to maintain this understanding throughout the life of the operation.

We are committed to interacting with our host communities regarding all decisions that may affect them, and supporting equitable and informed community participation. This includes community engagement programmes, where our senior operational management engage with their local communities in regular workshops and other events. Where necessary, we can provide leadership training to the community to give them the tools to help create a constructive dialogue and build a relationship of trust.

In addition, the assets we control have grievance and conflict resolution processes for community members and others to make complaints and raise concerns, anonymously if preferred. These include transparent procedures for registering, evaluating and responding appropriately to community concerns.

Going forward, we will also review and strengthen our approach to soliciting external feedback on our performance through regular perception surveys.

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**Case study: Proactive community engagement**

Following progressive decreases in production capacity in previous years, Glencore Nickel had to transition its Falcondo operation to care and maintenance towards the end of 2013. This was mainly due to the lack of access to low-cost, competitive sustainable energy and low nickel prices. This was a difficult decision with a significant impact on the local community and we have made diligent efforts to support them during this transition.

We established our round tables for dialogue and development in 12 of the communities close to our Falcondo operation in the Dominican Republic. This has contributed to improved understanding, stronger relationships and collaborative work on community-driven initiatives.

In 2013, we received fewer complaints at Falcondo, partly due to an ability to pre-empt problems through regular conversation, before they might be escalated. We also experienced a significant reduction in social disruptions such as road blocks, which used to be common before this initiative began.

The round tables bring together a cross-section of community representatives and mine personnel to discuss matters associated with the mine, and define priorities and ways to work together, and with others, on community development initiatives. The approach focuses on empowering local communities to find local solutions to local problems.

We established the round tables over the course of 9 months, with our community relations team holding discussions on proposed objectives and scopes. One by one we assisted these communities in systematically forming and building consensus on representation and procedure. Importantly, all decisions remained in the hand of the communities.

In July 2013, we delivered training on community development and dialogue method to community round table leaders. Ensuring that our people share the same tools, language and skills as community leaders has proven critical to opening up new communication channels and ways of working together. We continue to emphasise community training and remain committed to round table support at Falcondo.
In 2013, our operating assets received 1,481 complaints. 44% of these related to noise, mostly originating from our coal operations in Australia. The management teams at our Australian coal operations continue to engage with the complainants and we monitor noise levels through real-time measuring units and seek further opportunities to reduce levels. 11% related to odour and fumes: of these a significant number related to an agricultural crushing plant in Germany, which is investigating chemical scrubbers or biofilters as a solution, to be implemented in 2014. 7% were about dust and another 7% related to damage claims from environmental fallout.

Artisanal and small-scale mining
Artisanal and small-scale mining (ASM) ranges from informal, subsistence mining by individuals to commercial mining operations. It tends to be more prevalent in the developing world, particularly in remote, rural areas where there is little alternative work. It is often associated with hard working conditions, conflict, corruption, child labour and poor environmental practices.

Our approach to ASM depends on the operational setting, the social context and the business case. We try to provide alternative economic opportunities to reduce the attraction of ASM, such as funding micro-enterprises or offering employment at our operations.

In 2013, 9 out of 187 sites reported ASM activities near their operations; this was the same as in 2012.

These include our copper operations in the DRC. Here we have developed a range of programmes to offer alternative employment to artisanal miners working close to our assets, including agricultural and livestock cooperatives. Where possible, we also offer employment to artisanal miners, as in the case of the Mutanda copper mine, which currently employs 41 former artisanal miners.

Our zinc mines in Bolivia are located close to operations run by small mining cooperatives, where safety incidents and poor working conditions are common. We are engaging with the leadership of these cooperatives to offer training, and are exploring the potential for partnership opportunities to help improve their practices.

Case study: Tackling child malnutrition
In 2008, Los Quenuales and Perubar, our zinc mine and logistics unit in Peru, began an initiative to improve the nutrition of local children and pregnant mothers. The Los Quenuales programme finished in 2012, having benefited over 800 children. It targeted mothers-to-be and children up to 3 years old, from the rural communities near our operations.

The Perubar programme is still running; it targets mothers-to-be and children from infancy to 5, from urban settlements near our logistics unit, giving them nutritional supplements. The aim is to reduce malnutrition in the local area.

We started with a baseline study of the nutritional status of the region’s children and pregnant mothers at that time. This has allowed us to measure the success of these interventions. The intervention methodology, which involved community leaders, included providing households with improved stoves and better sanitary and health conditions, developing healthcare workshops for mothers, and training mothers to wash their hands before food preparation and cooking with germinated grains.

The programme also trained 12 women from the local community who participated as voluntary nutrition educators/leaders. We tasked these leaders with regular follow ups with each family in the programme, to ensure we were achieving results.

In 2013 the Perubar programme included 539 children with anaemia and 43 mothers-to-be. Upon completing the programme, there was an 87% decrease in anaemia among the children who took part; retarded growth fell by 15%; acute malnutrition was reduced by 12%; and overall malnutrition by 5.2%. It has helped over 3,000 people since 2008.

5 This figure includes only external community complaints received by our operating assets. This is a different approach to previous years, taken to align Glencore and Xstrata calculation methodologies. 73 internal complaints from former Glencore assets have been excluded.
9. Community

Resettlement
In the course of our mining operations we may need to disturb land that is used by a local community. We seek to avoid resettlement, but when it is the only viable course of action, we consult closely with the affected population, and seek to obtain its broad-based support.

Our approach is aligned with the International Finance Corporation (IFC) Performance Standard 5: Land Acquisition and Involuntary Resettlement, and places particular emphasis on community collaboration, and ensuring economic livelihood following the resettlement.

In 2013, there were resettlement activities at 7 of our operations.

We continued to undertake resettlement of 3 communities near our Calenturitas coal mine in Colombia. Working with two other coal mines in the area, as well as external experts, we continued to engage with the affected communities. Engagement had a particular focus on livelihood programmes to help once resettlement is completed. In the interim, we have provided the communities with food and materials, as well as training in agricultural skills. In February 2014, the resettlement action plan was signed with the Plan Bonito community, signalling an important milestone in this process.

In Peru, 2013 saw progression in our resettlement of the community living near our Las Bambas copper project. We worked in consultation with the community to construct new housing and infrastructure in the town where they will be relocated. We have transferred their cattle to new pastures, and offered training programmes to support the community’s relocation and livelihoods following the resettlement.

There are also ongoing resettlement activities near the independently operated Cerrejón coal mine in Colombia, which we own jointly with Anglo American and BHP Billiton. In 2013 we successfully completed relocation of the Roche and Tamaquito communities, and are in ongoing negotiations with other households. As part of the relocation process, regular round table dialogues were held with the communities, focusing on post-relocation livelihood and educational support. We collaborated with Indepaz, a Colombian NGO, during these resettlement activities. Indepaz has engaged with the communities and shared findings with the Cerrejón team to help improve our approach.

In South Africa, resettlements continued around our coal operations at Goedgevonden and Tweefontein. In 2013, we resettled 21 households around these operations: the families moved to new accommodation of our construction in a nearby township, and have been integrated into the community. We have also signed relocation agreements with a number of households for relocation in 2014. We seek to ensure a fully participatory approach to these resettlement consultations, and to secure necessary infrastructure and livelihood opportunities following the relocation.

In Chile, development of the Punitaqui copper mine requires the resettlement of 7 families. The consultation process has reached agreement with 1 family so far, with other consultations still ongoing. No resettlement took place in 2013.

We also continued with planning the resettlement process for the community near our Kabanga nickel mine in Tanzania. We established an entitlement framework with the community in 2013. This outlines the types of compensation it will receive. The next stage is to begin developing individual agreements with each household.
Case study: Typhoon Haiyan

On the morning of 8 November 2013, a Category 5 Typhoon Haiyan hit the Philippines. It devastated 36 provinces, including Isabel, the home of our PASAR copper smelter. Although none of our workers or their families were hurt, many lost their homes and needed food, healthcare and other resources. We contributed $2 million to the relief effort.

Food
Food was the most immediate concern, particularly rice; many families only had enough for 3 to 5 days. Those living below the poverty line might only have had enough for a day. As most markets were destroyed and supply chains were disrupted, food security was the primary issue. PASAR provided food packs for more than 25,000 local people during the first 30 days.

Water supply and sanitation
Another immediate issue was disruption of clean water supplies, sanitation and hygiene. PASAR provided drinking water for the first 60 days.

Shelter
With around 9,000 houses damaged, shelter was a major concern, especially for families with pregnant mothers or babies, abandoned families with more than 2 small children, or households with older or infirm family members. They needed immediate life-saving shelter, such as tarpaulins and tents, as well as basic tools and fixings for damaged and makeshift shelters. We supplied support to early recovery shelter projects, such as debris removal, salvaging/recycling used lumber and roofing materials, and the use of fallen trees as lumber for immediate shelter. We also supplied mobile equipment for clean-up efforts for 30 days following the typhoon, and developed and distributed a visual guide to “building back safer” to support future construction of more typhoon-resilient housing.

Healthcare
Public health infrastructure was damaged or destroyed, disrupting the delivery of essential health services. Our assistance focused on restoring the capacity of local health centres to prevent injury complications such as infection, tetanus and disability. We also supported them in distributing essential medical supplies, including generator fuel.

Education
About 12,000 children were displaced in the municipality of Isabel alone. We assisted with emergency roofing in schools, psychological support to teachers and pupils, especially over Christmas, repairing classrooms, and replacing school supplies as well as teaching and learning materials.

Infrastructure and rebuilding livelihoods
We have begun to provide assistance in this regard, with an initial focus on school rehabilitation and power infrastructure. The relief effort also plans to identify income-generating opportunities for affected families, and to support them in benefiting from these.
9. Community

NGO engagement

In 2013, we further expanded our partnerships with NGOs, with the aim of increasing our community participation and strengthening our approach to community engagement.

Some of our ferroalloy operations are near the municipality of Rustenburg, in the North West province of South Africa. Rustenburg is severely impacted by widespread hunger, HIV/AIDS and poverty. Glencore Ferroalloys provides funding for Rustenburg FoodBank, an NGO that distributes food and basic non-food supplies to over 12,500 people, including orphans, HIV-positive individuals, pregnant women and the elderly.

In 2013, the FoodBank enhanced its contribution to the local economy by sourcing food from local small-scale farmers. The FoodBank plans to further strengthen its independence from our support, by building partnerships with other businesses in the area and developing its network of local suppliers.

A report on our operations in the DRC was published in 2012: *Glencore in the Democratic Republic of Congo: profit before human rights and the environment*. We invited the report author, a Swiss NGO called *Bread for All*, to visit KCC and Mutanda, along with *Bread for All*’s partners from the UK and the DRC. During their visit, these NGOs could view the operations, conduct extensive meetings with management, and provide feedback and recommendations. A follow-up report will be published later in 2014. We have also participated in a workshop in Kolwezi, organised by *Bread for All*, to improve the community’s understanding of the mining industry in the DRC.

Going forward, we plan to strengthen our partnerships with NGOs further, including building strategic partnerships across the Glencore Xstrata Group.
To date, 8,360 children, 148 junior leaders, 89 coaches, 1,000 parents and community members and 17 schools in the communities of Rulenge, Bukiriro, Muganza, Bugarama and Murusagamba in the Ngara District have participated in Right to Play initiatives. Our $120,000 investment is beginning to pay off in ways that cannot be calculated.

**Increased school attendance:** Teachers have reported that the provision of sport equipment and regular sport and play activities in schools has not only increased attendance figures but improved student-teacher relationships. Mumilamila Primary School has seen attendance increase from 61% to 68% during the last quarter of 2013. Nyabihanga Primary School reports that children who used to attend only occasionally are now in class more regularly to participate in Right to Play activities.

**Increased knowledge of road safety:** Sport tournaments and play days organised through community youth clubs have provided an avenue for discussions on road safety issues, including limiting passengers, obeying speed limits and using protective equipment like helmets. Right to Play collaborated with the Rulenge police to educate over 1,000 community members on appropriate road use, including how to cross the road, interpreting road signs and precautions on the road.

**Increased knowledge on health issues:** During World AIDS Day over 1,200 community members acquired the knowledge and skills to prevent HIV transmission, and found out where to seek treatment and support if HIV positive.

Right to Play’s child protection programme, which focuses on developing action plans to safeguard children’s rights within each ward, trained 25 members of the Child Protection Team (CPT). CPT members include the police, ward officers, medical personnel and community development officers. 3 Kabanga team members also attended the training sessions. CPT members selected teachers of trust from each partner school to whom kids can freely report issues and confide their concerns. These teachers will also assist in establishing child protection clubs in their schools.

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**Case study:**

**Right to Play in Tanzania**

We are working with international NGO Right to Play at our Kabanga nickel project in Tanzania. Right to Play drives social change through sport and play.

Our nickel project in Tanzania is a major supporter of Right To Play, an NGO that uses sport and play programmes to help children and communities improve their health, develop life skills and foster peace. Together, we have identified three specific goals for this region:

- To increase knowledge of road safety among children and youth
- To increase children’s positive associations with school
- To increase knowledge on health issues throughout the community
10. Environment

From our Code of Conduct:

We are aware that our global operations can have both direct and indirect impact on the environment. We comply with applicable laws, regulations and other requirements for environmental management. Where these are less stringent than our own standards we seek to exceed the statutory requirements wherever possible.

Our approach to environmental management

Some of our greatest sustainability challenges relate to environmental protection. In everything we do, we attempt to minimise any negative impact on the natural environment. We are committed to identifying, understanding and mitigating our environmental impact, integrating this consideration into our strategic planning, management systems and day-to-day operations.

Our operations are diverse in nature and geographical location, including the prospecting, production, reclamation, processing, storage, transportation and marketing of natural resources. For this reason, our environmental management considerations are complex with different potential types of impact, specific to individual departments or production sites.

We are aware of the increasing challenges arising from the climate change debate, which affect many different parts of our business; we acknowledge that climate change is now part of the political, societal and regulatory landscape in which we operate. We are addressing these challenges with an accordingly wide range of specific business-led initiatives. As a Group we are committed to resource efficiency throughout our operations, which has a positive effect on our use of carbon-bearing energy sources.

Meanwhile, we engage constructively with governments and stakeholders to inform policy and regulation for constraining or reducing greenhouse gas (GHG) emissions and the likely impact this may have on business. Effective climate change policy must be informed by the realities of global energy demand and supply, as well as balancing the social and economic aspirations of countries and their citizens.

Meeting rising energy demand in developed and developing economies will require all forms and sources of energy (including fossil fuels) and a suite of low-emission technologies to deliver energy security, economic growth and sustainable environmental performance. We already contribute to supporting such technologies.

We participate in a number of supply chains that we do not control directly; for instance we may use third-party services for shipping and storing our products. In these cases, we seek to work with our customers, suppliers and service providers to limit the environmental impact of the entire supply chain.
887 million m³ of water recycled or reused
10. Environment

Environmental incidents and fines
We are committed to eliminating material environmental incidents and incurring zero environmental fines, penalties or prosecutions. We monitor, report, investigate and remedy any incidents that do occur and apply any lessons learnt to prevent similar events in the future.

In 2013, there were 4,592 environmental incidents reported at our industrial operations. None were of the highest classification, while 1, involving arson at an agricultural asset in Brazil, was of the second-highest classification. There were also 75 moderate, 914 minor and 3,602 negligible incidents. Of these, 48 of the reported environmental incidents were additionally classified as high potential risk incidents (HPRIs), ie incidents that could have resulted in a serious environmental incident. All HPRIs are reported and investigated.

At this time, Glencore classified incidents against a 4-point scale, from very serious (Class A+) to minor (Class C), while Xstrata classified against a 5-point scale, from disastrous (Category 5) to negligible (Category 1). These classifications will be harmonised in 2014. Guidance on definitions to support these classifications is being developed and will be rolled out.

In 2013, Glencore Xstrata paid $3,261,992 in environmental fines, compared to $111,445 in 2012 and $287,897 in 2011. The significant increase in 2013 is mostly related to a single violation of regulations on the storage of waste products at Kazzinc, our production facility in Kazakhstan. This operation was also charged a previously determined levy for exceeding agreed emission levels. Kazzinc has made changes to production processes, to avoid similar storage violations in the future; we are also working closely with the country’s environmental authorities to clarify their emissions regulations, to remove any ambiguity in readings.

Biodiversity and land management
We closely monitor our activities in and near environmentally-sensitive areas, both those with high biodiversity value and those that are legally designated as protected.

In 2013, Glencore Xstrata activities on land close or adjacent to land designated as “protected” by host governments totalled 3% of the land that we leased, owned or managed. In addition, 10% of our leased, owned or managed land was within or close to areas of high biodiversity value.

The areas identified as being of high biodiversity value include a mining site belonging to Prodeco in Colombia, which is located near the forest reserve of Serranía de los Motilones (a protected area), and Wonderfontein, a coal mining site in South Africa.

Our smelting operation in the Philippines is close to a mangrove forest; we have constructed a protective dike enclosure and maintain a fish sanctuary in partnership with the Department of Environment and Natural Resources.

Part of our US alumina operation is located near the Aranasas Federal Wildlife Refuge, the National Estuarine Research Reserve and protected wetlands.

Our Australian Rolleston site is partially located in the protected Brigalow Belt Bioregion, a semi-evergreen vine thicket, brigalow and bluegrass ecosystem.

Our Tweefontein operations in South Africa are situated in the protected Makou pan, a permanent, temporary and seasonal wetland.

Mount Isa Mine in Australia has a regional water source, Lake Moodarra, located within our mining lease, but approximately 5km from mining operations. The lake is recognised under several agreements as having conservation value related to migratory birds; it is listed as a wetland of national significance.

Our Koniambo operations in New Caledonia are located in an area of high biodiversity value where 80% of the plant species are endemic, as well as most reptiles in the mine site area. In addition to undertaking progressive site rehabilitation, we produced a detailed biodiversity management plan in 2007, followed by a protected area management plan in 2011 and a rare species management plan in 2014. Our objectives are to avoid net loss of biodiversity and maintain large conservation areas onsite (approximately 825 hectares) that minimise the risk of fire and invasive exotic species and house research into these rare species.

Our Mutanda operation, in the Democratic Republic of Congo, is located in the Upemba National Park and runs adjacent to the Kando river for a distance of around 5 kilometres. Mutanda seeks to limit any impact of its operations through diligent environmental management and progressive rehabilitation plans.

6 We only report on spillages and leaks occurring on the vessels we own; none occurred in 2013.
We planted a new 430 hectare area forest in an area previously devoid of native woodland and forest vegetation. The area has since been incorporated into the Ravensworth State Forest, where it is designated for conservation. It is regularly monitored as part of our ongoing flora and fauna monitoring and research programme.

We have developed a strong partnership with the Centre for Sustainable Ecosystem Restoration at the University of Newcastle. Research has included:

- Studies linked to research training
- Monitoring plant diversity in the state forest and rehabilitation sites
- Manipulative experiments to improve rehabilitation outcomes

To date, 5 undergraduate and 2 doctorate projects have been completed, providing valuable information on the quality and regeneration process of mine rehabilitation areas at Mount Owen, and how closely they resemble the natural environment in Ravensworth State Forest.

We have also begun further targeted research with the University of Newcastle, to assist implementation of our biodiversity offset strategy. The primary aim is determining best practice for restoring pastureland to a forest woodland ecosystem. The outcomes and resulting restoration techniques will be freely available to the community for adoption in similar projects.

Our biodiversity offset strategy seeks to establish offset areas through experimental intervention, providing impetus for natural and seeded/planted forest regeneration in offset areas.

Case study: Rehabilitation research for Ravensworth State Forest

In 1995, our Mount Owen coal mine in New South Wales, Australia, embarked on a research programme that has already led to the establishment of a native forest area on rehabilitated mining land.

While there were existing techniques for growing trees on overburden previously removed from mining areas, it is important to establish native forest vegetation on land used by Hunter Valley mines, as we progressively rehabilitate areas that are no longer mined. This research could also help establish native forests beyond Mount Owen’s boundaries and help meet the operation’s biodiversity objectives for the wider Hunter Valley. The techniques being developed could also enhance the condition of areas we have already rehabilitated.
10. Environment

Our grain storage facility next to the Danube in Hungary lies above a water table. There are wells in use approximately 500m away, placing this site in the hydrogeological protection zone of those wells. Our port in Russia is considered to be located in a protected area according to Article 65 of the Russian Water Code. Under this code, water protection zones are territories adjacent to water bodies such as the shoreline of seas, rivers, water reservoirs, etc. Special conditions are established to prevent contamination or depletion of water bodies and to conserve the habitat for aquatic biological resources and other flora and fauna.

**Mining**
In 2013, Glencore Xstrata mining operations covered over 1.4 million hectares of owned or leased land. This is a similar to the area covered in 2012, but previous reporting was inflated due to the inclusion of land we did not own or lease but where we had a licence to mine.

Land management for mining operations is complex, affecting each mine’s entire life cycle. This is due to the business requirement to maximise productivity and minimise operating costs while having the smallest possible impact on local communities, biodiversity and the landscape.

We minimise the impact of our mines by removing the least possible topsoil and vegetation from each area, and rehabilitating as quickly as possible after operations have ceased. We usually reserve the topsoil and clay excavated from a new site and use them to rehabilitate a nearby area. If this is not possible, the reserved matter is stored for future use.

The surroundings and requirements for each site are unique. Potential disturbances might be direct (for instance, land clearing) or indirect: for example, noise or air emissions.

Where we work in areas with high biodiversity value and areas legally designated as protected, our mining operations have site-specific land management plans, created by each operation’s management team and approved by the local competent authorities. These plans consider the specific geographical location and any nearby protected or high biodiversity areas. They may include environmental impact assessments and biodiversity baseline studies, which determine and minimise impact and allow conservation and restoration of biodiversity (by collecting plants and seeds to cultivate in nurseries as well as wildlife relocation).

Our operations work to avoid the loss of any International Union for Conservation of Nature (IUCN) Red List threatened species.

Rehabilitation was a major focus area for the former Xstrata coal assets in 2012; this continued into 2013. Their rehabilitation management protocol and dedicated rehabilitation working group contributed to these assets exceeding their target for the area of disturbed land rehabilitated in 2013 by 90 hectares: 1,255 hectares in total.

**Mine closure plans**
Those of our mining operations that are at an appropriate point in their life cycles develop closure plans in accordance with relevant laws. These plans encompass the expected life of the mine, requirements from its operating licence, societal impacts where relevant, and closure cost estimates.

As part of our annual financial reporting, we report on our financial provisions for the future restoration, rehabilitation and decommissioning of each operation, with necessary assumptions regarding the circumstances of closure. We regularly review closure cost provisions to ensure that these fully address all relevant requirements.

**Agriculture**
In 2013, Glencore Xstrata raised crops on over 300,000 hectares of land that we owned, part-owned and leased.

<table>
<thead>
<tr>
<th>Glencore Xstrata farming land by location (2013)</th>
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<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>Latin America</td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>CIS</td>
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</table>

We are committed to minimising the environmental impact of our arable land cultivation while maintaining its long-term productivity.

Our farming assets are located in the Commonwealth of Independent States (CIS), Australia, Uruguay, Paraguay, Argentina and Brazil. We actively build and maintain good working relationships with the other farmers in the regions where we operate.
Our operations are kept up to date on good agricultural practice, including precision agriculture technology. For instance, our new Canadian and Australasian grain operations work closely with industry groups and associations on research to address the increasing global demand for safe, reliable food sources. We have made significant investments, including a $2 million contribution to the Global Institute for Food Security (GIFS) at the University of Saskatchewan in 2013. This will support research into sustainable crop production through yield enhancements and agronomic improvements for the major crops grown in Western Canada.

Water
Glencore Xstrata encompasses many diverse activities, but water is essential to each for different reasons. Our Metals and minerals and Agricultural operations require water as an essential input, while our oil division ships millions of barrels of petroleum products and crude oil over maritime waters, along coastlines and through inland waterways.

This makes protecting maritime and inland waters, and maintaining access to high-quality water, two of our key water-related sustainability challenges.

We prioritise water reuse/recycling, efficient water use, responsible waste water disposal and maintenance of integrity for any equipment that may pose a hazard to water quality. We also consult directly with the communities near our operations regarding their collective water interests, including preserving sources of fresh water.

In 2013, Glencore and Xstrata made separate disclosures to the CDP water disclosure programme, based on our water management performance data from 2012.

Many of our operations are located in arid regions of Australia, South Africa and South America. There is increasing concern in these regions about preserving an adequate supply of clean water. We require our assets in water-scarce regions to have current water management plans to mitigate water scarcity risks; all assets with significant water source impacts have completed this requirement.

In 2013, we used 969 million m$^3$ of water, a 45% increase on 2012 (670 million m$^3$). This increase was mainly due to increased production, integration of new assets and improved measurement and reporting procedures. In 2011 we used 779 million m$^3$.

| Glencore Xstrata water withdrawal by region (2013) |
|---|---|---|---|---|---|
| Africa | North America | South/Latin America | Australasia | Europe |
| 11% | 17% | 29% | 13% | 30% |

In 2013, Glencore Xstrata made separate disclosures to the CDP water disclosure programme, based on our water management performance data from 2012.

| Water withdrawn by Glencore Xstrata |
|---|---|---|---|
| Water withdrawn | Water recycled/reused | Water discharged |
| 136 | 307 | 33 |
| 126 | 335 | 31 |
| 163 | 444 | 31 |

2013 | 2012 | 2011

NB: These figures include our agricultural activities. 2011 and 2012 data has been restated to reflect improvements in reporting. The consumption of surface water by our rice assets is an estimated figure, based on the total hectares used for cultivation. Former Xstrata assets do not include water imported from third parties in their calculations.

Mining and agriculture
Our mining and agricultural activities focus on using water as efficiently as possible. This includes water reconditioning and reuse; also waste water is treated before discharge into public sewers or surface water. This treatment may include pH neutralisation and the removal of heavy metals as well as suspended solids, oils and greases.

Each site tailors its water management plan to match the local water requirements and geographical environment.
10. Environment

**Product transportation**
Our marketing activities must maintain the quality of the oceans, coastal waters and inland waterways on which we transport our products. Our oil division runs a large fleet of owned and chartered vessels. We have a number of measures in place to avoid spillages; in the unlikely event of an incident occurring during transportation, we have emergency procedures to minimise the damage. All the vessels that our oil division owned and chartered in 2013 were double-hulled, an important measure to protect against leakage.

We vet our voyage-chartered vessels for safety before each use, in accordance with our chartering standards. Time-chartered vessels that carry hydrocarbons participate in our structural integrity assurance programme.

We also take precautions to ensure that our service providers manage our vessels and product storage facilities sustainably. We have contributed our knowledge and experience to improve general waste water management during ore concentrate shipping and to encourage engagement with this issue from the shipping industry. The following applies for our oil department and our owned fleet:

We require tank cleaning activities to comply with the OCIMF/ICS International Safety Guide for Oil Tankers and Terminals. Waste water from cleaning tanks must be handled and dealt with in strict compliance with MARPOL (the International Convention for the Prevention of Pollution from Ships 1973) regulations. Before undertaking tank cleaning, the service providers must carefully consider factors such as the cargo’s history, vessel construction and equipment, the availability of resources and the experience of the cleaning supervisor. This is an important quality procedure to avoid cargo contamination.

The managers of our time-chartered and owned vessels must have a class-approved management plan for ballast water (water with which ships fill their ballast tanks, to maintain stability during travel) and sediments, and follow it strictly. They must maintain records of all ballast water exchanges, in accordance with the current Ballast Water Management (BWM) convention, and comply with any country-specific requirements. Ballast water exchange is the practice of replacing coastal ballast water with open-ocean water during a voyage, to reduce the chance of transferring water-borne organisms from one coast to another.

**Air emissions**

**Industrial operations**

The material emissions are sulphur dioxide (SO$_2$), dust or particulate matter (PM), and nitrogen oxides (NOx).

Our metallurgical smelters emit SO$_2$, PM and NOx as both stack and fugitive emissions.

Stack (or point) emissions emanate consistently from a fixed source (such as a smelter furnace).

Fugitive emissions emanate irregularly from diffuse sources. Fugitive PM emissions are one of the main concerns for our mining operations; these occur during the blasting, excavating, moving and crushing of ore rock, or the removal of topsoil, overburden or waste rock. As they emanate from so many points, we cannot use stationary filter equipment to eliminate them. Instead, each operation undertakes a different range of minimising activities appropriate to their circumstances.

The combustion engines of our land-based mobile machinery (excavators, off-road trucks, generators, etc.) emit SO$_2$, NOx and PM.

<table>
<thead>
<tr>
<th>SO$_2$ emissions from Glencore Xstrata industrial activities</th>
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<tr>
<td>thousand tonnes</td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td>559</td>
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NB: Glencore figures for 2011 do not include Mutanda, which only started reporting in 2012.

<table>
<thead>
<tr>
<th>NOx emissions from Glencore Xstrata industrial activities</th>
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<tr>
<td>thousand tonnes</td>
</tr>
<tr>
<td>2013</td>
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<td>22.7</td>
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PM, or dust, can be generated by bulldozing, dragline operations, shovel excavation, blasting and vehicles travelling on unsealed roads. Our Australian coal operations established an air quality working group in late 2010, with the aims of identifying best practice from across the country’s mining industry, and understanding how air quality is affected by our operations.

From this work, we developed air quality monitoring protocols, which set minimum requirements for our coal operations, many of which go beyond compliance with existing legislation. We have instituted a range of measures to minimise dust and improve air quality within these specific operations, which we will evaluate for dissemination across the Group, including:

- Using water trucks, wheel washers, road sweepers and dust suppressants
- Altering or ceasing operations at open-cut mines during adverse weather conditions
- Water sprays on conveyors and stockpiles
- Dust control centres that continuously monitor dust levels via
  - Use of video camera surveillance technology
  - Observation of real-time dust monitoring equipment results
- Trigger Action Response Plans (TARPs) for appropriate response to dust levels
- Operator training on truck simulators with specific environmental instructions for minimising impact on air quality
- Temporary rehabilitation: seeding disturbed areas to minimise exposed land even if the land is likely to be re-disturbed in the near future.

During 2013 we quantified the resulting reductions in air quality emissions and offsite impacts. We found a substantial reduction in emissions, primarily from improved PM control at unsealed haul roads. An assessment of the protocol’s effectiveness will be used as the basis of a 2014 review.

In NSW, our stakeholders have also expressed concern over dust from coal trains. In response, we supported a study by the University of Newcastle in 2012 which investigated how coal composition, particularly water content, may contribute to PM generation during transportation. The results suggest that moisture in our coal samples is high enough to make dust emissions unlikely.

We are continuing to work with a range of stakeholders to understand the issue and develop measures to manage the issue should it be deemed necessary. In NSW, we are incorporating dust management into our training modules.

---

**PM emissions from Glencore Xstrata industrial activities**

<table>
<thead>
<tr>
<th>Year</th>
<th>PM emissions (thousand tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>9.4</td>
</tr>
<tr>
<td>2012</td>
<td>6.8</td>
</tr>
<tr>
<td>2013</td>
<td>9.4</td>
</tr>
</tbody>
</table>

The temporary drop in PM emissions for 2012 is mostly due to one of our smelters being shut down from January to June 2012.

**Product transportation**

Our marketing activities emissions (SO₂ and NOₓ) mostly originate from transportation. This means that the relevant regulations are generally based on fuel use, to control emissions by limiting how much sulphur is allowed into fuel oil supply chains rather than using end-of-pipe technology such as scrubbers or filters.

Our maritime SO₂ emissions are regulated by maximum sulphur content levels for different fuel types. The general maximum limit is currently 3.5%; it is regulated by MARPOL, with a reduction programme in place to reduce the limit progressively to 0.5% from 1 January 2020.

The North and Baltic Seas are emission control areas (ECAs) with a limit of 1.0%, which will be reduced to 0.1% at the beginning of 2015, while the EU limit is 0.1% in port. A 1.0% limit also applies to the North American ECA (covering the east and west coasts of US and Canada); this will expand to a new ECA for the US Caribbean Sea in 2014.

We calculate our SO₂ and NOₓ figures based on our fuel oil demand and the mix of high and low sulphur fuel oil consumed during maritime shipping of oil, coal and agricultural products by our owned and time-chartered vessels.
Our approach | Our focus areas | Additional information

10. Environment

**SO₂ and NOₓ emissions from maritime shipping**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO₂</td>
<td>56</td>
<td>75</td>
<td>84</td>
</tr>
<tr>
<td>NOₓ</td>
<td>92</td>
<td>119</td>
<td>131</td>
</tr>
</tbody>
</table>

Our reduction in activity and lower consumption of bunker fuels are leading to a consistent reduction in SO₂ and NOₓ emissions.

**Waste**

Our operations generate a significant amount of waste, which is managed differently by each asset in line with local conditions and disposal facilities.

Mineral waste, which includes rock, tailings and slag, forms the majority of the waste we generate. In mining, this normally remains onsite and is categorised as overburden (rock, soil and ecosystem that lies above a coal seam or body of ore, excluding waste rock), waste rock or tailings (waste from ore processing).

**Glencore Xstrata mineral waste**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-H</td>
<td>1,934</td>
<td>1,862</td>
<td>1,660</td>
</tr>
<tr>
<td>Hazardo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-H</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB: Figures for Glencore exclude overburden.

Topsoil is a valuable resource, stored separately for use in rehabilitation. We use as much of our waste rock as possible to backfill previous mining areas. Where this is not possible, it is stored in designated facilities to minimise erosion or acid rock drainage (where the waste has an acid-bearing potential) through, for instance, capping the disposal area.

Our metals mines and some of our coal mines typically generate tailings, a type of waste disposed of using tailing dams. These are specially designed ponds filled with a suspension of tailings and water, which is normally piped from our mine concentrator plants. Over time the tailings fill the dam, through sedimentation of the suspended solids. Excess water is evaporated, recycled back into the plant or discharged into surface water in accordance with local regulations. Once a tailing dam reaches capacity, the structure is rehabilitated, generally by drying it out and covering with topsoil.

Maintaining the integrity of a tailings dam is one of the most important tasks at each mining operation, as a failure can result in an unintended release of tailings and negative effects on the surrounding environment and communities. For this reason our tailings dams are regularly inspected by both our own workers and independent surveyors.

**Glencore Xstrata non-mineral waste (hazardous v non-hazardous)**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-H</td>
<td>616</td>
<td>265</td>
<td>160</td>
</tr>
<tr>
<td>Hazardo</td>
<td>279</td>
<td>412</td>
<td>412</td>
</tr>
</tbody>
</table>

NB: Data for former Glencore assets excludes some agricultural assets, some oil storage assets and Mutanda. The figures assume that all waste that could potentially be classified as having acid mine drainage (AMD) potential is hazardous waste.

The substantial increase in non-mineral, non-hazardous waste produced in 2013 compared to previous years is mostly due to the Viterra acquisition and construction work at the Las Bambas copper project in Peru.

**Climate change and energy**

Continuing worldwide economic and social development means that global energy demand continues to increase. All nations require affordable, reliable and secure energy supplies. We believe that fossil fuels will be a vital element of the world’s energy sources for some time to come. This makes it ever more necessary to find new ways to reduce emissions and use energy efficiently in the production and consumption of fossil fuels.
The weight of global scientific opinion calls for significant reductions in human-generated greenhouse gas emissions (GHG) worldwide. We believe that navigating the complex and often conflicting policy issues around climate change requires a collaborative, long-term approach between governments, industries, research and scientific institutions, and consumers.

We engage constructively with the governments and key stakeholders of the jurisdictions in which we operate to understand the impacts of policy and regulation. In 2013, we were particularly active in Australia, Canada and South Africa.

We currently make continuous efforts to improve our operational efficiency, reduce energy consumption and implement measures to mitigate our direct greenhouse gas emissions where feasible. In addition to our ongoing support for a suite of low-emission technologies, we believe this approach is in line with society’s general aspiration to reduce global GHG emissions.

We consider the climate change and energy policies of different jurisdictions in the context of long-term impacts on those countries’ national economies, ongoing trade competitiveness, investment attractiveness, potential opportunities and risk to shareholder value.

We divide GHG emissions into three different types, or scopes, following the Greenhouse Gas Protocol, a commonly used accounting and reporting standard developed by a partnership between the World Resources Institute and the World Business Council for Sustainable Development.

In 2013, Glencore and Xstrata made separate disclosures to the CDP carbon disclosure programme, based on our carbon management performance data from 2012.

### Glencore Xstrata CO2e emissions, Scopes 1 and 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Scope 1 (thousand tons CO2e)</th>
<th>Scope 2 (thousand tons CO2e)</th>
<th>Total (thousand tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>25,014</td>
<td>26,448</td>
<td>51,462</td>
</tr>
<tr>
<td>2012</td>
<td>24,753</td>
<td>27,117</td>
<td>51,870</td>
</tr>
<tr>
<td>2011</td>
<td>22,565</td>
<td>24,742</td>
<td>47,307</td>
</tr>
</tbody>
</table>

Glencore Xstrata shipping emissions versus all other Scope 1 and Scope 2 emissions (2013)

- Total direct/indirect without shipping: 91%
- Shipping: 9%

**Industrial operations**

The GHG emissions from our industrial activities originate mainly from the fossil fuel use of stationary installations and mobile hauling equipment in our mines, and the agricultural machinery of our farming operations.

Glencore Coal in Australia uses waste coal mine gas for power (see page 60) and has installed flares where it is feasible and safe to do so, to mitigate GHG emissions. Flaring involves draining or capturing GHG emissions from coal seams and burning the captured methane gas to produce carbon dioxide (which has a lower impact) and water vapour. We also continue to support low-emission coal technology projects and GHG-related studies.

**Glencore Xstrata’s main GHG sources**

<table>
<thead>
<tr>
<th>Scope</th>
<th>Direct emissions</th>
<th>Indirect emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1: Direct emissions</td>
<td>• Fuel combustion in boilers, furnaces or generators at mining and metallurgical operations</td>
<td>• Consumption of purchased electricity, steam or heat at our mining, metallurgical, oil and agricultural operations</td>
</tr>
<tr>
<td></td>
<td>• Fuel oil used by our time charter fleet and own vessels</td>
<td>• Emissions from outsourced activities such as maritime and inland shipping and land transportation†</td>
</tr>
<tr>
<td></td>
<td>• Diesel and gasoline combustion by mobile machinery</td>
<td>• End use of our products (coal and oil products)</td>
</tr>
<tr>
<td></td>
<td>• Methane emissions from coal mining and processing</td>
<td>• Methane supplied to third parties for power generation†</td>
</tr>
<tr>
<td></td>
<td>• Emissions from decommissioned underground coal mines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reductants used in metallurgical smelters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use of explosives†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rice cultivation in farming assets that we own*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Grain and sugar cane farming operations†</td>
<td></td>
</tr>
<tr>
<td>Scope 2: Indirect emissions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Emissions from outsourced activities such as maritime and inland shipping and land transportation†</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• End use of our products (coal and oil products)</td>
<td></td>
</tr>
<tr>
<td>Scope 3: Indirect emissions</td>
<td>• Methane supplied to third parties for power generation†</td>
<td></td>
</tr>
</tbody>
</table>

* Excluded from Xstrata’s GHG emissions reporting.
† Excluded from Glencore’s GHG emissions reporting.
10. Environment

These include:

- **FutureGen project**: working with the US Department of Energy (DOE), this $1.65 billion project will upgrade a power plant in Illinois with oxy-combustion technology. This should capture approximately 1.1 million tons of CO₂ each year (over 90% of the plant’s emissions) to be stored underground. We are a member of the FutureGen Industrial Alliance.

- **Callide Oxyfuel project**: a $245 million large-scale demonstration project to prove the suitability of oxyfuel technology in capturing CO₂ for both new-build and existing coal-fired power stations. It involves burning coal in a mixture of oxygen and recirculated exhaust gases, instead of air, and results in a concentrated stream of CO₂ suitable for capture and storage. The project is a joint venture between CS Energy, ACA Low Emissions Technologies, Glencore Xstrata, Schlumberger Carbon Services and Japanese participants J-Power, Mitsui & Co Ltd and IHI Corporation.

- **Micronised Refined Carbon – Direct Injection Carbon Engine (MRC_DICE) project**: a collaboration between the Australian Commonwealth Scientific and Industrial Research Organisation, Xstrata Technology and MAN Diesel and Turbo, to investigate the production of coal water fuel, for direct injections into diesel engines.

- **Bio Char Research Project**: a collaboration with GGS Environmental to use coal tailing for the creation of biochar for soils, to enhance agricultural productivity.

- **CO₂ Capture Research Project**: a collaboration with the University of Queensland to develop perovskite (ceramic) capillaries from hollow fibres; the aim is air separation to produce oxygen for use in oxyfuel power generation.

- **CO₂ Nano Capture Research Project**: a collaboration with the University of Sydney to develop nano-structured calcium oxide sorbent for use in post combustion capture of CO₂.

Case study: Powering a mine on wind

The Raglan nickel mine is in the far north of Canada; it is exposed to extreme, Arctic conditions. It is not connected to the province’s hydro-grid or the natural gas network; energy is the mine’s second largest budget item.

The operation has become an energy innovator through its wind power project; it is in a favourable position, on a plateau 600m high, with few trees in the surrounding area. The project will eventually allow a significant reduction in diesel consumption and dependence on fossil fuels, and a major decrease in GHG emissions.

A few years ago, Raglan began to measure the wind and investigate the engineering requirements and potential environmental impact of a wind turbine installation. We also undertook consultations with local communities and other stakeholders.

As Canada’s first industrial-scale wind power facility with storage, the project is being implemented in 2 phases, to test whether the technology can work under harsh Arctic conditions and reduce the financial risk attached to a project of this scale.

The first stage involves the gradual implementation of a wind farm. In the summer of 2014, we will build wind energy storage facilities and an Enercon wind turbine. If successful, the second stage will see the construction of 3 to 5 wind turbines during 2016. Once completed, the facility is expected to reduce Raglan’s diesel consumption by over 50%. During periods of high wind, power surpluses will produce hydrogen (via electrolysis of water), which will be stored in compressed gas tanks. When the local power grid for the mine needs additional energy, the hydrogen will be used as fuel.

The governments of Canada and Quebec are committed to help mining companies to improve their environmental practices and both are supporting the project financially. If the pilot produces the expected results, the expertise and technologies will be exported to 14 local Nunavik villages.

During a recent stay at the Raglan mine site, the Prime Minister of Canada, Stephen Harper congratulated us for our leadership in eco-energy.
Case study: Reducing energy use through new technologies

In 2010, Glencore Merafe PSV, our chrome operation in South Africa, opened the Tswelopele plant at our energy-intensive ferrochrome smelting complex, Rustenberg. During the second half of 2012, we completed construction of the ZAR 800 million Tswelopele smelter, designed to reduce energy use. The smelter reached full production in 2013.

The Tswelopele smelter uses the latest technology to pelletise and sinter chrome ore powder, as well as treating the ore to allow the use of more energy-efficient furnaces. Implementation has reduced Rustenberg’s annual energy demand by around 13% compared with 2011/12: a yearly saving of approximately 150,000 megawatts.

The smelter’s advanced processes also have environmental benefits. They have contributed to a reduction in the amount of dust and slag produced and eliminated effluents. They can also use Upper Group 2 chrome ore exclusively, a type of ore that is more challenging to process successfully. And the new technology reduces the amount of ore required by 30%.

The smelter is one part of an efficiency investment programme that we have been running for approximately 10 years. This has included investing around ZAR 6.7 billion in smelter expansions and nearly ZAR 1.6 billion on improving the efficiency of current smelters. As a result, electrical energy efficiency has improved by more than 25% across our smelters at Rustenberg.

In 2013, the Tswelopele smelter was declared joint winner in the industrial category at Eskom’s eta Awards for exceptional, innovative and outstanding efforts in the efficient use of energy.

- Chemical Looping Research Project: a collaboration with the University of Newcastle for the development and further understanding of chemical looping in the combustion or gasification of coal
- Coal Impurity Research Project: a collaboration with the University of Newcastle for the development and further understanding of coal impurity and gas quality control, with regard to efficient combustion or gasification of coal within oxyfuel

In addition, the International Energy Centre (IEC) is a collaborative initiative that Glencore Xstrata has established with 3 of Australia’s leading universities. The IEC’s aim is to create a centre of excellence in thought leadership, postgraduate education and innovation on energy and climate change related issues. It promotes energy literacy, leadership skills development and energy stewardship.

The IEC’s masters degree in Energy Studies is aimed at young and mid-level professionals looking for a masters qualification that integrates the many facets of the energy sector. The programme currently has around 60 students enrolled. We have committed to contributing $3 million over 4 years to support the IEC and its masters programme.

Product transport
We deliver our commodities to our customers via extensive global shipping operations. GHG emissions from international shipping are mostly composed of CO₂. We primarily use third party contractors for land and inland waterway transportation, meaning that the GHG generated is categorised as Scope 3 emissions. This categorisation also applies to emissions from most of the maritime shipping for our metals and minerals and coal products.
Government engagement
We recognise that governments may develop policies or impose regulatory constraints on their economies as a way to reduce national GHG emissions. There are a number of policy measures (direct regulation or carbon pricing mechanisms) available.

There is a list of assessment criteria we consider when examining new carbon policies. We examine individual climate change policies against a number of factors. Each policy option has different impacts on that country’s economy, and influences on market behaviour, including:

- Impact on international trade competitiveness
- Impact on the value of existing operations and investment
- Impact on the value of future investment
- Perceived levels of sovereign risk
- Policy credibility and long-term certainty
- Consideration of future industry investment or growth
- Our support for investment in low-emission technologies
- The extent to which the emission reduction task is equitably distributed across the country’s economy
- Implementation complexity (including the administrative, reporting and assurance burden)
- Avoiding risk to government revenue raising
- Ensuring reduction is achieved at the lowest possible cost
- Alignment with global developments and comparative effort of major trade competitors

Energy
Our energy demand comprises both direct and indirect energy. Direct energy is that produced onsite by our own operations; sources include fuel oil, coal, gasoil and natural gas. Indirect energy is purchased from external suppliers and is mostly in the form of electricity.

In Kazakhstan, Kazzinc operates the Bukhtarma hydroelectric plant, which has 975 megawatt turbines with a total generating capacity of 675 megawatts. The plant is integrated into Kazakhstan’s national electricity grid to regulate supply frequency. Bukhtarma generates 2.4 billion kilowatt hours of electricity per year, covering up to 60% of Kazzinc’s electricity requirements. If this energy was generated by a conventional fossil fuel-based power plant, it would release the equivalent of 1.2 million tons of CO₂ each year.

We use waste gas from our coal mines to supplement onsite power generation from our operations at Oaky Creek (installed capacity 24 megawatts), Blakefield (installed capacity 9 megawatts), Tahmoor (installed capacity 7 megawatts) and Teralba (installed capacity 4 megawatts). The total installed capacity is 44 megawatts. We began commissioning an additional 9 megawatts of capacity from the Bulga operation in 2013, which is currently ramping up to production capacity.
11. Socio-economic contribution

From our Code of Conduct:

We work with governments, local authorities, community representatives, inter-governmental and non-governmental organisations and other interested parties to develop and support community investment projects.

Our approach

Our business generates significant economic benefits for the countries in which we operate and for the communities close to our assets.

Our agricultural division purchases from many small and family-owned businesses. This allows them to take advantage of extensive infrastructure within their own countries, as well as giving them access to our logistics expertise and to global markets.

We aim to help the communities in which we operate get maximum possible benefit from our presence. This will not only advantage these communities but will help generate a broad level of goodwill for Glencore Xstrata among the local people and secure our ongoing licence to operate.

We prioritise employing people who live in the regions where we work. This extends to investing in education projects, skills development programmes and apprenticeships for local people.

We aim to buy locally wherever possible; we work with local suppliers to help them meet our quality and compliance standards, or invest in enterprise development to help local people provide goods and services.

As part of the ongoing process of integrating the former Glencore and Xstrata systems, we are reviewing community investment programmes at our assets and developing an updated Group strategy. This will ensure that our investments are aligned to our business priorities and deliver value to our host communities, as well as ensure that we can consistently monitor results.

We work with governments to improve transparency of revenue flows and to strengthen governance of these funds for local, regional and national development. We have endorsed the Extractive Industries Transparency Initiative (EITI).
11. Socio-economic contribution

Economic development
We prefer to use local contractors and suppliers where possible, for services and supplies that include maintenance, catering, transportation and basic construction materials. We pay these partners commercial rates for supplying goods and services within agreed timescales.

We work with our suppliers, contractors and business partners to assess their health, safety, environmental and community practices and performance. Where performance does not meet our expectations, we help them to put remediation plans in place. If no satisfactory solution can be found, we terminate contracts.

Local employment, training and skills development
The natural resource commodities that we produce and sell are often part of long value chains. This means that our activities employ a vast number of people around the world. This employment is one of the most obvious signs of the economic benefits we supply to our host countries, especially as many have comparatively high unemployment rates. We provide thousands of families with their livelihoods, via direct employment at our operations, and indirect employment via contractors and our use of local suppliers.

We prioritise the employment of local people to maximise the benefits for us and for our host economies. In 2013, 85% of Glencore Xstrata employees and 57% of senior operational managers were local people. Our commitment to prioritising local employment extends to offering training opportunities to local communities, such as literacy training to enable them to meet our competence requirements.

In 2013, our former Glencore industrial operations worked with more than 36,000 local suppliers, representing a procurement value of over $5.4 billion.

Charitable contributions and sponsorship
In addition to our large-scale community programmes, we also make individual donations and provide sponsorship. Employees may make charitable donations in Glencore Xstrata’s name for bona fide purposes (ie to a charitable or not-for-profit organisation for which no tangible benefit is received, or expected, by Glencore Xstrata). This must be in accordance with applicable laws and regulations.

Our marketing offices gave approximately $6 million in charitable donations and $1.5 million in sponsorship across the Group in 2013.

Taxes and royalties
Taxes and royalties are the direct annual cash contributions that we make to the governments of the countries in which we operate. Tax and royalty payment levels are determined by the national, regional or local government for each operation. The payments we make often represent a significant source of income to those countries and regions.

In 2013, our combined companies paid approximately $3.7 billion in royalties and taxes. At some operations, we also have profit sharing or other financial agreements in place. These provide a share of our profits to local communities, over and above tax and royalty payments and voluntary community donations and sponsorship.

We support increased transparency of how taxes and royalty payments are redistributed and/or reinvested into the communities in which we operate.

Glencore supports the Extractive Industries Transparency Initiative (EITI), an extractive industry sector initiative promoting good tax governance, accountability, transparency and the prevention of corruption through the verification and full publication of Company payments and government revenues. The EITI candidate countries in which we operated during 2013 were Indonesia, the Philippines and Papua New Guinea, while Cameroon, Tanzania, Kazakhstan, Norway, Peru, Zambia and Burkina Faso were EITI-compliant countries. The DRC’s status was temporarily suspended on 17 April 2013. Details of our activities in support of this initiative in participating countries can be found on www.eiti.org.
Case study: Developing skills in southern Peru

Our copper operations in southern Peru are involved in a number of programmes designed to improve the skills of the community members living close to our operations. We are developing the technical and industrial capabilities of young people to improve their employment options and to promote entrepreneurship and self-employment.

Addressing illiteracy
Since 2004, our Tintaya-Antapaccay copper mine has been involved in the Education for a New Life programme, which supports a reduction in illiteracy and builds communication and basic maths skills through topics involving food, healthcare, production, work, family and citizenship. Around 7% of the local population cannot read, of whom 75% are women.

To date, this programme has encouraged over 1,000 people to read and write, of whom 90% are women. In addition to improving literacy skills, the participants have been able to increase their income by developing minor production projects (small animal husbandry, preparation of food with local supplies, preparation of garments via textile production, growing vegetables in their household orchards, etc.).

Specialised educational resource centre
The Espinar Specialised Educational Resource Centre (CREE, in Spanish) is a modern educational centre based on a Colombian model that gives children and teenagers supplementary education to develop specific skills and abilities. The initiative helps to address the limited available resources for educational institutions of the area.

CREE opened its doors in Espinar in April 2011, offering supplementary academic programmes with cutting-edge technology, enabling students to learn in a more informative and competitive manner. Each subject or specialty has been divided into workshops, provided with state-of-the-art instruments and equipment, resulting in discovery of talented students in the scientific, artistic and sports areas.

CREE has directly benefited more than 11,000 students and 539 teachers from public and private schools in the Espinar urban area. In 2016, CREE will be fully transferred to the Ministry of Education; the Ministry is considering whether to adapt this pilot programme for provincial, regional and even national roll-out.

Yachay Watakunapac training programme
The Yachay Watakunapac (Learning for the Future) training programme and the T’ikariy Wiñapac (Flourishing Forever) extension programme target residents of the Cotabambas province, close to our Las Bambas copper asset. The programmes develop and build local residents’ skills across a range of technical-production specialties to increase their employment opportunities.

Courses in metal joinery, electric installations, civil construction, cooking, confectionery, business management, heavy equipment operation, driving and agricultural and livestock breeding are provided for free.

In 2013, 325 young people underwent training; more than 2,000 have participated since the programmes began in 2007. Many graduates work for Las Bambas and its contractors and many become self-employed with their own micro-enterprises.
11. Socio-economic contribution

Economic value added by Glencore Xstrata industrial activities

<table>
<thead>
<tr>
<th>$ million</th>
<th>Group</th>
<th>Australasia</th>
<th>Europe</th>
<th>North America</th>
<th>South/Latin America</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic value generated</td>
<td>81,771</td>
<td>44,050</td>
<td>7,419</td>
<td>12,645</td>
<td>12,307</td>
<td>5,350</td>
</tr>
<tr>
<td>Revenues¹</td>
<td>81,771</td>
<td>44,050</td>
<td>7,419</td>
<td>12,645</td>
<td>12,307</td>
<td>5,350</td>
</tr>
<tr>
<td>Payments to suppliers (operating costs)²</td>
<td>70,491</td>
<td>40,755</td>
<td>3,914</td>
<td>12,158</td>
<td>9,866</td>
<td>3,799</td>
</tr>
<tr>
<td>Economic value added</td>
<td>11,279</td>
<td>3,295</td>
<td>3,505</td>
<td>487</td>
<td>2,442</td>
<td>1,551</td>
</tr>
<tr>
<td>Royalties and taxes³</td>
<td>3,696</td>
<td>1,484</td>
<td>134</td>
<td>185</td>
<td>1,511</td>
<td>382</td>
</tr>
<tr>
<td>Employee wages and benefits⁴</td>
<td>4,288</td>
<td>1,905</td>
<td>293</td>
<td>676</td>
<td>695</td>
<td>718</td>
</tr>
<tr>
<td>Payments to providers of capital (dividends and interest)⁴</td>
<td>2,714</td>
<td>595</td>
<td>667</td>
<td>0</td>
<td>1,476</td>
<td>-25</td>
</tr>
<tr>
<td>Community investments⁵/⁶</td>
<td>168</td>
<td>55</td>
<td>2</td>
<td>7</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>8,790</td>
<td>3,031</td>
<td>259</td>
<td>534</td>
<td>2,575</td>
<td>2,392</td>
</tr>
<tr>
<td>Economic value retained/contributed</td>
<td>-8,377</td>
<td>-3,775</td>
<td>2,149</td>
<td>-915</td>
<td>-3,875</td>
<td>-1,962</td>
</tr>
</tbody>
</table>

NB For presentation purposes, all figures in this table have been rounded to the nearest unit.
1 Revenues include sales and other income.
2 Operating costs are all costs of goods sold excluding salaries, employee wages and benefits; community investments noted separately.
3 Including stamp duty payments in Australia relating to acquisition of Xstrata. Data includes tax rebates and excludes joint ventures where we do not have operational control. Data for former Xstrata includes marketing offices; Glencore data covers industrial sites only.
4 Employee wages and benefits exclude all contractor-related costs; these are shown in operating costs.
5 Excludes charitable donations and sponsorship from marketing offices (see page 62); excludes in-kind investments by former Xstrata assets and investments made by joint ventures where we do not have operational control.
6 Glencore data is collected via the GCP database; Xstrata data is collected by the finance team. From 2014 onwards, all data will be collected via the GCP database.
7 Independently assured by Deloitte LLP for 2013.

In addition to corporate taxes, we are responsible for other, non-income taxes, which include licence fees, property taxes, withholding taxes, export taxes, employer-related payroll taxes and other tax payments, as required by the applicable domestic tax laws.

In 2013, payments to our host governments totalled $3,696 million. The individual countries that each accounted for at least 3% of this balance were Argentina, Australia, Canada, Colombia, DRC, Kazakhstan, Peru and Zambia.

Community investment

Many of our activity programmes that address employment, safety, environmental and community concerns are interconnected, as are the people they benefit. Each of our assets has an individual community programme designed for its specific employment policies, environmental measures and health and safety programmes.

This leads to a diverse range of approaches, with support varying from direct financial donations (usually towards infrastructure projects) to in-kind contributions, technical skills and medical or other specialist support. They can cover infrastructure, education, training, sustainable health or food and water supplies.

Our preference is to support initiatives that fulfil long-term community requirements and that, while having an immediate impact, can eventually become self-sustaining. We never set out to supplant relevant state programmes with our activities, but we do provide extensive support for fundamental needs such as health or education.

The medical support we provide is often designed to complement scarce or underdeveloped public health infrastructure. We work with local people, public health authorities and others to help protect and educate local communities.

Our community investment spending is in addition to our community relations activities and any community investments that we are required to make by regulation. Our aim is to give more back to the communities in which we work, over and above those contributions. We do not fund programmes that benefit only our employees or any exclusive groups or organisations.
Case study: Supporting agricultural groups and research

Our agricultural operations sponsor a number of growers groups, research organisations and community groups and events.

The sponsorship funds for grower groups and research organisations are used to educate growers in best practice for farming management, including economically and environmentally sustainable cropping systems and research into improved cropping techniques and resource management.

Sponsorship for community groups goes towards the promotion of agricultural activities or supports a group’s specific activity; our customers are involved in many of these activities.

Our Australian agricultural operations also run a donation programme that, for every tonne of grain sold, gives a donation to a chosen community club that has a high level of grower membership and involvement.

It also produces and circulates the free magazine Grain Business 3 times a year to approximately 14,000 growers throughout Australia. This provides information on the grain industry, research results and best practice.

Annual investment in the magazine includes funding for the South Australian Research and Development Institute to compile and publish an annual crop performance report from their crop trials.

Our Viterra assets in Canada have a community investment programme that supports their host communities in 4 areas:

- Promoting youth sports and recreation in rural communities
- Supporting agriculture and associated activities
- Supporting community development programmes, projects and infrastructure in communities where our employees live and work
- Promoting safety on farms and within the grain industry

Viterra has a donation programme with the Canadian Foodgrains Bank (CFGB), donating $5 to the CFGB for each tonne of grain donated by farmers. Canadian farmers donated 17,596 tonnes of grain, worth over CAD5.8 million, via this programme in 2013. The CFGB supports food assistance and agriculture as well as nutrition programmes for people in the developing world. In November 2013 we also announced a $2 million investment in the Global Institute for Food Security, supporting their mission to address the increasing global demand for safe, reliable food.
11. Socio-economic contribution

**Glencore Xstrata community investment (2013)**

<table>
<thead>
<tr>
<th></th>
<th>Investment ($ thousand)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>45,389</td>
<td>27%</td>
</tr>
<tr>
<td>Australasia</td>
<td>54,932</td>
<td>33%</td>
</tr>
<tr>
<td>Europe</td>
<td>1,565</td>
<td>1%</td>
</tr>
<tr>
<td>North America</td>
<td>6,747</td>
<td>4%</td>
</tr>
<tr>
<td>South America</td>
<td>59,663</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>168,296</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

NB All numbers exclude charitable donations and sponsorship from marketing offices (see page 62) as well as in-kind investments by former Xstrata assets, and investments made by joint ventures where we do not have operational control.

1 Includes $13 million corresponding to a 3-year (2011–2013) community agreement set up by a Peruvian asset that has not been reported previously. These funds are managed by a bank trust and are being gradually allocated to the local community.

2 Independently assured by Deloitte LLP for 2013.

**Enterprise development and diversification**

We support the communities in which we work by helping to establish small and medium-sized enterprises with the aim of creating sustainable, autonomous businesses. We may provide finance, management expertise and advice, or premises from which to work. We also offer guidance to these businesses on how to meet our quality standards for suppliers.

We recognise that many of our activities depend on the use of finite resources. We support diversification of the local economies in which we operate, to reduce those communities’ long-term dependence on our operations.

**Public health**

Local public health issues not only affect our workforce but can inhibit socio-economic development. We work with local people, public health authorities and dedicated development agencies to improve community health and address pandemic diseases, such as HIV/AIDS, tuberculosis and malaria. Depending on specific community needs we may also support work to tackle localised health issues, such as cholera. We are committed to improving sanitation, medical facilities, community knowledge and access to prevention and treatment of communicable diseases.

**Case study:**

**Supporting local enterprise development**

KCC, our copper asset in the DRC, has been reducing its waste and implementing better waste management systems while supporting the development of local enterprise.

The packing wood and boxes used for KCC’s site deliveries are being transformed into chairs, tables and windows. We commission items to be manufactured and used at our operations and donate furniture and other items, such as beehives, to local community facilities, which include schools and health centres.

When we receive goods on site, the workers taking delivery select any packing wood that might be reusable and separate it from our domestic waste. Once a useful quantity of wood has been collected, it is passed on to our community team, who check its quality, and whether it has been treated with any harmful chemicals, with the help of our environmental specialists.

If it is safe to use and of suitable quality, we take it to one of two local carpentry businesses and commission the items required by our operations or needed by our community team. This can include doors, window frames, tables and chairs for community projects and shelving for use by our operations. We pay the full local market rate for manufacture, supporting these small local businesses financially as well as donating materials.
Case study: Investing in public health initiatives, Zambia

Our Mopani copper mine in Zambia has supported many public health initiatives over the years. These include programmes targeting specific regional health issues such as HIV/AIDS, malaria and cervical cancer, as well as making contributions to local healthcare facilities.

HIV/AIDS counselling and testing
Mopani has been running a voluntary counselling and testing (VCT) programme for its workers and host community since 2004. It has expanded from a total of 1,550 users in 2005, to having seen 57,286 individuals in total by the end of 2013. In addition, community sensitisation programmes have contributed to reducing the number of HIV-positive individuals. In 2005, 43% of those using the counselling service were HIV-positive, whereas by December 2013 the number was down to 14%.

The programme has also increased the number of patients in a different but related programme, anti-retroviral therapy (ART). Numbers have increased from 24 in 2004 to 12,107 in 2013. This year, 84% of these patients are community members rather than Mopani employees.

GBCH Health, a New York-based coalition of companies and organisations committed to investing in health matters, gave Mopani a commendation in its Business Action on Health Awards 2013, to recognise our holistic community HIV and AIDS programme.

Anti-malaria campaign
Our integrated anti-malarial programme encompasses the spraying of homes, larval control through chemical use, drain and swamp clearing, education and sensitisation programmes, and the distribution of insecticide-treated nets to pregnant mothers and children under 5. This year, the indoor residual spray programme covered 35,860 houses, of Mopani employees and community members; this is a slight increase from 35,515 in 2012.

The programme has achieved a reduction of the malaria incidence rate in the population from 216 cases per 1,000 in 2000 to 16.67 cases in 2013.

Cervical cancer screening
This year 1,196 women, aged from 25 to 40, were screened for cervical cancer at the 2 screening centres we set up in 2012, at the cost of over $250,000. These are at Wusakile Hospital in Kitwe and Malcom Watson Hospital in Mufulira.

Club foot treatment
Club foot, also called congenital talipes equinovarus (CTEV), is a congenital deformity that can affect one or both feet, making them appear rotated at the ankle. With treatment, most sufferers can make a full recovery by early childhood, allowing them to walk and run normally. We opened 2 centres for the treatment of club foot in March 2012. The centres have corrected this condition for 74 children so far.
Case study:
Investing in public health initiatives, South Africa

Since 2006 our South African coal operations have provided more than R35 million to fund renovation or construction of 7 hospitals and clinics for the people of Mpumalanga where our operations are located. These community health initiatives were constructed in partnership with non-government organisation Re-Action! and the Mpumalanga Department of Health & Social Development which caters for the local communities in the area and also the surrounding farms. The projects are designed so that each of the clinics eventually transitions to full control by the department.

A key focus of the clinics’ work is HIV/AIDS, a disease which has a major impact on our workforce. The clinics provide testing, counselling and treatment. Our HIV intervention strategy aims to have every GX worker know their HIV status, and to seek treatment if they are infected.

We have established a programme to provide support to HIV-positive employees spearheaded by a steering committee involving employee representatives, department representatives, the local community and local government. The programme has been hugely successful, with more than 92% of our workforce having been tested. Of our employees who tested positive, 67% are registered into treatment. There are ongoing efforts to bring the others into the fold. Wellness Champions – employees who dedicate their own time to assisting with wellness promotion – undertake broader health promotion activities in the workplace such as raising awareness by putting up posters, distributing flyers and generally providing support to their colleagues. Wellness Advocates are HIV-positive individuals who have decided to make their status known to their colleagues to help de-stigmatise the disease and encourage more people to be tested and treated.

Our approach is in line with the South African Chamber of Mines’ 2007 Sustainability and Transformation Report which urged that all mining industry employees should know their HIV status and that this knowledge should be applied to practise prevention and to enter wellness treatment programmes.

Infrastructure contributions
We work with local authorities and representatives of our host community to determine local infrastructure needs and what may assist economic growth. This might include water supply, power supply, road or bridge construction, or assistance with education, health and urban facilities.

In addition to these community investments, we may also assist local communities by making contributions to infrastructure improvement programmes that also have benefit to us. Our operations invest significantly in ways that benefit the surrounding communities.

Lobbying
Anyone who lobbies on Glencore Xstrata's behalf must comply with applicable laws and regulations (including but not limited to those relating to registration and reporting).

We give guidance on our lobbying policy as part of our corporate compliance programme. There is a list of the lobbying organisations and associations of which we have membership on our website at www.glencorexstrata.com/sustainability/
12. Product stewardship

From our Code of Conduct:

We aim to maintain high standards of service wherever we operate, honour all our business obligations and develop long-term relationships with business partners based on trust and integrity.

Approach

We know that effective product stewardship can generate additional value for all our stakeholders. We take every practicable step to deliver competitively-priced goods and services that satisfy our customers’ needs while minimising associated sustainability risk.

Our systems and processes are designed to ensure consistently high service standards wherever we operate. This includes honouring business obligations and developing long-term relationships based on trust and integrity.

We have always maintained a continuous dialogue with our strong customer base; our aim is to meet customer expectations at every stage of our processes. To this end, there are rigorous procedures and standards for quality assurance throughout our supply chain.

We entrust our products to many service providers for delivery to our customers. These third parties include warehouses, land freight forwarders and shipping lines. Each stage of the journey can have an impact on product quality, so we have quality controls at specific points in the supply chain, especially the load and discharge locations. These controls form the backbone of our quality assurance programmes.

We work with our suppliers, contractors and business partners to assess the adequacy of their health, safety, environmental and community practices and performance. If performance does not meet our expectations, we work with these partners to create remediation plans. If no satisfactory solution can be found, we terminate contracts.
Quality assurance
Strict quality controls are particularly important for bulk commodities, such as crude oil and petroleum products, grain, coal and ores and ore concentrates. Our procedures follow applicable international standards and internationally accepted practice; these requirements are generally stated in our customer and supplier contracts.

Control checks are typically conducted by independent inspectors or by qualified, trained Glencore Xstrata workers who have been assessed by an internationally accredited inspection organisation. This includes checking critical transport parameters, for example the moisture content of grain, coal or ore concentrates.

Any customer complaint we might receive is investigated promptly, with responsibility shared on a case-by-case basis between our marketing, traffic and chartering functions. They aim to resolve customer or supplier issues as quickly as possible, investigating the underlying causes and putting any necessary changes in place to prevent similar cases. Any corrective measures are tailored to the specific requirements of the commodity in question.

Our products comply with regulatory and legislative requirements and we provide information and documentation to support their safe transport, handling and use.

We continue to monitor developments at the European Chemicals Agency (ECHA) closely, to ensure our continued compliance with REACH. In 2013 we met the second REACH registration deadline and successfully implemented the revised requirements for Annex V of MARPOL for solid dry bulk shipment logistics. As a result, we ensured our ability to deliver a secure supply of our products around the world.

Product safety
We work diligently to ensure that our products are properly managed and used. We are responsible for understanding and considering the actual and potential impacts of our products, as well as communicating this to our workers and customers. This communication helps encourage the proper use of our resources, ensuring that we continue to benefit from them in the future.

Many of our product stewardship activities are process-focused. We seek to optimise our production and application of minerals and metals by improving efficiency, reducing waste and maximising value, such as processing refinery by-products to maximise the recovery of useful metals, while minimising environmental, health and safety risks.

Kazzinc in Kazakhstan and our copper refinery in Quebec include gold refineries within their operations. These are both accredited by the London Bullion Market Association’s Responsible Gold programme, for their high standards of due diligence to ensure a conflict-free gold supply chain.

Product stewardship good practice is shared throughout the Group. Our metals and minerals operation in Canada undertakes widely recognised research and innovation projects in sulphuric acid management. It shares the resulting improvements to acid management processes across the Group. The team have also rolled out training in acid handling to our customers.

We provide our customers with the latest hazard and safety information. We constantly review and update the information we provide to keep up with the latest developments and regulations. Our dedicated product safety department prepares and distributes safety data sheets. We have a 24-hour emergency hotline to assist customers with acute health, safety and environmental incidents that may require immediate attention.
We investigate gaps in the general knowledge of metals related to potential environmental and health risks and improve risk management measures. We have worked with the Cobalt Development Institute, a trade association for cobalt producers, users, recyclers and traders, to run cobalt studies to help prevent occupational illnesses.

We continued to work closely with the ICMM and other companies in 2013 to improve waste water management during ore concentrate shipping, reducing marine pollution. As a leading contributor to this consortium, with direct control over many port facilities and shipping operations, we contributed our knowledge and experience to help raise awareness and encourage shipping industry engagement. This should help the ICMM to understand their perspective and take part in an improved waste water management dialogue.

Food safety
Our Agricultural products business is part of a supply chain for oil seeds and beans, grain, rice, cotton and sugar. Each stage of this chain has the potential for exposure to different types of product contamination, from oil seed trading to bottling edible oil.

A controlled supply chain management system is therefore vital to detect and eliminate safety risks at the earliest stages. In 2013 we intensified our focus on food safety by building stronger food safety teams at both operational and national levels.

Glencore’s ISCC-certificated operations at the end of 2013

Some products may require supplementary quality assurance measures, such as the International Sustainability and Carbon Certification (ISCC) requirements for renewable fuels. These operations are certified as meeting those requirements.

- Glencore Céréales France SAS
- Glencore España, SA
- Glencore Grain BV
- Glencore Grain Bulgaria EOOD
- Glencore Grain Czech sro
- Glencore Grain Hungary Kft
- Glencore Grain Australia Pty Ltd
- Glencore Grain UK Ltd
- Glencore Polska Sp
- Glencore Romania srl
- Biopetrol Rostock GmbH
- Biopetrol Rotterdam BV
- Biopetrol Marketing
- Pannon, Noevenyolajgyarto Kft
- Serna, Ukraine
- Oleaginosa Moreno Hermanos SACIF
- Usti Oils sro
- ZakladyTluszczowe w Bodaczowie Sp
During 2013 we undertook a number of improvement programmes, including detailed safety assessments and investigations, throughout our industrial assets followed by subsequent improvement plans as necessary. We also developed a global food and feed safety training programme, implemented proactive monitoring for specific contaminants and set up a product contaminant data management system.

**The EU and the former Soviet Union**
In 2013, our Ukrainian agricultural supply chain was affected by several feed safety incidents stemming from incorrect farming and drying practices by local companies. To give greater protection to our product streams and prevent unwanted contaminants, we engaged a food and feed expert to reassess our agricultural processing assets in Europe and Ukraine, identify improvements and update our action plans.

Key findings were actioned in 2013, with longer-term plans to be implemented over the next 3 years. These include training in hazard analysis and use of critical control points during the first quarter of 2014. The training is tailored to the specific needs of those assets, ensuring the skills and tools to analyse contamination risk. This marks an important step forward in risk control for critical contaminants, as it will lead to more proactive monitoring and investigation of contaminants, with a special focus on the Balkan region.

**South America**
In 2013, our oil seed crushing, storage and oil refining assets in Argentina and Uruguay implemented an improved food safety quality assurance framework. This framework will be rolled out further, to our grain and rice assets, in 2014.

In Brazil, our food safety quality assurance team developed a more robust food safety management system, covering both soy and wheat.

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**Case study:**
**Spreading improvements from new assets**

Our Viterra agricultural assets in Canada and Australia, acquired at the end of 2012, had strong risk management resources, knowledge and experience. Various learnings from these assets are being shared across the Group where possible. Some examples of best practice we hope to expand to other Group operations include:

- Establishing processes to track and identify crops at every stage of production, from seed to customer delivery
- Compliance with ISO 22000 food safety management system requirements for organisations within the food chain; these demonstrate organisations can control food safety hazards to ensure food is safe at the time of human consumption
- The Canadian port terminals and several other sites comply with the GMP+ B3 standard for quality control of foreign feed material suppliers (many of our other industrial assets in the agriculture business throughout the Group already comply with this standard)
- Specially designated grain handling facilities that ship canola to biofuel markets in Europe have been certified as sustainable; these facilities and certain farmers are certified under the ISCC scheme.
- All workers involved in the storage and handling of grain undergo extensive quality and food safety training
- On delivery, all grain is quality tested and segregated by grade, allowing us to assemble cargos to specific customer requirements; our comprehensive grain classification and residue testing procedures comply with industry standards and ensure the highest quality and food safety requirements
- Dedicated laboratory facilities, accredited by the National Association of Testing Authorities, oversee all quality testing at sites, ensuring consistency and reliability of grain quality
From our Code of Conduct:

Everyone who works for Glencore Xstrata must comply with or exceed the laws, regulations and best practice guidelines applicable in the jurisdictions where we operate.

We will not assist any third party in breaching the law in any country, or participate in any other criminal, fraudulent or corrupt practice. We seek to prevent such misconduct through strong leadership, internal policies and procedures.

Our approach
Our primary objective is to ensure that we maintain a culture of ethical behaviour and compliance throughout the Group, rather than simply performing the minimum required by laws and regulations.

Glencore Xstrata compliance programme
We have a compliance programme that includes a wide range of policies, manuals and guidelines. These are developed and maintained by the different compliance departments within our operations. Each of our operations has a designated compliance co-ordinator to handle implementation of our compliance programme. These co-ordinators are given guidance by our operations’ compliance departments.
13. Compliance

We also have a business ethics committee (BEC); each of our main marketing offices has its own business ethics officer who is a member of the BEC. The BEC’s role is to develop and review our policies and principles on business ethics and to seek to prevent bribery and corruption. It also receives updates and reports from the business ethics sub-committee.

Employees and contractors can read our compliance documentation either via the corporate intranet or that of the specific operation at which they work. They can also get this information from their local compliance co-ordinator. Relevant employees must confirm their understanding and awareness of our compliance requirements in writing every year.

Our permanent and temporary employees, Directors and officers as well as contractors (where they are under a relevant contractual obligation) must, in addition to complying with applicable laws and regulations, comply with the corporate compliance policies that apply to their duties. Our managers and supervisors are responsible for ensuring that our people understand and comply with these obligations. Local compliance co-ordinators have been appointed to support our employees in day-to-day business considerations.

Individual operations may implement their own policies in addition to the Glencore Xstrata corporate policies. These should be designed to address their specific requirements, while being consistent with our statement of values and the principles set out by the Code of Conduct and Glencore Xstrata corporate policies.

Bribery is a criminal act in most countries. Glencore Xstrata has a clear position on bribery and corruption, which is that offering, paying, authorising, soliciting or accepting bribes is unacceptable.

In addition, we will not assist any third party in violating the law in any country, pay or receive bribes, or participate in any other criminal, fraudulent or corrupt practice. We strive to prevent the possibility of such misconduct with strong leadership, internal policies and procedures. We conduct continuous analysis for corruption risks within our businesses, with our corporate compliance and internal audit functions being brought in if necessary.

Marketing employees receive induction and ongoing training on sanctions, the prevention of bribery and corrupt payments, money laundering, confidential information and conflicts of interest. Industrial operations carry out their own training programmes, designed to address their specific requirements while being consistent with our statement of values, the Code of Conduct and Glencore Xstrata corporate policies.

In 2013, 5,970 employees and contractors, who work in functions considered to have a relatively high exposure to compliance-related risk, took part in face-to-face training on our compliance programme, as part of a programme to train staff on the new Glencore Xstrata corporate policies. Two of the main focuses were policies and procedures for the prevention of bribery and corrupt payments and guidelines on how to raise concerns. In addition, 132 marketing employees in key functions took part in a seminar on anti-corruption case studies prepared by Glencore Xstrata and external consultants.

Reporting misconduct

Glencore Xstrata operates in a complex business environment. Our managers and supervisors are obliged to prevent, detect and report any violations of the law or our corporate policies.

If one of our people encounters a situation in which the Code of Conduct or underlying policies appear to be breached, the individual must raise this promptly with his or her immediate supervisor or manager. Alternatively, that individual may raise the concern with another appropriate manager, local compliance co-ordinator, a business ethics officer or another member of the BEC. The BEC includes representatives from our external legal advisers, to whom misconduct can be reported independently.

If the individual has any material concern that remains unresolved, he or she should refer the matter to CodeofConduct@glencore.com. Queries are reviewed and assessed promptly.

Glencore Xstrata is of the view that, in the context of the Group as a whole, there were no material breaches of any applicable laws or regulations during 2013.
Our approach | Our focus areas | Additional information

BEC Committee

BEC Sub-Committee

External regulatory requirements

Operations’ Compliance Department

Compliance policies, manuals and guidelines

Intranet

Training

External guidance and consultations on regulatory requirements

Operations in marketing, logistics and industrial activities

Internal audit
14. Glossary

ASM
Artisanal and small-scale mining.

Australasia
Glencore Xstrata defines this region as including Australia, Azerbaijan, China, India, Indonesia, Japan, Kazakhstan, New Caledonia, New Zealand, Papua New Guinea, Philippines, Russia, Singapore, South Korea, Taiwan, Turkey, UAE and Vietnam, as we undertake business activities in these countries.

backfilling
Material generally sourced from mine residues and used to fill mined voids, to ensure long-term stability of excavations and minimise the effects of seismic activity.

brownfield site
A potential development site that has had previous development. See “greenfield”.

business segment
Glencore Xstrata’s operations are divided into three business segments: Metals & minerals, Energy products and Agricultural products. Each segment manages its own marketing, sourcing, hedging, logistics and industrial investments.

CDP
The Carbon Disclosure Project is an international, not-for-profit organisation that provides a global system for companies and cities to measure, share and disclose environmental information. See www.cdp.net for further information.

closure plan
A formal document detailing a costed conceptual outline of how the operation will be closed, taking into account the options available to deal with prevailing social and environmental issues.

CO2e
The universal unit of measurement for the global warming potential (GWP) of greenhouse gases, where one unit of CO2e is the GWP for one unit of carbon dioxide. This unit allows us to discuss the equivalence of different GHGs in terms of their GWP. The GWPs used in this report are 1 for CO2, 25 for CH4 (methane) and 298 for N2O (nitrous oxide) for Glencore, and 1 for CO2, 21 for CH4 and 310 for N2O for Xstrata.

commodity departments
Each of Glencore Xstrata’s business segments are divided into a number of commodity departments, eg copper, nickel and ferroalloys within the Metals & minerals business segment.

community investments
Donations and investments into the communities connected to our operations.

concentrate
A natural commodity consisting of extracted and processed mineral ores; it is the first step towards producing refined minerals and metals.

direct energy
Energy used and generated by Glencore Xstrata operations, including via combustion in boilers, furnaces and vehicles owned or controlled by us. For former Xstrata activities sources include heavy fuel oil, coal, coke, diesel, biodiesel, light fuel oil, jet fuel, LPG, naphtha, petrol, poly fuel, kerosene, natural gas, and recovered electricity generated on site; for former Glencore activities sources include coal, natural gas, fuel oil, kerosene, diesel, gasoline, marine fuel oil, biomass, and reductants.

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

ferroalloys
Various iron alloys that have a high proportion of 1 or more other element, for example manganese, chrome or silicon.

FSSC 22000
An international standard developed for the certification of food safety management systems for food manufacturers, combining the requirements of ISO 22000 and PASS220.

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

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14. Glossary

GCP
Glencore Xstrata Corporate Practice, our corporate responsibility framework and management programme.

Global Food Safety Initiative
A business-driven initiative for the continuous improvement of food safety management systems, intended to ensure consumer confidence in the delivery of safe food.

GMP+B3
One of the European GMP+ standards that harmonise requirements for feed chain quality and safety, specific to trade and transhipment.

greenfield site
A previously undeveloped site for commercial development or exploitation. See “brownfield”.

Greenhouse Gas Protocol
Standards and guidance for corporate accounting and reporting on GHG emissions, helping governments and business leaders to understand, quantify, and manage GHG emissions (eg CO2). Includes a division of GHG emissions into different scopes depending on source.

GRI
The Global Reporting Initiative is a network-based organisation that develops and disseminates voluntary sustainability reporting guidelines; there is a specific supplement for the mining and metals industry.

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

hazardous
dangerous, as defined by national legislation.

HPRIs
High potential risk incidents are incidents that could have potentially resulted in a catastrophic (Category 5) or major (Category 4) outcome, under the current Glencore Xstrata risk management framework. The equivalent outcomes under Glencore’s previous classification system would be very serious (Class A+) or major (Class A) incidents.

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

IFC
The International Finance Corporation is part of the World Bank Group that finances and provides advice and guidelines for private sector ventures and projects in developing countries.

ILO
The International Labour Organization, a United Nations agency that seeks the promotion of social justice and internationally recognised human and labour rights.

ILO Declaration
The Declaration on Fundamental Principles and Rights at Work adopted by the International Labour Organization (ILO) in 1988, with the core categories of collective bargaining, discrimination, forced labour and child labour.

IMO
The International Maritime Organization is the United Nations agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.

indirect energy
Energy used by Glencore Xstrata sites, but supplied by third parties, often as electricity. For former Xstrata activities, this is electricity; for former Glencore activities it includes electricity, steam and heating/cooling.

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

ICMM
International Council on Mining and Metals.

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

ISCC
International Sustainability and Carbon Certification is an international certification system for biomass and biofuels.

ISO 9001
A quality management system standard (not a performance standard) issued by the International Organization for Standardization (ISO). It is a voluntary standard that can be independently audited by certifying bodies.
ISO 14001
A management system standard, similar to ISO 9001, but covering environmental impacts and risk.

ISO 22000
A management system standard, similar to ISO 9001, but covering food safety management systems.

ISO 26000
A management system standard covering social responsibility.

IUCN
The International Union for Conservation of Nature is a professional global environmental network with over 1,000 member organisations in 140 countries.

LTI
Lost time injuries are recorded when an employee or contractor is unable to work following an incident. Former Glencore assets record LTIs that result in lost days from the next calendar day after the incident, while former Xstrata assets record LTIs that result in lost days from the next rostered day after the incident. Therefore the combined LTI figures reported in this publication are not based on data of consistent definition.

LTIFR
Glencore Xstrata’s lost time injury frequency rate is the total number of LTIs recorded per million hours worked.

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

MARPOL
The main international convention for preventing ships from polluting the marine environment, whether by operational or accidental causes.

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

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

OCIMF
The Oil Companies International Marine Forum is a voluntary association of oil companies with an interest in the shipment of crude oil and products.

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

off-gas
Gas emitted as a result of industrial processes or the combustion of fuels such as natural gas, gasoline/petrol, diesel fuel, fuel oil or coal.

petajoule
A measure of energy equivalent to a thousand trillion joules, or 1,015 joules, usually used to express energy consumption by cities or major industries.

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

PM10
Particles of 10 micrometres or less in size, the particulate on which the US Environmental Protection Agency’s air quality standard is now measured.

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

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

SIRE
The Ship Inspection Report Programme is an OCIMF tanker risk assessment tool intended to address safety concerns about sub-standard shipping. It is the most significant safety initiative accepted across the oil industry.

sulphur dioxide
A chemical compound (SO2) produced by various industrial processes, including the combustion of sulphur-containing fuels. SO2 is a pollutant gas and a precursor to particulates in the atmosphere. It can be captured and converted to saleable sulphuric acid.
14. Glossary

tailings
The residue of an industrial process, especially residue that contains mineral ore.

TRIFR
Total Recordable Injury Frequency Rate = number of fatalities + number of total recordable injuries (LTI + restricted work injuries (RWI) + medical treatment injuries (MTI)) per million hours worked.

Voluntary Principles
The Voluntary Principles on Security and Human Rights (VPs) Initiative is a multi-stakeholder initiative involving governments, companies and NGOs that promotes implementation of a set of principles to guide oil, gas, and mining companies on providing security for their operations in a manner that respects human rights.

waste rock
Mineral wastes produced during mining, excluding overburden. It includes the parts of ore deposits that are not processed for economic reasons. Waste rock is either used for backfilling or stored at the surface.

water discharge
Total of water effluents discharged over the course of the reporting period to subsurface waters, surface waters, sewers that lead to rivers, oceans, lakes, wetlands, treatment facilities and ground water.

water withdrawal
Total of all water drawn into the boundaries of the reporting organisation from all sources for any use over the course of the reporting period. Includes surface water, ground water, rainwater, municipal water and, for Glencore only, waste water from third parties.

WHO
The World Health Organisation is the directing and coordinating authority for health within the United Nations system, which sets many internationally-recognised norms and standards.

workforce
References to Glencore Xstrata’s workforce includes both employees and contractors.

15. Contacts

We welcome feedback on this report or on any other aspect of sustainability at Glencore. You can send general comments to global.gcp@glencore.com.

Otherwise you can contact:

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charles.watenphul@glencore.com
This is the second sustainability report produced by Glencore Xstrata since the acquisition of Xstrata in May 2013. It complies with the Global Reporting Initiative (GRI) G3 sustainability reporting guidelines version 3.0, including the metals and mining sector supplement. See the GRI Index (Appendix 2) for further details.

This report meets application level A+ of the GRI guidelines, with the self-declared GRI A+ level independently assured by Deloitte LLP (Appendix 3).

**Boundaries and scope**
This report includes information and data from our industrial and marketing activities including only assets where we have operational control whilst excluding investment, trading and holding companies.9

The report contains data for the full year 2013, although former Glencore acquisitions are only included if they were integrated before 1 July, while all former Xstrata acquisitions from 2013 are included.

**Data and information**
The data in this report is taken from Glencore and Xstrata’s reporting systems. Both systems were used to consolidate sustainability data from across those operations and activities that met the 2 companies’ different boundary definitions. Some data may be based on estimates where actual data is not measured or available as Glencore and Xstrata’s previous data capture methods or definitions are not fully aligned.

The data for Glencore and Xstrata is presented separately for certain specific key performance indicators (KPIs), as the 2 companies had different reporting systems before the acquisition, as well as some slight variations in definitions. Indicators have been harmonised within the GCP database for 2014 onwards.

The metrics in this report reflect those used in the commodities and sectors in which we operate and are primarily based on GRI indicators.

In some instances, prior years’ figures have been restated to reflect improvements in our data collection, analysis and validation systems. These restatements are not remarked upon, but all figures stated in this report represent the latest available data.

The databook in Appendix 2 contains combined data for Glencore Xstrata; as data reporting for the 2 companies is not yet fully aligned, we have not always been able to maintain the level of reporting seen in both companies’ previous individual reports.

Selected 2013 KPIs within this report were subject to limited assurance (see Appendix 3) by Deloitte LLP. Where data for previous reporting years has been restated, Deloitte LLP has not undertaken additional work to review accuracy and completeness. No assurance is provided over restated data. Deloitte LLP did not review data relating to Xstrata’s performance before 2013.

We may change our approach to how we report our data in future sustainability reports without prior announcement; we may also change the reporting of specific data and its interpretation.

Glencore Xstrata made disclosures to the Dow Jones Sustainability Index, the Carbon Disclosure Project (CDP) for GHG emissions, and the CDP water programme in 2013.

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9 Data for 2013 excluded our Cameroon oil assets and several corporate and logistics offices.
### Appendix 2:
**Databook and GRI references**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy and analysis</strong></td>
<td></td>
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</tr>
<tr>
<td>1.1</td>
<td>Statement from the most senior decision maker in the organisation about the relevance of sustainability to the organisation and its strategy</td>
<td>CEO Statement (pp. 3–4)</td>
<td>●</td>
</tr>
<tr>
<td>1.2</td>
<td>Description of key impacts, risks and opportunities, including: the organisation’s key impacts on sustainability and effects on stakeholders, including rights as defined by national laws, and relevant internationally agreed standards; and the impact of sustainability trends, risks and opportunities on the long-term prospects and financial performance of the organisation</td>
<td>Materiality assessment (pp. 14–15) Performance and targets (pp. 16–18) Glencore Xstrata AR, Principal risks and uncertainties (pp. 18–31)</td>
<td>●</td>
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<tr>
<td><strong>Organisational profile</strong></td>
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</tr>
<tr>
<td>2.1</td>
<td>Name of the organisation</td>
<td>2. (pp. 6–12) Glencore Xstrata AR</td>
<td>●</td>
</tr>
<tr>
<td>2.2</td>
<td>Primary brands, products, and/or services</td>
<td>The Glencore Xstrata business model (pp. 8–9) Where we operate (pp. 10–11)</td>
<td>●</td>
</tr>
<tr>
<td>2.3</td>
<td>Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures</td>
<td>The Glencore Xstrata business model (pp. 8–9) Where we operate (pp. 10–11)</td>
<td>●</td>
</tr>
<tr>
<td>2.4</td>
<td>Location of organisation’s headquarters</td>
<td>Glencore Xstrata AR (p. 207)</td>
<td>●</td>
</tr>
<tr>
<td>2.5</td>
<td>Number of countries where the organisation operates and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report</td>
<td>Who we are (p. 1) <a href="http://www.glencorexstrata.com">www.glencorexstrata.com</a></td>
<td>●</td>
</tr>
<tr>
<td>2.6</td>
<td>Nature of ownership and legal form</td>
<td>Glencore Xstrata AR (p. 207)</td>
<td>●</td>
</tr>
<tr>
<td>2.7</td>
<td>Markets served (including geographic breakdown, sectors served and types of customers/beneficiaries)</td>
<td>The Glencore Xstrata business model (pp. 8–9) Where we operate (pp. 10–11)</td>
<td>●</td>
</tr>
<tr>
<td>2.8</td>
<td>Scale of the reporting organisation, including: number of employees, net sales, total capitalisation and quantity of products provided</td>
<td>Appendix 1 (p. 81) Glencore Xstrata AR (pp. 32–74)</td>
<td>●</td>
</tr>
<tr>
<td>2.9</td>
<td>Significant changes during the reporting periods regarding size, structure or ownership, including the location of or changes in operations, including facility openings, closings and expansions; and changes in the share capital structure and other capital formation, maintenance and alteration operations</td>
<td>CEO Statement (pp. 3–4) Glencore Xstrata – an overview (pp. 6–12) Appendix 1 (p. 81) Glencore Xstrata AR (pp. 8–9)</td>
<td>●</td>
</tr>
<tr>
<td>2.10</td>
<td>Awards received in the reporting period</td>
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<tr>
<td><strong>Report parameters</strong></td>
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<tr>
<td>3.1</td>
<td>Reporting period for information provided</td>
<td>1 January 2013 to 31 December 2013</td>
<td>●</td>
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<tr>
<td>3.2</td>
<td>Date of most recent previous report</td>
<td>Glencore Xstrata Sustainability Report 2012</td>
<td>●</td>
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<tr>
<td>3.3</td>
<td>Reporting cycle</td>
<td>Annual</td>
<td>●</td>
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<tr>
<td>3.4</td>
<td>Contact point for questions regarding the report or its contents</td>
<td>Contacts (p. 80)</td>
<td>●</td>
</tr>
<tr>
<td>3.5</td>
<td>Process for defining report content, including: determining materiality, prioritising topics within the report and identifying stakeholders the organisation expects to use the report</td>
<td>Materiality assessment (pp. 14–15) Appendix 1 (p. 81)</td>
<td>●</td>
</tr>
<tr>
<td>3.6</td>
<td>Boundary of the report</td>
<td>Glencore Xstrata – an overview (pp. 6–12)</td>
<td>●</td>
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</tbody>
</table>
No awards at a Group level; individual operations received awards.
Appendix 2:
Databook and GRI references continued

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
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<tr>
<td><strong>Report parameters continued</strong></td>
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</tr>
<tr>
<td>3.7</td>
<td>State any specific limitations on the scope or boundary of the report</td>
<td>Appendix 1 (p. 81)</td>
<td>●</td>
</tr>
<tr>
<td>3.8</td>
<td>Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations and other entities that can significantly affect comparability from period to period and/or between reporting organisations</td>
<td>Glencore Xstrata – an overview (pp. 6–12) Appendix 1 (p. 81)</td>
<td>●</td>
</tr>
<tr>
<td>3.9</td>
<td>Data measurement techniques and the basis of calculations, including assumptions and technique underlying estimations applied to the compilation of the indicators and other information in the report</td>
<td>Appendix 1 (p. 81)</td>
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<tr>
<td>3.10</td>
<td>Explanation of the effect of any restatements of information provided in earlier reports, and the reasons for such restatement</td>
<td>Appendix 1 (p. 81)</td>
<td>●</td>
</tr>
<tr>
<td>3.11</td>
<td>Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report</td>
<td>Our approach to sustainability (p. 13) Appendix 1 (p. 81)</td>
<td>●</td>
</tr>
<tr>
<td>3.12</td>
<td>Table identifying the location of the standard disclosures report</td>
<td>Appendix 2 (pp. 82-101)</td>
<td>●</td>
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<tr>
<td>3.13</td>
<td>Policy and current practices with regard to seeking external assurance for the report</td>
<td>Appendix 1 (p. 81) Appendix 3 (pp. 102–104)</td>
<td>●</td>
</tr>
<tr>
<td><strong>Governance, commitments and engagement</strong></td>
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</tr>
<tr>
<td>4.1</td>
<td>Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight</td>
<td>Where we operate (p. 10–11) Glencore Xstrata AR (pp. 80–91)</td>
<td>●</td>
</tr>
<tr>
<td>4.2</td>
<td>Indicate whether the Chair of the highest governance body is also an executive officer (and, if so, their function within the organisation’s management, and the reason for this arrangement)</td>
<td>Glencore Xstrata AR, 3.3 (pp. 80)</td>
<td>●</td>
</tr>
<tr>
<td>4.3</td>
<td>For organisations that have a unitary board structure, state the number of members of the highest governance body that are independent, and/or non-executive members</td>
<td>Glencore Xstrata AR (pp. 80)</td>
<td>●</td>
</tr>
<tr>
<td>4.4</td>
<td>Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body</td>
<td>Glencore Xstrata AR (pp. 85–86)</td>
<td>●</td>
</tr>
<tr>
<td>4.5</td>
<td>Linkage between compensation for members of the highest governance body, senior managers and executives (including departure arrangements), and the organisation’s performance (including social and environmental performance)</td>
<td>Glencore Xstrata AR (pp. 92–107)</td>
<td>●</td>
</tr>
<tr>
<td>4.6</td>
<td>Processes in place for the highest governance body to ensure conflicts of interest are avoided</td>
<td>Glencore Xstrata AR (pp. 80–91, 108–114)</td>
<td>●</td>
</tr>
<tr>
<td>4.7</td>
<td>Process for determining the qualification and expertise of members of the highest governance body for guiding the organisation’s strategy on economic, environmental and social topics</td>
<td>Corporate governance (p. 12) Glencore Xstrata AR (pp. 82–83, 108–114)</td>
<td>●</td>
</tr>
</tbody>
</table>
Detailed information on Glencore Xstrata’s 2013 data collection processes and procedures is not reported. The glossary provides information on indicator definitions and variations between Glencore and Xstrata.

The effects of restatements are not disclosed.

Detailed information on Glencore Xstrata’s 2013 changes in data collection methods are not disclosed. The Glossary provides information on indicator definitions and variations.

Mechanisms used by employees are not disclosed externally.

Details of this process are not disclosed externally.
### Appendix 2:

**Databook and GRI references continued**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
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<tbody>
<tr>
<td><strong>Governance, commitments and engagement continued</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.8</td>
<td>Internally developed statements of mission or values, codes of conduct and principles relevant to economic, environmental and social performance and the status of their implementation</td>
<td>Our approach to sustainability (p. 13) Materiality assessment (pp. 14–15) ICMM application (p. 14) Glencore Xstrata Code of Conduct</td>
<td>●</td>
</tr>
<tr>
<td>4.9</td>
<td>Procedures of the highest governance body for overseeing the organisation’s identification, and management of economic, environmental and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct and principles</td>
<td>Our Values (p. 7) Glencore Xstrata AR (pp. 80–91) Terms of Reference – Health, Safety, Environment and Communities Committee: <a href="http://www.glencorexstrata.com">www.glencorexstrata.com</a></td>
<td>●</td>
</tr>
<tr>
<td>4.10</td>
<td>Processes for evaluating the highest governance body’s own performance, particularly with respect to economic, environmental and social performance</td>
<td>Glencore Xstrata AR (pp. 80–91, 108–114)</td>
<td>●</td>
</tr>
<tr>
<td>4.11</td>
<td>Explanation of whether and how the precautionary approach or principle is addressed by the organisation. Article 15 of the Rio Principles introduced the precautionary approach</td>
<td>Where we operate (pp. 10–11) Performance and targets (pp. 16–18)</td>
<td>●</td>
</tr>
<tr>
<td>4.12</td>
<td>Externally developed economic, environmental, and social charters, principles or other initiatives to which the organisation subscribes or endorses</td>
<td>Our people – Our approach (p. 30) Human Rights – Our approach (p. 36) Indigenous communities (pp. 38) Product safety (p. 70) Food safety (p. 71)</td>
<td>●</td>
</tr>
<tr>
<td>4.13</td>
<td>Memberships in associations (such as industry associations) and/or national/international advocacy organisations in which the organisation: has positions in governance bodies, participated in projects or committees, provides substantive funding beyond routine membership dues or views membership as strategic</td>
<td>List of Memberships of Lobbying Organisations and Other Associations: <a href="http://www.glencorexstrata.com">www.glencorexstrata.com</a></td>
<td>●</td>
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<tr>
<td>4.14</td>
<td>List of stakeholder groups engaged by the organisation</td>
<td>Materiality assessment (pp. 14–15)</td>
<td>●</td>
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<tr>
<td>4.15</td>
<td>Basis for identification and selection of stakeholders with whom to engage</td>
<td>Materiality assessment (pp. 14–15)</td>
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<td>4.16</td>
<td>Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group</td>
<td>Materiality assessment (pp. 14–15) Community (pp. 40–47)</td>
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<td>4.17</td>
<td>Key topics and concerns that have been raised through stakeholder engagement and how the organisation has responded to those key topics and concerns, including through its reporting</td>
<td>Materiality assessment (pp. 14–15) Group-wide material issues (p. 15) Health and safety (pp. 20–29) Human rights (pp. 36–39) Environment (pp. 48–60) Compliance (pp. 73–75)</td>
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<tr>
<td><strong>Economic indicators</strong></td>
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<tr>
<td>DMAEC</td>
<td>Management approach to economic aspects, goals and performance, policy, additional contextual information</td>
<td>Performance and targets (pp. 16–18) Economic development (pp. 62–64) Glencore Xstrata AR (pp. 4–5, 12–15, 18–31)</td>
<td>●</td>
</tr>
<tr>
<td>EC1</td>
<td>Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings and payments to capital providers and to governments</td>
<td>Performance and targets (pp. 16–18) Economic development (pp. 62–64) Glencore Xstrata AR (pp. 4–5, 12–15, 18–31)</td>
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<tr>
<td>Key:</td>
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<td>Fully reported GRI indicator</td>
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<td>Partially reported GRI indicator</td>
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<tr>
<td>Not reported GRI indicator</td>
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<tr>
<td>Independently assured by Deloitte LLP for 2013</td>
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<tr>
<td>N/A Not applicable</td>
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<table>
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<tr>
<th>Glencore Xstrata (combined)</th>
<th>Comments</th>
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<tr>
<td>2011</td>
<td>2012</td>
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Details of the application of this principle are not disclosed.

Gathered internally, but not reported externally.

Frequency tracked internally, but not reported externally.
## Appendix 2: Databook and GRI references continued

<table>
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<tr>
<th>Indicator</th>
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<td><strong>Economic indicators continued</strong></td>
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<tr>
<td>EC2</td>
<td>Financial implications, other risks and opportunities for the organisation’s activities due to climate change</td>
<td>Climate change and energy (pp. 56–60) Glencore Xstrata AR (p. 30)</td>
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<tr>
<td>EC3</td>
<td>Coverage of the organisation’s defined benefit plan obligations</td>
<td>Glencore Xstrata AR (p. 169 (note 23))</td>
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<tr>
<td>EC4</td>
<td>Significant financial assistance received from government</td>
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<td>EC6</td>
<td>Policies, practices and proportion of spending on locally based suppliers at significant locations of operation</td>
<td>Total spend with local suppliers ($ million)</td>
<td>●</td>
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<td></td>
<td></td>
<td>Total number of local suppliers</td>
<td>●</td>
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<tr>
<td>EC7</td>
<td>Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation</td>
<td>Local employment, training and skills development (p. 62)</td>
<td>●</td>
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<tr>
<td>EC8</td>
<td>Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro-bono engagement</td>
<td>Community investment (pp. 64–68)</td>
<td>●</td>
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<td><strong>Environmental indicators</strong></td>
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<td>Management approach to environmental aspects, goals and performance, policy, additional contextual information</td>
<td>Our approach to sustainability (p. 13) Materiality assessment (pp. 14–15) Performance and targets (pp. 16–18) Environment (pp. 48–60) Glencore Xstrata AR (pp. 16–17, 80–91)</td>
<td>●</td>
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<tr>
<td>EN1</td>
<td>Weight of materials used by weight or volume</td>
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<tr>
<td>EN2</td>
<td>Percentage of materials used that are recycled input materials</td>
<td>Secondary materials and recyclable wastes, ie scrap (%)</td>
<td>●</td>
</tr>
<tr>
<td>EN3</td>
<td>Direct energy consumption by primary energy source</td>
<td>Direct energy (PJ)</td>
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<tr>
<td></td>
<td></td>
<td>Coal</td>
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<td>Natural gas</td>
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<td>Mineral oil</td>
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<td>Reductants</td>
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<td>Renewable (hydropower etc.)</td>
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<td>Other sources</td>
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<td>EN4</td>
<td>Indirect energy consumption by primary energy source</td>
<td>Purchased electricity (PJ)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Renewable</td>
<td>●</td>
</tr>
<tr>
<td>EN8</td>
<td>Total water withdrawal</td>
<td>Total water withdrawal (million m³)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surface water (million m³)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Groundwater (million m³)</td>
<td>●</td>
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<tr>
<td></td>
<td></td>
<td>Potable water (million m³)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other sources (million m³)</td>
<td>●</td>
</tr>
<tr>
<td>EN10</td>
<td>Percentage of water recycled and reused</td>
<td>Total volume of water recycled and reused (million m³)</td>
<td>●</td>
</tr>
</tbody>
</table>
Key:
- Fully reported GRI indicator
- Partially reported GRI indicator
- Not reported GRI indicator
- Independently assured by Deloitte LLP for 2013
- N/A Not applicable

<table>
<thead>
<tr>
<th>Glencore Xstrata (combined)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2012</td>
</tr>
</tbody>
</table>

Financial implications are not disclosed.

Businesses that received government grants have not reported government stake and any other grants received are not of a material nature.

5,439 Figures refer to legacy Glencore assets, data not available for Xstrata.
Data is tracked internally, but not reported externally.

36,365 Figures refer to legacy Glencore assets, data not available for Xstrata.
Data is tracked internally, but not reported externally.

Procedures are not disclosed.

Impact of investments is not disclosed externally.

Production report for the 12 months ended 31 December 2013
http://www.glencorexstrata.com/investors
Other data are tracked internally but not for external reporting.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>183</td>
<td>180</td>
<td>176*</td>
</tr>
<tr>
<td>7%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>12%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>65%</td>
<td>67%</td>
<td>64%</td>
</tr>
<tr>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>7%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>4%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>92</td>
<td>97</td>
<td>109*</td>
</tr>
<tr>
<td>88%</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>12%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>779</td>
<td>670</td>
<td>969*</td>
</tr>
<tr>
<td>329</td>
<td>259</td>
<td>333</td>
</tr>
<tr>
<td>184</td>
<td>148</td>
<td>206</td>
</tr>
<tr>
<td>60</td>
<td>57</td>
<td>69</td>
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<td>207</td>
<td>206</td>
<td>361</td>
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<tr>
<td>631</td>
<td>635</td>
<td>587</td>
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Environment (pp. 48–60)
## Appendix 2:
### Databook and GRI references continued

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental indicators continued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EN11</td>
<td>Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas</td>
<td>Areas owned, leased or managed adjacent to protected areas (ha)</td>
<td>●</td>
</tr>
<tr>
<td>EN12</td>
<td>Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas</td>
<td>Biodiversity and land management (pp. 50–52); Mining (p. 52)</td>
<td>●</td>
</tr>
<tr>
<td>MM1</td>
<td>Amount of land disturbed or rehabilitated</td>
<td>Total land disturbed to date (ha); Land rehabilitated (ha)</td>
<td>●</td>
</tr>
<tr>
<td>MM2</td>
<td>Number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.</td>
<td>Mining (p. 52)</td>
<td>●</td>
</tr>
<tr>
<td>EN16</td>
<td>Total direct and indirect greenhouse gas emissions by weight</td>
<td>Direct emissions (thousand tonnes CO₂e); Indirect emissions (thousand tonnes CO₂e); Total emissions (thousand tonnes CO₂e)</td>
<td>●</td>
</tr>
<tr>
<td>EN17</td>
<td>Other relevant indirect greenhouse gas emissions by weight</td>
<td>(thousand tonnes CO₂e)</td>
<td>●</td>
</tr>
<tr>
<td>EN19</td>
<td>Emissions of ozone-depleting substances by weight</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>EN20</td>
<td>NOx, SOx and other significant air emissions by type and weight</td>
<td>Total particulates – stack emissions – total mass (tonnes); NOx (oxides of nitrogen) – stack emissions – total mass (tonnes); SOx (oxides of sulphur) – stack emissions – total mass (tonnes)</td>
<td>●</td>
</tr>
<tr>
<td>EN21</td>
<td>Total water discharge by quality and destination</td>
<td>Total discharged water (million m³)</td>
<td>●</td>
</tr>
</tbody>
</table>

- Water discharges from site to surface water (million m³) ●
- Water discharges from site to sea water/ocean (million m³) ●
- Water discharge from site to groundwater (million m³) ●
- Water discharge to offsite treatment (million m³) ●
- Water exported to a third party (million m³) ●
### Glencore Xstrata (combined)

<table>
<thead>
<tr>
<th>Comments</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity and land management (pp. 50–52)</td>
<td>22,646</td>
<td>51,755</td>
<td>46,908</td>
</tr>
<tr>
<td>A full land balance is tracked internally, but not reported externally.</td>
<td>87,598</td>
<td>93,596</td>
<td>105,625</td>
</tr>
<tr>
<td>A full land balance is tracked internally, but not reported externally.</td>
<td>19,691</td>
<td>26,141</td>
<td>39,575</td>
</tr>
<tr>
<td>Where required, our mining operations have site-specific land management plans, created by each operation’s management team and approved by the local competent authorities. Data related to number and percentage of sites identified as requiring biodiversity management plans are tracked internally but not reported externally.</td>
<td>22,935</td>
<td>24,944</td>
<td>25,814*</td>
</tr>
<tr>
<td>Climate change and energy (pp. 56–59)</td>
<td>11,542</td>
<td>12,173</td>
<td>13,334*</td>
</tr>
<tr>
<td>Climate change and energy (pp. 56–59)</td>
<td>34,477</td>
<td>37,117</td>
<td>39,148*</td>
</tr>
<tr>
<td>Combustion of coal and oil products by third parties only (assuming all coal and oil products were incinerated)</td>
<td>–</td>
<td>–</td>
<td>772,071</td>
</tr>
<tr>
<td>Combustion of coal and oil products by third parties only (assuming all coal and oil products were incinerated)</td>
<td>8,448</td>
<td>6,764</td>
<td>9,437</td>
</tr>
<tr>
<td>Not including shipping (shipping emitted: 9,923 (2011); 9,024 (2012); 6,959 (2013)).</td>
<td>14,202</td>
<td>20,340</td>
<td>22,667</td>
</tr>
<tr>
<td>Not including shipping (shipping emitted: 130,698 (2011); 118,970 (2012); 91,722 (2013)) or fugitive emissions.</td>
<td>519,059</td>
<td>544,806</td>
<td>558,522*</td>
</tr>
<tr>
<td>Not including shipping (shipping emitted: 84,203 (2011); 75,038 (2012); 56,459 (2013)) or fugitive emissions.</td>
<td>444</td>
<td>566</td>
<td>975</td>
</tr>
<tr>
<td>Since 2012, we have classified irrigation water as discharged waste water and reported it as such. Approximately 99% of all waste water discharged from our agricultural products division is irrigation water. Glencore Xstrata’s managed operations undertake assessments of their water needs and those of local users. All our assets in water-scarce regions with significant water source impacts have water management plans in place. Glencore Xstrata does not collect all breakdown data.</td>
<td>n/a</td>
<td>461</td>
<td>772</td>
</tr>
<tr>
<td>n/a</td>
<td>0</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>n/a</td>
<td>80</td>
<td>128</td>
<td></td>
</tr>
<tr>
<td>n/a</td>
<td>6</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>n/a</td>
<td>18</td>
<td>13</td>
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</table>

- **Fully reported GRI indicator**
- **Partially reported GRI indicator**
- **Not reported GRI indicator**
- **Independently assured by Deloitte LLP for 2013**
- **N/A Not applicable**
## Appendix 2: Databook and GRI references continued

### Environmental indicators continued

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN22</td>
<td>Total weight of waste by type and disposal method</td>
<td>Mineral waste (million tonnes)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>% mineral waste recycled</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-mineral waste (thousand tonnes)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hazardous non-mineral waste (thousand tonnes)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-hazardous non-mineral waste (thousand tonnes)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% non-mineral waste recycled</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>MM3</td>
<td>Total amounts of overburden, rock, tailings and sludges and their associated risks</td>
<td>Total amounts of overburden, rock, tailings and sludges (million tonnes)</td>
<td>●</td>
</tr>
<tr>
<td>EN23</td>
<td>Total number and volume of significant spills</td>
<td>Number of significant spills</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Volume of significant spills (m³)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>EN26</td>
<td>Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation</td>
<td>Our approach to environmental management (p. 48)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Industrial operations (pp. 57–59)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>EN27</td>
<td>Percentage of products sold and their packaging materials that are reclaimed by category</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>EN28</td>
<td>Monetary value of significant fines (USD)</td>
<td>Monetary value of environmental fines ($)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Total number of non-monetary sanctions for non-compliance with environmental laws and regulations</td>
<td>Number of non-monetary sanctions (environmental prosecutions, regulatory actions/orders, regulatory non-compliance and other sustainability-related penalties)</td>
<td>●</td>
</tr>
</tbody>
</table>

### Labour practices and decent work

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMALA</td>
<td>Management approach to labour practices and aspects, goals and performance, policy, organisational responsibility, training and awareness, monitoring and follow-up and additional contextual information</td>
<td>Our people – Our approach (pp. 30–32)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Freedom of association (p. 34)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health and safety – Our approach (pp. 20–22)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safety (pp. 23–24)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Occupational health (p. 28)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training and development (p. 34)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diversity (p. 34)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CEO statement (pp. 3–4)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corporate governance (p. 12)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group-wide material issues (p. 15)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance and targets (pp. 16–18)</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glencore Xstrata Code of Conduct</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>LA1</td>
<td>Total workforce</td>
<td>Total workforce</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Total employees</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total contractors</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee breakdown by role type</td>
<td>Executive/senior/middle management</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Supervisors/administrators/technical</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational/production/maintenance/security</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% Female employees</td>
<td>% of employees that are female</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>% of managers that are female</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>
### Glencore Xstrata (combined) Comments

<table>
<thead>
<tr>
<th>Key:</th>
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<th>Partially reported GRI indicator</th>
<th>Not reported GRI indicator</th>
<th>Independently assured by Deloitte LLP for 2013</th>
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<tbody>
<tr>
<td><strong>2011</strong></td>
<td><strong>2012</strong></td>
<td><strong>2013</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,660</td>
<td>1,862</td>
<td>1,934* Hazardous and non-hazardous waste; Xstrata mineral waste data covers waste generated, Glencore mineral waste covers waste disposed of by the assets. Excavated materials waste data is excluded for the McArthur River Zinc, Rhovan, Thorncliffe, Magareng, Horizon and Helena mines. Data excluding overburden of 216 million tonnes from legacy Glencore assets.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>692</td>
<td>477</td>
<td>879* Non-mineral waste data refers to waste disposed of by the assets.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>412</td>
<td>160</td>
<td>263*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>279</td>
<td>317</td>
<td>616*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66%</td>
<td>56%</td>
<td>42%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,660</td>
<td>1,862</td>
<td>1,934 Data excluding overburden of 216 million tonnes for legacy Glencore assets. Waste (p. 56)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>127</td>
<td>75 There were a total of 4,592* environmental incidents and spills in 2013. EN23 data is significant spills i.e. those in categories A+, A and B for Glencore and categories 3, 4 and 5 for Xstrata. Other incidents or non-significant spills are not included in the scope of EN23.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>570</td>
<td>1,378</td>
<td>112,485</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Independently assured by Deloitte LLP for 2013</td>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

We review the environmental impacts of products and services but do not currently report on the extent of the impact of mitigation actions.

Packaging is not considered material to the business.

| **2011** | **2012** | **2013** |
| 287,897 | 111,445 | 3,261,992 |
| – | – | 14 Xstrata: this is the total number of instances of environmental non-compliance, regulatory actions/orders and prosecutions, including those accompanied by a fine. Glencore: we did not collect information on non-monetary environmental sanctions at a Group level in 2012 |

| **2011** | **2012** | **2013** |
| 169,305 | 188,555 | 203,637* Our people – Our approach (p. 30) |
| 99,407 | 112,563 | 112,308 |
| 69,898 | 75,992 | 91,329 |
| 4% | 4% | 4% |
| 16% | 16% | 17%* |
| 16% | 17% | 17% |
## Appendix 2:
*Databook and GRI references continued*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labour practices and decent work continued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA2</td>
<td>Total redundancies</td>
<td>Forced redundancies + voluntary redundancies</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Total turnover by region</td>
<td>Africa</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North America</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South/Latin America</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Australasia</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Total turnover by age group</td>
<td>Age &lt; 30</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age 30–50</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age &gt; 50</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Total turnover by gender</td>
<td>Male</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>●</td>
</tr>
<tr>
<td>LA4</td>
<td>Percentage of employees covered by collective bargaining agreement</td>
<td>Percentage of employees covered by collective bargaining agreement</td>
<td>●</td>
</tr>
<tr>
<td>LA5</td>
<td>Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>MM4</td>
<td>Number of strikes and lock-outs exceeding one week's duration</td>
<td>Number of strikes and lock-outs exceeding one week's duration</td>
<td>●</td>
</tr>
<tr>
<td>LA7</td>
<td>Occupational illness (number of new cases)</td>
<td>Occupational illness (number of new cases)</td>
<td>●</td>
</tr>
<tr>
<td>LA7</td>
<td>Total recordable injury frequency rate (TRIFR)</td>
<td>TRIFR</td>
<td>●</td>
</tr>
<tr>
<td>LA7</td>
<td>Lost time injury frequency rate (LTIFR)</td>
<td>LTIFR</td>
<td>●</td>
</tr>
<tr>
<td>LA7</td>
<td>Disabling injury severity rate (DISR)</td>
<td>DISR</td>
<td>●</td>
</tr>
<tr>
<td>LA7</td>
<td>Workforce fatality frequency rate (FIFR)</td>
<td>FIFR</td>
<td>●</td>
</tr>
<tr>
<td>LA7</td>
<td>Total number of fatalities</td>
<td>Number of workforce (employees + contractors) fatalities</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Total number of fatalities – by region</td>
<td>Africa</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North America</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South America</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Australasia</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Europe</td>
<td>●</td>
</tr>
<tr>
<td>LA8</td>
<td>Education, training, counselling, prevention and risk-control programmes in place to assist workforce members, their families or community members regarding serious diseases</td>
<td>Occupational health (p. 28) Public health (p. 66)</td>
<td>●</td>
</tr>
<tr>
<td>LA10</td>
<td>Average hours of training per year per employee by employee category</td>
<td>Average training hours per worker (employees + contractors)</td>
<td>●</td>
</tr>
</tbody>
</table>
### Our people – Our approach (p. 32)

<table>
<thead>
<tr>
<th>Glencore Xstrata (combined)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>36%</td>
<td>33%</td>
</tr>
<tr>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>65%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Glencore TRIFR includes all types of injuries plus instances where first aid was given.

Collection for the entire Group started in 2014.

The data is tracked and reported based on the average of employees and contractors. It does not differentiate between employee categories for external reporting.
### Appendix 2:

**Databook and GRI references continued**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labour practices and decent work continued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LA13</td>
<td>Composition of governance bodies and breakdown of employees per category according to gender, age, minority group membership and other indicators of diversity</td>
<td>Minority group membership</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Men &lt; 30</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women &lt; 30</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Men 30–50</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women 30–50</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Men &gt; 50</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women &gt; 50</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% of managers that are female</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female members of the Board of Directors</td>
<td>●</td>
</tr>
<tr>
<td>LA14</td>
<td>Ratio of basic salary of men to women by employee category</td>
<td>Glencore Xstrata AR (p. 92–107)</td>
<td>●</td>
</tr>
<tr>
<td><strong>Human rights</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMAHA</td>
<td>Management approach to human rights aspects, goals and performance policy, organisational responsibility, training and awareness, monitoring and follow up additional contextual information</td>
<td>Economic development (pp. 62–66)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Our people – Our approach (p. 30)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freedom of association (p. 34)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Child and forced labour (p. 34)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security (p. 38)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resettlement (p. 44)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Rights – Our approach (p. 36)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CEO statement (pp. 3–4)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corporate governance (p. 12)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performance and targets (pp. 16–18)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glencore Xstrata Code of Conduct</td>
<td>●</td>
</tr>
<tr>
<td>HR1</td>
<td>Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening</td>
<td>Human rights (p. 36–39)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glencore Xstrata Code of Conduct</td>
<td>●</td>
</tr>
<tr>
<td>HR2</td>
<td>Percentage of significant suppliers and contractors that have undergone screening on human rights, and actions taken</td>
<td>Human rights (p. 36–39)</td>
<td>●</td>
</tr>
<tr>
<td>HR4</td>
<td>Total number of incidents of discrimination and actions taken</td>
<td>Glencore Xstrata Code of Conduct</td>
<td>●</td>
</tr>
<tr>
<td>HR5</td>
<td>Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights</td>
<td>Number of identified operations</td>
<td>●</td>
</tr>
<tr>
<td>HR6</td>
<td>Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour</td>
<td>Number of identified operations</td>
<td>●</td>
</tr>
<tr>
<td>HR7</td>
<td>Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour</td>
<td>Number of identified operations</td>
<td>●</td>
</tr>
</tbody>
</table>
Glencore Xstrata has operations in areas where minority group membership data cannot be collected for privacy reasons. We therefore cannot provide an accurate number here. Glencore Xstrata does not collect this breakdown.

<table>
<thead>
<tr>
<th>Glencore Xstrata (combined)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 2012 2013</td>
<td></td>
</tr>
<tr>
<td>19% 19% 17%</td>
<td></td>
</tr>
<tr>
<td>5% 5% 4%</td>
<td></td>
</tr>
<tr>
<td>47% 47% 48%</td>
<td></td>
</tr>
<tr>
<td>9% 9% 10%</td>
<td></td>
</tr>
<tr>
<td>17% 17% 18%</td>
<td></td>
</tr>
<tr>
<td>3% 3% 3%</td>
<td></td>
</tr>
<tr>
<td>16% 17% 17%</td>
<td></td>
</tr>
<tr>
<td>0 0 0</td>
<td></td>
</tr>
</tbody>
</table>

The breakdown ‘Employee breakdown by role type’ can be found under LA1.

The data for 2011 and 2012 refers to both Glencore and Xstrata that were separate companies at that point of time.

Our basic salaries are not differentiated by gender (1:1)

We undertake due diligence of all our major investments, and human rights risks are considered as part of this process. We seek to ensure that all significant investment agreements include a requirement to comply, or demonstrate comparable practices, with the Glencore Xstrata Code of Conduct, including its provisions on respect of human rights. Figures are tracked for internal purposes but not externally reporting.

We review our approach to supply chain management against the UN Guiding Principles on Business and Human Rights. Data on percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken are tracked and monitored for internal use only.

<p>| 2 0 21 | Each reported case of discrimination is carefully analysed and where confirmed appropriate disciplinary action is taken. |
| 0 0 0 | |
| 0 0 0 | |
| 0 0 0 | |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human rights continued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MM5</td>
<td>Number of sites located on or near indigenous people's land</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Number of sites with operations in or adjacent to an indigenous community that have an agreement with that community</td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td><strong>Social performance indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMASO</td>
<td>Management approach to society aspects, goals and performance policy, organisational responsibility, training and awareness, monitoring and follow-up</td>
<td>Community – Our approach (p. 40) Environmental incidents and fines (p. 50) Glencore Xstrata compliance programme (pp. 73–75) Lobbying (p. 68) Compliance (pp. 73–75) CEO statement (pp. 3–4) Corporate governance (p. 12) Group-wide material issues (p. 15) Performance and targets (pp. 16–18) Glencore Xstrata Code of Conduct</td>
<td>●</td>
</tr>
<tr>
<td>SO1</td>
<td>Nature, scope and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering operating and exiting</td>
<td>Community (p. 40–47)</td>
<td>●</td>
</tr>
<tr>
<td>MM6</td>
<td>Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>MM7</td>
<td>The extent to which grievance mechanisms were used to resolve disputes relating to land use and customary rights of local communities and indigenous peoples, and the outcomes</td>
<td>Human rights (p. 36–39) Resettlement (p. 44) Environmental incidents and fines (p. 50)</td>
<td>●</td>
</tr>
<tr>
<td>MM8</td>
<td>Number (and percentage) of Company operating sites where artisanal and small scale mining takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks</td>
<td>Number of sites % of sites</td>
<td>● ●</td>
</tr>
<tr>
<td>MM9</td>
<td>Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process</td>
<td>Resettlement (p. 44)</td>
<td>●</td>
</tr>
<tr>
<td>MM10</td>
<td>Number and percentage of operations with closure plans</td>
<td>Mine closure plans (p. 52)</td>
<td>●</td>
</tr>
<tr>
<td>SO2</td>
<td>Percentage and total number of business units assessed for risks related to corruption</td>
<td>Glencore Xstrata compliance programme (p. 73)</td>
<td>●</td>
</tr>
<tr>
<td>SO3</td>
<td>Percentage of employees trained in organisation's anti-corruption policies and procedures</td>
<td>Managers trained: 80.5% Non-managers trained: 13.9% Total trained: 16.2%</td>
<td>●</td>
</tr>
<tr>
<td>SO4</td>
<td>Actions taken in response to incidents of corruption</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>
Our operations draw up detailed engagement plans that vary depending on the complexity of their community interactions and relationships.

10 There were 10 disputes related to land use in 2013. These occurred at Frieda River (2), Mufulira (1), Nkana (1), Tampakan (2), Elands (1), Lion Chrome Smelter (1), Vantech (1) and Falcondo (1).

We require each operation where we have operational control to have a complaint registration process. This should include a formal grievance and conflict resolution process, for community members and others to make complaints and raise concerns. The process should include transparent procedures for registering, evaluating and responding appropriately to the concerns raised. The complaints regarding access to land are mainly related to resettlement planning activities, and have been addressed through ongoing consultations around these processes.

9 Artisanal and small-scale mining (p. 43)

5% Artisanal and small-scale mining (p. 43)

This indicator was not collected by Xstrata in 2013 so the percentage is based on Glencore’s employee headcount.

In 2013, 5,970 employees and contractors, who are considered to work in high-risk functions such as procurement, took part in face-to-face training on our compliance programme, as part of a programme to train staff on the new Glencore Xstrata corporate policies. Two of the main focuses were policies and procedures for the prevention of bribery and corrupt payments and guidelines on how to raise concerns. In addition, 132 marketing employees in key functions took part in a seminar on anti-corruption case studies prepared by Glencore Xstrata and external consultants.

Data is tracked and monitored for internal use only.

---

**Key:**
- **Fully reported GRI indicator**
- **Partially reported GRI indicator**
- **Not reported GRI indicator**
- **Independently assured by Deloitte LLP for 2013**

N/A Not applicable
## Appendix 2:

**Databook and GRI references continued**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Response/cross reference</th>
<th>Level of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social performance indicators continued</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| SO5 | Public policy positions and participation in public policy development and lobbying | Lobbying (p. 68)  
List of Memberships of Lobbying Organisations and Other Associations: www.glencorexstrata.com | ● |
| SO8 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations | N/A | |
| **Product responsibility** | | | |
| DMAPR | Management approach to product responsibility aspects, goals and performance policy, organisational responsibility, training and awareness, monitoring and follow-up additional contextual information | Product safety (pp. 70–71)  
Food safety (p. 71)  
Marketing communications: N/A  
Customer privacy: N/A  
Compliance: (pp. 73–75)  
Corporate governance (p. 12)  
Group-wide material issues (p. 15)  
Performance and targets (pp. 16–18)  
Glencore Xstrata Code of Conduct | ● |
| MM11 | Programmes and progress relating to materials stewardship | Product stewardship (pp. 69–72) | ● |
| PR1 | Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures | Product stewardship (pp. 69–72) | ● |
| PR3 | Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements | Product stewardship (pp. 69–72) | ● |
| PR6 | Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship | N/A | |
| PR9 | Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services | | ● |
### Our approach | Our focus areas | Additional information

---

<table>
<thead>
<tr>
<th>Glencore Xstrata (combined)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td><img src="image" alt="Not reported GRI indicator" /></td>
<td>Further detailed information is not for external reporting.</td>
</tr>
<tr>
<td><img src="image" alt="Partially reported GRI indicator" /></td>
<td>Not applicable. See EN28 and PR9.</td>
</tr>
<tr>
<td><img src="image" alt="Fully reported GRI indicator" /></td>
<td>Progress is tracked internally, but not reported externally.</td>
</tr>
<tr>
<td><img src="image" alt="Independently assured by Deloitte LLP for 2013" /></td>
<td>All our products are thoroughly assessed in the course of the REACH registration and notification process.</td>
</tr>
<tr>
<td><img src="image" alt="Not reported GRI indicator" /></td>
<td>Our GCP principles require our commodity products to be compliant with the regulations and good practice guidelines in regions in which we operate. This also applies to the information requirements of our products. In Europe, for all substances in our products subject to the REACH (pre)-registration, extensive dossiers have been drafted and submitted, containing information on properties, environmental impacts and guidance for safe use. This information is actively sent to all our customers by means of a safety data sheet (SDS). Also, for products not subject to REACH registration, information on properties, environmental impacts and guidance for safe use has been documented in SDSs and made available to our customers.</td>
</tr>
<tr>
<td><img src="image" alt="Not applicable" /></td>
<td>Not material; this indicator is not relevant to our core business of mining and commodities marketing.</td>
</tr>
<tr>
<td><img src="image" alt="Not applicable" /></td>
<td>None to report.</td>
</tr>
</tbody>
</table>

---

**Key:**
- ![Fully reported GRI indicator](image)
- ![Partially reported GRI indicator](image)
- ![Not reported GRI indicator](image)
- ![Independently assured by Deloitte LLP for 2013](image)
- ![Not applicable](image)
Appendix 3: Assurance statement

Independent assurance report by Deloitte LLP to Glencore Xstrata Plc on the Glencore Xstrata Sustainability Report 2013

What we looked at: scope of our work
Glencore International AG has engaged us to give assurance on:

Limited assurance:
1. Glencore Xstrata plc’s (“Glencore Xstrata”) sustainability performance data – for the year ended 31 December 2013 assured data comprises the following Glencore Xstrata indicators, additionally listed on pages 43, 64, 66 and 82–101 of the Glencore Xstrata Sustainability Report 2013, relating to the Glencore Xstrata business:

   • Environment
     – Direct energy consumption and indirect energy consumption (PJ)
     – Direct GHG emissions and indirect GHG emissions (tonnes of CO₂e)
     – SO₂ emissions (tonnes)
     – Total water withdrawal (m³)
     – Total hazardous and non-hazardous non-mineral waste (tonnes)
     – Total hazardous and non-hazardous mineral waste (tonnes)
     – Total number of environmental incidents and spills (Class A+ to C for Glencore business and Category 1 to 5 for former Xstrata business)

   • Safety
     – Employee and contractor working hours
     – Lost Time Injury Frequency Rate (LTIFR) employee and contractor
     – Fatalities employee and contractor

   • Social and Economic
     – Total amount of payments to governments (USD)
     – Total amount of community investments (USD)
     – Number of community complaints
     – Number (representation) of women on the Board
     – Number/% of female employees
     – Total workforce

2. GRI assurance: using the Global Reporting Initiative 2006 Sustainability Reporting Guidelines (“the GRI guidelines”) in preparing the report – Glencore Xstrata’s self-declaration on page 81 “About this report” that it has applied the GRI guidelines at level “A+” in preparing the Glencore Xstrata Sustainability Report 2013.

What we found: our assurance opinion
Limited assurance conclusion:
Based on the work we performed:

1. Glencore Xstrata’s sustainability performance data for the indicators listed below and on pages 43, 64, 66 and 82–101 of the Glencore Xstrata Sustainability Report 2013 and relating only to the Glencore Xstrata business for the year ended 31 December 2013:

   • Environment
     – Direct energy consumption and indirect energy consumption (PJ)
     – Direct GHG emissions and indirect GHG emissions (tonnes of CO₂e)
     – SO₂ emissions (tonnes)
     – Total water withdrawal (m³)
     – Total hazardous and non-hazardous non-mineral waste (tonnes)
     – Total hazardous and non-hazardous mineral waste (tonnes)
     – Total number of environmental incidents and spills (Class A+ to C for Glencore business and Category 1 to 5 for former Xstrata business)

   • Safety
     – Employee and contractor working hours
     – Lost Time Injury Frequency Rate (LTIFR) employee and contractor
     – Fatalities employee and contractor

   • Social and Economic
     – Total amount of payments to governments (USD)
     – Total amount of community investments (USD)
     – Number of community complaints
     – Number (representation) of women on the Board
     – Number/% of female employees
     – Total workforce

   nothing came to our attention to suggest that the Group level consolidation of 2013 Glencore Xstrata data is materially misstated.

2. Nothing came to our attention to suggest that Glencore Xstrata’s self-declaration on pages 82–101 of the Glencore Xstrata Sustainability Report 2013 that it has applied the GRI guidelines at level A+ is materially misstated.

As noted on page 23 the Glencore and Xstrata businesses do not use a consistent definition of LTIs. A Lost Time Incidents (LTI) is recorded when an employee or contractor is unable to work following an incident. Glencore records LTIs which result in lost days from the next calendar day.
after the incident, whilst Xstrata records LTIs from the next
dated day after the incident – therefore the combined
LTI figure is not based on data of consistent definition.

In relation to environmental incidents and spills we tested
the compilation of the data at a Group level. We confirmed
there were no reported incidents in the highest category,
A+ / Category 5, otherwise our assurance does not extend
to the classification of individual incidents.

What standards we used: basis of our work
and level of assurance

We carried out limited assurance on the selected
key performance indicators in accordance with the
International Standard on Assurance Engagements
3000 (ISAE 3000). To achieve limited assurance ISAE
3000 requires that we review the processes, systems
and competencies used to compile the areas on which
we provide assurance. This is designed to give a similar
level of assurance to that obtained in the review of
interim financial information. It does not include detailed
testing of source data or the operating effectiveness
of processes and internal controls and therefore the
evidence gathering procedures completed were more
limited than for a reasonable assurance engagement, and
therefore less assurance is obtained than in a reasonable
assurance engagement.

What we did: our key assurance procedures

Our key procedures included:

• interviewing personnel at Glencore Xstrata’s head office,
  including the Group Sustainability (Glencore Corporate
  Practice) team;

• reading and analysing public information relating to
  Glencore Xstrata’s and the industry’s sustainability
  practices and performance during the year;

• visiting seven assets across the world (a sample based on
  the materiality of their reported sustainability impact)
  to review the systems to capture, collate and process
  source data for the environmental, safety and social and
  economic indicators listed above applicable to each asset;

• analysing and testing on a non-statistical sample basis
  Glencore Xstrata’s processes relating to the collation,
  validation and reporting of the selected performance
  data in accordance with their definitions and basis for
  calculation which can be found throughout the report;

• checking that the GRI conformance index, for each of
  the standard disclosures required by the GRI guidance
  required at level “A+”, contains the relevant indicator
  or an explanation is given as to why it is not relevant to
  Glencore Xstrata; and

• reviewing the content of the Glencore Xstrata
  Sustainability Report 2013 against the findings of our
  work and making recommendations for improvement
  where necessary.

We have selected assets that are representative of the major
commodity businesses, cover diverse geographic locations,
and have the largest reported sustainability impact from
the entire asset portfolio. The sites visited included:

• Portovesme, Italy (Zinc and Copper)
• AR Zinc, Argentina (Zinc and Copper)
• Sinchi Wayra, Bolivia (Zinc and Copper)
• Viterra ANZ, Australia (Grain)
• Mount Isa Mines, Australia (Copper and Lead)
• Antapaccay, Peru (Copper)
• Hinojedo Roasting Plant, Spain (Zinc)

Our key procedures did not include testing, at Glencore
Xstrata asset level, of source data for indicators.
Glencore Xstrata assets are frequently made up of a
number of sites and offices. The process of collecting,
compiling and reporting assured indicators to Group level
was reviewed, however we did not test back to source at
each of the sites and offices that make up the total asset nor
did we review the requirements of local legislation with
regards to reporting.

Where data relating to prior reporting years has been
restated by Glencore Xstrata no additional work has
been undertaken by Deloitte to review the accuracy
and completeness of the restated data. No assurance is
provided over restated data.
Appendix 3:
Assurance statement continued

Responsibilities of Directors and independent assurance provider

Glencore International AG’s responsibilities

The Directors are responsible for the preparation of the Glencore Xstrata Sustainability Report 2013 and for the information and statements contained within it. They are responsible for determining Glencore Xstrata’s sustainability objectives and for establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived.

Deloitte’s responsibilities, independence and team competencies

We complied with Deloitte’s independence policies, which address and, in certain cases, exceed the requirements of the International Ethics Standards Board for Accountants’ Code of Ethics for Professional Accountants in their role as independent auditors, and in particular preclude us from taking financial, commercial, governance and ownership positions which might affect, or be perceived to affect, our independence and impartiality, and from any involvement in the preparation of the report.

We have confirmed to Glencore International AG that we have maintained our independence and objectivity throughout the year and in particular that there were no events or prohibited services provided which could impair our independence and objectivity.

Our team consisted of a combination of sustainability and assurance professionals with environmental, health & safety, community investment and stakeholder engagement expertise, including many years’ experience in providing sustainability report assurance.

Our responsibility is to independently express conclusions on the subject matters as defined within the scope of work above to Glencore International AG in accordance with our letter of engagement. Our work has been undertaken so that we might state to the Company those matters we are required to state to them in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Glencore International AG for our work, for this report, or for the conclusions we have formed.

Deloitte LLP
London, United Kingdom
13 May 2014
This report may include statements that are, or may be deemed to be, “forward looking statements”, beliefs or opinions, including statements with respect to the business, prospects, strategies and plans of Glencore. These forward looking statements involve known and unknown risks and uncertainties, many of which are beyond Glencore’s control. These forward looking statements may be identified by the use of forward looking terminology, including the terms “believes”, “estimates”, “plans”, “projects”, “anticipates”, “will”, “could”, or “should” or in each case, their negative or other variations thereon or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward looking statements include all matters that are not historical facts. Forward looking statements may and often do differ materially from actual results. Glencore is not under any obligation and Glencore and its affiliates expressly disclaim any intention or obligation to update or revise any forward looking statements, whether as a result of new information, future events or otherwise.

No assurance can be given that such future results will be achieved; actual events or results may differ materially as a result of risks and uncertainties facing Glencore. Such risks and uncertainties could cause actual results to vary materially from the future results indicated, expressed or implied in such forward looking statements. Forward looking statements speak only as of the date of this report.