It’s our...
It’s our licence to operate

Our world is facing many complex, interrelated challenges in balancing ever increasing demand for resources with sustainable development.

For society to grant us our ‘licence to operate’, we must demonstrate to our host communities and governments that we can, and will, protect the value of their environmental and social resources and that they will share in our business success.

As the world’s largest diversified resource company, our decisions have the potential to impact our environment and society – now and into the future.

To ensure the decisions we make today are the right ones for a sustainable future, we will reach out to our employees, contractors, suppliers, customers, business partners, and host communities and governments. We will work together with them to innovate, to challenge standard practice and to find sustainable solutions.

This report is one of three annual Company publications: Annual Review, Annual Report, Sustainability Report.
Message From The Chief Executive Officer

The continuing success and sustainability of our Company is heavily dependent on securing and maintaining our ‘licence to operate’, wherever we do business around the globe. We work actively on securing and maintaining our licence to operate through the ethical conduct of all our people, our ability to keep our people healthy and safe, our efforts to improve the quality of life of the communities in which we operate and protection of the environment.

While it is a time of unparalleled growth and prosperity of our business, it is also a time of dynamic and complex challenges. To find truly effective and sustainable solutions will require others to engage in the challenge. We can not do it alone; it is a shared responsibility that we have with our host nations, regions and communities, our people, our business partners and our peers. This year we continued to seek opportunities to engage, ranging from one-on-one meetings and multi-stakeholder forums to cross-sectoral partnerships and industry initiatives.

The strong commodity cycle, driven by solid growth in developing economies, such as China and India, influences the types of sustainability challenges we face and how we approach them.

Strong investment has increased our industry’s demand for skilled technical and professional people. Attracting the right people to the right location at the right time continues to present challenges. But with challenges comes opportunities, and as we expand our activities into less traditional regions, we are opening up new strategies for attracting and developing talent. Our International Graduate Program is testament to this approach.

There is a growing consumer expectation that mined resources are sourced and supplied responsibly. The risk of harm caused by improper handling and use of commodities such as lead and uranium are of significant concern to many stakeholders. Our stewardship initiatives are designed to provide a framework that engages key actors in the lifecycle of our products such that responsible management is assured at all times.

Tragically and unacceptably, eight people lost their lives at our operations during the year, despite overall improvements in our injury trends. We continue to reinforce our steadfast belief that we must never take the health and safety of our people for granted and the pursuit of Zero Harm remains our overriding goal.

In 2007, we generally performed well against most of our other sustainable development measures. Our current five-year targets concluded at the close of the 2007 financial year, with good results in the total number of injuries recorded and greenhouse gas emissions. Our increase in the number of diagnosed cases of noise-induced hearing loss while disappointing, reflects our commitment to continuous improvement in monitoring techniques and our willingness to assess our performance against the most stringent standards.

New five-year public targets will commence in 2008. In particular, we will further focus our attention on eliminating fatal risks, further reducing the energy and greenhouse intensity of our business, optimising the use of water, and minimising occupational exposures.

Climate change is an area of increased focus for the Company. We recognise our shared responsibility to address the risks of climate change and are working with others to find ways of reducing greenhouse gas emissions. We have updated our policy by setting new targets to further reduce the energy and greenhouse gas intensity of our business, we are committing increased funds to finding technological solutions in partnership with others and we are working to better understand and manage our emissions, and the impact of our products, on climate change. This includes working with the Australian Government to help define a National Carbon Emissions Trading System, as well as continuing to build our trading profile in Europe.

Our commitment to spending 1 per cent of pre-tax profits, on a rolling three-year average, on voluntary community programs resulted in US$103.4 million going directly to benefit our communities. Through our global Employee Matched Giving Program our employees personally donated or fundraised around US$1.8 million and contributed 69,000 hours of volunteering time. The Company matched these efforts by providing around US$2.4 million to over 880 community organisations.
As a member of the International Council on Mining and Metals (ICMM), we are committed to superior business practices in sustainable development. We have committed to implement the ICMM Sustainable Development Framework and comply with policy statements of the ICMM Council. Details are given in the Full Sustainability Report, which has been prepared in accordance with the Global Reporting Initiative (GRI) 2006 Sustainability Reporting Guidelines. We believe the Report provides a balanced and reasonable representation of our economic, environmental and social performance.

I would like to thank all our employees and contractors for their commitment and efforts and for their contribution to the success of BHP Billiton. I am leaving the Company with the confidence that it is well positioned to continue its commitment to sustainable development as an integral part of its ability to prosper and succeed.

Charles Goodyear
Chief Executive Officer
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2007 At A Glance

2007 at a Glance is intended to provide you with an overview of our performance during the 2007 reporting period. See the following for:

- Our HSEC Targets Scorecard
- Customer Sector Group Performance Reviews
- Recognition for our sustainability activities
- A summary of key sustainability data

For a description of our company and our 2007 performance, read:

- Company Profile
- Sustainable Development Governance • 2007 Performance
- Stewardship • 2007 Performance
- Healthy People • 2007 Performance
- Safe Workplace • 2007 Performance
- Environmental Commitment • 2007 Performance
- Social Responsibility • 2007 Performance
- Our People • 2007 Performance
- Socio-Economic Contributions • 2007 Performance
HSEC Targets Scorecard

The 2007 reporting year marked the end of our current five-year HSEC targets.

The table below shows our performance in the 2007 reporting period and our overall performance for the period 2002/03 to 2006/07. (Base year: 1 July 2001 to 30 June 2002 for reduction targets except where stated otherwise)

As of 1 July 2007, the Company will introduce new five-year HSEC targets.

### Overall performance against the 5 year HSEC Targets:

<table>
<thead>
<tr>
<th>Target</th>
<th>Performance</th>
</tr>
</thead>
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<tr>
<td>Zero Harm</td>
<td>Result</td>
</tr>
<tr>
<td>Zero fatalities</td>
<td></td>
</tr>
<tr>
<td>Zero significant environmental incidents (i.e. rated 3 and above on the BHP Billiton Consequence Severity Table)</td>
<td></td>
</tr>
<tr>
<td>No transgressions within the Group’s activities of the principles embodied within the UN Universal Declaration of Human Rights</td>
<td></td>
</tr>
<tr>
<td><strong>Legal Compliance</strong></td>
<td></td>
</tr>
<tr>
<td>Zero fines and prosecutions²</td>
<td></td>
</tr>
<tr>
<td><strong>Management Systems</strong></td>
<td></td>
</tr>
<tr>
<td>All sites to undertake annual self-assessments against the BHP Billiton HSEC Management Standards⁴ and have plans to achieve conformance with the Standards by 30 June 2008</td>
<td></td>
</tr>
<tr>
<td>An overall conformance of 3.9 out of 5 has been achieved, compared to our conformance target of greater than 4</td>
<td></td>
</tr>
<tr>
<td>All sites⁵,⁶ to maintain ISO 14001 Certification</td>
<td></td>
</tr>
<tr>
<td><strong>Legal Compliance</strong></td>
<td></td>
</tr>
<tr>
<td>Risk registers to be in place and maintained at all sites⁵ and within BHP Billiton businesses</td>
<td></td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
</tr>
<tr>
<td>All sites⁵ to implement a baseline survey on occupational exposure hazards and establish occupational hygiene monitoring and health surveillance programs</td>
<td></td>
</tr>
<tr>
<td>Annual reduction in exposures above occupational exposure limits, expressed as a percentage of people in the workforce</td>
<td></td>
</tr>
<tr>
<td>During the year, Other Exposures, if not for the use of personal protective equipment (PPE), reduced by 1 per cent from 2005/06, and reduced by 6 per cent compared to the base year 2003/04</td>
<td></td>
</tr>
<tr>
<td>20 per cent reduction in incidence of occupational disease by 30 June 2007</td>
<td></td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
</tr>
<tr>
<td>Legal Compliance</td>
<td>Result</td>
</tr>
<tr>
<td>50 per cent reduction in Classified Injury Frequency Rate (CIFR)² (excluding first aid treatments) at sites by 30 June 2007</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Result</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Energy and Greenhouse</strong></td>
<td>All sites(^5) with emissions greater than 100,000 tonnes per year of</td>
</tr>
<tr>
<td>carbon dioxide equivalent to have and maintain energy conservation programs with specific targets</td>
<td>All sites(^5) with emissions greater than 100,000 tonnes per year of</td>
</tr>
<tr>
<td>carbon dioxide equivalent to have and maintain greenhouse gas management programs</td>
<td>Aggregate Group target for reduction in greenhouse gas emissions per unit of production of 5 per cent by 30 June 2007</td>
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<tr>
<td><strong>Water</strong></td>
<td>All sites(^2) with fresh water consumption greater than 500 ML per year</td>
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<tr>
<td>to have and maintain water management plans</td>
<td>Aggregate Group target of 10 per cent reduction in fresh water consumption per unit of production by 30 June 2007</td>
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<tr>
<td><strong>Waste</strong></td>
<td>All sites(^2) to have and maintain waste minimisation programs</td>
</tr>
<tr>
<td>Aggregate Group target of 20 per cent reduction in waste (excluding recycled and mining-related materials, such as waste rock, tailings, coal reject and slag) per unit of production by 30 June 2007</td>
<td>During the year, our general waste intensity index increased by 21 per cent, resulting in an overall reduction to date of 3 per cent against the base year(^8)</td>
</tr>
<tr>
<td><strong>Land management</strong></td>
<td>All sites(^10) to have and maintain land management plans to protect and enhance agreed beneficial uses</td>
</tr>
<tr>
<td><strong>Product Stewardship</strong></td>
<td>Life cycle assessments prepared for all major BHP Billiton mineral products(^11) (incorporating participation in industry programs as appropriate)</td>
</tr>
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<td><strong>Community</strong></td>
<td>All sites(^10) to prepare public HSEC reports at a local level (including incidents, community complaints and relevant site-specific emissions) on an annual basis</td>
</tr>
<tr>
<td>Aggregate contribution to community programs, including in-kind support, of a target of 1 per cent of pre-tax profits, calculated on a three-year rolling average</td>
<td>Community relations plans are in place at 97 per cent of required sites and at 21 sites that were not required to meet this target</td>
</tr>
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Notes

1. Controlled activities are work related activities which BHP Billiton directly supervises and enforces HSEC standards.
2. Fines reported may relate to incidents that occurred in previous years.
3. Prosecutions included are those that have been determined during the year and resulted in fines. They may relate to incidents that occurred in previous years.
4. Includes 70 sites and excludes non-operated assets, development projects, closed sites in the monitoring and maintenance phase, offices and sites being divested.
5. Excludes exploration and development projects, sites being divested, closed sites and offices.
6. Excludes Nickel West sites which have been given until 30 June 2008 to achieve certification to ISO 14001.
7. A classified injury is any workplace injury that has resulted in the person not returning to their unrestricted normal duties after the day on which the injury was received.
8. Former WMC sites data have not been included in intensity indices as they were not part of the business when the baselines were set.
9. Global warming potential factors were changed to be consistent with the Second Assessment Report (IPCC (1996)) values in 2006/07 which decreased the greenhouse gas intensity by 0.6%.

10. Excludes petroleum platforms, exploration and development projects, closed sites, offices with no significant community or land management issues, and former WMC sites, which have until 30 June 2008 to achieve compliance with the target.

11. Excludes petroleum and diamonds.
Customer Sector Group Performance Reviews

Our organisation is designed around Customer Sector Groups (CSGs), which are focused on customers, rather than operations. These CSGs are supported by finance, development, legal, HSEC, human resources and marketing (including transport and logistics) functions.

Each CSG is a substantial business in its own right, and several are leaders in their respective fields. They have autonomy to optimise their businesses, with clear accountabilities.

For a summary of sustainability performance for each of our CSGs in the 2007 reporting year, see:

- Aluminium
- Base Metals
- Diamonds and Specialty Products
- Energy Coal
- Iron Ore
- Manganese
- Metallurgical Coal
- Petroleum
- Stainless Steel Materials
Aluminium

BHP Billiton is the world’s fourth largest producer of primary aluminium, with a total operating capacity in excess of 1.4 million tonnes of aluminium, approximately 5.3 million tonnes of bauxite and 3.4 million tonnes of alumina per annum. Our network of operations has sites in South America, southern Africa and Australia.

2007 Sustainability Performance Overview

Key aspects of the sustainability performance of the Aluminium CSG in 2006/07 were:

- We are saddened to report that our key target of zero fatalities was not met, with one fatal accident occurring in the Mozal operations in Mozambique.
- CSG performance against Group targets for the period 2007 has been generally improving, with compliance or improvement evident in the majority of areas across the business operations. Several indicators showing deterioration when compared to the previous reporting period have had priority action plans developed.
- No significant environmental incidents occurred, there were no transgressions against the UN Universal Declaration of Human Rights, and no fines or prosecutions were imposed on any of our operations.
- All Company targets for management systems and risk management were met. All managed sites maintained their ISO 14001 certification.
- Our injury frequency rate has reduced and significant progress has been made across all operations in terms of maturing Fatal Risk Control Protocol compliance, an area which will continue to receive leadership focus at all times.
- Occupational exposure to noise has increased in comparison with the baseline year of 2002/2003; however, all other occupational exposures and incidents of occupational disease have continued to reduce.
- Water intensity increased by 10 per cent in the past year resulting in a net reduction to date of 31 per cent against the baseline, thus still meeting the Group target of 10 per cent. Our greenhouse gas intensity increased by 1 per cent in the past year resulting in an overall reduction to date of 6 per cent against the baseline, thus still meeting the Group target of 5 per cent. Action plans are in place to address the deterioration of these two measures in the period 2005/06 to 2006/07.
- All operations met the target to achieve compliance with the Group Closure Standard.
- We have continued to operate and support community programs in all countries where we operate. Aluminium CSG expenditure totalled US$7.9 million for community programs.

2008 Sustainability Outlook

- Looking ahead for the Aluminium CSG, a focus on the BHP Billiton key sustainability challenges will include the following:

Fatal Risks

- Zero Harm requires appropriate programs and systems to be implemented, understood and adhered to by all. Continued application of the BHP Billiton Fatal Risk Control Protocols and elimination of Zero Barrier incidents will remain a priority. In addition, behaviour-based HSE programs for all employees will continue to be a high priority for leadership.

Occupational and Community Health

- We will focus on the continued application of the CSG occupational health program for all employees, and additional reporting metrics have been employed to improve our understanding of health performance. Occupational exposures have been identified in a baseline study. This baselining has enabled us to establish maintenance and assessment systems to ensure sustained monitoring of occupational health exposure management. Key focus areas for us are respiratory function and hearing protection. We have also continued our focus on skills development in occupational health.
- The impact of HIV/AIDS on the smelters in southern Africa, as well as in the communities in which we operate, continues to be a challenge. For this reason an ongoing program of HIV/AIDS education within our operations and
communities remains a high priority.

- The risk of malaria challenges people across most of the African continent. Anti-malarial programs (well established and recognised in Mozambique) are a high priority in communities wherever we operate. Travel health plans are now well established to reduce risk to employees travelling to and working in these areas.
- The threat of health pandemics, such as avian flu, now exists globally; and steps to mitigate this have been built into Business Continuity Plans.

Greenhouse Gas Emissions

- Aluminium smelting, being energy intensive, requires continuous focus on energy efficiency to achieve BHP Billiton Corporate HSEC targets. Energy Champions have been appointed to represent all operations for the BHP Billiton Energy Initiative. Process quality and control performance are priority actions in improving on performance, as is the efficiency of auxiliary power.

Access to and Management of Resources

- Access to available water resources is under increasing pressure from population growth and an increasing prevalence of drought. The efficient use of water is a priority, with a particular focus on recycling process water. Operations have established appropriate targets to support this need, and metrics are being tracked in monthly reports.
- High-quality environmental studies associated with new developments and projects are designed to reduce impact on natural resources.
- We are continuing to focus on the control and reporting of emissions to improve air quality around our operations and ensure transparency with our key stakeholders.

Sustainable Community Development and Closure

- Our focus on human rights responsibilities and community development activities will expand to ensure that our programs are relevant to the communities in which we operate.
- Community projects will continue to focus on fostering positive partnerships with communities and governments. Programs are designed to impact overall HSEC needs as well as capacity building, but with an increased specific focus on the HIV/AIDS pandemic in Africa and South America and the malaria threat in Africa.
- In line with the Company’s Closure Standard, a review of closure plans for all sites has been concluded. Ongoing activity in this regard will ensure closure plans are implemented in parallel with ongoing mining operations, to further reduce environmental impacts.
Base Metals

BHP Billiton is one of the world’s top producers of copper, silver, lead and uranium and a leading producer of zinc. We provide base metal concentrates to custom smelters and copper cathodes to rod and brass mills and casting plants, and uranium oxide to power utilities. We aim to become the pre-eminent supplier in base metals through capacity expansions, reliable supply and innovative solutions.

2007 Sustainability Performance Overview

Key aspects of the sustainability performance of the Base Metals CSG in 2006/07 were:

- With deep sadness, we reported that three workers lost their lives in accidents at two of our operations. Read more: Fatalities
- In addition, Roberto Benavides passed away on March 25, 2007 while working on shovel maintenance at Escondida. The cause of his death is still unknown. Pending a decision from the authorities, we are treating this as a controlled event.
- Our Total Recordable Injury Frequency Rate increased slightly in 2007. The integration of Olympic Dam into the Base Metals CSG was successful and has shown a strong and continuous safety improvement trend.
- No significant environmental incidents, prosecutions or major fines.
- BHP Billiton was instrumental in establishing the Uranium Stewardship Working Group within the World Nuclear Association.
- We actively support the International Copper Association in the Copper Stewardship Program, including the current Life Cycle Assessment project.
- The Green Lead™ project, an initiative conceived by our Cannington operation, was a major contributor to the Lead Stewardship booklet recently published by the Australian government and now internationally available in five languages.
- Minera Spence was again recognised for outstanding safety performance, receiving the 2006 Annual Mining Safety Award from the Chilean National Mining and Geology Service (Sernageomin), as “Empresa Destacada” (“Outstanding Company”).
- Minera Escondida was recognised as one of the ten most respected companies in Chile in a survey conducted by the national newspaper La Segunda.
- Olympic Dam has negotiated a life-of-mine agreement with the three aboriginal groups with native land title claims in the area.
- Minera Antamina, a copper-zinc joint venture, has entered into an agreement with the Peruvian government, under which 3.75 per cent of after-tax profits over the next five years will be used for sustainable community development projects in the Ancash region where the mine is located.
- Base Metals contributed more than one per cent of EBIT to community development programs. The largest contributors were Antamina and Escondida.
- Minera Escondida made major contributions to national development programs in housing (‘A Roof for Chile’ – a program aimed at eliminating slums) and education (‘Professionals for a Global Chile’ – a program of international scholarships at the post-secondary level).
- A major accomplishment was the successful update of the closure plans and closure financial evaluations of each asset, to be consistent with the BHP Billiton Closure Standard.
- Base Metals produced a Fatal Risk Control Protocol awareness and motivational video that has proven very successful and will be distributed more widely.
2008 Sustainability Outlook

Looking ahead for Base Metals, a focus on the BHP Billiton key sustainability challenges will include the following:

Eliminating Fatal Risks

- We will emphasise behaviour based safety and visible leadership, with the leadership team in the field talking with our workforce and setting the expected safety behaviours.
- Implementation of the Fatal Risk Control Protocols (FRCP) will include rigorous self-assessments resulting in action plans. FRCP facilitators will assist in identifying the gaps.
- A communication plan will be deployed including a motivational video.
- Significant incident reporting and investigation will be improved and Incident Cause and Analysis Methodology (ICAM) champions will be identified and trained at all sites.
- We will improve follow up of repeat and Zero Barrier significant incidents and management of contractors, including implementation of identified best practices.

Occupational and Community Health

- We will continue the process of aligning concepts and procedures, using coaching-style site visits supported by corporate functional leaders.
- Consolidation of the South American Occupational Health and Hygiene Network will continue to improve the sharing of best practices.
- We will conduct Fatigue Management self-assessments at all sites and fatigue conditions medical surveys at all South American sites.
- We will work to identify our workforce’s most important non-occupational medical conditions.

Greenhouse Gas Emissions

- The efficient use of energy and the reduction of greenhouse gas emissions are priorities for all our assets. In Chile, gas shortages in the next few years will present major challenges and be a key driver to find opportunities for both energy conservation and carbon reduction projects.
- Within our asset’s Energy Excellence Programs, efforts will focus on site energy audits and characterisation of variables in order to identify improvement opportunities. We will continue to be an active part of Chile’s “Country Program for Energy Efficiency”

Access to and Management of Resources

- Access to water will continue to be a primary focus in 2008, in both Chile and Australia. Responsible use of our water resources, recycling and desalinated water, and embedding of sustainability considerations in risk evaluations, will drive water supply evaluations.

Sustainable Community Development and Closure of Operations

- Sustainable community development activities will require special attention at Antamina to ensure the successful implementation of the voluntary agreement signed in FY07.
- Base Metals community development programs will support the global target of 1 percent of EBIT.
- Recent experience has highlighted the opportunity to reduce closure liabilities through operational planning and design. In 2007/08 the focus will be on integrating closure considerations and opportunities into operations.
Diamonds and Specialty Products

The Diamonds and Specialty Products (D&SP) Customer Sector Group includes our diamond and titanium minerals businesses. Our principal operations are located in Canada, South Africa, Mozambique and Angola.

The cornerstone of our diamonds business is the EKATI Diamond Mine which is operated by BHP Billiton Diamonds Inc. and is a joint venture between BHP Billiton (80 per cent) and founding geologists Charles Fipke (10 per cent) and Dr Stewart Blusson (10 per cent).

Located in Canada’s Northwest Territories, 310 kilometres northeast of Yellowknife, the EKATI Diamond Mine operates in an area of continuous permafrost. The mine employs more than 700 northern residents with over 400 of these people being from local communities. EKATI has produced an average of approximately three and a half million carats of rough diamonds annually over the last two years. Due to changes in available ore sources, future rough diamond production may vary from historical levels. Annual sales from EKATI (including minority shares) represent around 3 per cent of current world rough diamond supply by weight and 6 per cent by value.

2007 Sustainability Performance Overview

Key aspects of the sustainability performance of the D&SP CSG in 2006/07 were:

- No fatalities or significant environmental incidents.
- Achieved over a 100 per cent increase in near miss reporting ratio, job safe behaviour observations reviews and incident reporting and follow-up.
- Recertification of ISO 14001 standard by external auditors.
- Achieved significant reduction in injury frequency rate and improved site induction to ensure new employees and contractors are familiar with EKATI safety requirements.
- Focus and support for contractors with monthly reporting, weekly workplace audits and monthly management led reviews of performance and accomplishments.
- Conducted the Absolute Safety Habits program (advanced PASS program with natural safety leaders within the workforce to include permanent and contracted employees) to promote individual Absolute Safety Habits. The purpose of this program was to share the practices of those people who already have very good safety habits across the site. Four booklets were developed to describe the habits that the ‘safety-conscious’ people used. These people were chosen from their work areas by asking the question of their colleagues ‘who on your team would you most want your son or daughter to learn safety from?’ These habits have been shared across the site through our Positive Attitude Safety System (PASS) meetings with the challenge for people to adopt one of these habits for their own.
- Increased leadership visibility in the workplace by conducting management-led behaviour-based observations focusing on individual behaviours.
- Received the underground section and were overall winner of the 2007 Northwest Territories and Nunavut Mine Rescue First Aid competition. The underground award was won for the second year in a row.
- Further developed our comprehensive interim closure plan, which is now under review by local authorities and stakeholders.
- Reinvigorated the Energy Smart program with a ‘No Idle’ campaign, which contributed to fuel savings and greenhouse gas reduction. The campaign addresses energy inefficiencies faced during cold winter months when vehicles are kept idling (i.e., are kept running to stay warm). The campaign replaces the idling approach with the more efficient approach of connecting vehicles to electric power to keep them warm.
- Reviewed waste management program and identified areas for improvement.
- EKATI has a number of initiatives related to indigenous employment and training. We have exceeded our target of 31 per cent of Northern Aboriginal people employed within our workforce, with 92 per cent of those employed occupying semi-skilled, skilled and professional positions. We, and our contractors, are committed to the development of Aboriginal and other Northern residents of the North West Territories of Canada. To help meet this commitment, we sponsor a wide range of employee training programs and provide apprenticeships; and in 2006, 90 per cent of the apprentice employment was occupied by Aboriginal and Northern residents.
2008 Sustainability Outlook

Looking ahead for the D&SP CSG, a focus on the BHP Billiton key sustainability challenges will include the following:

Eliminating Fatal Risks

- Increase leadership involvement in safe behaviour observations and follow-up.
- Consistently implementing the Fatal Risk Control Protocols across all businesses.
- Improve sharing of key learnings from significant near miss and actual incidents with corrective actions resulting from learnings tracked and reviewed.

Occupational and Community Health

- Increase medical testing of all individuals in exposure areas.
- Improve drug and alcohol detection systems.
- Finalise hygiene baseline and implement additional programs to further reduce exposure.

Greenhouse Gas Emissions

- Improve tracking and reporting of greenhouse gases to meet internal and external voluntary reporting requirements
- Continue to improve greenhouse gas reduction programs ‘Energy Smart’, ‘No Idle’ and waste management
- Determine alternate sources of power.

Access to and Management of Resources

- Proactive approach to environmental reporting permitting and compliance. We will consult regularly with our people and challenge our current approach to environmental management to ensure it reflects the Company’s overall goal of long-term sustainability.
- Focused improvement of waste management at EKATI to minimise overall volumes and to reduce inherent risks.

Sustainable Community Development and Closure

- Improve our community engagement strategy to align the key business objectives with community need and concerns. Recognising local community concerns about the protection of the local caribou, we have worked together to combine all the existing caribou information to provide an improved knowledge base.
- Improve leadership training, focusing on local employees to develop knowledgeable, experienced leaders who will support a sustainable future.
- Identify long-term procurement opportunities for locally sourced goods and services with a goal of 80 per cent spend in the northern region.
- Increase involvement of communities and stakeholders in new permit and license applications.
Energy Coal

Energy Coal is one of the world’s largest producers and marketers of export thermal coal, which is primarily used in power generation.

With our unique blend of export and domestic customers, we aim to play a significant role in satisfying the worldwide demand for this commodity. Our global footprint and our multi-source supply strategy underpin our commitment to and capability of delivering to customer requirements.

2007 Sustainability Performance Overview

Key aspects of the sustainability performance of the Energy Coal CSG in 2006/07 were:

- With great sadness, we report that Energy Coal did not achieve a fatality free year and experienced three fatal incidents during the year. For further details, see: Fatalities
- No significant environmental incidents were reported within Energy Coal and all sites maintained, or were recommended for, their ISO 14001 Certification.
- We also experienced a number of high potential near miss incidents involving surface mobile equipment, isolation and ground control issues that we can learn from.
- We are increasing awareness and support for the BHP Billiton four HSEC pillars of People, Leadership, Operating Discipline, and Systems and Equipment.
- We continued to implement preventative measures in accordance with the BHP Billiton Fatal Risk Control Protocols. Current self-assessments indicate that Energy Coal sites are performing reasonably well from a systems point of view
- Behaviour-based safety processes were further progressed during the year at all sites.
- We achieved acceptable performance against our leading safety target, with incident reporting per 100 employees and contractors improving significantly. However, we did not meet our expectation for overall safety performance, with our Total Recordable Injury Frequency Rate (TRIFR) increasing in 2007.
- Significant progress has been made regarding excess water management plans within BHP Billiton Energy Coal South Africa (BECSA), and Hunter Valley Energy Coal, Australia (HVEC) has substantially addressed its potential water shortage due to the continuing drought conditions in southern Australia.
- We received one health fine (US$8,256) for overdue medical examinations at our Khutala Colliery operation in South Africa. Additional control procedures have since been implemented to ensure compliance with the medical surveillance program requirements. We received one environmental notice and fine for six violations (US$1,000 each) of the Borough Regulations and BHP Billiton permits at our Western Arctic Coal operation. A compliance plan was required within 30 days of receiving the notice. We also received multiple safety fines totalling US$64,050 for minor infringements at our Navajo Coal and San Juan Coal operations in the USA.
- At our Mt Arthur Coal operation in Australia, we have implemented a new program to improve the health risk profile of our emergency response team. Read more in our case study.
- At our Khutala Colliery operation in South Africa we have installed a digital real-time noise display to increase awareness in the maintenance workshop. Read more in our case study.
- Our New Mexico Coal operation in the USA has introduced a Contractor Management Plan to control contractor access into our sites and improve their health and safety protection. All contractor work is risk assessed, and a site representative is assigned to each contractor while performing work on site in order to ensure HSEC compliance. Read more in our case study.
- Our Cerréjon Coal operation’s human rights training program for employees and other critical stakeholders in Colombia is resulting in a positive change in the attitude of the public security forces, as well as a growing sense of trust between the community and the authorities. Read more in our case study.
2008 Sustainability Outlook

Looking ahead, for the Energy Coal CSG, a focus on the BHP Billiton key sustainability challenges will include the following:

Eliminating Fatal Risks

- Our primary focus will be on the elimination of fatalities from our operations and the key mechanism for this will be through the effective implementation of the Fatal Risk Control Protocols (FRCPs). As a result we have identified, and are focusing our efforts on, opportunities for improvement in competency and compliance with the protocols.
- Encouraging the reporting of near misses, investigating them thoroughly and implementing controls to prevent a recurrence will complement and support the focus on eliminating fatalities and the FRCPs.
- Continuing to foster and monitor awareness and support for the BHP Billiton four HSEC pillars of People, Leadership, Operating Discipline, and Systems and Equipment.

Occupational and Community Health

- Identifying the top three occupational exposures and developing reduction plans.
- Implementing fatigue management programs in accordance with the BHP Billiton guidelines.
- Continuing to implement our occupational and community health plans to meet existing and future targets and demonstrate continuous improvement.

Greenhouse Gas Emissions

- All operations have conducted baseline studies and developed plans to limit and possibly reduce their energy consumption per unit of production in line with the new Company-wide target, which will have a positive effect on greenhouse gas emissions. Our New Mexico operations will, however, be mining deeper and into areas with higher gas concentrations; and as a result it will be extremely difficult to reduce the amount of greenhouse gas emitted per unit of production. Initiatives to mitigate the increase are currently being evaluated.

Sustainable Community Development and Closure of Operations

- Completing closure plans at all Energy Coal operations in accordance with BHP Billiton requirements and guidelines.
- Demonstrating continuous improvement in the implementation of our community plans.

Access to and Management of Resources

- Monitoring the effectiveness and efficiency of our water management plans, in recognition that access to water and excess affected water presents a key sustainability challenge to our Company. Of particular interest is our BHP Billiton Energy Coal South Africa (BECSA) operation, where we will be commissioning water treatment plants for the treatment of excess affected water from closed operations, and our Hunter Valley Energy Coal operation, where we have a potential water shortage due to continuing drought conditions in southern Australia.
Iron Ore

Iron Ore is a leading supplier of raw materials and services to the international steel industry, producing and marketing iron ore and iron pellets. With operations in Australia, and Brazil, Iron Ore is currently the world’s third largest supplier of seaborne iron ore.

2007 Sustainability Performance Overview

Key aspects of the sustainability performance of the Iron Ore CSG in 2006/07 were:

- The business progressed against the HSEC Standards, averaging a score of 3.9 from internal HSEC audits in 2007 compared with 3.6 in 2006.
- All controlled sites maintained their ISO 14001 certification.
- Our injury frequency rate reduced in 2007 and no fatal injuries or significant environmental incidents were recorded within our operations.
- We continued to meet our commitment to our Memorandum of Understanding (MOU) with the Australian Health Minister for the Pilbara region to pledge A$3.342 million over three years to 2008. This MOU has more than 22 initiatives and involves a range of partners in addition to the Department of Health.
- We continued to meet our commitment to our MOUs with the Town of Port Hedland and the Shire of East Pilbara for A$1 million per year for three years to 2008.
- A water use efficiency plan and targets were established for Port Hedland operations in conjunction with local government and community. Management plans are in place across the mines.
- The fatigue awareness program, launched for Iron Ore workers and their families in Newman and Port Hedland during 2006, was extended to contractors and is currently being employed across the business.
- A healthy lifestyle program called 'The Biggest Winner' has been launched for Iron Ore workers and their families in Newman and Port Hedland. The program is facilitated by an external provider and, to date, 1000 employees and family members have signed on.
- This year has seen continued improvements and review of the Iron Ore Occupational Hygiene program through standardisation of procedures and strong networking of hygiene professionals.
- Through the Port Hedland Enhancement Scheme three new Town Parks and associated infrastructure were opened.
- In Port Hedland two new community office fronts were opened and have developed into becoming key points of community interface including job start assistance primarily for indigenous candidates.
- The Kicking Goals sports education program entered it’s second year and has grown to 120 youth participants and has resulted in improved educational performance, reduced truancy and increased youth volunteers across the community.
- The BHP Billiton Curtin University Resources and Chemistry research precinct was officially launched. Once construction is completed in 2008 it is expected to become the largest collection of resources focused research scientists in the Southern hemisphere. The partnership also provides for an innovative graduate employment strategy to be adopted.
- Indigenous communities across the Pilbara continued to be supported through an innovative health based partnership with the Royal Flying Doctor Service that funds nurses and doctors to visit the remote communities via a large 4wd truck providing heath care and health promotion services.
2008 Sustainability Outlook

Looking ahead for the Iron Ore CSG, a focus on the BHP Billiton key sustainability challenges will include the following:

Eliminating Fatal Risks

- Focus on improved integration of HSEC requirements, awareness and training for our contractors, particularly safety performance.

Occupational and Community Health

- A key outcome of the ‘The Biggest Winner’ healthy lifestyle program will be an analysis of business value returned to the Company through higher productivity, morale and reduced absenteeism.
- Contribute to the completion of the Western Australian Department of Health study on health effects of dust particles in Port Hedland and help to communicate findings to employees and the local community.

Greenhouse Gas Emissions

- Continue our focus on energy efficiency improvements and complete our assessment and planning requirements to meet new Australian legislation.

Access to and Management of Resources

- Undertake the development of a Western Australian Iron Ore biodiversity strategy.
- With continued demand for growth, environmental studies will continue to ramp up across the business to support approvals.
- Continually improve our approach to dust management at Port Hedland through implementation of the Dust Management Program, including completion of air monitoring reviews at both Port Hedland and Newman.
- Undertake a review of water management across the business.
- Work proactively with Pilbara Traditional Owners on land access and heritage issues.
- Attract and retain people to meet our projected business growth, including a focus on Indigenous employment and education agreements at a state and national level.

Sustainable Community Development and Closure

- Continue progressive implementation of the Company’s Closure Standard, including progressing to detailed planning for the Goldsworthy Operations.
- Continue the Social Impact Assessment program to address local community expectations and target investment to community priorities, including education and health service provision, infrastructure and dust mitigation. The Port Hedland Pilot Residential Area Cleaning Program was launched in May 2007. This includes coordinating the cleaning of fences and exterior building surfaces on approximately 45 residential buildings.
- Implemented MOU agreements to the value of A$2M with the Town of Port Hedland and the East Pilbara Shire to renew and replace township infrastructure, including footpaths, street lighting, and playground equipment. To date the local governments have been successful in leveraging the BHP Billiton Iron Ore commitments for a further A$3.2M.
- Continue supporting improvements in health, education and police service delivery in Port Hedland, Newman and various Pilbara-based Indigenous communities through a formal MOU. These MOUs are now being used by government as a blueprint for new private enterprise/state government partnerships across Western Australia.
Manganese

Manganese is the fourth most commonly used metal after iron, aluminium and copper with the majority of mined ore being used in the steel industry to produce a strong, resistant metal that is easy to machine, form or weld.

BHP Billiton’s 60 per cent owned global manganese ore and alloy business comprises operations in South Africa and Australia and is the world’s largest integrated producer of manganese units. The South African operations are held through Samancor Manganese (Proprietary) Limited while the Australian assets are owned through a local subsidiary. Anglo American Corporation holds the remaining 40 per cent in both entities. Through Samancor, BHP Billiton also holds a 51 per cent interest in Manganese Metal Company.

2007 Sustainability Performance Overview

Key aspects of the sustainability performance of the Manganese CSG in 2006/07 were:

- No fatal injuries or significant environmental incidents were recorded at our operations
- Our injury frequency rate has reduced in 2007 and we improved compliance with the BHP Billiton Fatal Risk Control Protocols.
- All our sites maintained, or were recommended for, external certification for their Environmental Management Standards (ISO 14001) and Health and Safety Management Standards (OHSAS18001 and AS4801).
- Closure plan risk assessments were reviewed, and closure financial modelling was completed for all our operations.
- All our sites progressed well in implementing the corporate guidelines for Fit for Work/Fit for Life.
- The reported number of people exposed to dust above the Occupational Exposure Limit level decreased over the previous year.
- The percentage of employees in our South African operations attending voluntary confidential counselling and testing for HIV and AIDS increased to 73 per cent (target 60 per cent).
- All our operations reviewed and tested their respective crisis and emergency management procedures in line with the BHP Billiton Crisis and Emergency Management Guidelines.
- No fines or prosecutions were received.
- Accidental discharges of hydrocarbons decreased by 44 per cent.
- Community complaints received at our operations reduced from 24 in 2006 to 22 in 2007.

2008 Sustainability Outlook

Looking ahead for the Manganese CSG, a focus on the BHP Billiton key sustainability challenges will include the following:

Eliminating Fatal Risks

- Sustain and improve compliance with current management systems (HSEC Standards, Fatal Risk Control Protocols and BHP Billiton Guidelines).
- Prevent and continue to eliminate fatalities and catastrophic events at our operations through the development and implementation of effective catastrophic risk management processes and strong emphasis on process safety as well as personal safety.

Occupational and Community Health

- Reduce Group exposure to health risks by expanding our HIV/AIDS programs to our contractors and the communities in which we operate.

Greenhouse Gas Emissions

- Embed improvement programs and performance targets for energy efficiency, greenhouse gasses and occupational exposure reduction in Business Unit operational strategies.
Access to and Management of Resources

- Align CSG and asset HSEC strategies with the corporate targets and HSEC strategic plans.
- Develop HSEC leadership culture amongst all levels of leadership in the organisation in line with the BHP Billiton leadership model and leadership expectations.
- Our water conservation efforts will be enhanced by our Hotazel Manganese Mines operation’s decision to produce a single sinter grade, which will reduce the operation of a more water-intensive sinter plant.

Sustainable Community Development and Closure

- Empowerment objectives met in South Africa across all aspects of codes – especially equity and people.
- Plans for our businesses to address regional diversity management imperatives.
- Maintain our current level of full compliance with the BHP Billiton Closure Standard.
- Address and align Manganese CSG black economic empowerment objectives with the overall BHP Billiton Republic of South Africa empowerment strategic objectives. Targets will be based upon the requirements of the Department of Trade and Industry (DTI) codes and the Mining Charter.
- Corporate Social Investment Funds which had in the past been spent purely on socio economic development in the areas we operate in will in future also be focused towards projects supporting enterprise and skills development.
Metallurgical Coal

BHP Billiton Metallurgical Coal is the largest global supplier of seaborne traded hard coking coal. We primarily produce and market high quality hard coking coals for the international steel industry. In addition, we supply a wide range of other coal qualities to satisfy specific customer requirements. Illawarra Coal (New South Wales) supplies almost all the coking needs for the Australian steel industry. Production is from our low cost asset base located in Queensland (predominantly open cut mines owned in an alliance with Mitsubishi Corporation “BMA”) and New South Wales (100 per cent owned underground operations).

2007 Sustainability Performance Overview

- ISO 14001 implementation - certification maintained at all BMA and Illawarra Coal sites.
- Environment Protection Authority (Queensland, Australia) Financial Assurance Category – average score of BMA mines maintained.
- Our injury frequency rate has decreased and our near miss incident reporting rate has increased.
- We are continuing to implement the Fatal Risk Control Protocols, though we recognise that protocol compliance is not yet complete. Recent protocol improvements recognise that continuous improvement in Fatality Risk Control will be ongoing as technology, innovation and knowledge improves.
- We are working to improve our energy efficiency by adopting a more vigilant approach to diesel fuel management and more efficient utilisation of the mines’ large earthmoving equipment.
- In partnership with the Australian coal industry, this year we committed to increase our voluntary commitment to low emissions technology development through the Australian coal industry’s COAL21 Fund.
- 2006/07 was the sixth year of BMA’s Community Partnerships Program, during which time our funding of community support projects has increased five-fold to more than $5 million per annum. This is in addition to other forms of township support, such as rates and special rates and water subsidies, that take BMA’s total annual commitment to more than $20 million. Besides growing in scale, the program has been accompanied by a series of evaluations and community surveys that have allowed its effectiveness to be evaluated and progressively improved. The most recent of these was our Bowen Basin Family Needs Survey of employees living in the key towns of Blackwater, Dysart and Moranbah that are closest to BMA’s mines. It identified the priority needs of each of the towns – many of which were shared and centred around medical and health care services, child care, and sporting, recreational and social facilities. The Metallurgical Coal group spent $5.8 million in community projects during the last year.
- Several BMA operations received health and safety awards in 2006/07, as follows:
  - Qld Work Safe Award for the automatic coal wagon vibrator at Hay Point coal terminal
  - Judges’ Award at the Qld Mining Health & Safety conference for the large equipment dynamic brake testing package developed by Blackwater Mine
- People’s Choice Award at the Qld Mining Health & Safety conference for the large mobile equipment collision avoidance system.
- We have developed and promoted a Fatigue Management Plan at each of our assets to ensure employees receive sufficient rest and sleep to perform their duties safely. BMA has also developed an ‘Hours of Work’ Standard.
- BMA also continued to take a leading role in the Mining Industry Road Safety Alliance, which is a coal industry-sponsored program to improve road conditions and promote safe driving on regional highways in Queensland’s Bowen Basin region.
- Mine life plans are an important element of our conformance with BHP Billiton’s ‘Closure Standard’, which requires operations to prepare and regularly update plans that identify and manage the risks of eventual mine closure. Mine life plans have been completed by BMA’s Blackwater, Gregory Crinum, Norwich Park and South Walker Creek Mines, and landform design studies have been completed for Saraji, Peak Downs, Goonyella Riverside and Poitrel Mines in preparation for the development of mine life plans. All Illawarra Coal mines are in compliance with the Closure Standard.
BMA is one of the leading proponents of the Blackwater International Coal Centre (BICC) and a founding member of the company set up to develop and manage the project. To be located on the Capricorn Highway at Blackwater, BICC will incorporate an interpretive centre for local residents, students, visitors and tourists on coal and the coal industry. Key themes will include the origins of coal and history of the Bowen Basin, the science of coal mining and coal use and the role of clean coal technology in a sustainable energy future. The centre will be integrated with education and entertainment facilities for the local community that will be unique to the region. Partners in the $9M project include the Commonwealth and Queensland Governments, other coal companies and key suppliers to the coal industry.

Our Indonesia Coal Projects (ICP) business has taken a comprehensive and integrated approach to developing Health, Safety Environment and Community (HSEC) practices and processes before mining commences. Read more in our case study.

2008 Sustainability Outlook

Looking ahead for the Metallurgical Coal CSG, a focus on the BHP Billiton Key Sustainability Challenges will include the following:

Eliminating Fatal Risks

- All sites have plans in place to comply with and continuously improve against the Fatal Risk Control Protocol requirements.

Occupational and Community Health

- A ‘Fit for Work, Fit for Life approach has been adopted across the group to effectively manage health and wellbeing in the work environment as well as outside of work hours. The focus in 2006/07 was on health promotion activities for employees and family members, fatigue management during and after work, and task analysis to improve employees’ understanding of how work tasks and the work environment may be redesigned and improved.

Sustainable Community Development and Closure

- Over the last five years, the total area of land disturbed by BMA’s mining operations has increased by more than 20 per cent. In response to this trend, BMA has initiated a program of mine life planning to enable an increase in the rate of land rehabilitation in future years. It involves identifying a desired post-mining landform and more closely integrating this into the planning of the mine’s current and future activities. The aim is to limit the extent of future disturbance and rehabilitating required for rehabilitation and thereby hasten its progress.

- BMA is using its 2007 Community Needs survey results to guide and grow its community program. This will include new ‘landmark’ projects designed specifically to meet needs identified in the survey and further improve the towns as places to live and work. One such project is already underway (Blackwater International Coal Centre), while another is at an advanced stage of planning (Dysart Multipurpose Sports Centre). BMA has established Community Reference Groups in the three towns to help identify and implement other potential projects. Illawarra Coal undertook a community survey during 2007 and is developing an action plan as a result.

- BMA will partner with the Queensland Government, and hopefully the Commonwealth, to develop a multipurpose indoor sports centre in the town of Dysart near BMA’s Saraji and Norwich Park Mines. The core of the centre will be two courts for netball, basketball and volleyball, and a gymnasium and aerobics centre. The complex will also incorporate a youth centre, café and facilities for adjacent child care. The centre will meet a long standing need for upgraded sporting facilities of this type in Dysart, which has been made more acute with the growth of the town’s population in concert with the expansion of coal mining in Central Queensland. It will also respond to the changing demographics of Dysart and the need, identified in BMA’s Bowen Basin Community Needs Survey, of providing more shaded recreational facilities for young parents and their children.

- Illawarra Coal continues to focus on strengthening relationships with local communities through both consultation and community partnerships programs. In the 2007 year, the members of the Dendrobium Community Enhancement Program Board prepared a new community strategy which has been well received by the community.

Access to and Management of Resources

- BMA is a major water user and a major supplier to towns, farmers and other mining companies through its own Central Queensland pipeline network. BMA also has obligations under environmental law to carefully manage the control, storage and release of used water. Water is essential to mining and processing operations, and prolonged
drought conditions in the region have prompted significant and ongoing changes in water management practices. Water management measures include:
- The adoption of increasingly stringent pipeline use reduction targets by our mines;
- Enlisting the cooperation of the towns and other third parties that we supply in order to improve their water management and reducing their consumption;
- Improving water harvesting at mines and increasing their rates of water recycling – this is a continuing focus of our strategy;
- Underwriting new water infrastructure, most notably a new pipeline from the Burdekin Falls Dam that will be essential for augmenting our vulnerable existing allocations from established sources and providing the capacity for sustained future growth.

- Freshwater consumption at Illawarra Coal increased by 87 ML to 471 ML compared to the previous year. The principal reason for the increase was the increased need to use fresh water on new longwall equipment at Appin to ensure the asset is protected. During FY07, Illawarra Coal installed a new water filtration plant at Appin West. The plant has offset the volume of fresh water purchased by 92 ML since it began operations in December 2006.

Greenhouse Gas Emissions

Energy

- In coming years, initiatives are expected to reduce the rate of increase in our energy consumption, but will not reverse it given the company’s reliance for the foreseeable future on open cut mining for the bulk of its coal production.
- BMA will be one of the first business groups to implement BHP Billiton’s new Energy Excellence Program, through which the company will respond to, and exceed, the requirements of national Energy Efficiency Opportunities legislation. The aim is for minesites to identify initial energy saving projects, and develop processes to ensure that energy efficiency considerations are integrated into ongoing decision making.
- We will adopt an approach whereby we purchase larger capacity and more fuel efficient trucks and other mobile mining equipment. Our dragline improvement program also aims to increase the operating range and productivity of our fleet of 32 draglines.
- Our ‘Last Drop’ project, for example, aims to demonstrate how a more technical approach to overburden stripping can increase coal recovery rates, improve dragline utilisation and reduce reliance on truck-shovel operations, and reduce explosives use.
- The WestVAMP project, which is now producing electricity, will assist in reducing the energy intensity of the West Cliff operations. This project represents a significant investment of $30 million. It will reduce greenhouse gas emissions by up to 250,000 tonnes of carbon dioxide equivalents per year and generate sufficient electricity to power up to 20,000 homes. Taking into account the various factors that affect energy intensity at Illawarra Coal, such as conveyor loads (which will increase at each of the mines in the future as the coal conveying distance from coal faces to the surface increase), ventilation requirements, and production figures, on balance, energy intensity does have the potential to decrease from FY08 to FY12.

Clean Coal Technology

- Although important, emissions from mining operations constitute only a small part of the greenhouse gases associated with coal. The bulk of emissions is accounted for by CO2 released during use of the product – in our case, mainly from the use of metallurgical coal in the coke making plants and blast furnaces of steel producers, and to a lesser extent from the combustion of thermal coal in power stations, and in cement factories and other industrial applications. We accept that, together with other producers and users of fossil fuels, we have an obligation to contribute to the search for technological solutions to the problem of unsustainable growth in global energy-related greenhouse emissions.
- We have been at the forefront of industry efforts to establish the Australian Coal Association’s Low Emissions Technology Fund – the ‘COAL21 Fund’ – which is dedicated to supporting the demonstration of emerging low emission coal technologies and related research. Our contribution to the Fund via a voluntary coal industry levy is expected to exceed $140 million over ten years out of a total industry contribution of around $1 billion. The money will complement low emissions technology funding from federal and state governments, and will be applied mainly to trialling technologies for the capture and geological storage of CO2 from coal. It represents the latest and most significant of a series of Australian coal industry initiatives.
Petroleum

BHP Billiton Petroleum is a substantial oil and gas exploration and production business. Its principal activities are oil and natural gas exploration, development, production and marketing. Sustainable development – that is, development that meets the needs of the present without compromising the ability of future generations to meet their own needs, is at the centre of everything executed within BHP Billiton Petroleum. The company is uncompromising in its commitment in ensuring this - to the benefit of our shareholders, communities in which we operate, employees, and all influenced by our operation.

2007 Sustainability Performance Overview

Key sustainable development milestones achieved by BHP Billiton Petroleum from this past year included:

- Zero fatalities and significant environmental incidents.
- Our injury frequency rate reduced and we have implemented Safety Cases for all our operated production facilities and development drilling campaigns under all regulatory jurisdictions.
- Implemented an “Elimination of High Risk Activities” program based on BHP Billiton’s Fatal Risk Control Protocols at a number of our Production facilities and Drilling rigs.
- ISO (International Organisation for Standardization) 14001 certification for environmental performance was achieved or maintained at all operated production facilities.
- OHSAS (Occupational Health and Safety Assessment Series) 18001 certification for occupational health and safety has been achieved by our Gulf of Mexico and Pakistan production units.
- All Petroleum operations subjected to either independent or Corporate HSEC Management Standards audits or self assessments achieved overall scores of 4.0 or greater.
- During FY2007, BHP Billiton Petroleum developed and implemented a numerical environmental impact severity metric - the "Harm Index" - for emissions, spills, releases and discharges to the environment with factors for volume, bioavailability, persistence and toxicity of the released substance, and the sensitivity of the affected environment. From 2008 onwards, the Harm Index will provide a simple tool for incident reporters to use when estimating event severity.
- The principles of sustainable development continue to drive our initiatives with the communities near all our operations, and many of our production units have received external recognition for these efforts during FY 2007.
- External HSEC Performance Recognition in 2006/07
  - The Australian Petroleum Production and Exploration Association (APPEA) presented its 2006 APPEA Environmental Award to The Centre for Whale Research in Western Australia and employees on the Griffin Venture for a whale migration survey, which is based on visual observations from the FPSO. The three-year program provides data on the analysis for the migration patterns in the North West Cape region and is part of a longer term research program assessing the interaction between offshore oil and gas industry activities and migrating humpback and other whales in the region.
  - The North Wales Fire and Rescue Service presented the Corporate Community Award to the UK Production Unit’s Liverpool Bay team for its partnership in converting the Point of Ayr Gas Terminal’s visitor centre into an education exhibit. Named DangerPoint, this new resource is designed to increase the quality of life for the whole community by addressing social issues and the challenges of safety, citizenship and crime prevention that people face on a daily basis. DangerPoint offers the community a benefit that can remain well after all the recoverable oil and gas reserves at Liverpool Bay have been produced.
  - The South Trinidad Chamber of Industry and Commerce presented the Trinidad and Tobago Production Unit with the "Upstream Achiever of the Year" award in recognition of the Company’s commitment to local content, community relations and corporate social responsibility programs, and its health, safety, and environmental initiatives.

Challenges in 2007

The year was not without its challenges, however. These challenges were accepted with a continuous improvement mindset as they enabled us to ultimately improve the way we work. Here are some of the key learning opportunities from the past year:

- The proposed Cabrillo Port project in California was one of our significant challenges during 2007. We spent
several years attempting to get an offshore LNG regasification project approved by the authorities. In doing so, we met with thousands of community members, many of whom were supportive of the project, and some of whom were not. We offered a project to bring much needed natural gas into California, but ultimately our applications were rejected.

- While our reduction in injury frequency rate reflects significant improvement, our goal is zero harm, so clearly we have significant work to do.
- All health, safety and environmental performance is now measured for each production unit and project team in the Petroleum CSG, providing complete transparency. This is reviewed monthly by Petroleum senior management and actions are taken.

2008 Sustainability Outlook

Looking ahead for the Petroleum CSG, a focus on the BHP Billiton key sustainability challenges will include the following:

Eliminating Fatal Risks

- The company’s focus on HSEC must and will move in step with what is required as the company transitions to a larger operating role with respect to oil and gas exploration and production.
- A set of corporate Fatal Risk Control Protocols have been in place since 2003 that establish minimum standards to control hazards and mitigate risks related to activities performed at BHP Billiton. The Petroleum CSG will continue to identify areas not common to the rest of the Corporation and develop unique Petroleum solutions.

Sustainable Community Development and Closure of Operations

- No operations were closed during FY 2007; however, an extensive effort was undertaken across all controlled operations and production units to define our potential closure liabilities. This work was subjected to both internal and external audit, and closure preparedness was found to be well controlled with several notable practices observed.
- Customised community engagement programs have been put in place for each of our onshore facilities. Community support was achieved for all operational requirements.
- Improved measurement of the effectiveness of our community development programs and social performance

Access to and Management of Resources

- Five year targets with respect to reductions or improvements in efficiency have been established for 2 key resources. The resources are energy usage and fresh water consumption. BHP Billiton Petroleum has developed a five-year plan to ensure that these reductions are cascaded to each operation.
- We will continue our three pronged focus on ensuring the integrity of the equipment employed in the development, production and processing of our petroleum resources, the quality and robustness of our procedures and the competence and awareness of our personnel.

Greenhouse Gas Emissions

- Greenhouse gas emission targets have been established for each production facility resulting in a 6 per cent target decrease by 2012.

Occupational and Community Health

- The Petroleum CSG has established a dedicated occupational health function and network of health and hygiene functional resources throughout its operations. Operating standards are being updated for all health related exposures. The management of these health risks associated with petroleum operations will be monitored as part of an extensive, worldwide “Fit for Work/Fit for Life” audit program. The Company has commenced the first phase of implementing a global health and hygiene system to manage health information, allow us to better understand the impact of our compliance programs, to undertake trend analysis and sustain our continuous improvement philosophy.
- Continuing our focus on implementation in the areas of Fatigue Management, Fitness for Work Medical Assessments and a world-wide standard of the Drug and Alcohol Policy.
Stainless Steel Materials

BHP Billiton is the world’s third largest nickel producer. Stainless Steel Materials primarily services the stainless steel industry through its wide range of high quality nickel products. In addition, we supply nickel and cobalt to other markets including the specialty alloy, foundry, chemicals, and refractory material industries.

2007 Sustainability Performance Overview

- Utilisation of waste heat energy to increase the energy efficiency of our operations has been the subject of intense investigation during the year. Ravensthorpe Nickel, for example, will generate power by utilising heat from combustion of sulphur to generate acid for the leaching process. This will result in significant energy intensity reductions across the group.
- Our injury frequency rate has reduced and there were no fatalities in 2006/07.
- Process hazard analyses have proven effective during the year in identifying potential serious incidents and prompting risk reduction measures.
- Significant progress has been made on implementing the HSEC Management Standards and the Fatal Risk Control Protocols.
- New projects are designed to include BHP Billiton HSEC requirements.
- Our reporting of significant incidents has improved. The objective of this reporting is to ensure corrective actions are addressed and fatality potential is reduced. The learnings associated with these incidents are shared across the organisation.
- Work is progressing on greenhouse gas emissions reduction.
- In 2006 Cerro Matoso was acknowledged as the benchmark safety site in BHP Billiton by being awarded the BHP Billiton CEO’s Safety Excellence Award for 2006. Cerro Matoso’s activities include nickel ore mining and smelting as well as refining of ferronickel.
- We continue to work closely with our host communities with programs at CMSA considered to be benchmark in this area including the San Isidro Foundation. CMSA has been twice awarded the ‘best social outreach in the country’ by the Junior Chamber of Colombia. The learnings from CMSA are being used in other developing areas, such as Guatemala and the Philippines.
- An intensive program to reduce exposures to dust and noise at their ‘source’ was successfully trialled during the year and will now be rolled-out at all Stainless Steel Materials’ sites in 2008.
- Skills shortages particularly in Australia have posed challenges for our major projects in Ravensthorpe and Yabulu. With both projects now in commissioning, operations workforce requirements particularly in Ravensthorpe are being met with attractive housing options, rosters and other lifestyle incentives.
- Significant research has been undertaken in the area of utilising low grade ore through heap leaching processes. A pilot plant is under construction at Cerro Matoso to prove this process which would allow utilisation of our significant low grade reserves.

2008 Sustainability Outlook

Looking ahead for the Stainless Steel Materials CSG, a focus on the BHP Billiton Key Sustainability Challenges will include the following:

Access to and Management of Resources

- Access to resources is critical for Stainless Steel Materials and this is best achieved by earning a reputation as being the partner of choice in the industry and enhancing our licence to operate through excellence in HSEC performance. It was particularly gratifying that our Hallmark Project in the Philippines received special recognition from the World Health Organisation and the Philippines Department of Health for our support of the Global Fund Malaria Project.

Fatal Risks

- Elimination of fatal risk is a major focus going forward with the implementation of the FRCPs, close-out of actions associated with all incidents and continuing to implement process safety management. Zero Harm is the ultimate goal.
Occupational & Community Health

- Occupational health focus will be around reducing hazardous exposures in the workplace. Critical issues for Stainless Steel Materials include exposure to nickel, noise and heat. Stainless Steel Materials has developed a Health Future State and a Nickel Health Management standard that will be implemented in the first step towards the future state.

Sustainable Community Development & Closure

- Stainless Steel Materials maintains a robust development program to ensure a viable pipeline of new production into the future. Prospective areas include the Philippines and Indonesia together with active exploration and development activities in our host countries of South America and Australia. More than ever before communities, environmental groups, businesses and governments are working with us to plan and implement community development projects in both areas where we operate and where active project studies are underway. These community development projects include community education, job creation, skills training, community health and local infrastructure development initiatives delivered as part of community development and community relations plans developed by our operations each year.

Greenhouse Gas Emissions

- Reduction of energy and greenhouse gas emissions per unit of production remains a key focus for Stainless Steel Materials. The ramp up of the Ravensthorpe Nickel Project next calendar year will assist this overall reduction with significant production increase from an energy efficient plant. Energy efficiency audits are also being conducted across the business to identify additional areas for improvement.
External Recognition

The table below summarises the external recognition we have received at a corporate level in 2006/07. In addition, many of our operations received recognition for excellence at a local or regional level. Read more: Customer Sector Group Reviews.

## Awards & Commendations

<table>
<thead>
<tr>
<th>Recognition</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2006 Association of Certified Chartered Accountants (ACCA) Australia and New Zealand Awards for Sustainability Reporting – Commendation for Best Practice by an ASX listed Company | The awards aim to:  
- Reward and recognise those organisations that report and disclose environmental, social or full sustainability information within Australia.  
- Encourage the uptake of environmental, social or sustainability reporting.  
- Raise awareness of corporate transparency issues and increase accountability for responsiveness to stakeholders. |
| Business in the Community (UK) - 2007 Big Tick Award (Social Impact Category) and Finalist for Company of the Year | Business in the Community (UK). The Big Tick is independently assessed and awarded to companies that have demonstrated leadership and positive, measurable impacts of their corporate responsibility programs. |
| Sustainability Reporters Benchmark Program – Ranked Number 1 for the second successive year | The Sustainability Reporters Benchmark Program is a partnership between the Australian Centre for Public Agency Sustainability Reporting, the Environment Protection Authority of Victoria (Australia) and URS, the international engineering and design consultancy. |
| 2007 Australasian Reporting Awards – Gold Award Winner. Finalist in the categories: Sustainability, Corporate Governance, Occupational Health and Safety, and Knowledge Capital | The Australasian Reporting Awards (established in 1951) aim to encourage organisations to strive for excellence in reporting to their stakeholders. |
| 2007 Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria (GBC) - Commendation for Business Excellence on Malaria | Instituted in 1998, the Global Business Coalition (GBC) awards program recognises outstanding contributions from businesses and business leaders fighting HIV/AIDS, tuberculosis and malaria; each award promotes new global best practices. |

## Investment Indices

<table>
<thead>
<tr>
<th>Recognition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dow Jones Sustainability Indices - Included in the global index since 2002</td>
<td>The Dow Jones Sustainability World Indexes (DJSI) consist of more than 300 companies that represent the top 10 per cent of the leading sustainability companies in 60 industry groups in the 34 countries covered by the biggest 2500 companies in the Dow Jones Global Indexes.</td>
</tr>
<tr>
<td>FTSE4Good Index - Included in the international ethical index since 2003</td>
<td>FTSE Group confirms that BHP Billiton has been independently assessed according to the FTSE4Good criteria and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index company FTSE Group, FTSE4Good is an equity index series that is designed to facilitate investment in companies that meet globally recognised corporate responsibility standards. Companies in the FTSE4Good Index Series have met stringent social, ethical and environmental criteria, and are positioned to capitalise on the benefits of responsible business practice.</td>
</tr>
<tr>
<td>The Australian SAM Sustainability Index - Mining sector leader, third year in a row</td>
<td>Launched in February 2005, the Australian SAM Sustainability Index (AuSSI) tracks the performance of Australian companies that lead their industry in terms of corporate sustainability. Based on a thorough assessment of economic, environmental and social criteria, the AuSSI comprises the top sustainability-driven companies from each of 21 industry clusters covering the entire Australian economy. Based on the methodology of Sustainable Asset Management (SAM), it applies the same research criteria as the Dow Jones Sustainability Indexes for which SAM selects sustainability leaders on a worldwide scale. In 2006, BHP Billiton was listed as an industry leader for the Mining and Metals sector.</td>
</tr>
<tr>
<td>Business in the Community (UK) – Platinum-band Company and 2006 Joint Sector Leader</td>
<td>Originally established in 2002 in the UK by Business in the Community the Corporate Responsibility Index was developed to ensure a systematic approach to managing, measuring and reporting upon the various impacts that companies have upon society and their environment. The index works as a management tool for companies to see how their corporate responsibility activities are integrated into their mainstream business operations.</td>
</tr>
<tr>
<td>Corporate Responsibility Index (Australia) – Materials Sector Leader for the last three years (Joint sector leader in 2006)</td>
<td>In 2006, we achieved Platinum-band status and Joint Sector Leader in the UK Index. In the Australian release of the index, utilising the same questionnaire and scoring system, we achieved Joint Sector Leader Status.</td>
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<tr>
<td>Carbon Disclosure Project – included in the 2006 Climate Leadership Index, comprising the 50 ‘best in-class’ responses among the FT500</td>
<td>The Carbon Disclosure Project (CDP) is the most comprehensive survey sponsored by international institutional investors regarding risks and opportunities presented by climate change. Historically, the request has been limited to the FT500 largest companies in the world, but in 2006, the scope was expanded to reach over 1900 companies. The 2006 CDP was signed by 225 institutional investors with assets of more than $31 trillion. In 2006 BHP Billiton was included in the Climate Leadership Index, comprising the 50 ‘best in-class’ responses among the FT500. At the time of reporting, our 2007 CDP submission had not yet been evaluated for inclusion in the 2007 Index.</td>
</tr>
<tr>
<td>Johannesburg Stock Exchange Socially Responsible Investment Index - included in the South African sustainability index since it’s inception in 2004</td>
<td>The JSE launched the first Socially Responsible Investment (SRI) Index in May 2004. A voluntary assessment is made of the triple bottom line performance of FTSE/JSE All Share Index companies, with the aim of compiling an index comprising those companies that pass the criteria requirements.</td>
</tr>
</tbody>
</table>
Company-wide Employee HSEC Awards

The BHP Billiton Employee HSEC Awards encourage and recognise those employees and their teams who openly embody the values expressed in our Charter and go beyond what is required in their day-to-day jobs to care for their fellow employees, the community and the environment.

The Awards also provide a platform for sharing creativity and best practice. A wealth of knowledge is gathered through the entry submission process, and this is published across the Company to bring business benefits.

Awards are presented in the four categories of Health, Safety, Environment and Community, together with an award for Individual Excellence, the recipient of which is personally selected by the Chair of the Judging Panel. Each category of nominations is assessed by a separate judging panel, comprising one Company representative and four experts from the non-government, government and academic sectors.

This year, despite the number of allowable entries being capped at eight per site (i.e. two entries per HSEC category), 229 nominations were received from around the world. The judges selected a short list of finalists in each category. From these, the recipients of Excellence, Highly Commended and Merit Awards were chosen.

In recognition of their initiative, each Excellence Award and Highly Commended Award recipient will be presented with a specially designed sculpture, and each Merit Award recipient will receive a certificate. The finalists each nominated a charity or not-for-profit organisation to share in their award. These organisations will receive a donation of US$7,500 (Excellence Award), US$3750 (Highly Commended) or US$1,500 (Merit). All the recipients are to be congratulated for the high standard of their contributions.

We also thank the judges who participated in the assessment of entries and acknowledge their contribution to the Awards process.

Use the links below to find out about this year’s Award finalists and their projects.

- Health
- Safety
- Environment
- Community
Health Awards

Excellence Award

Frank Harris
Base Metals, Olympic Dam, Australia
Smelter Ventilation Project to Reduce Radiation Exposure

In uranium mining, one of the risks to occupational health is exposure to airborne particles of Polonium-210 (Po210), which is part of the natural uranium decay process. The smelter ventilation project, led by Frank and his team and based on integrating occupational hygiene monitoring with process controls and improved ventilation, is resulting in substantial reductions in exposure to Po210.

Highly Commended Award

Ian Sawyer
Stainless Steel Materials, Nickel West, Western Australia
Controlling Reproductive Health Risk In Women Occupationally Exposed To Nickel

Following concerns over the potential reproductive toxicity of nickel, Ian and his team of health professionals conducted a multi-faceted project that led to the implementation of a business process for controlling reproductive health risk in women occupationally exposed to nickel in the workplace.

Norah Segoati
Corporate, Johannesburg, South Africa
Hotazel Mobile Clinics

Our Hotazel manganese operation is located in one of the poorest rural districts in South Africa where health services remain inaccessible to a large proportion of the population. Following consultation with relevant stakeholders, Norah and her team facilitated the contribution of state-of-the-art mobile healthcare clinics to the municipality along with seven water tanks to provide clean water.

Merit Award

David Henry
Stainless Steel Materials, Mt Keith Mining Operations, Nickel West, Western Australia
Optalert Drowsiness Detection Technology Project

David and his team, representing both BHP Billiton and Thiess Pty Ltd, have facilitated a world-first trial for the mining industry of Optalert, a drowsiness detection technology that continuously analyses data obtained from sensors fitted to driver glasses to measure eyelid movements. Drivers are warned of impending drowsiness via an audible alert and a voice prompt from a small processing unit in the vehicle.

Stanley Boldewijn
Aluminium, Coermotibo operation, Suriname
Health Week At Coermotibo

By staging a Health Week for not only our employees and contractors but also the local communities neighbouring our Coermotibo operation, Stanley and the Fit for Work/Fit for Life Health Promotion Team have helped more than 2,000 people – or some half of the local population living in this remote location – adopt a healthier lifestyle.

Anthony Wilkinson
Stainless Steel Materials, Kwinana Nickel, Western Australia
Sprain and Strain Initiative

Using readily available materials, Anthony and his team have designed and fabricated a purpose-built, simple and portable welder’s chair that reduces the extreme discomfort traditionally experienced to the neck and shoulder areas of the body when working in overhead positions.
Rodrigo Daza
Energy Coal, Cerrejón Coal Mine, Colombia
Alcohol and Drug Rehabilitation Program

A rehabilitation program for employees with alcohol and drug addiction implemented by Rodrigo and his team of health professionals is delivering impressive results. Over a five year period, 83 per cent of program participants have maintained their abstinence from alcohol or drugs. Concurrently, for the same time period, there have been no health and safety incidents related to the consumption or influence of alcohol and drugs among the 4,800 Cerrejón employees.

Mark Hockey
Metallurgical Coal, Douglas Project, Illawarra Coal, Australia
Reducing A Manual Handling Hazard From Underground Operations

For minimal cost, Mark and his colleagues from the Ventilation Crew have adapted a commercially available product (trailer) that reduces the manual handling risk involved in moving a pump used in establishing and maintaining the ventilation network of Illawarra’s underground operations. The detachable nature of the unit’s design also minimises the potential for danger during transport with diesel powered machinery.
Safety Awards

Excellence Award

Justin Bauer
Base Metals, Olympic Dam, Australia
Olympic Dam Smelter Outage 2006

Olympic Dam’s most recent major maintenance shutdown occurred in September 2006 and involved a 16-day outage with a budgeted cost of US$72 million and a workforce of 960, the vast majority of which had no previous experience on site or with BHP Billiton processes. Despite the intensity and complexity of the work undertaken, the outage was completed without injury or significant incident.

Highly Commended Award

Paulo Jorge
Aluminium, Mozal, Maputo, Mozambique
Community Road Safety Initiative

While the implementation of many road safety initiatives has significantly reduced the number of accidents involving Mozal’s vehicles travelling between the smelter and harbour terminal, near miss incidents were still being reported. By convening a road users’ safety forum with Mozal’s surrounding businesses, taxi associations and traffic authorities, Paulo and his team is helping improve road safety for all users.

Rob Watson
Stainless Steel Materials, Nickel West, Western Australia
Field Leadership

Field Leadership is a leadership program developed by Rob and his team that is assisting in the achievement of Zero Harm by combining three different observation processes under one simple program utilising the same principles and approaches. The program measures every individual and contractors are encouraged to participate.

Merit Award

Nick Loughlin
Petroleum, United Kingdom Production Unit, UK
Workforce Involvement Network

The Workforce Involvement Network, or WIN, led by Nick, was designed to capture the knowledge, opinions and suggestions of all members of the local workforce on how to improve safety and then empower them to implement their ideas. The project delivered over 6000 HSE improvement ideas, of which 250 have been implemented, some of which simultaneously address multiple suggestions.

Dave Power
Metallurgical Coal, BMA Hay Point, Queensland, Australia
Elimination of Risks in Transfer Chutes

Dave and his team have initiated a project to eliminate the risks associated with the maintenance of and access to coal transfer chutes by implementing inherently safe, hard engineering controls to ensure the safety of those requiring access to the chutes at all times.

Hernan Catalan
Base Metals, Minéra Escondida, Chile
Remote Control Tractors In Stockpile

Following a number of incidents involving tractors in Escondida’s stockpiles, Hernan has totally eliminated the risk of accidents for the operators by successfully identifying and implementing technology that allow tractors in a stockpile to be remotely operated.
Rod Wells
Aluminium, Worsley Alumina, Western Australia
Clearance to Work Project

Rod and his team have implemented a Clearance to Work system whereby people have to comply with a formal process that ensures adequate risk assessment and permitting is in place before onsite work can commence. The system replaces a previously fragmented and ineffective process and is designed to eliminate or minimise the risk of injuries, incidents and fatalities arising from the uncontrolled release of energy or hazardous materials.

John Bout
Iron Ore, Nelson Point, Point Hedland, Western Australia
Chute Door Upgrade

John and his team have redesigned the ore chute door in a manner that facilitates easy and safe inspection and cleaning. Designed in accordance with current Australia Standards, the required installation time is minimal thus minimising production downtime.
Environment Awards

Excellence Award

Anthony Avidon and Stefan van der Walt
Aluminium, Bayside Smelter, Richards Bay, South Africa
Disposal And Recycling Of Spent Potlining

Anthony and Stefan and their respective teams have successfully resolved issues surrounding our current contract to recycle or re-use a portion of our spent pot lining (the largest waste stream from aluminium smelting) as well as developing alternative, cost effective solutions for recycling or re-using the total volume of SPL.

Highly Commended Award

Brian Marshall
Diamonds & Specialty Products, EKATI Diamond Mine, Canada
Energy Smart Project

In the year to 30 June 2006, Brian and his team have saved approximately 1.5 million litres of diesel fuel and 4,226 tons of greenhouse gases – the equivalent of removing 1600 from the road – through the Energy Smart Project. Initiated in 2002, this energy conservation project has reduced the environmental impact of the site, raised employee awareness around energy efficiency and reduced costs.

Andrew Crust
Carbon Steel Materials, Western Australia Iron Ore, Australia
Newman Eco Villages

Andrew and his team have led the development of the Newman Eco Villages. Combining a range of eco-friendly innovations in energy and water efficiency so as to make a real contribution towards sustainable development, the Eco Villages are designed to help increase worker retention rates by providing semi-residential (fly-in, fly-out) workers with a higher standard of accommodation.

Merit Award

Andy Witcomb
Aluminium, BHP Billiton Maatschappij Suriname (BMS), Suriname
Camera Trapping Project

As part of the BMS exploration program to define bauxite resources in its Bakhuis concession in western Suriname, Andy and the Bakhuis field staff have implemented a camera trapping program to record the wildlife of the concession. The concession comprises a largely undisturbed tract of tropical rainforest known to have high flora and fauna diversity, and is adjacent to the Central Suriname Nature Reserve, a designated World Heritage site.

Phil Johnston and Stephen Vlahos
Aluminium, Worsley Alumina, Western Australia
‘Rehabilitation Success’ Project

Phil and Stephen and their team are responsible for the progressive rehabilitation of Worsley mined areas, the majority of which occurs in State native forest. Key to their successful approach is the establishment of a wide range of collaborative research projects that enables them to continuously improve the rate at which forest biodiversity is re-established.

Scott Johnsen
Base Metals, San Manuel, USA
San Manuel Plant Reclamation Project

In January 2003, the formal closure of the San Manuel Plant Site was announced, with reclamation activities commencing in March 2004. The approach adopted by Scott and his project team in ensuring that the entire closure process has been open and transparent in terms of permitting, plan development and execution has become a model for future closure projects.
Joanne Page
Metallurgical Coal, Illawarra Coal, Australia
Water Filtration Plant Project

By implementing an integrated water management system, Joanne and her team have been successful in transforming traditional waste minewater into a usable resource for our operations. In doing so, the amount of potable water used to dilute excess treated minewater prior to discharge into the local river has been significantly reduced.
Community Awards

Excellence Award

Humera Malik
Petroleum, Zanzama Asset, Pakistan
Installing Hand Pumps Project

A project managed by Humera and her team to install hand pumps in villages neighbouring our Zanzama asset is providing more than 10,000 people with easier access to water and, in doing so, is helping to reduce the prevalence of waterborne disease and the workloads of women and children.

Highly Commended Award

José Haroldo Paula Chaves
Aluminium, Mineração Rio do Norte, Brazil
Escola do Campo Project

The Escola do Campo project, managed by Jose and his team, is providing some 1,400 students with both theoretical and practical knowledge in agricultural and cattle ranching techniques. In addition to imparting valuable nutritional advice, the project also aims to educate students in the benefits of sustainable farming.

Victor Garrido
Energy Coal, Cerrejón Coal Mine, Colombia
HIV/AIDS Prevention Program

The HIV/AIDS Prevention Program, managed by Victor and his team, has improved the knowledge on HIV/AIDS throughout the population of the 15 municipalities neighbouring our operation.

Merit Award

Katrina DeCourcy
Iron Ore, Port Hedland, Western Australia
Indigenous Contracting Program

Historically, very few Indigenous businesses in Western Australia’s Pilbara region have been able to comply with our commercial standards. The Indigenous Contracting Guidelines developed by Katrina and her team is helping to overcome this by promoting opportunities for Indigenous contracting businesses and outlining the assistance available from Iron Ore in accessing these opportunities.

Venecia van Loggerenberg
Aluminium, Hillside Smelter, Richards Bay, South Africa
Project GREEN

Project GREEN was developed by Venecia and the Hillside Corporate Social Investment department to help assess and ensure the environmental sustainability of community projects selected for support. Its underlying premise is that many environmental problems are related to social issues and many environmental solutions are dependent on social processes.

Rebecca Erskine
Energy Coal, Hunter Valley Energy Coal, New South Wales, Australia
Mt Arthur Coal and Hunter Life Education Community Partnership

Rebecca and her team are responsible for managing the community partnership between Mt Arthur Coal and Hunter Life Education that is designed to help address drug awareness issues with young people and their parents in the local region by delivering effective health, drug and alcohol education.
Carlos Munoz  
Base Metals, Minera Escondida, Chile  
Supply of spring water to Los Corrales rural community  

Los Corrales is a small rural community suffering from a lack of all basic needs. By supplying water from nearby springs, Carlos and the team from Escondida’s oxide plant have helped this community improve its quality of life, with much needed water now available for the harvesting of local produce and raising of small animal herds.

Zodwa Ntuli  
Aluminium, Hillside Smelter, Richards Bay, South Africa  
‘A Place of Hope’ Ethembeni Care Centre  

The Ethembeni Care Centre has been helping people with HIV/AIDS-related problems since 1996. Initially catering for six patients in an abandoned farmhouse, Ethembeni currently cares for an average of 82 patients per month, largely due to the efforts of Zodwa and the Hillside Corporate Social Investment Department in securing local and provincial government support.
### Key Sustainability Data

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<thead>
<tr>
<th>Health</th>
<th>Units</th>
<th>2001/02(7)</th>
<th>2002/03(7)</th>
<th>2003/04(7)</th>
<th>2004/05(7)</th>
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<tr>
<td>Number of new cases of occupational illnesses</td>
<td>Total number</td>
<td>226</td>
<td>197</td>
<td>152</td>
<td>124</td>
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<tr>
<td>Safety</td>
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<tr>
<td>Number of fatalities at our controlled operations</td>
<td>Total number</td>
<td>13</td>
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<td>Classified Injury Frequency Rate</td>
<td>See CIFR</td>
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<td>Total Recordable Injury Frequency Rate</td>
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<td>8.8</td>
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<td>59,100</td>
<td>68,100</td>
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<td>Total number of full-time employees</td>
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<td>Group turnover</td>
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<td>9,330</td>
<td>15,277</td>
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1. Figures restated to facilitate year-to-year comparison of performance without BHP Steel, which was demerged in July 2002.
2. Assumes immediate closure of all operations.
3. Excludes recycled materials and mining related materials, such as waste rock, tailings, coal reject and slag. Hazardous waste includes waste oil.
4. % pre-tax profits calculated on a rolling 3-year average.
5. The definition of value add is provided by the 2006 Global Reporting Initiative Guidelines. See Economic Contributions.

6. Underlying Earnings Before Interest and Tax is earnings before net finance costs and taxation, and jointly controlled entities’ net finance costs and taxation and any exceptional items.

7. Information for the years 2004/05 to 2006/07 is stated under IFRS. Information for the years 2001/02 to 2003/04 is prepared in accordance with the UKGAAP and has not been restated.
## Environmental Data Summary

View Environmental Data Summaries for: Aluminium Base Metals Iron Ore Metallurgical Coal Manganese Stainless Steel Materials Energy Coal Petroleum

View Environmental Data Summaries for: Land Water Waste

<table>
<thead>
<tr>
<th></th>
<th>Aluminium</th>
<th>Base Metals</th>
<th>Iron Ore</th>
<th>Metallurgical Coal</th>
<th>Manganese</th>
<th>Stainless Steel Materials</th>
<th>Energy Coal</th>
<th>Petroleum</th>
<th>Diamonds &amp; Specialty Products</th>
<th>Corporate &amp; Other</th>
<th>BHP Billiton Total</th>
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<tr>
<td><strong>Accidental Discharges (litres)</strong></td>
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<tr>
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<tr>
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1. Includes hydrocarbons released to secondary containment facilities and subsequently recovered.
2. Includes onshore exploration leases but excludes offshore exploration leases.
3. This value includes the area to be rehabilitated while the project is operational, not the total area that will require rehabilitation at the end of project life.
4. One megalitre is equal to $10^6$ litres.
5. One petajoule is equal to $10^{15}$ joules.
6. CO2-e = Carbon dioxide equivalent (the basis of comparing the warming effect of greenhouse gases such as carbon dioxide, methane, perfluorocarbons, etc.)
7. One kilolitre is equal to $10^3$ litres.
8. The BHP Billiton Total figure is inclusive of data from our closed Beenup site in Western Australia, Minerals Exploration and Technology Centres.

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<th>Greenhouse Gas Emissions (000 tonnes CO2-e)</th>
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<th>4,320</th>
<th>1,020</th>
<th>2,700</th>
<th>3,620</th>
<th>3,400</th>
<th>1,690</th>
<th>1,110</th>
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<td>80,430</td>
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<tr>
<td>(megalitres)</td>
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<td>(tonnes)</td>
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<tr>
<td>General waste disposed to landfill</td>
<td>9,930</td>
<td>31,710</td>
<td>27,980</td>
<td>14,960</td>
<td>11,410</td>
<td>28,870</td>
<td>6,050</td>
<td>1,770</td>
<td>0</td>
<td>130</td>
<td>132,810</td>
<td></td>
</tr>
</tbody>
</table>

1. Includes hydrocarbons released to secondary containment facilities and subsequently recovered.
2. Includes onshore exploration leases but excludes offshore exploration leases.
3. This value includes the area to be rehabilitated while the project is operational, not the total area that will require rehabilitation at the end of project life.
4. One megalitre is equal to $10^6$ litres.
5. One petajoule is equal to $10^{15}$ joules.
6. CO2-e = Carbon dioxide equivalent (the basis of comparing the warming effect of greenhouse gases such as carbon dioxide, methane, perfluorocarbons, etc.)
7. One kilolitre is equal to $10^3$ litres.
8. The BHP Billiton Total figure is inclusive of data from our closed Beenup site in Western Australia, Minerals Exploration and Technology Centres.
Our Approach To Sustainability

For BHP Billiton, sustainable development is about ensuring our business remains viable and contributes lasting benefits to society through the consideration of social, environmental, ethical and economic aspects in all that we do.

Working through complex operational issues associated with our operations has highlighted environmental and social performance as a critical success factor for the Company. We are well aware of the costs of getting it wrong; but more importantly, we recognise the value that can be created by getting it right. Consequently, we adopt a holistic approach to business strategy, seeking to realise value for all our stakeholders through a sustainable business philosophy.

Line managers have ultimate accountability for ensuring our businesses contribute to sustainable development and move towards our aspirational goal of Zero Harm. This is implemented through a number of processes, such as our HSEC Management Standards (PDF 148 KB) and our Guide to Business Conduct.

Our Vision

Our vision for sustainable development is to be the company of choice — creating sustainable value for shareholders, employees, contractors, suppliers, customers, business partners and host communities. Central to our vision is our aspirational goal of Zero Harm to people, our host communities and the environment.

Zero Harm means:

- We aspire to create a workplace that is injury, illness and incident free. We seek to adopt a precautionary approach to minimise and, where possible, eliminate our environmental impacts over time.

Company of choice means:

- Being selected by shareholders as a valued investment, based on strong financial performance and sound governance processes.
- Being preferred by employees for providing a safe, healthy and equitable workplace and caring about the communities in which we live.
- Being preferred by the communities in which we operate for our contribution to sustainable community wellbeing.
- Being preferred by our business partners — customers, suppliers, contractors, governments and joint venture partners — as a committed and reliable partner in delivering sustainable value.

Our emphasis on sustainable value means we have the willingness to invest for the future while ensuring we deliver value in the shorter term.

Our Strategy

BHP Billiton is the world’s largest diversified resources company. The Company aims to be diversified in terms of our markets and countries of operation, and this enhances the stability of our cash flows and capacity to invest and grow throughout the business and commodity price cycles. This stability also enables us to take a longer-term, precautionary approach to all aspects of our business, including financial, social and environmental perspectives, improving our ability to deliver value for all our key stakeholders.

Our sustainable development strategy comprises two dimensions – the business dimension and the sustainability dimension – that together contribute to bottom line performance.

Business Dimensions

The business dimension represents traditional contributors to a financially successful and competitive business, recognising that without a profitable business we are unable to contribute to the broader goals of sustainability. This dimension includes:

- Business excellence and customer focus.
- Portfolio diversity.
- Deep inventory of growth projects across all Customer Sector Groups, including greenfield and brownfield projects, as well as appropriate merger and acquisition activities.
Quality, long-life assets.

**Sustainability Dimension**

Our bottom line performance is, however, dependent upon ensuring access to resources and gaining and maintaining a licence to operate and grow. Maximising bottom line performance is about recognising the value protection and value add to be achieved through performance in non-financial dimensions - or sustainability dimensions, such as:

- Aspiring towards Zero Harm to people, our host communities and the environment.
- Ensuring effective governance and risk management processes are in place to ensure a precautionary approach is taken to achieving business outcomes.
- Recognising the need to be socially responsible and contribute to sustainable community development.
- Ensuring the broader economic contributions of our operations are effectively injected into the regions where we operate.

A useful metaphor we apply to our sustainable development strategy is illustrated below. Together, our two strategic dimensions combine to form a structure similar to that of a natural diamond. The diamond's inherently stable structure is created by the strength in each dimension that contributes equally to an even stronger, stable and more valuable whole and is symbolic of our total business approach to sustainable development.

![Sustainability Diamond Diagram](image)

**Working with business partners**

Our Sustainable Development Vision and Strategy are underpinned by our Sustainable Development Policy and HSEC Management Standards, which are applied to BHP Billiton sites and operations throughout the world. These include:

- Majority owned and/or operated and controlled facilities and activities (from exploration and planning through to closure and rehabilitation).
- Development projects, mergers, acquisitions and divestments.
- Activities by contractors on BHP Billiton sites or under BHP Billiton management (including construction activities...
prior to hand-over).

Where BHP Billiton does not have operational responsibility but has an equity stake, or where significant BHP Billiton assets are involved, we make all reasonable efforts to promote our approach and make our HSEC Management Standards are made available to the operator, so that comparable HSEC Management Standards may be applied. The resolution of conflicts presented by the implementation of these Standards must be consistent with the principles of the BHP Billiton Charter.

Measuring Progress

Our Sustainable Development Road Map is a strategy map that provides a contextual framework for how we measure our progress on our journey towards sustainable development.

We encourage our managers to place their decisions in the context of this Road Map and question how they can better improve the sustainability performance of their operations.

The Road Map seeks to illustrate that there are three contexts to consider when making decisions that influence our ability to contribute to sustainable development:

- Operational level — seek out leading sustainability practices.
- Strategic level — identify opportunities to drive sustainable value creation.
- Commodity level — demonstrate stewardship by building partnerships across the life cycles of our products to deliver broader business and societal returns.

We encourage our operations to strive for excellence in areas where they perceive the greatest relevance to their stakeholders and business. This approach recognises that there may not always be a need for operations to excel in all aspects of sustainability. While each stage in maturity is distinct, the requirements of the previous stage must be maintained and built upon to progress in maturity.

BHP Billiton Sustainable Development Road Map
Self-Assessment Against Our Road Map

In 2006/07, we reviewed our overall performance against the Sustainable Development Road Map and concluded that, in general, we believe that our Company performance is at least at the level of ‘Responsibility’, as all compliance, risk and transparency mechanisms are now broadly established.

We can demonstrate, and aim to continuously improve, our current level of ‘Innovation’ and ‘Strategic Alignment’ performance, as follows:

- Attracting socially responsible investment by increasing engagement and support of the mainstream investment community on sustainability performance.
- Proactively identifying opportunities for energy efficiency and realising significant cost and greenhouse emissions savings.
- Implementing spin-off technology or other business opportunities; for example, through conducting trials of biofuels at some of our operations and supporting clean coal technology research.
- Increasing market access or penetration; for example, community confidence in our application for market access has played a role in the successful bid for a number of recent investment approvals.
- Repositioning businesses or products in the marketplace; for example, Canada Mark diamonds and the GreenLeadTM recycling program.
- Productivity gain, including reductions in hazardous waste and energy use in 2006/07.
- Proactively identifying opportunities – proactive engagement of supply chain on stewardship issues, technology research into improved sustainability performance.
- Recognised as a business leader, partner of choice, exemplified by being awarded Mining Sector Leader status in various investment indices.

Read more:

- Performance against our five-year HSEC targets (2003-2007)
- Sustainable Development Governance

<table>
<thead>
<tr>
<th>Maturity Phase</th>
<th>Indicative Milestones</th>
</tr>
</thead>
</table>
| 1. Compliance | ● Compliance system in place for health, safety, environmental, social, ethical and economic performance.  
                 ● Demonstrated compliance with relevant laws. |
| 2. Risk Management | ● Risks identified, assessed, prioritised and managed.  
                     ● Risk-based management systems in place.  
                     ● Strategies to improve performance identified and implementation plans developed.  
                     ● Stakeholder engagement process implemented  
                     ● Non-financial performance measurement and reporting systems implemented. |
| 3. Responsibility | ● Health, safety, environmental, social, economic and ethical aspects integral to business planning and employee remuneration.  
                    ● Sustainability reports verified by a third party.  
                    ● We advocate the benefits of sustainability to our industry and supply chain.  
                    ● We advocate responsible business practice. |
| 4. Innovation | ● Socially responsible investment attracted.  
                 ● Spin-off technology or other business opportunity implemented.  
                 ● Market access or penetration increased.  
                 ● Business or products repositioned in marketplace. |
| 5. Strategic Alignment | ● Production systems are closed loop.  
                          ● Productivity gains made.  
                          ● Proactively identifying opportunities.  
                          ● Business renowned as a leader, partner of choice. |
Our Profile

BHP Billiton Is The World’s Largest Diversified Resources Company

We are distinguished from other resource companies by the quality of our assets; our deep inventory of growth projects; our customer-focused marketing; our diversification across countries, commodities and markets; and our Petroleum business.

We have some 39,000 employees working in more than 100 operations in 25 countries. Reflecting our aim to be a premier global company, we occupy industry leader or near industry leader positions in major commodity businesses, including aluminium, energy coal and metallurgical coal, copper, manganese, iron ore, uranium, nickel, silver and titanium minerals, and have substantial interests in oil, gas, liquefied natural gas and diamonds.

The central tenet of the BHP Billiton business model is that its diversified portfolio of high quality assets provides more stable cash flows and greater capacity to drive growth than the traditional resource cyclicals. In 2007, we generated turnover of US$47.5 billion, underlying earnings before interest and tax (underlying EBIT) of US$20.1 billion, attributable profit (excluding exceptional items) of US$13.7 billion and net operating cash flow of US$15.6 billion. As at 16 August 2007 our market capitalisation was US$140.4 billion.

BHP Billiton was created through the Dual Listed Companies (DLC) merger of BHP Limited (now BHP Billiton Limited) and Billiton Plc (now BHP Billiton Plc), which was concluded on 29 June 2001.

BHP Billiton Limited and BHP Billiton Plc continue to exist as separate companies, but operate on a combined basis as BHP Billiton. The headquarters of BHP Billiton Limited, and the global headquarters of the combined BHP Billiton Group, are located in Melbourne, Australia. BHP Billiton Plc is located in London, United Kingdom. Both companies have identical boards of directors and are run by a unified management team. Shareholders in each company have equivalent economic and voting rights in the BHP Billiton Group as a whole.
Business Case For Sustainable Development

Our bottom line performance is dependent on ensuring access to resources and securing and maintaining our licence to operate and grow. Maximising the bottom line is, however, about recognising the value protection and value-add that can be achieved through enhanced sustainability performance. Delivery on this approach is a core expectation of our management teams and recognised through the following:

- **Reduced Business Risk And Enhanced Business Opportunities** - Understanding and managing risk provides greater certainty for shareholders, employees, customers, suppliers, and the communities in which we operate. By managing our business risk we can be better informed and more decisive and can pursue growth opportunities with increased confidence. The aim is to embed risk management in all critical business systems and processes so that risks can be identified and managed in a consistent and holistic manner.

- **Gaining And Maintaining Our Licence To Operate And Grow** - Access to resources is crucial to the sustainability of our business. Fundamental to achieving access to resources is effectively addressing heightened political and societal expectations related to the environmental and social aspects of our business.

- **Improved Operational Performance And Efficiency** - Many key operational performance indicators are inextricably linked to sustainability performance. For example, improving energy efficiencies reduce both costs and greenhouse gases; increasing plant life reduces maintenance cycles, which then reduces requirements for consumables and replacement items, reducing wastes immediately lowers operational costs. The application of innovation and business improvement processes not only improves operational efficiency and performance but also delivers sustainability gains.

- **Improved Attraction And Retention Of Our Workforce** - Our workforce is an essential element of our business, and being able to attract and retain a quality workforce is fundamental to our success. Maintaining a healthy and safe workplace is a universal value of all employees. Effective employee development and training programs, attractive remuneration packages, addressing work/life balance, and providing a fair and non-discriminatory work environment all contribute to employee attraction and retention.

- **Maintained Security Of Operations** - Asset security is a critical element that can be significantly impacted by the nature of relationships with host communities. Trusting and supportive relationships can lead to reduced security risks, whereas distrustful relationships can lead to heightened security risks. This is particularly critical for our operations in parts of the world with politically unstable environments.

- **Enhanced Reputation** - The benefits of enhanced reputation are many but often difficult to quantify. Understanding what our stakeholders perceive as responsible behaviour, meeting these expectations and achieving recognition from financial institutions, investors and customers can deliver value. For example, enhanced reputation may foster an increased belief that the Company has the credibility and capabilities to deliver on its commitments. This can promote shareholders’ faith in proposed investments, communities’ faith in community development plans, governments’ faith in successful delivery of projects, and business partners’ faith that we are reliable and competent in all that we do.

- **Enhanced Ability To Strategically Plan For The Longer Term** - By anticipating and understanding trends in society – new regulations, heightened societal expectations and improved scientific knowledge – and assessing these against our business models, our ability to proactively plan for the longer term is improved. This includes entering emerging markets, revising product mixes or changing operational technologies.

Beyond the Business Case

Beyond the business case described above, there are many clear societal benefits that flow from our ability to integrate aspects of sustainability into our business. These benefits include contributing to:

- Improved standards of living.
- Self-sustaining communities.
- Enhanced resource conservation.
- Improved work/life balance.
- Enhancement of biodiversity.
- Enhanced economic contributions.
- Improved stakeholder trust.
Our Sustainability Challenges

Our sustainability challenges are those issues that we believe may have a material impact on our ability to be a successful business. These impacts can directly affect our shareholders, our employees, the communities in which we operate and, more generally, the broader society and the natural environment. Addressing these challenges is a priority, as reflected in our corporate objective and HSEC targets.

Our key sustainability challenges are:

- Eliminating Fatal Risks
- Occupational and Community Health
- Greenhouse Gas Emissions
- Access to and Management of Resources - land, water, biodiversity and people
- Sustainable Community Development and Closure

Each challenge is complex, often converging with other challenges. In defining and reviewing these challenges, we have taken into account internal and external factors, including:

- **External** – concerns raised by stakeholders; sector challenges reported by peers; competitors and key industry forums; relevant laws, regulations and international agreements; and anticipated sustainability impacts, risks, or opportunities identified by our people, often in partnership with independent recognised experts.

- **Internal** – our Board Governance Document, Company Charter, Strategic Framework, Sustainable Development Policy, HSEC Management Standards and HSEC performance targets; the interests and expectations of our people; our key risk factors; and the core competencies and structure of our organisation.

To better inform our stakeholders of this complexity and our commitment to respond effectively, we have presented the issues underpinning each challenge. Read more: Our Material Issues
Eliminating Fatal Risks

Our Challenges and Opportunities

Employees and contractors have a right to a safe work environment. Families and dependants also face having their lives devastated through the death or severe injury of a loved one.

Our challenge is to fully implement and optimise the safety management standards we have developed. To achieve this we need to ensure that all our employees and contractors understand, rigorously apply, and fully comply with these standards.

Our opportunity is to secure and maintain our licence to operate through recognition by our host communities that we are a company that:

- Protects and cares for its people
- Is committed and able to continue operating within increasingly stringent regulatory frameworks.

Read more about our relevant Risk Factors in the BHP Billiton 2007 Annual Report.

Our Approach

Across the organisation, safety risks are managed through the risk-based HSEC Management Standards and other dedicated safety systems.

Our safety strategy is based on three principles:

- Leadership effectiveness
- Behaviours and awareness
- Rigorous standards and systems for managing risks and ensuring full compliance.

These focus on our people and systems, with two key objectives:

- Ensuring that our practices, procedures, conditions, equipment and behaviour contribute towards creating a workplace where it is possible to work without adverse impact on people, the environment or the community
- Developing our people, including contractors, to make the right decisions as they go about their day-to-day work.

Read more: Safe Workplaces.

Our Performance

We are saddened to report that eight fatal accidents occurred during the year at our controlled operations. Each of these incidents has been thoroughly investigated, with lessons learnt shared and acted upon across the Company.

While our experience continues to confirm that low injury frequency rates do not mean low fatality rates, we are pleased to report that in 2006/07, both the Total Recordable Injury Frequency Rate (TRIFR) and the Classified Injury Frequency Rate (CIFR) showed an overall improvement.

The TRIFR, which represents the total number of injuries resulting in lost time, restricted work duties or medical treatment per million work hours, decreased from 8.7 to 7.4 in the current year. The CIFR also decreased from 4.8 to 4.3.

Performance against other supporting metrics was solid. The Significant Near Miss Reporting Ratio per 100 people, which is our most valuable indicator for improvement, was 2.5, reflecting our maturity in safety reporting. After significant improvement in 2005/06, our Duration Rate has been maintained at 37.5 days.

Read more:
- HSEC Targets Scorecard for a review of performance against Company-wide safety targets.
Our Priorities

We remain determined to eliminate fatalities from our organisation, and, as a result, the allocation for HSEC performance incentive in employee scorecards for 2008 is primarily directed at this imperative.

Our plan is to maintain focus on the implementation of our Fatal Risk Control Protocols (FRCPs), a set of mandatory protocols that prescribe how we address key risk areas. We are also focused on implementing our Contractor Engagement Program and a project to address catastrophic safety risk – both of which are designed to address the effective management of those risks that can threaten our license to operate.

We have a new target of a 50 per cent reduction in Total Recordable Injury Frequency Rate (TRIFR) at sites by 30 June 2012. Achieving this level of improvement will deliver a TRIFR below 5 – considered to be a world-class level of performance. This, together with improved performance against our other target of zero fatalities, will take us closer to our stated objectives of Zero Harm and safety excellence.
Occupational and Community Health

Our Challenges and Opportunities

Our challenge is to ensure that our health programs are supporting our endeavours towards our goal of Zero Harm by recognising and influencing those factors that impact our employees, their families and our host communities.

Through the effective management of the health of our employees, contractors and communities, our opportunities include:

- Maintaining operational performance and efficiency by having a workforce that is able to work productively.
- Continuing to attract and retain a workforce by establishing a reputation for a healthy workplace where the broader health needs of employees are also considered.
- Continuing to gain access to resources through improved capacity to work in areas where there are health risks, and demonstrating that this capacity contributes more broadly to the improved health of the communities where we operate.

Read more about our relevant Risk Factors in the BHP Billiton 2007 Annual Report.

Our Approach

The Company seeks to address the challenge of occupational and community health by applying a holistic approach to the management of health, targeting health impacts at work, at home and in the broader community.

Our health program is based on:

- Continuing to develop and refine standardised procedures for managing and reducing occupational exposure levels and for measuring and reporting exposures.
- Promoting an environment that contributes to our employees being both fit for work and fit for life, in recognition that many health issues overlap with the community and impact our ability to contribute to sustainable development.
- Focusing our community health endeavours towards the prevention and treatment of three major communicable diseases that may impact many of our operations, namely HIV/AIDS, tuberculosis and malaria.
- Supporting activities that extend health benefits beyond the communities in which we operate, including funding various medical research programs.

Read more: Healthy People.

Our Performance

Over the last four years we have experienced a reduction in potential employee occupational exposures above regulatory limits for most exposures. Noise-induced hearing loss, however, remains a significant issue for the Company. We are keenly aware of the need to move from a dependence on personal protective equipment to implementing engineering processes so as to reduce these exposures.

Measurement of noise-induced hearing loss in BHP Billiton is based on the U.S. Occupational Safety and Health Administration Standards, which are among the most stringent in the world and focused on detecting noise-induced hearing loss at the earliest stage. We have had a strong focus on applying these standards at all operations, resulting in a large increase in diagnosed cases in 2006/07.

While Company-wide noise exposure rates have remained stable over the last five years, we are confident that we are detecting cases of noise-induced hearing loss at an early stage. This should assist in preventing further deterioration of hearing in these cases. At the same time, we are actively promoting activities designed to reduce noise, with particular focus directed to noise management for maintenance workshops and the use of underground ventilation fans.

Going forward, we are targeting a further 15 per cent reduction in potential employee exposures above occupational exposure limits. Key to this approach has been the identification of and targeted activity to address the top three exposure risks faced by each of our Customer Sector Groups.
Largely as a result of the number of new cases of noise-induced hearing loss, our incidence of occupational illness has increased, resulting in an overall increase of 17 per cent against the baseline year 2002/03. At the same, we improved our coverage of our medical surveillance program by 5 per cent, with 89 per cent of employees requiring medical examinations completing them during the year.

During the year we received the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria Commendation for Business Excellence on Malaria. The Commendation recognises our continued support for malaria control in southern Africa.

Our long-term efforts in HIV/AIDS education and treatment in Africa are returning encouraging results: 60 per cent of employees participate in testing, and the prevalence rate for BHP Billiton employees in Southern Africa is half the average prevalence rate of South Africans aged between 15 and 49 years. We believe this lower rate is due to our efforts in communication and counselling.

Read more:

- Healthy People 2007 Performance for a full description of health performance in 2007
- HSEC Targets Scorecard for a review of performance against Company-wide health targets.

**Our Priorities**

- Healthy employees and contractors – We have a target of a 30 per cent reduction in the incidence of occupational disease by 30 June 2012. Exposure reduction initiatives are also ongoing in the Company. The Fit for Work/Fit for Life program has been introduced throughout the Company to assist in improving overall fitness for work to assist in preventing occupational illness. A self-assessment program is being introduced across the Company.
- Healthy communities – Globally we are working with leading world health organisations to help manage the fight against HIV/AIDS and malaria at a regional level, and at a local level we are working to implement programs to both educate our communities and to manage disease infection rates.
- Responding to the World Health Organisation’s assessment that we are still at significant risk of a global avian flu pandemic, we are continuing our proactive approach with the development of Company Guidelines for business continuity planning and crisis management and practice drills at higher risk locations, such as Indonesia and Singapore.
Greenhouse Gas Emissions

Our Challenges and Opportunities

Our challenge as a member of global society is to help meet the world’s minerals and energy needs while working with others to mitigate the potential impact of greenhouse gas emissions on the climate.

BHP Billiton is both a user and producer of fossil fuel energy products that create greenhouse gas emissions. Scientific evidence suggests that greenhouse gas emissions associated with fossil fuel consumption and other human activity are contributing to global warming. Global warming may be associated with an increasing frequency of extreme weather conditions that could have a significant impact on the environment and the quality of human life.

Looking forward over the next two decades, global demand for minerals and energy is anticipated to continue to grow, with the strongest growth in developing countries. Access to affordable energy, minerals and metals is a critical component of poverty alleviation and social and economic development and, therefore, will remain central to society.

In addressing the challenge of climate change our opportunities include:

- Value creation by continuing to explore ways to assist customers to reduce their emissions footprint. We aim to respond to customer needs, particularly those in Europe, who have their greenhouse gas emissions regulated.
- Significant reduction in our greenhouse gas emissions, as well as in our US$2.3 billion annual fuel bill.
- Earn the respect of the communities in which we operate and attract and retain employees. The communities in which we operate and where we sell our products are concerned about the impacts of climate change within their national borders and globally. We must take a stewardship approach and be recognised as a responsible company.
- Protect long-term growth in shareholder value. As a result of climate change, we expect that customers will seek to diversify their fuel supplies. BHP Billiton is well placed to meet such shifts in demand through the diversity of its energy portfolio.
- Protect the value of our assets. We must assess risk and prepare appropriately for climate change – related events that could affect our operations. The potential physical impacts of climate change on our operations are highly uncertain, and will be particular to the geographic circumstances. These may include changes in rainfall patterns, water shortages, changing sea levels, changing storm patterns and intensities, and changing temperature levels. These effects may adversely impact the cost, production and financial performance of our operations.

Read more about our relevant Risk Factors in the BHP Billiton 2007 Annual Report.

Our Approach

Our approach to this sustainability challenge is focused on:

- Using energy as efficiently as possible.
- Controlling the emissions that we produce at our sites.
- Working with our customers to help identify ways to reduce the emissions produced when they consume our products, both now and in the future.

Read more: Climate Change.

Our Performance

During the year, we revised our Climate Change Position Statement to reflect the concerns and aspirations of a range of stakeholders. In addition to significantly increasing our research and development funding we have committed to targets to reduce the intensity of our emissions in production, improve energy efficiency, improve our understanding of life cycle emissions, and work collaboratively with others. We have engaged all our businesses in seeking to achieve improvements in energy efficiency, while recognising the value of targeting our efforts at businesses that use the most energy in production, such as our Aluminium CSG, or create the most emissions in the use of the product, such as our Energy Coal CSG.

Over the last five years we have achieved a 6 per cent reduction in greenhouse gas intensity. While production volumes for our major products have increased significantly over the past three years, the Company’s total energy consumption has decreased, and greenhouse gas emissions have remained relatively stable.
Our Energy Excellence program, which aims to improve energy efficiency at our assets, commenced in March 2007 with an initial focus on:

- Responding to new Energy Efficiency Opportunity legislation in Australia.
- Appointing a corporate Global Practice Leader Climate Change and Energy Excellence Champions at key Australian assets.
- Developing a process to identify and assess potential Energy Excellence projects that would drive improvement in energy usage and, therefore, reductions in greenhouse gas emissions.
- Developing a self-assessment tool that will help sites to identify current gaps in energy management and implement improvement processes designed to make energy efficiency a fundamental way of how we do business.

To date, all Australian sites have commenced undertaking energy assessments to identify opportunities for reductions in usage. While we are still in the early phase of the process, the opportunities explored to date appear promising.

Read more:

- HSEC Targets Scorecard for a review of performance against Company-wide energy and greenhouse gas emissions targets.

**Our Priorities**

In addition to increasing our research and development funding, we have committed to targets to reduce the intensity of our emissions in production, improve energy efficiency, improve our understanding of life cycle emissions, and work collaboratively with others. We have engaged all our businesses in achieving improvements in energy efficiency, while recognising the value of targeting our efforts at businesses that use the most energy in production, such as our Aluminium CSG, or create the most emissions in the use of the product, such as our Energy Coal CSG. Effectively reducing our total greenhouse emissions, however, presents an ongoing challenge as mines age and we use more energy to dig deeper to extract the resource.

We have established a new target of a 6 per cent reduction in greenhouse gas emissions per unit of production, and a 13 per cent reduction in energy use per unit of production, both by 30 June 2012.

We have made a US$300 million financial commitment over the next five years to accelerate the research and development of low emissions energy technologies, support internal Energy Excellence projects that would not otherwise be supported and encourage and assist our employees and host communities in efforts to reduce their emissions.

Energy Efficiency – We are continuing to improve energy efficiency at our sites and too manage knowledge in this area. We have established a new target of 13 per cent reduction in carbon-based energy use per unit of production by 30 June 2012.

Business Continuity – We are improving the preparedness of our operations for climate change – related events.

Product stewardship – We are developing our understanding of the impacts on climate change of sourcing, producing, supplying and using our products.
Access To And Management Of Resources

Our Challenges and Opportunities

Access to resources is fundamental to the sustainability of our business. Our challenge is to achieve access to the resources relevant to our scope of operations while addressing heightened political and societal expectations related to obtaining and maintaining our licence to operate.

By appropriately identifying and effectively managing issues about accessing and managing resources, our opportunities include:

- Obtaining and maintaining our licence to operate
- Improving access to new business opportunities
- Keeping ahead of regulations and reducing business uncertainty
- Enhancing and protecting our reputation
- Differentiating ourselves from our competitors
- Ensuring that our human resource talent pool is adequate to support the Company’s growth.

These opportunities are fundamental to our sustainability as a business and our ability to deliver long-term shareholder value.

Read more about our relevant Risk Factors in the BHP Billiton 2007 Annual Report.

Our Approach

Our approach to addressing the challenge of access to and the management of resources is based on:

- Having systems and processes – Sustainable Development Policy and HSEC Management Standards – to manage risks and issues, including those relating to our relationships with our internal and external stakeholders, human rights and the environment, including biodiversity.
- Requiring sites to assess their exposure to potential human rights issues and develop management plans to address key exposures through our human rights self-assessment process.
- All operations developing and implementing a community relations plan to ensure important stakeholder issues are identified and managed.
- Introducing an aggregate Group target of a 10 per cent improvement in the ratio of water recycled/reused to fresh water consumed by 30 June 2012.
- Requiring environmental and social impact assessments for all development projects.
- Sites having and maintaining land management plans to identify, protect and enhance agreed beneficial land uses, including the consideration of biodiversity values. Furthermore, sites that operate in sensitive areas continue to implement biodiversity management programs.
- Utilising internal tollgating and assessment tools, including formal risk and impact assessments, to identify environmental and social risks and issues associated with accessing resources and to ensure they are appropriately managed.
- Proactively engaging our stakeholders and working with them to identify and manage their issues and concerns.
- Publicly committing to a number of policy positions in conjunction with our key stakeholders; for example, we will not:
  - Explore or mine in World Heritage properties, and we commit to take all possible steps to ensure that the effects of operations adjacent to these areas are not incompatible with the outstanding universal values of World Heritage properties.
  - Commit to a new mining project that disposes of waste rock or tailings into a river.
  - Pursue deep sea tailings placement (DSTP) as a potential tailings disposal option for any of our current prospects.

Also:
- Our Black Economic Empowerment and Employment Equity policies underpin our commitment to accelerating development and fostering entrepreneurship of historically disadvantaged groups in South Africa.
Our Performance

Over the last five years, our improvements in environmental performance against targets support our ability to access and manage resources.

For example, we have achieved a 6 per cent reduction in greenhouse gas intensity, a 4 per cent reduction in water intensity, a 3 percent reduction in general waste intensity and a 50 per cent reduction in hazardous waste intensity. While production volumes for our major products have increased significantly over the past three years, the Company’s total energy consumption has decreased, and greenhouse gas emissions have remained relatively stable. All of our operating sites have environmental management systems certified to ISO 14001, except two sites which are expected to receive certification in August 2007. As a result of our mining activities, we currently manage 149,050 hectares of disturbed land, and in 2007 we rehabilitated 41,720 hectares, or 28 per cent of this land. We continue to support biodiversity research, with a US$3.5 million expenditure in research and development. We had no significant environmental incidents and received four environmental fines totalling US$37,387 in 2006/07.

Going forward, our current performance results have formed the basis for identifying areas that require enhanced focus or performance improvement, and these are reflected in our new environmental targets for greenhouse gases, energy, water and land management.

We are enhancing our commitment to recycling with a new target of a 10 per cent improvement in the ratio of water recycled or reused to fresh water consumed. We are taking a proactive approach to biodiversity protection by developing a biodiversity assessment tool that will assist sites to identify biodiversity impact risks. We are also seeking opportunities to address regional biodiversity impacts outside the footprint of our assets; and in this regard, we have mapped the location of our operations in relation to World Heritage (Natural) Sites and internationally recognised biodiversity hotspots.

We have reinforced our commitment to land management with the introduction of a new target to reduce the amount of land available for rehabilitation by 10 per cent. This target embraces our approach to life-of-asset planning, recognising that rehabilitation and sustainable closure land use are essential parts of our stewardship approach.

Our new Human Resources Strategy aims to connect our Charter values, culture and business objectives to the way we manage our people. We are working to identify, recruit, train, develop and retain a talented, diverse, mobile and motivated workforce. We are also recruiting from countries in which we expect our future development to occur, collaborating with educational institutions on training programs, and ensuring the industry is attractive to new generations. All operations have tailored learnership (or apprenticeship) programs that provide for technical and personal training for tradespeople and technical university students. Equally important is the ongoing development of our internal talent pipelines to ensure we have people who are ready to meet future challenges and opportunities.

To our knowledge, there were no transgressions of the principles of the UN Universal Declaration of Human Rights. To assist sites to appraise their potential risks to human rights issues, we have introduced a target for all sites to undertake a human rights self-assessment and implement a risk-based human rights management plan by 30 June 2008. Similarly, all sites are to have a formal community engagement plan in place by 30 June 2008.

Our Priorities

- **Access to land.** Our ability to successfully rehabilitate land and return it to a beneficial use enhances our reputation as responsible land stewards and resource developers and reduces our closure liability. The Company-wide Closure Standard specifies that all sites must have rehabilitation plans, and we have introduced a new target to reduce the total area of land available for rehabilitation by 10 per cent by 30 June 2012.
- **Access to water.** We are committed to reducing our consumption of fresh water and have introduced a new target of a 10 per cent improvement in the ratio of water recycled or reused to fresh water consumed by 30 June 2012.
- **Biodiversity.** We survey flora and fauna as part of exploration and project development programs, identify biodiversity risks and implement biodiversity management and closure plans at sites operating in sensitive areas, and we share leading practices through our internal networks.
- **Access to skills.** Our revised Human Resources Strategy and Standards outline our comprehensive approach to employee attraction and retention, including effective targeting of required skill sets, recruitment and development of graduates from around the world, developing key relationships with industry and educational and institutional bodies to develop a pool of candidates for the mining industry. To this end we are providing scholarships and direct university sponsorships for professional mining roles, increasing our support of and intake into apprenticeships programs with a view to increasing the pool of trade-qualified personnel. We are also actively engaged in internal talent development.
- **Human Rights.** To assist sites to appraise their potential risks to human rights issues, we have introduced a target for all sites to undertake a human rights self-assessment and implement a risk-based human rights management plan by 30 June 2008.

Read more:

- [Environmental Commitment>2007 Performance](#) for a full description of environmental performance in 2006/07.
- [Our People>2007 Performance](#) for a full description of human resources performance in 2006/07
- [HSEC Targets Scorecard](#) for a review of performance against Company-wide environmental targets.
Sustainable Community Development and Closure of Operations

Our Challenges and Opportunities

Our challenge is to implement social programs that will deliver long-term value to communities during the development and operational phase of a site so that a positive, lasting legacy remains after closure.

As stated in the BHP Billiton Charter, one of our indicators of success is that ‘the communities in which we operate value our citizenship’. Sustainable community development ensures communities benefit throughout all phases of the life of an operation – during development, operation and closure.

Through the effective implementation of these efforts, the Company also benefits by:

- Creating a supportive environment in which the Company can operate and grow. We recognise that, by participating as a partner in the social and community development process, we are helping to create a stronger, more stable and healthy society, which, in turn, will support the efficient operation of our businesses.
- Gaining a social licence to operate for new projects. With many new projects located in developing countries, it is increasingly important for us to be able to demonstrate to key stakeholders, including governments, our good track record in making a sustainable contribution to the environment and community, as well as providing economic benefits.
- Attracting and retaining the best employees. We recognise that an increasingly important aspect for consideration by prospective employees is a company’s social and environmental credentials. To attract and retain the best employees, we need to provide opportunities for them to be involved in the company’s community initiatives and support them in their own personal community involvement activities.

Read more about our relevant Risk Factors in the BHP Billiton 2007 Annual Report.

Our Approach

Our approach to addressing the challenge of sustainable community development and closure is based on:

- Sharing the Company’s financial success with the communities in which it operates – since 2002, the Company has met its target to spend one per cent of pre-tax profits (on a rolling three-year average) on voluntary community programs.
- Sustainability – initiatives that will be sustainable beyond the life of the project are preferred, and we are careful to avoid creating dependency on our support.
- Community participation and engagement – it is critical that the selection and delivery of community programs is a participative process. The people best placed to respond to local needs and concerns and hence manage community development are those living in the host communities.
- Long-term relationships – any good working relationship takes time, so rather than becoming involved in one-off commitments the Company generally looks to develop longer-term relationships with not-for-profit organisations. This enables a rapport to be established between the organisations and provides an opportunity to explore creative opportunities for the organisations to assist each other, such as through the sharing of skills and knowledge.
- Employee involvement – wherever possible, Company employees are involved in the delivery of community programs, as it enables them to gain a better understanding of the contribution the Company is making to the community, giving them a sense of pride; e.g. the BHP Billiton Matched Giving Program.
- A consistent approach to community development – while the Company operates the majority of its community investment programs at a regional and local level, it facilitates a consistent approach to community development via Company-wide Standards and guidelines.
- Mandated compliance with the Company’s Closure Standard – this Standard applies to all investment opportunities and controlled operations and strives to leave a legacy that outlasts the operation itself and to ensure a positive future for host communities. Closure planning is required throughout the life cycle of the operation, starting with exploration and development and continuing as long as necessary.
Our 2007 Performance

During 2006/07, we voluntarily invested US$103.4 million, comprising cash, in-kind support and administration costs, in community programs. This amount equates to 1.12 per cent of pre-tax profit (three-year rolling average), which meets our target of 1 per cent. This compares to an investment of US$81.3 million, or 1.44 per cent, of pre-tax profit during our last reporting period. Over the five-year period our total investment in community programs exceeded US$330 million. At the same time BHP Billiton employees personally donated or fundraised around US$1.8 million and contributed 69,000 hours of their own time volunteering to some 830 not-for-profit organisations worldwide. BHP Billiton matched their efforts by providing around US$2.4 million to these charities.

Our relationship with Oxfam to deliver community development training programs for our practitioners also continued. During the 2007 reporting period, five courses were run (Pakistan, Trinidad and Tobago, Chile, Peru and Australia). We also developed a set of competencies for our community relations practitioners, with the key aims of enhancing selection and recruitment and assisting in professional development planning for existing practitioners.

Based on the work of the International Council on Mining and Metals, we have developed and are trialling a tool to measure the socio-economic contributions of our assets.

In line with our HSEC targets, all sites required to do so prepared a public HSEC report at a local level. During the year, 43 of our sites received a total of 543 complaints, a decrease from 603 in 2005/06. Similar to the previous reporting period, the main source of community complaint was noise-related.

Illawarra Coal in New South Wales, Australia, received 200 noise-related complaints and 20 traffic-related complaints (captured in the 'Other' category) primarily associated with noise generated by trains hauling coal and traffic movements (primarily from trucks). In 2005/06, Illawarra Coal engaged the services of an internationally recognised rail noise expert, Dr Stephen Marich, to recommend ways to reduce noise emissions. These recommendations informed a A$1.5 million rail infrastructure improvement program and in February 2007, this program was completed. There has been a substantial reduction in the number of complaints as a result. Illawarra Coal continues to work collaboratively with the community to address stakeholder concerns through the Community Consultative Committee and regular meetings with complainants.

In 2004, we established a Closure Standard that applies to all phases of our activities from exploration to final land release. At the end of June 2007, all sites reported that their closure planning activities conform to the Standard. Key aspects of the Standard include having a documented closure plan for all activities and identifying closure-related risks.

Our Priorities

- Community development – continuing to share the Company’s financial success with the communities in which it operates by investing 1 per cent of pre-tax profits (on a rolling three-year average) on voluntary community programs. All sites have now prepared and are maintaining a community relations plan. We are trialling different methods of evaluating community development programs.
- Capacity building – we continue to share leading practices in community development and closure throughout the Company networks.
- Closure – we continue to integrate our site closure plans into all business planning processes throughout the organisation, including financial planning, mine planning and community consultation to better understand expectations for final land use.
- Community complaints – all sites will continue to maintain community complaints registers to record and track the management of community concerns.

Read more:
- Community Programs
- Closure Planning.

Read more:
- Social Responsibility>2007 Performance for a full description of community performance in 2007
Our Public Commitments

Our commitment to sustainable development is underpinned by our public commitment to key initiatives and processes that drive best practice.

Externally, we recognise and support:

- UN Global Compact
- UN Universal Declaration of Human Rights
- World Bank Operational Directive on Involuntary Resettlement
- US-UK Voluntary Principles on Security and Human Rights
- ISO 14001 Management Systems
- No exploration or mining in World Heritage listed properties
- No new mining projects that disposes of waste rock or tailings into a river

Our external and internal commitments are underpinned by our Sustainable Development Governance approach. Also see Hierarchy of Systems and Documents.
What Others Say

For our 2007 Sustainability Report, we invited members of the Forum on Corporate Responsibility, Ethics Panel and other key sustainability peers to provide their perspective on key issues affecting our business and their views on our response.

Sound Governance

Simon Longstaff, Executive Director, St James Ethics Centre

"Corporations are increasingly challenged to demonstrate how they can create societal confidence in their conduct. Regulatory compliance alone is ethically problematic and corporations need to make it clear to society that the sole test for their business conduct approach is not a legalistic one, rather, that they are prepared to take responsibility for their actions without the need for highly regulated direction from government.

"BHP Billiton’s governance structure and approach creates clear ethical constraints on the approach to achieving business outcomes. The Board Governance Document and Company Charter expressly model at the corporation level what you would want to achieve at a societal level – that those in key leadership roles in the Company are given the accountabilities, support and means to meet the clear ethical mandate of the Board. The CEO delegation structure is an excellent demonstration of this approach in action.

"Going forward, BHP Billiton should explicitly communicate the confidence building measures the Board will use to satisfy themselves that the delegations they have established are being fully respected and acted upon."

Healthy People

Professor Ed Byrne, Executive Dean of Faculty of Biomedical Sciences and Head of the Medical School, University College London

"Global mining and resource companies such as BHP Billiton face health challenges in three main domains. BHP Billiton is making an effective response in each of these areas.

"Firstly, BHP Billiton has a global work force with many individuals working in physically demanding environments with numerous health exposures. The company pays a great deal of attention to ensuring that their workplaces are as safe as possible and to encouraging innovation to minimise adverse exposures. An example of this is the high quality of the projects put up and implemented by employees through the BHP Billiton awards programme covering issues such as reducing noise and dust exposure, back safety and preventative medicine.

"Secondly, BHP Billiton operates in many countries and takes great care to ensure that its operations are environmentally safe from the health point of view.

"Thirdly, there are major health problems in many of the countries that BHP Billiton operates in, for example, malaria and HIV infection. The Company supports a range of programmes that are making a real difference in this area. These range from a commitment to support major initiatives such as a worldwide campaign against malaria, to local initiatives, such as reduction in HIV prevalence at a regional level through facilitation of improved education.

"BHP Billiton therefore is closely involved in contributing to maintenance of health in its workforce and to improvement of health in the communities in which it operates. It is to be commended for many initiatives in these areas."

Safe Workplaces

Emeritus Professor Jim Galvin, Australia

"BHP Billiton’s management systems, standards and Fatal Risk Control Protocols are leading practice in the resource sector. Coupled with this, their Board and senior management commitment to safety is unquestionable. However, BHP Billiton still faces challenges in embedding safety practices and changing culture throughout their operations. While some assets demonstrate excellent commitment and performance to safety, the sheer volume of employee and contractor numbers, combined with incredibly diverse locations and cultures, means that the Company needs to continue to demonstrate leadership and strengthen their efforts to achieve safe workplaces universally throughout their organisation."
Environmental Commitment

David Butcher, Chief Executive Officer, Greening Australia

"Mining and the environment are not mutually exclusive concepts. While mining companies have taken huge and positive steps over the past ten years, the path ahead remains an extremely difficult one. The major environmental challenges confronting leading companies include climate change, water management, closure planning, waste management, product stewardship and habitat destruction. To achieve strong outcomes incremental change will not be enough. To be the mining leader of the future, BHP Billiton must introduce transformational change into its practices - questioning current activities – encouraging innovative thinking, new technology and thorough planning. The attributes of individuals needed to achieve transformational change must be identified, encouraged and rewarded."

Social Responsibility

Dr Marcelo De Andrade, Chairman, Pró-Natura

"Extractive industry projects influence community development over very large areas, sometimes whole countries. While this influence is generally positive in that it accelerates development, it needs to be managed carefully. Not managing it correctly can cause delays in project development, extra costs, higher risk profile and damage to corporate reputation. More recently, financing for resource projects has become conditional on the capacity demonstrated by the mining company to deliver sustainable management of the impacted region.

"BHP Billiton has one of the most successful, intelligent and responsible approaches I know within the industry in most of its projects. As BHP Billiton is a global player and operates or participates in projects in almost all geographies, climates, cultures and political contexts, the final “form of delivery” may vary significantly on a case-by-case basis. This adds tremendous complexity.

"I believe improvement could be made on better systematising the methodology of implementation and in building partnerships on global and local levels. Going forward, it is important to share best and worst practices as useful lessons, tailor and replicate what works and avoid what doesn’t work. This approach will attract better partners, help leverage other funds on a community project level, lead to better relations with host governments and provide other direct and indirect benefits of being a good local and global corporate citizen."

Economic Contributions

Mokhethi Moshoeshoe, President, CIVA Innovation Management (Pty) Limited, South Africa

"Private ownership coupled with public benefit is the principle underlying the issuing of a 'licence to operate', especially in the extractive industry sector.

"In Africa, for many years ordinary people have not experienced the 'public benefit'. Instead they have seen private ownership coupled with private benefit to the political elite. Historically, multinational corporations have inadvertently denied themselves the richness of differences in perspective and depth of invaluable knowledge by refusing to embrace diversity.

"Multinational corporations such as BHP Billiton can improve the effectiveness of their governing board’s role as leaders and moral guardians by including recruits from less represented ethical cultures and traditions. Including African women on the governing board of multinational corporations is critical, as they are on the sharp edge of the knife of poverty. Deepening poverty is no longer the issue of the ‘have’ and the ‘have-nots’, as it used to be called. It is a universal indictment of the dignity of humanity.

"As BHP Billiton moves further into Africa it can anticipate a set of new challenges. Democrtisation and strengthening of democratic institutions in Africa are critical for the future of corporations operating in Africa. Corporations have to put their money where their mouths are – strong civil society organisations are an indispensable element of a strong democracy.”
Stewardship

Matthew A. Runci, Chairman of the Board, Council for Responsible Jewellery Practices, and President and CEO, Jewellers of America

"BHP Billiton is contributing significantly to the leading product stewardship initiatives of the gold and diamond jewellery supply chain. As an early adopter to the Council for Responsible Jewellery Practices and their key role in facilitating the Initiative for Responsible Mining Assurance (IRMA), their efforts have, for the first time, brought together key stakeholders from every sector of the supply chain from mine to retail. These companion efforts have very quickly become the defining sustainability initiatives for businesses throughout this supply chain."
Our Approach To Sustainability Reporting

Our Sustainable Development Policy states that we are committed to ‘regularly review our performance and publicly report our progress’. We do this as:

- A demonstration of accountability and transparency.
- A central element of effective stakeholder engagement.
- A management tool, providing a collation of performance data and statement of key issues and related management approaches.

Our Sustainability Report is presented in two forms: this detailed web-based Full Report and a printed Summary Report.

This Full Report is prepared in accordance with the Global Reporting Initiative (GRI) 2006. Ernst & Young has conducted limited assurance over a selection of disclosures (performance statements and case studies).

To demonstrate the convergence between the Company’s risk management approach and our sustainability programs, this year the Sustainability Summary Report is also presented as a chapter within the Company’s Annual Report.

Given the size and nature of our organisation, we recognise that it is not possible for the Company’s Sustainability Report to comprehensively meet the information needs of all our stakeholders, particularly at the local and regional level. Our operations produce their own annual public site HSEC or sustainability reports to provide a review of HSEC issues and performance specific to their site circumstances, regional context and stakeholder needs.

Our past Sustainability Reports are available on this website.

Refer to Report Packs for PDFs of this Report, or you can order a hard copy of our Summary Report from hsec@bhpbilliton.com.

Read more:

- GRI Index and Self Declaration
- Ernst & Young Assurance Statement contained with our 2007 Full Report. (PDF 4.6 MB)

Your comments on the content and usability of our Sustainability Report are appreciated, as they are useful in preparing future Reports. Please use our Feedback mechanism if you have any suggestions for our future Sustainability Reports.

If you have any further queries, please do not hesitate to contact us:

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Independent Limited Assurance Statement to the Management and Directors of BHP Billiton Limited

Scope of Our Engagement

BHP Billiton’s 2007 Sustainability Report (‘the Report’) has been prepared by the management of BHP Billiton, who are responsible for the collection and presentation of information within it. Management is also responsible for maintaining adequate records and internal controls that are designed to support the sustainability reporting process. There are currently no prescribed requirements relating to the preparation, publication and verification of sustainability reports.

Our responsibility, in accordance with BHP Billiton management’s instructions, is to carry out a limited assurance engagement in relation to a selection of disclosures (performance statements and case studies) reported in the Report, for the period 1 July 2006 to 30 June 2007, for the boundaries described in the Report. For the purposes of this assurance statement, we refer to the selection of information as ‘specific sustainability priorities’, which are comprised of: safety; employee occupational health; greenhouse gas emissions; and water use.

Our responsibility in performing our assurance activities is to the Management and Directors of BHP Billiton only and in accordance with the terms of reference for this engagement as agreed with them. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organisation. Any reliance any such third party may place on the Report is entirely at its own risk.

Our review has been planned and performed in accordance with the International Federation of Accountants’ International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (‘ISAE 3000’) and with regard to AccountAbility’s AA1000 Assurance Standard (‘AA1000’), specifically the principles of materiality and completeness.

We have designed our procedures in order for us to evaluate the Report against the following criteria:

- Whether BHP Billiton has applied the principle of ‘Materiality’ as set out in AA1000 specifically as follows:
  I. Has BHP Billiton applied its process stated in the Materiality section of the Report to identify material issues for inclusion in the Report?
  II. From the framework in I above, has BHP Billiton reported the material issues relating to its sustainability performance?
  III. Are there any material aspects relating to the four specific sustainability priorities that are not addressed in the Report?

- Whether BHP Billiton has applied the principle of ‘Completeness’ as set out in AA1000 specifically as follows:
  I. Has BHP Billiton provided a fair and balanced representation of the four specific sustainability priorities through its performance statements, claims and case studies included in the Report?
  II. Has BHP Billiton included sustainability performance information from all entities in its defined boundary for its reporting of the four specific sustainability priorities?
  III. Has BHP Billiton accurately collated group data relating to the four specific sustainability priorities from operations level data?
  IV. Is the operations-level data for the four specific sustainability priorities from the sites tested accurate?

- Whether BHP Billiton have applied the guidance of the Global Reporting Initiative (‘GRI’) ‘G3 Sustainability Reporting Guidelines’ specifically as follows:
  Has BHP Billiton’s management reported core and sector supplement indicators related to the four specific sustainability priorities in line with requirements specified in GRI G3 Guidelines?

In addition to providing our conclusions, we have listed observations which do not limit our conclusions.

Liability limited by a scheme approved under Professional Standards Legislation.
Our Procedures
In order to form our conclusions we undertook the procedures outlined below:

- Interviewed a selection of BHP Billiton executives from within the Corporate organisation responsible for health, safety, environment and community.
- Considered BHP Billiton’s processes for the identification of material sustainability issues and processes for stakeholder consultation and engagement in order to identify issues of stakeholder interest.
- Compared sustainability issues identified by BHP Billiton to industry sector peers.
- Considered publicly available information in relation to BHP Billiton’s sustainability exposures.
- Used the outcomes of the above procedures to confirm material issues for the business and to understand their relative importance.
- On the basis of this ranking, selected a subset of four specific sustainability priorities for the focus of our review, (safety, employee occupational health, greenhouse gas emissions and water use).
- Identified six BHP Billiton sites that were significant contributors to the four specific sustainability priorities and visited these sites in order to sample test the processes for the collection of the data used by the selected sites to report performance, in relation to what we considered to be major data sets relating to the specific sustainability priorities.
- Sample tested the corporate data collection, aggregation and disclosure processes for the specific sustainability priorities.
- Reviewed the Report to check whether material topics and performance issues identified during our initial procedures had been adequately disclosed.
- Sample tested reported data, performance statements, claims and case studies relating to the specific sustainability priorities against supporting source information, and against BHP Billiton’s reported boundary.
- Assessed the appropriate application of the core and sector specific GRI indicators to the data presented in relation to the specific sustainability priorities.

Limitations of Our Review Scope
The scope of our work was limited to a sample of six operational sites selected from approximately 90 BHP Billiton sites around the world and to the four specific sustainability priorities of safety, employee occupational health, greenhouse gas emissions and water use identified in the Report. The basis for choosing the particular six operational sites was to test sites that were significant contributors to the four specific sustainability priorities. The sites selected included:

- Middelburg Coal, Coal, South Africa
- Minera Escondida, Base Metals, Chile
- Mozaal, Aluminium, Mozambique
- West Cliff, Coal, Australia
- Worsley, Aluminium, Australia
- Yabulu, Stainless Steel Materials, Australia

Unless otherwise stated, our review of data processes and reported information included only indicators and information relating to these sites and to the four specific sustainability priorities. Management’s forward looking comments are outside the scope of our review. We did not consider responsiveness under AA1000, including attendance at any stakeholder engagement activities.

No review has been undertaken of remaining core G3 or Sector Supplement indicators, Profile Disclosures or Management Approach Disclosures, and as such no conclusion is provided as to whether the Report meets the requirements of the A+ application level of the G3 Guidelines.

Where comparisons have been made against historical data, we have not conducted assurance procedures over the historical data. While we provide no comment on previous assurance over BHP Billiton’s Sustainability Reports, we note that BHP Billiton’s Sustainability Reports since 1998 have been independently assured by other parties.

Level of Assurance
Our assurance procedures have been designed to obtain a limited level of assurance over the Report on which to base our conclusions. The procedures conducted do not provide all the evidence that would be required in a reasonable assurance engagement, thus the level of assurance provided is less than that given in an audit and, accordingly we do not express an audit opinion. While we considered the effectiveness of management’s internal controls when determining the nature and extent of our procedures, our review was not designed to provide assurance on internal controls.
Our Conclusions
Subject to our limitations of scope noted above and on the basis of our procedures for this limited assurance engagement, we provide the following conclusions:

Materiality
I. Has BHP Billiton applied its process stated in the Materiality section of the Report to identify material issues for inclusion in the Report?
Nothing has come to our attention to cause us to believe that BHP Billiton has not applied its process stated in the Materiality section of the Report to identify material issues for inclusion in the Report.

II. From the framework in I above, has BHP Billiton reported the material issues relating to its sustainability performance?
We have not become aware of any material issues relating to BHP Billiton’s sustainability performance that are not included in the Report.

III. Are there any material aspects relating to the four specific sustainability priorities that are not addressed in the Report?
We have not become aware of any material aspects relating to the four specific sustainability priorities of safety, employee occupational health, greenhouse gas and water use that haven’t been addressed in the Report.

Completeness
I. Has BHP Billiton provided a fair and balanced representation of the four specific sustainability priorities through its performance statements, claims and case studies included in the Report?
Nothing has come to our attention to cause us to believe that BHP Billiton has not provided a fair and balanced representation of its disclosures relating to the four specific sustainability priorities.

II. Has BHP Billiton included sustainability performance information from all entities in its defined boundary for its reporting of the four specific sustainability priorities?
We have not become aware of any material reporting units excluded from the information included in the Report relating to the four specific sustainability priorities.

III. Has BHP Billiton accurately collated group data relating to the four specific sustainability priorities from operations level data?
Nothing has come to our attention to cause us to believe that the group level and customer sector group level data relating to the four specific sustainability priorities has not been accurately collated from operations level data.

IV. Is the operations-level data for the four specific sustainability priorities from the sites tested accurate?
Except for the contribution of data from Middelburg which had an immature HSEC infrastructure as set out in the Accuracy section of BHP Billiton’s Report, we have not become aware of any data sets related to the specific sustainability priorities that may contain material errors.

GRI
Has BHP Billiton’s management reported core and sector supplement indicators related to greenhouse gas emissions, employee occupational health, safety and water use in line with requirements specified in GRI G3 Guidelines?
Based on our review, nothing has come to our attention that causes us to believe that BHP Billiton management’s reporting of core and sector supplement indicators relating to greenhouse gas emissions, employee occupational health, safety and water use are not aligned with the guidance contained in the GRI G3 Guidelines.

Selected Observations
Our observations, gathered during the performance of our assurance procedures, will be raised in a report to BHP Billiton management. Selected observations are provided below, which do not affect our conclusions as set out above.

- BHP Billiton has invested in significant resources at its sites and in the corporate office to implement its Health, Safety, Environment and Community policies and the capture of data and performance of sites under these policies.
• We identified site/mine closure as a significant sustainability priority of BHP Billiton. However, the framework for performance measurement of this sustainability priority is relatively immature. The new sustainability targets for 2008 – 2012 provide a more robust environment to track and report on performance and will allow a better base for independent assurance in the future.

• The process for the selection of material issues for the Sustainability Report is not formally linked to the Group’s internal risk management system. Similarly, the process does not formally consider the media tracking that is undertaken. These formal systems could combine to provide input for a dynamic Sustainability Issues Register.

• Current and proposed metrics for clean water consumption do not report on the relative scarcity of water sources in the local environment for each site. Reporting of relative water scarcity would provide more context to the reporting of BHP Billiton performance.

• The processes that BHP Billiton implemented to check the quality of site data were very active as evidenced by the significant number of interventions undertaken to query data or performance.

• BHP Billiton defines its reporting boundary to exclude non-operated joint ventures, however, as a number of these entities are jointly controlled their exclusion does not meet the requirements of the GRI Boundary Reporting Protocol (2005).

• The basis for determining which BHP Billiton sites report information for Health, Safety, Environment and Community performance varies for each sustainability priority. Standardised criteria would aid the comparability of performance across each sustainability priority.

• The quality and consistency of safety data was noted across the Group. The other specific sustainability priorities of employee occupational health, greenhouse gas emissions and water use were more variable in quality and consistency. In particular, poor data quality was observed in our visit to Middelburg as referred to in the Accuracy section of BHP Billiton’s Report.

• The reporting of Climate Change performance in the report is very much “current state” and does not include performance indicators arising from the significant investments that BHP Billiton is making in greenhouse gas emission reduction programs, initiatives and technologies. Revising future reporting to be more responsive to these initiatives will provide more effective communication.

Independence
The Australian firm and all professional personnel involved in this engagement have met the independence requirements of Australian professional ethical requirements. Each team member has confirmed their independence to work on this engagement. Non-Ernst & Young specialists used in the conduct of the procedures to undertake this limited assurance engagement confirmed their financial independence.

Our assurance team
Our assurance team includes specialists from the global environment and sustainability network, which undertakes similar engagements with a number of Australian and international businesses. Our team has the required competencies and experience for this engagement.

Ernst & Young
4 September 2007
Report Boundary

When preparing this Full Sustainability Report, we have taken guidance from the 2006 Global Reporting Initiative (GRI) Guidelines in developing our approach to defining our Report boundary. The Report covers all entities that generate significant sustainability impacts (actual and potential) and all entities over which we exercise control or significant influence with regard to financial and operating policies and practices. Read more about our approach to working with business partners.

Entities over which we don’t exercise significant influence and control (e.g. supply chain) are included in our narrative disclosures due to the materiality of their impact on our business. Read more: Product Stewardship.

Indicative data boundaries for HSEC data in our 2007 Sustainability Report

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<td>Environment</td>
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<td>Included</td>
<td>Partially included</td>
<td>Included</td>
<td>Included</td>
<td>Included</td>
</tr>
<tr>
<td>Community</td>
<td>Partially included</td>
<td>Partially included</td>
<td>Partially included</td>
<td>Included</td>
<td>Included</td>
<td>Partially included</td>
</tr>
</tbody>
</table>

1. Projects in selection and definition phase.
2. Some projects and close sites that we do not require to report health and environmental aspects have provided data and this has been included.

Data Collection and Basis

The statistics in this Report cover sites owned and operated wholly by BHP Billiton or operated by BHP Billiton in a joint venture operation (i.e., controlled sites) during the 12-month period to 30 June 2007. Data is reported on a 100 per cent basis for facilities operated by BHP Billiton irrespective of our equity share, unless otherwise stated. Joint venture projects that are not operated by us are excluded unless expressly stated. All monetary amounts in the Report are in US dollars unless otherwise stated.

Performance data from the former WMC Resources Ltd (WMC) have been fully integrated into our 2007 Report, with the exception of performance measures calculated as an intensity index. This approach recognises historic differences in data collection between the two companies. Global warming potential factors have been changed to be consistent with the Second Assessment Report (IPCC (1996)) values in 2006/07. Performance data excludes the divested Koornfontein Mine, Algeria (PTL) and North Sea Asset Team (PTL) (the latter two are now monitored sites only). We also endeavour to report our influence across the life cycle of our products, including working with suppliers, processors, manufacturers and users.

In a complex organisation of over 90 operational sites, there are a variety of site-based HSEC systems and processes in place. The Group has continued to invest in improving our HSEC infrastructure, including systems, processes and people; all sites, however, have not yet necessarily embedded their HSEC infrastructure to a level that the system is fully functional in the face of organisational change.

One such site that has undergone significant recent organisational change is the Middleburg Mine. The Middleburg Mine has seen significant turnover of key personnel, with limited training on the site. HSEC data collection systems are particularly vulnerable as some of these systems are heritage and informal systems. While the key data inaccuracies have been rectified for the purposes of this Report, there remains uncertainty as to the accuracy of some of the HSEC performance data reported from this site.

We are continuously improving our reporting systems and endeavour to present useful and accurate information. While every effort has been made to ensure the accuracy of the information, the data is derived from our many operations around the world, and, in some cases, grouped data is not strictly comparable. In addition, as we seek to improve our data collection processes, data may not be strictly comparable year on year. Anyone seeking to rely on information in this Report or seeking to draw detailed conclusions from the data should contact the Company for verification and assistance.

Read more about our approach to defining Report Materiality and addressing Global Reporting Initiative Standard.
Disclosures in our GRI Index.

**Acquisitions and Divestments**

Our strategy revolves around long-life, low-cost, expandable assets, and we continually review our portfolio, as we look at options to create value, by divesting assets that do not fit this strategy. These activities continued during the year with proceeds of US$444 million being realised. We disposed of a number of assets and interests, including Southern Cross Fertilisers, 1,000,000 tonnes of annual capacity in the Richards Bay Coal Terminal, our Moranbah Coal Bed Methane assets, our interest in Eyesizwe and Alliance Copper.

At 30 June 2007 we had also announced the sale of Koornfontein and potential sale of Optimum (both energy coal mines in South Africa). We also acquired an interest in the Genghis Khan oil field for US$583 million and the Global Alumina project for US$140 million during the year.

For the purposes of this Report, performance data for these interests is included to the point of divestment.

**Explanation of Company Terms**

BHP Billiton Limited, BHP Billiton Plc and their respective subsidiaries operate as one combined group known as BHP Billiton. Throughout the Sustainability Report, the terms BHP Billiton, the Company and the Group refer to the combined group unless otherwise stated.

The headquarters of BHP Billiton Limited and the global headquarters of the combined BHP Billiton Group are located in Melbourne, Australia. BHP Billiton Plc is located in London, UK. Both companies have identical Boards of Directors and are run by a unified management team. Throughout this Report, the Boards are referred to collectively as the Board.

**BHP Billiton Limited. ABN 49 004 028 077**

Registered in Australia.
Registered Office: BHP Billiton Centre, 180 Lonsdale Street, Melbourne, Victoria 3000, Australia.

**BHP Billiton Plc. Registration Number 3196209**

Registered in England and Wales.
Registered Office: Neathouse Place, London SW1V 1BH, United Kingdom.
Materiality

We have taken guidance from the 2006 GRI Guidelines in developing our approach to defining our material issues. We have attempted to cover topics and indicators that reflect BHP Billiton’s significant economic, environmental and social impacts or that would substantively influence the assessments and decisions of stakeholders.

External Factors

In defining our material topics, we have taken into account external factors, including:

- Sustainability concerns raised by stakeholders through our annual dialogue process and ongoing community consultation programs.
- The main topics and future challenges for the sector, as reported by peers and competitors and through our ongoing involvement in key industry forums, such as International Council on Mining and Metals (ICMM) and the Minerals Council of Australia.
- Relevant laws, regulations and international agreements, such as our voluntary commitment to the UN Global Compact and the UN Universal Declaration of Human Rights.
- Reasonably estimable sustainability impacts, risks, or opportunities identified by our network of HSEC professionals, often in partnership with independent recognised experts. (e.g. climate change activities, Virax HIV/AIDS program).

Internal Factors

In defining material topics, take into account internal factors, including:

- Our Company Charter values, Strategic Framework, Sustainable Development Policy, HSEC Management Standards, HSEC Performance Targets and Scorecard.
- The interests/expectations of stakeholders specifically invested in the success of the organisation (e.g., our people, shareholders, and supplier).
- Significant risks to the organisation, such as our key sustainability challenges.
- Critical factors for enabling organisational success, such as our Sustainable Development organisation structure, our Human Resources strategy and our professional networks.
- The core competencies of the organisation (i.e. Board and governance structure, sustainability, accounting, supply, marketing, operations etc) and the manner in which they can or could contribute to sustainable development.

Prioritising

The report prioritises material topics and Indicators. All 'core' and 'sector supplement' indicators have been addressed. 'Additional' indicators have been addressed where they are material to our business.

Stakeholder Inclusiveness

Our Report audience is diverse, ranging from those with minimal knowledge of our operations to those who are familiar with our business and processes. Our stakeholders range from groups such as employees, local communities, shareholders and contractors to non-government organisations, unions, socially responsible investment analysts, governments and academia.

It remains an ongoing challenge for us to ensure our Report meets the reasonable expectations and interests of such a broad range of stakeholder groups. The Report content draws upon feedback from our:

- Annual stakeholder dialogue, which provides critical feedback on our approach to sustainability reporting and key sustainability issues.
- Regular meetings with our Forum on Corporate Responsibility.
- Regular consultation with our host communities and partners.

These engagement processes are consistent with the scope and boundary of our Report as the discussions focus on significant sustainability issues and expectations of our key stakeholders.
Given the size and nature of our organisation, we recognise that it is not possible for the Company’s Sustainability Report to comprehensively meet the information needs of all our stakeholders, particularly at the local and regional level. Our operations produce annual public site HSEC or sustainability reports to provide a review of HSEC issues and performance specific to their site circumstances, regional context and stakeholder needs.

Sustainability Context
We have attempted to present our performance in the wider context of sustainability.

Our approach to sustainable development is underpinned by our clear business case and performance measures.

Recognising our global footprint, we have presented our performance information with reference to international sustainable development conditions and goals, such as the UN Global Compact and the ICMM Sustainable Development Principles.

Key sustainability measures are reported on a global and a regional basis to reflect the magnitude of impact in both geographical contexts. For example, see Community Contributions.

The Report describes how sustainability topics relate to long-term organisational strategy and risks and opportunities, including supply-chain topics.

Completeness
We have endeavoured to ensure that our Report coverage is sufficient so that stakeholders can confidently assess our sustainability performance during the reporting period.

The Report was developed taking into account our supply chain and customer relationships and reasonably covers all material information relevant to these stakeholders.

The statistics in the Report cover the facilities owned and operated by BHP Billiton during the 12-month period to 30 June 2007. Data is reported on a 100 per cent basis for facilities operated by BHP Billiton irrespective of our equity share, unless otherwise stated. Joint venture projects that are not operated by us are excluded unless expressly stated.

Case study information, performance data and incident summaries are included to reflect all significant actions or events in the reporting period.

The Report does not omit relevant information that would influence or inform stakeholder assessments or decisions or that would reflect significant economic, environmental, and social impacts.

Balance
The Report reflects positive and negative aspects of our performance to enable a reasoned assessment of overall performance. Positive aspects include external recognition, community programs and some aspects of performance against our HSEC Targets Scorecard. Negative aspects include incidents, fatalities and some aspects of performance against our HSEC Targets Scorecard.

Trend information is presented for all key sustainability information.

The emphasis on the various topics in the Report is proportionate to their relative materiality, given our broad scope of operations, locations and the number of internal or external stakeholders impacted. Our traditional reporting areas of governance, health, safety, environment and community are underpinned by our HSEC Management Standards and form the basis of our performance and reporting focus. In more recent years, our emerging focus on stewardship, supply chain and economic contributions has broadened the scope of our Report.
Comparability

Since commencing sustainability reporting in 1997, the issues and information we present has been selected, compiled and reported consistently to enable stakeholders to analyse:

- Changes in our performance over time (i.e. year-to-year trend information to support our HSEC targets scorecard), and
- Our performance relative to other organisations.

Our information is grouped to reflect our performance against appropriate benchmarks using the following navigator tools:

- UN Global Compact
- ICMM Sustainable Development Framework
- UN Millennium Development Goals
- Global Reporting Initiative (i.e. the revised G3 2006 Guidelines, and Mining and Metals Sector Supplement).

Any significant variations between reporting periods (for example, Report boundary or scope) are identified and explained in Report Boundary.

Accuracy

Our Report aims to provide accurate and detailed information for our stakeholders to assess our performance.

Data have been measured and collected at all of our operated assets and aggregated to provide Group level performance information. Our data measurement techniques, such as intensity index calculations, are described in Data Collection and Basis, and our calculation and scope assumptions are footnoted throughout the Report (for example, see HSEC Targets Scorecard).

We do not believe our margin of error for quantitative data is sufficient to substantially influence the ability of stakeholders to reach appropriate and informed conclusions on performance. For example, the margin of error for our energy and greenhouse indices is estimated to be less than 5 per cent. However, we recognise that the margin is likely to vary by data type.

The qualitative statements in the Report are valid on the basis of other reported information and other available evidence. See: Ernst and Young Assurance Statement.

Timeliness

Our Report is produced on an annual, financial year basis (i.e. 1 July 2006 to 30 June 2007). The collection of sustainability data from our operated sites is aligned to the reporting schedule so that all information in the Report is relevant to the reporting period.

Clarity

We have endeavoured to ensure that the information in our Report is readily understandable and accessible to our stakeholders. While the scope of information required by our broad range of stakeholders requires that our Full Report be quite extensive, we have attempted to avoid excessive and unnecessary detail by focusing on the information requirements expressed in stakeholder dialogue and appropriate benchmarks (Read more: Comparability).

Reliability

The information and processes used the preparation of our Report have been examined by an external assurance provider to determine the quality and materiality of our information.

We have identified and confirmed the accuracy of our original sources of information and provided evidence to support our assumptions and calculations to the satisfaction of our external assurer. (Read more: Ernst and Young Assurance Statement)
Our Material Issues

In developing our Report, we have sought to ensure that qualitative statements are supported by robust evidence. A selection of data and qualitative statements was reviewed for accuracy by our assurance provider. As part of a good governance process, we consider risk factors that could affect the Group. A major assessment of sustainability risk four years ago led us to identify five key sustainability challenges:

- Eliminating Fatal Risks
- Occupational and Community Health
- Greenhouse Gas Emissions
- Access to and Management of Resources
- Sustainable Community Development and Closure.

Each challenge is complex, often converging with other challenges. To better inform our stakeholders of this complexity and our commitment to respond effectively, we have presented the material issues underpinning each challenge below:

<table>
<thead>
<tr>
<th>Issue</th>
<th>Main Affected Stakeholders</th>
<th>Key Elements of BHP Billiton’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to and management of resources</td>
<td>Communities, government, environmental NGOs</td>
<td>We are committed to reducing our consumption of fresh water and have introduced a target of a 10 per cent improvement in the ratio of water recycled or reused to fresh water consumed by 30 June 2012.</td>
</tr>
<tr>
<td>Accessing land</td>
<td>Communities, government, environmental NGOs</td>
<td>The nature of our business requires us to clear land. We also manage large tracts of land for exploration, future developments and as a buffer from neighbouring land uses. Our Closure Standard requires all sites to have rehabilitation plans, and we have a target to reduce the total of land available for rehabilitation by 10 per cent by 30 June 2012.</td>
</tr>
<tr>
<td>Conserving biodiversity</td>
<td>Communities, government, environmental NGOs</td>
<td>We survey flora and fauna as part of exploration and project development programs, identify biodiversity risks and implement biodiversity management and closure plans at sites operating in sensitive areas.</td>
</tr>
<tr>
<td>Accessing skilled people</td>
<td>Employees, contractors, communities, government</td>
<td>Our revised Human Resources Policy and Standards outline our approach to employee attraction and retention.</td>
</tr>
<tr>
<td>Responsible marketing and stewardship</td>
<td>Customers, communities, regulators</td>
<td>We continue to build stewardship programs across our commodities. We also work with industry associations and the supply chain to build relationships with other stakeholders in the life cycle of our products.</td>
</tr>
<tr>
<td>Bribery, corruption and anti-trust</td>
<td>Government, regulators, customers</td>
<td>Our Guide to Business Conduct sets a zero tolerance on bribery and corruption and requires all employees to comply with all applicable anti-corruption laws and regulations.</td>
</tr>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>Communities, Government, environmental NGOs</td>
<td>We are committed to helping to mitigate climate change by setting a target of 6 per cent reduction in greenhouse gas emissions per unit of production, and a 13 per cent reduction in energy use per unit of production, both by 30 June 2012. We are also investing US$300 million in research and development and internal energy efficiency measures over the next five years.</td>
</tr>
<tr>
<td>Sustainable Community Development and Closure of Operations</td>
<td></td>
<td>We are publicly committed to the UN Universal Declaration of Human Rights, Voluntary Principles on Security and Human Rights and the UN Global Compact. All sites are required to undertake a human rights self-assessment and implement a risk-based human rights management plan by 30 June 2008.</td>
</tr>
<tr>
<td>Protecting the human rights of our people and host communities</td>
<td>Employees, contractors, local communities, government</td>
<td>Our capacity to build strong relationships with our host communities is critical to existing operations and our reputation for involving and supporting communities will also be important in obtaining land access for new projects. We continue to invest 1 per cent of pre-tax profits in community programs.</td>
</tr>
<tr>
<td>Empowering communities for the long term</td>
<td>Governments, local communities</td>
<td>The socio-economic impact of extractive industries is significant, and we are working to enhance our ability to make a positive contribution to the regions and communities in which we operate. We continue to use local suppliers wherever possible.</td>
</tr>
</tbody>
</table>
**Eliminating Fatal Risks**

| Eliminating fatal risks | Employees, contractors, local communities, regulators | The safety of our workforce must never be compromised. We are accelerating the implementation of our Fatal Risk Control Protocols and have also introduced a new target of a 50 per cent reduction in Total Recordable Injury Frequency Rate at sites by 30 June 2012. |

**Occupational and Community Health**

| Protecting our people | Employees, contractors, local communities, regulations | Our approach to employee health recognises the need to establish a number of measures to reduce any potential for exposure to risk. We have a target of a 30 per cent reduction in the incidence of occupational disease by 30 June 2012 and we have combined our Fit for Work program with a series of Fit for Life initiatives that include injury management, employee counselling and health promotion. |
| Protecting our communities | Local communities, government | Infectious diseases in the region in which we operate are a major threat to our business. Globally we are working with leading world health organisations to help manage the fight against HIV/AIDS and malaria. At a local level, we are working to implement programs to both educate our communities and to manage disease infection rates. |
UN Global Compact Navigator

This progress assessment represents our judgment of how the principles of the UN Global Compact have been progressed through our policy and actions during the year. Refer to the items highlighted below for the particular document or a more detailed description of our performance in relation to the related UN Global Compact principle. Please contact the Company if you would like further information in relation to this assessment.

**Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights**

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>HSEC Targets Scorecard. No transgressions within the Group’s activities of the principles embodied within the UN Universal Declaration of Human Rights were identified.</td>
<td>HR 1</td>
</tr>
<tr>
<td>Guide to Business Conduct</td>
<td>Management Systems Review. Our Sustainable Development Policy and HSEC Management Standards continue to support and respect human rights.</td>
<td>HR 2</td>
</tr>
<tr>
<td>HSEC Management Standards (PDF 184KB)</td>
<td>Audit and Self Assessment. Thirty-two HSEC audits were conducted against the revised HSEC Management Standards during the reporting period.</td>
<td>HR 3</td>
</tr>
<tr>
<td>HSEC Management Standard 8</td>
<td>Human Rights. Human Rights Self-Assessment - implementation, thirty-six sites completed the self-assessment this year.</td>
<td>HR 8</td>
</tr>
<tr>
<td>UN Universal Declaration of Human Rights</td>
<td>Business Conduct. The Guide to Business Conduct provides employees and contractors with direction and advice on carrying out business and interacting with governments, communities and business partners.</td>
<td>SO1</td>
</tr>
<tr>
<td>US-UK Voluntary Principles on Security and Human Rights</td>
<td>Case Studies. The selection of case studies illustrates how we have progressed with regards to upholding fundamental human rights across the areas of health, safety, environment, community and socio-economics. Read more about our case studies on human rights training, HIV/AIDs, provision of drinking water pumps and more.</td>
<td></td>
</tr>
<tr>
<td>World Bank Operational Directive on Involuntary Resettlement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Principle 2: Businesses should make sure their own corporations are not complicit in human rights abuses**

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
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<tr>
<td>HSEC Management Standard 8</td>
<td>Human Rights. Human Rights Self-Assessment - implementation, thirty-six sites completed the self-assessment this year.</td>
<td>HR 8</td>
</tr>
<tr>
<td>Human Rights Self-Assessment Toolkit</td>
<td>Business Conduct. The Guide to Business Conduct provides employees and contractors with direction and advice on carrying out business and interacting with governments, communities and business partners.</td>
<td>SO1</td>
</tr>
<tr>
<td>UN Universal Declaration of Human Rights</td>
<td>Case Studies. The selection of case studies illustrates how we have progressed with regards to upholding fundamental human rights across the areas of health, safety, environment, community and socio-economics. Read more about our case studies on human rights training, HIV/AIDs, provision of drinking water pumps and more.</td>
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</tr>
<tr>
<td>US-UK Voluntary Principles on Security and Human Rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Bank Operational Directive on Involuntary Resettlement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining**

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>Employee Relations. Employee relations arrangements at individual workplaces are required to respect local legislative requirements and other local standards and circumstances. All employees are free to join trade unions.</td>
<td>HR 5, LA 4</td>
</tr>
<tr>
<td>Human Resources Strategy and Standards</td>
<td>Freedom of Association. Across our locations we have a mix of collective and individually regulated employment arrangements and Common Law contracts. While collective bargaining is not universally practiced across our operations, this does not affect the rights of employees to choose to belong to trade unions. Prospective employees are made aware of employment arrangements prior to joining the Company. 49 per cent of the workforce was covered by collective bargaining agreements at operated sites and offices.</td>
<td>LA 5, LA 9</td>
</tr>
<tr>
<td>Guide to Business Conduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Letter to UN Secretary General from Chip Goodyear (December 2003)</td>
<td>Remuneration. All Company employees earned greater than the stipulated minimum wage in the countries in which they worked.</td>
<td></td>
</tr>
</tbody>
</table>

**Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labour.**

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>Child and Forced Labour. We exclude the use of child labour and prohibit forced labour at our operations.</td>
<td>HR 7</td>
</tr>
<tr>
<td>Guide to Business Conduct</td>
<td>Remuneration. All Company employees earned greater than the stipulated minimum wage in the countries in which they worked.</td>
<td></td>
</tr>
<tr>
<td>UN Universal Declaration of Human Rights</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Principle 5: Businesses should uphold the effective abolition of child labour.**

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>Child and Forced Labour. We exclude the use of child and forced labour at our operations.</td>
<td>HR 6</td>
</tr>
<tr>
<td>Guide to Business Conduct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Universal Declaration of Human Rights</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.**

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>Employee Profile. In 2007 we employed approximately 39,000 employees and 59,000 contractors around the world. See our chart on Employee Numbers by Region.</td>
<td>HR 4</td>
</tr>
<tr>
<td>Employment Principles</td>
<td>Diversity. Approximately 14% of full-time employees at operated sites and offices were women.</td>
<td>LA 13</td>
</tr>
<tr>
<td>Guide to Business Conduct</td>
<td>Employment Equity in South Africa. To address historical issues in South Africa, which resulted in the majority of South Africans being excluded from participating in the mainstream economy, BHP Billiton South Africa adopted an empowerment strategy of change. In 2007 we exceeded our target of 40 per cent representation by designated groups in middle and senior management roles.</td>
<td>LA 14</td>
</tr>
<tr>
<td>UN Universal Declaration of Human Rights</td>
<td>Indigenous Employment and Training. We recognise indigenous employment and training as an important issue and, as has been reported in previous years, undertake a number of initiatives in this regard. Read more about our case studies on Indigenous employment and Black Economic Empowerment.</td>
<td></td>
</tr>
</tbody>
</table>

BHP Billiton 2007 Full Sustainability Report
### Principle 7: Businesses should support a precautionary approach to environmental challenges.

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>HSEC Targets Scorecard. Risk registers are in place at 100% of required sites, businesses and Corporate offices.</td>
<td>4.8</td>
</tr>
<tr>
<td>HSEC Management Standards (PDF 184KB)</td>
<td>Environment. Our approach to environmental management is incorporated in our Charter, which states that we have an overriding commitment to health, safety, environmental responsibility and sustainable development.</td>
<td>4.11</td>
</tr>
<tr>
<td>HSEC Management Standard 3</td>
<td>Key Management Processes. The Company has a Risk Management Policy and uses a common framework across all operations and functions to identify, assess and monitor risks. This includes business and HSEC risks and includes risks associated with projects and investment opportunities.</td>
<td></td>
</tr>
</tbody>
</table>

### Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>HSEC Targets Scorecard.</td>
<td>1.1</td>
</tr>
<tr>
<td>HSEC Management Standards (PDF 184KB)</td>
<td>• No Level 3 environmental incidents.</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>• 100 per cent of required self-assessments were completed at operating sites.</td>
<td>4.11</td>
</tr>
<tr>
<td>HSEC Management Standard 5</td>
<td>• 96 per cent of sites requiring ISO 14001 are certified or have been recommended for certification by their ISO auditor</td>
<td>EN2</td>
</tr>
<tr>
<td>HSEC Management Standard 12</td>
<td>• Energy conservation plans are in place at 95 per cent of required sites and at eight sites that were below the emissions threshold.</td>
<td>EN5</td>
</tr>
<tr>
<td></td>
<td>• Greenhouse gas management programs are in place at 95 per cent of required sites and at nine sites that were below the emissions threshold.</td>
<td>EN6</td>
</tr>
<tr>
<td></td>
<td>• Water management plans are in place at 95 per cent of required sites and at 25 sites that were below the usage threshold.</td>
<td>EN7</td>
</tr>
<tr>
<td></td>
<td>• Waste minimisation programs are in place at 98 per cent of required sites and at seven sites that were not required to meet this target.</td>
<td>EN10</td>
</tr>
<tr>
<td></td>
<td>• Land management plans are in place at 98 per cent of required sites and at 16 sites that were not required to meet this target.</td>
<td>EN14</td>
</tr>
<tr>
<td></td>
<td>• Life cycle assessments (ISO14043 compliant) have been completed for all our major commodities.</td>
<td>EN18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EN26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EN27</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EN30</td>
</tr>
</tbody>
</table>

**Environmental Management Systems.** During the reporting period we continued to strengthen environmental management systems across our operations.

**Closure.** In 2007 we continued to progress implementation of the Company-wide Closure Standard.

**Climate Change.** We are working on activities related to climate change risks and opportunities in a number of ways.

**Biodiversity.** Over the reporting period we progressed a number of initiatives including biodiversity plans at some sites and biodiversity-related research and development.

Environment Case Studies
Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>HSEC Targets Scorecard.</td>
<td>EN6</td>
</tr>
<tr>
<td>HSEC Management Standards (PDF 184KB)</td>
<td>• Energy conservation plans are in place at 95 per cent of required sites and at eight sites that were below the emissions threshold.</td>
<td>EN14</td>
</tr>
<tr>
<td>HSEC Management Standard 9</td>
<td>• Greenhouse gas management programs are in place at 95 per cent of required sites and at nine sites that were below the emissions threshold.</td>
<td>EN25</td>
</tr>
<tr>
<td>HSEC Management Standard 12</td>
<td>• Water management plans are in place at 95 per cent of required sites and at 25 sites that were below the usage threshold.</td>
<td>EN26</td>
</tr>
<tr>
<td></td>
<td>• Waste minimisation programs are in place at 98 per cent of required sites and at seven sites that were not required to meet this target.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Land management plans are in place at 98 per cent of required sites and at 16 sites that were not required to meet this target.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Life cycle assessments (ISO14043 compliant) have been completed for all our major commodities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Water management plans are in place at 95 per cent of required sites and at 25 sites that were below the usage threshold.</td>
<td></td>
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<tr>
<td></td>
<td>• Waste minimisation programs are in place at 98 per cent of required sites and at seven sites that were not required to meet this target.</td>
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</tr>
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<td></td>
<td>• Land management plans are in place at 98 per cent of required sites and at 16 sites that were not required to meet this target.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Life cycle assessments (ISO14043 compliant) have been completed for all our major commodities.</td>
<td></td>
</tr>
</tbody>
</table>

Stewardship. Over the past year we continued to refine our stewardship approach and work with our commodity customers.

Environmental Spending. Over the reporting period environmental expenditure for the Group totalled US$288 million.

Climate Change. We are working on various activities related to climate change, including the development of environmentally friendly technologies such as alternative fuels.

Environment Case Studies. Read our case study on biofuels.

Principle 10: Businesses should work against all forms of corruption, including extortion and bribery.

<table>
<thead>
<tr>
<th>BHP Billiton Policies, systems and commitments</th>
<th>BHP Billiton actions and performance as referenced in 2007 Sustainability Report</th>
<th>GRI Indicator Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Development Policy (PDF 28KB)</td>
<td>Business Conduct. The Guide to Business Conduct provides employees and contractors with direction and advice on carrying out business and interacting with governments, communities and business partners.</td>
<td>SO2</td>
</tr>
<tr>
<td>Guide to Business Conduct</td>
<td>Stewardship. Over the past year we continued to refine our stewardship approach and work with our commodity customers.</td>
<td>SO3</td>
</tr>
<tr>
<td>HSEC Management Standards (PDF 184KB)</td>
<td>Economic Contributions. Our economic contribution to society includes the value that flows from the broader contributions of our operations, such as payments to our employees and suppliers and disbursements to governments, including taxes and royalties.</td>
<td>SO4</td>
</tr>
<tr>
<td>HSEC Management Standard 8</td>
<td>Our Stakeholders • Governments BHP Billiton respects the authority of host governments. Our operations are required to work within relevant legislative frameworks at the international, national and local levels. We seek to have an open and constructive relationship with governments and regularly share information and opinions on issues that affect the Company.</td>
<td>SO5</td>
</tr>
<tr>
<td></td>
<td>The Company maintains a position of impartiality with respect to party politics. Accordingly, we do not contribute funds to any political party, politician or candidate for public office in any country .</td>
<td>SO6</td>
</tr>
<tr>
<td></td>
<td>Value Add. Refer to our table on Expenditure by Region for disclosure of regional tax payments.</td>
<td>SO7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SO8</td>
</tr>
</tbody>
</table>
UN Millennium Development Goals Navigator

As part of our commitment to the United Nations (UN) Global Compact, we know that some of the developing countries in which we operate face critical sustainability issues.

In 2006 we commenced reporting our financial contributions to community projects that relate to the United Nations Millennium Development Goals (MDGs). This year we further improved our mapping process to demonstrate that at least one third of our community contributions spend directly supports the mission of the MDGs.

We are seeing an increasing interest and investment in MDG-related projects by our assets over the year. For example:

- Investment in small and medium enterprises and business development initiatives has increased significantly from US$1.5 million to US$7.4 million.
- Investment in nutrition projects has increased from US$130,000 to US$8.6 million.
- Investment in maternal health has increased from US$190,000 to US$1.5 million.
- We have increased our support for NGOs addressing poverty issues from US$150,000 to US$1.7 million.

### Goal 1: Eradicate Extreme Poverty and Hunger

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small/medium business development projects</td>
<td>774,200</td>
</tr>
<tr>
<td>Skills development projects - general community</td>
<td>2,444,100</td>
</tr>
<tr>
<td>Support for NGOs addressing key causes of poverty</td>
<td>1,689,800</td>
</tr>
</tbody>
</table>

**Related Links**

- Human Rights
- Taxes Paid by Region
- Human Resources Strategy
- Net Employment Creation
- Reward and Recognition
- Community Investment

### Goal 2: Achieve Universal Primary Education

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary education projects e.g. school infrastructure or programs</td>
<td>3,826,100</td>
</tr>
<tr>
<td>Teacher training and development</td>
<td>224,600</td>
</tr>
<tr>
<td>Primary education scholarships</td>
<td>309,800</td>
</tr>
</tbody>
</table>

**Related Links**

- Human Rights
- Prevention of Child and Forced Labour
- Taxes Paid By Region
- Net Employment Creation
- Community Investment
Goal 3: Promote Gender Equality and Empower Women

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for women’s capacity building projects or for NGOs to address gender issues (non-health related)</td>
<td>148,100</td>
</tr>
<tr>
<td>Support for women in leadership</td>
<td>16,300</td>
</tr>
<tr>
<td>Awards/recognition especially for women</td>
<td>3,900</td>
</tr>
</tbody>
</table>

Related Links

- Business Conduct
- Employment Equity in South Africa
- Diversity
- Net Employment Creation
- Prevention of Child and Forced Labour
- Black Empowerment Policy
- Indigenous Culture and Heritage

Goal 4: Reduce Child Mortality

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitation and hygiene projects</td>
<td>924,800</td>
</tr>
<tr>
<td>Nutrition projects</td>
<td>8,603,200</td>
</tr>
<tr>
<td>Other general community health projects (e.g., immunisation programs)</td>
<td>712,600</td>
</tr>
<tr>
<td>HIV/AIDS orphanages</td>
<td>159,600</td>
</tr>
</tbody>
</table>

Related Links

- Employee Benefits
- Stewardship
- Community Health
- Community Investment
- 2007 Case Study: water pumps in Pakistan
- 2007 Case Study: HIV/AIDS

Goal 5: Improve Maternal Health

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women’s health projects (maternal health)</td>
<td>1,637,900</td>
</tr>
</tbody>
</table>

Related Links

- Employee Benefits
- Stewardship
- Community Health
- Employee Health
- Occupational Safety

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS programs (e.g., awareness and treatment)</td>
<td>1,411,000</td>
</tr>
<tr>
<td>Malaria programs</td>
<td>477,800</td>
</tr>
<tr>
<td>Other medical research projects</td>
<td>250,400</td>
</tr>
</tbody>
</table>
**Goal 7: Ensure Environmental Sustainability**

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for international environmental NGOs</td>
<td>21,700</td>
</tr>
<tr>
<td>Community-based rehabilitation and conservation programs</td>
<td>1,116,300</td>
</tr>
<tr>
<td>Education-based environmental and sustainable development programs</td>
<td>914,800</td>
</tr>
<tr>
<td>Support for environmental and sustainable development awards and recognition</td>
<td>19,600</td>
</tr>
<tr>
<td>Support for environmental research</td>
<td>395,300</td>
</tr>
</tbody>
</table>

**Goal 8: Develop a Global Partnership for Development**

<table>
<thead>
<tr>
<th>Project</th>
<th>Benefits (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support for global initiatives</td>
<td>60,700</td>
</tr>
<tr>
<td>Emergency relief support</td>
<td>259,400</td>
</tr>
</tbody>
</table>

**Related Links**

- Community Health
- 2007 Case Study: HIV/AIDS
- Environmental Commitment
- Business Conduct
- Anti-trust Protocols
- Working with Communities
- Community Foundations
- Community Investment Strategy
- Economic Contributions
Feedback On Our 2006 Report

Every year we hold a dialogue on selected key sustainability issues at our Head Office in Melbourne, Australia, including feedback on our latest Sustainability Report. This year we received the following feedback:

- Dialogue participants highlighted climate change, product stewardship, safety, Indigenous issues and workplace issues as important topics for our 2007 Report, along with a focus on uranium management, occupational health, water and waste.
- Our Sustainability Report content is used to advise the investment community, both socially responsible investors and institutional investors, in company analysis and investment decisions.
- Third-party assurance is viewed as very important to the credibility of our Sustainability Report.
- Our reporting approach provides stakeholders with high-quality information, and the quantity is generally adequate for our stakeholder’s information needs. Some stakeholders requested more detail on greenhouse gas emissions, long-term business and product mix strategy, safety performance and human capital management. Others suggested that more detail be provided on local issues in site-specific Sustainability Reports.

These views have been taken into consideration in the development of our 2007 Sustainability Report.

Read more: Hot Topics in 2007
Our Stakeholders

Stakeholder Identification

Key stakeholders are generally identified as people who are adversely or positively impacted by our operations, those who have an interest in what we do, or those who have an influence on what we do.

All sites are required to identify their key stakeholders and consider their expectations and concerns for all operational activities, across the life cycle of operations. Sites are also required to specifically consider any minority groups (such as Indigenous groups) and any social and cultural factors that may be critical to stakeholder engagement.

A regular review process is also a central requirement of stakeholder identification, to ensure that all appropriate groups and individuals are effectively identified and suitably engaged.

Stakeholder Engagement

We engage regularly with employees and contractors, local and Indigenous communities, shareholders and customers. As members of our workforce, our communities, supporters of our business and users of our products, we recognise that these stakeholders are core to our business.

We also recognise those who are important influencers of our business. These include the investment community, business partners, community organisations, unions, non-government organisations, suppliers, governments, media and industry associations.

Where stakeholder queries relate to a particular operation – for example, potential impact on the local community, employees and contractors, or local suppliers – engagement is facilitated by the relevant operation.

Where stakeholder queries relate to the broader sustainability challenges of BHP Billiton - for example, our ability to demonstrate progress against our public commitments to environmental and social performance - engagement is facilitated by the Corporate function.

See our list of stakeholders and how we engage with them.

Trust and Transparency

Every day we interact with numerous people from varied backgrounds. We are committed to maintaining and promoting dialogue with our stakeholders and remaining responsive to the global community’s concerns and aspirations.

We recognise the importance of trust to relationship building. Being accountable is paramount, as is transparency in our public reporting. Our Charter, Sustainable Development Policy, HSEC Management Standards and Guide to Business Conduct all promote a commitment to acting with honesty, integrity and fairness in all our activities. We constantly aim for a greater level of engagement and interaction with stakeholders, particularly with the communities in which we operate.

Our Approach to Dialogue

Our approach to stakeholder engagement is directed by the requirements of our HSEC Management Standard 7, with the intent being ‘Effective, transparent and open communication and consultation is maintained with stakeholders associated with Company activities. Stakeholders are encouraged to participate in and contribute to sustainable development through HSEC performance improvement initiatives.’

Benefits of Dialogue

The information we receive from stakeholders helps refine the management of our activities and mitigate their potential impacts, in line with the goals set out in our Charter. Lessons from individual relationships are also shared with others, in effect strengthening our relationship with all stakeholders.
Stakeholder Grievances and Concerns

Mechanisms to address grievances and concerns have also been established. Operating sites are required to maintain a register of concerns, complaints and relevant external communications. Concerns and complaints are to be investigated as official incidents, using our standard investigation processes, and outcomes and actions are reported back to relevant stakeholders. The confidential Business Conduct Helpline and email address provide a further means for raising issues of actual or potential concern, such as harassment, conflict of interest, fraud or bribery.
## BHP Billiton’s Stakeholder Relationships

<table>
<thead>
<tr>
<th>STAKEHOLDER</th>
<th>WHO ARE THEY?</th>
<th>INTERESTS AND CONCERNS</th>
<th>ENGAGEMENT METHODS</th>
</tr>
</thead>
</table>
| **Business Partners** | Our business partners include those organisations with which we have joint ventures. | Business partners are generally interested in being assured that suitable governance mechanisms are in place to ensure financial returns are delivered while mitigating non-financial risks sufficiently. | • We communicate with our business partners and regularly share knowledge and programs through joint venture boards and operating committees.  
• We seek to ensure that the conduct of our business partners reflects our own commitment to the UN Universal Declaration of Human Rights and our Guide to Business Conduct.  
• Joint venture partners have participated in our HSEC audit programs.  
• Publishing of annual financial and sustainability reports. |
| **Community Organisations** | Community organisations generally are established to represent the local and Indigenous communities near our operations. | Community organisations are concerned with being assured that any potential environmental and social impacts associated with our operations are mitigated and that opportunities presented by our operations are optimised, for example, ensuring sustainable community development opportunities can be maintained post mine closure. | • In conjunction with the development of community relations plans, sites are required to develop suitable engagement mechanisms with their host communities.  
• Community consultation and engagement groups are the primary form of engagement.  
• The majority of our community support is through local foundations, which currently exist in Chile, Peru, South Africa, Colombia and Mozambique. We also have a Corporate Community Program that focuses on Australian and international partnerships and projects. |
| **Customers**         | Our customers are typically other large organisations.                        | Our customers are largely interested in product quality, cost and delivery. Increasingly, customers throughout the supply chain are recognising the full life cycle impacts of our products and the downstream products made using BHP Billiton materials. A greater focus is emerging on materials and resource efficiency and the management of final waste materials. | • Regular communications with our Marketing group.  
• Technical support to assist with product utilisation, either in terms of process efficiency or product handling.  
• Product information, including material safety data sheets.  
• Visits to our operating sites.  
• Technology exchanges with our operating sites.  
• Participation in a range of stewardship initiatives with our various commodity customers, such as the Council for Responsible Jewellery Practices, the Green Lead\(^{TM}\) Project and the World Nuclear Association Uranium Stewardship Working Group. |
<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| Employees and Contractors | Our workforce is large and diverse with some 39,000 employees and 59,000 contractors in more than 25 countries | Employees and contractors have a broad range of interests and concerns, commencing with the health and safety of themselves and their fellow workers, to more general working conditions. Career opportunities and aspirations, as well as learning and training opportunities, are also central to maintaining satisfied employees and contractors. As much of our workforce lives in towns near our operations, many of their broader concerns are directly aligned with those of neighbouring communities. These include such aspects as local employment, business creation and social infrastructure, schooling and health care. Additionally, in many remote communities, quality of housing is an aspect key to employee attraction and retention. | • In line with HSEC Management Standard 7, sites are required to ensure processes are in place to enable stakeholders, including employees and contractors, to participate in and commit to HSEC performance improvement initiatives.  
• Regular performance reviews and employee surveys.  
• Direct communication with immediate supervision and management.  
• Site-based and corporate newsletters and general communications.  
• BHP Billiton Intranet.  
• Site-based and Corporate Sustainability Reports.  
• Business Conduct Helpline. |
| Government (including Regulators) | We engage with governments across local, regional, national and international levels. | Governments at national, regional and local levels establish the legislative and regulatory policy frameworks for the operations of all companies involved in the resources sector. This extends through the full project life cycle from initial entry to new countries, the allocation of exploration acreage and the issuance of production and other licences, to the approval and monitoring of closure plans. Governments also have critical roles to play in activities related to market access, product stewardship, environmental performance, social policy and fiscal regimes applicable to the resources sector. We work with host governments that participate in the Extractive Industries Transparency Initiative regarding disclosure of payments of taxes and policies. Policy formulation often intersects with aspects of our operations. | • We respect the authority of governments. Our operations are required to work within relevant legislative frameworks at the local, regional, national and international levels.  
• We seek to have an open and constructive relationship with governments and regularly share information and opinions on issues that affect the Company. This communication is essential to informed decision-making by both government officials and BHP Billiton.  
• The Company maintains a position of impartiality with respect to party politics and does not contribute funds to any political party, politician or candidate for public office in any country.  
• Company representatives attend selected events such as political party conventions for the purpose of better understanding the implications of public policy development on business operations.  
• Employees are free to participate in political activities as individuals and, if there is any doubt, they are asked to ensure that it is clear they are representing their personal views and not those of the Company. |
<table>
<thead>
<tr>
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<th>WHO ARE THEY?</th>
<th>INTERESTS AND CONCERNS</th>
<th>ENGAGEMENT METHODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Associations</td>
<td>Industry associations include commodity-specific associations as well as sector-specific associations, at national and international levels.</td>
<td>Industry associations are generally interested in a broad range of issues relating to the sector or a specific commodity. For example, they may advocate on key policy aspects with the sector, which may be as diverse as environmental legislation and establishing common safety standards through to promotion of leading practice.</td>
<td>Representatives from BHP Billiton are members of many specific committees and engaged through specific projects with industry associations both nationally and internationally, such as the Minerals Council of Australia and the International Council on Mining and Metals.</td>
</tr>
<tr>
<td>Investment Community</td>
<td>These stakeholders include both mainstream financial analysts and Socially Responsible Investment (SRI) analysts who advise existing and potential shareholders on our performance. These analysts are located globally.</td>
<td>The interests of the investment community are closely aligned to those of shareholders, both being broadly interested in good financial returns and strong Company performance and governance. Increasingly, non-financial performance is becoming more of a focus, with a greater desire to better understand governance mechanisms and the non-financial risks and mitigation measures of the organisation.</td>
<td>Regular communications from our Investor Relations &amp; Communications Group to mainstream investment organisations. Regular communications from our Sustainable Development group to SRI analysts. Analyst briefings on key issues, including an annual briefing for SRI and mainstream analysts with a particular interest in the environmental and social performance of the Company, and an annual dialogue on key sustainability issues with a range of stakeholders, including the SRI and mainstream investment community.</td>
</tr>
<tr>
<td>Local and Indigenous Communities</td>
<td>Most of our operations are located in rural and remote areas. We, therefore, have a broad spectrum of local and Indigenous community interests and concerns of which we need to be mindful.</td>
<td>The impact our business has on local communities varies considerably depending on the location, size and nature of the operation. Results from stakeholder perception surveys regularly conducted by operations rate local employment and business creation, support for social infrastructure and programs, a desire for improved community engagement mechanisms and improved environmental performance as one of local communities’ most important interests and concerns.</td>
<td>In conjunction with the development of community relations plans, sites are required to develop suitable engagement mechanisms with their host communities. Community consultation and engagement groups. Participation in Company activities. Newsletters and targeted communications. Site-based and Corporate Sustainability Reports. Community perception surveys.</td>
</tr>
<tr>
<td>Media</td>
<td>The media include representatives of print, radio and visual media.</td>
<td>Generally, media are interested in newsworthy items associated with our financial or non-financial performance.</td>
<td>We communicate with media via our Investor Relations &amp; Communications Group using press releases, briefings, presentations, and interviews.</td>
</tr>
</tbody>
</table>
## BHP Billiton’s Stakeholder Relationships

### Stakeholder

<table>
<thead>
<tr>
<th>STAKEHOLDER</th>
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</tr>
</thead>
</table>
| Non-Government Organisations | Non-government organisations with which we typically engage include environmental, social and human rights organisations at local, national and international levels. | Non-government organisations have a broad-ranging interest in our operations and their performance. This may include social and environmental performance of existing operations, proposed operations or closed operations. Additionally there is increasing interest in our broader policy positions on such issues as climate change and human rights. | • Each of our operations is required to identify relevant local non-government organisations and include mechanisms for engagement with them within the site’s community relations plan.  
• At the Corporate level, we regularly engage with relevant national and international organisations. A number of major international non-government organisations are represented on our Forum on Corporate Responsibility. |
| Shareholders                 | Our shareholder base is diverse. Majority holdings are in Australia, Europe and North America, with other significant holdings in South Africa. | Shareholders are broadly interested in ensuring that financial returns occur as a result of Company performance and governance. Increasingly, there is a greater desire to better understand governance mechanisms and the non-financial risks and mitigation measures of the organisation. | • Annual General Meetings.  
• Regular printed and electronic communications.  
• Presentations given to representatives of the investment community accessible by all shareholders through webcasts available on our Company website. |
| Suppliers                    | Our suppliers include businesses local to our operations as well as large international suppliers. | Our suppliers are interested in our supply agreements and payment processes as well as the standards we require of our suppliers. | • All our supply contracts are assigned to a single point of contact to ensure that regular reporting and communications are maintained between the Company and our suppliers.  
• Through our HSEC Management Standards we require our suppliers to identify potential HSEC risks associated with their operations and minimise any adverse consequences of these risks.  
• We seek to utilise local suppliers and support these suppliers in enhancing community development opportunities. |
| Unions                       | Workers unions are present at many of our operating sites and are represented at local, national and international levels. | Unions within our businesses are interested in upholding workers’ rights and interests. Collective bargaining, health and safety, remuneration, work hours and fly-in/fly-out arrangements are some of the issues that have been raised in relation to our operations. | • We respect the right of all employees to freely choose to join labour unions.  
• We communicate with unions as required on topical and general issues, such as changes to Company policies.  
• We have a mix of collective and individual work arrangements at our sites. Prospective employees are made aware of employment arrangements prior to joining the Company. |
Hot Topics in 2007

Stakeholder views are important in forming Company policy on issues that affect them. Each year we hold a dialogue on selected key sustainability issues at our Head Office in Melbourne, Australia.

In 2007 the one-day dialogue workshop was conducted with a range of non-government organisations, academics, and government, investment and employee representatives to inform our position statements and approach to managing three key sustainability issues:

- Community Investment
- Free, prior and informed Consent (FPIC)
- Climate Change

Stakeholders were also asked to provide feedback on BHP Billiton’s 2006 Sustainability Report.

During the discussion, a number of key themes emerged, although it is recognised that consensus was not achieved between all participants. A summary of comments follows:

Community Investment

- We should demonstrate clarity and transparency about our intentions and objectives when implementing programs in countries where we don’t currently operate.
- Building human and social capital within the communities is critical to ensure community investment is sustainable and results in long-term benefits for the community.
- Multi-stakeholder engagement is an important tool when developing and delivering programs to ensure that communities have ‘ownership’ of community programs.
- BHP Billiton should clearly demonstrate the social and economic benefits from programs we support to show how we have contributed to improving people’s livelihoods.

"Be community-driven, by community aspirations. Ensure that the community understands the issues and impacts from the start and provide regular review and contact to keep up to date on community concerns."

Katie Kiss (Australian Human Rights and Equal Opportunity Commission)

These views were taken into consideration in the development of our Community Investment Principles.

Free, Prior and Informed Consent (FPIC)

- BHP Billiton’s approach to community relationships needs to be contextual (i.e. may vary from site to site) and should be negotiated with the community at the outset, including how to resolve disputes and the criteria for determining whether the community supports the project.
- Ensure that communities have adequate and understandable information in a timely manner, engage and advocate for the community and ideally start the engagement process before exploration takes place. Utilise wherever possible credible third parties that are familiar with the communities, such as NGOs operating in the area, to assist with the different aspects of community consultations and participation.
- The processes of FPIC should be viewed as integral to building relationships, and the costs involved should be considered as an investment.
- Overall, there is a lack of information and a wide diversity of views about FPIC, particularly in relation to whether it constituted a power of veto. Greater discussion between all stakeholders is needed to reach a common understanding about the principles and how these could be implemented. Host governments particularly must be engaged as only they can grant FPIC.

"Are some groups too scared to speak out? How do you know you’ve captured everyone’s views? Each case is so individual that broad-brush policy/tests for FPIC are impossible."

Andrew Hamilton (Portfolio Partners)

These views were taken into consideration in the development of our internal position on FPIC.
Climate Change

- BHP Billiton’s Climate Change Position Statement should present a leadership view that is commensurate with our leadership position in the resources sector, particularly in reference to our influence on political policy development and process.
- BHP Billiton should be more willing to sacrifice short-term (profitability) goals for longer-term (national or shareholder interest) goals.
- BHP Billiton’s climate change research funding should have a mandate to pursue innovation and not ‘business as usual’ efficiency measures which the company should be doing anyway.
- BHP Billiton should provide more detail on its position regarding preferred allocation mechanisms for emissions trading permits. The relative merit of using either a permitting or licensing arrangement for emissions trading was discussed.

"Climate change is a mainstream investment issue. The community will impose externalities so BHP Billiton needs an intelligent response."

Erik Mather (BT Financial Group)

These views were taken into consideration in the development of our Climate Change Position Statement.
Sustainable Development Governance

At BHP Billiton, we believe there is a link between high-quality governance and business performance and that to maintain our position as one of the world’s leading companies we must commit to the highest ethical and governance standards in all our dealings. To do so is consistent with our Charter values and is fundamental to our licence to operate. Our goal is to foster a culture that values and rewards exemplary ethical standards, personal and corporate integrity, and respect for others.

We recognise that, in recent times, there has been an accelerating shift in societal values and expectations, and a corresponding demand for greater corporate accountability. Stakeholders expect transparency in all activities and look to corporations to demonstrate how governance commitments translate into action. This challenge is aptly described by Simon Longstaff, Executive Director, St James Ethics Centre, Australia, and a member of the BHP Billiton Ethics Panel. ‘Corporations are increasingly challenged to demonstrate how they can create societal confidence in their conduct. Regulatory compliance alone is ethically and financially problematic and corporations need to make it clear to society that the sole test for their business conduct approach is not a legalistic one, rather, that they are prepared to take responsibility for their actions without the need for highly regulated direction from government.’

Our approach to sustainable development governance comprises:

- A dedicated organisational structure and responsibilities
- A clear hierarchy of systems and documents
- A number of key management processes, central to integrating sustainability into our decision-making.

These are part of the suite of corporate governance processes that manage the broader affairs of the Company. The Board Governance Statement outlines the key governance principles and practices of the BHP Billiton Group. Sections of our Annual Report also contain details in this regard.

Read more.
Structure And Responsibilities

Our approach to sustainable development is characterised by the following key features:

- The Sustainability Committee of the Board oversees health, safety, environment and community (HSEC) matters across the Group.
- Business line management having primary responsibility and accountability for HSEC performance.
- The HSEC function provides advice and guidance directly, as well as through a series of networks across the business.
- Seeking input and insight from external experts through our Forum on Corporate Responsibility.
- Clear links exist between remuneration and HSEC performance.

Sustainable Development Organisational Structure

The diagram below illustrates our organisational structure for sustainable development. This structure provides the mechanism for employees and contractors to provide feedback and proposals to our highest governance body.

*BHP Billiton Board*

The role of the BHP Billiton Board is to represent the shareholders and to promote and protect the interests of the Company. It does so by governing the Group. The Board is appointed by the shareholders.

The Board will always have a majority of Directors who are non-executive and are judged by the Board to be independent on the basis that they demonstrate objective, unfettered and independent judgement and are free of material relationships with the Group and other entities and people that might influence such judgement. As of 30 June 2007, the Board consisted of 12 Directors: two executive and ten non-executive Directors.

The qualities for Directors of the Group are: unquestioned honesty and integrity; a proven track record of creating value for shareholders; time available to undertake the responsibilities; an ability to apply strategic thought to matters in issue; a preparedness to question, challenge and critique; and a willingness to understand and commit to the highest standards of governance for the Group.

The Board (with the assistance of the Nominations Committee) reviews the skills represented by Directors to ensure that the Board continues to have an appropriate composition and skills mix to achieve the Corporate Objective. Read more: Board Governance Document.
Sustainability Committee of the Board

The Company’s peak sustainable development governance body is the Sustainability Committee, a subcommittee of the Board.

The Committee’s members are non-executive directors - Dr J M Schubert (Chairman), Mr P M Anderson and Dr E G de Planque - all of whom the Board has determined are appropriately skilled in health, safety, environment and community matters. Executive directors and other external advisors participate in Committee work at the discretion of the non-executive director members.

The role of the Sustainability Committee is to assist the Board in its oversight of:

- HSEC risks.
- The Group’s compliance with applicable legal and regulatory requirements associated with HSEC matters.
- The Group’s performance in relation to HSEC matters.
- The performance and leadership of the health, safety and environment function and the sustainable development function.
- The Group’s Annual Sustainability Summary Report.
- The preparation of a report by the Committee for the Annual Report.

The Sustainability Committee of the Board meets as frequently as required, but not less than three times a year.

In addition to being skilled in health, safety, environment and community matters, members of the Sustainability Committee of the Board are required to participate in training and development activities to ensure they keep abreast of current thinking and leading practices in the core areas where the Committee focuses its work.

Read more:

- BHP Billiton Board Member Profiles
- Membership of Board Committees
- Sustainability Committee of the Board Terms of Reference

Forum on Corporate Responsibility

While not a governance body, the Forum on Corporate Responsibility brings together representatives of our senior management team, the leaders of several key non-government organisations and community opinion leaders to discuss and debate social and environmental matters relevant to the Company.

Forum members have an opportunity to provide advice and to challenge the views of our senior management on broad sustainable development issues of mutual interest. The Company is not bound by the advice of the Forum, and the Forum does not necessarily endorse the Company’s decisions. The Forum provides a means for direct and open dialogue about issues of interest to the wider community.

The Forum meets twice a year and is chaired by Chip Goodyear, BHP Billiton Chief Executive Officer.

Risk and Audit Committee of the Board

The purpose of the Risk and Audit Committee (RAC) is to assist the Board to fulfill its corporate governance and oversight responsibilities in relation to financial reporting, internal control structure, risk management systems and the internal and external audit functions. As required, the Sustainability Committee of the Board reports on Company HSEC risks to the RAC to assist it in its role of overseeing the management of Group risk. When considering risks, the RAC may request the Sustainability Committee to report back to it on a particular HSEC risk.

Global Ethics Panel

The Global Ethics Panel assists the Chief Executive Officer (CEO) to meet the requirement in the Board Governance Document relating to the ethics and culture of the Group. The CEO is required to ensure that the culture of the Group does not develop in a way that condones dishonest conduct or lack of integrity, respect or dignity in relationships among those involved in or affected by the Group’s activities. The Global Ethics Panel promotes the effective implementation of our business conduct systems through the Guide to Business Conduct.
The Panel, chaired by Chief People Officer Karen Wood, includes internal and external representatives with knowledge and experience in contemporary aspects of ethics and culture relevant to the Group. The role of the Panel is formalised in the Global Ethics Panel Charter outlining the scope of responsibility.

The Panel provides:

- A high-level point of contact for employees facing ethical issues.
- Regular reviews of all business conduct cases that have been raised through the Business Conduct Helpline.
- Assessment of emerging policy issues and recommendations to the Group Management Committee regarding appropriate changes to the Guide to Business Conduct.

**Executive Management**

As specified in the Board Governance Document, our CEO holds delegated authority from the Board to achieve the Corporate Objective, save for those matters the Board has retained for its own decision-making. The Board Governance Document requires that we consider all risk factors that could affect the Group. In doing so, it specifies that the CEO will not allow decisions or actions to be taken without assessing their health, safety, and environmental consequences and the impact on the achievement of the Corporate Objective.

The CEO uses an Approvals Framework to delegate authority to committees and individual members of management. Notwithstanding those further delegations, the CEO remains accountable to the Board for the authority delegated to him.

The CEO has established the Group Management Committee to assist him in exercising his authority. He also draws on the work of other committees including the:

- Executive Committee – assists the CEO to increase the value of our business by achieving agreed operational outcomes.
- Financial Risk Management Committee (FRMC) – monitors the Group’s financial risk management policies and exposures and approves financial transactions within the scope of its authority.
- Investment Review Committee (IRC) – oversees the management approval processes for major investments, which are designed to ensure that investments are aligned to the Group’s agreed strategies and values, risks are identified and evaluated, investments are fully optimised to produce the maximum shareholder value within an acceptable risk framework, and appropriate risk management strategies are pursued.

**Corporate HSEC**

While the majority of HSEC staff are embedded in the CSGs, core HSEC governance functions are provided within the Corporate Centre, with organisational responsibility divided between our Vice Presidents of Health, Safety, Environment, and Sustainable Development and Community Relations.

A critical component of the HSEC governance function provided by Corporate is the HSEC audit program. This is specifically designed to ensure all operations within the Group work within the requirements of our Charter, Sustainable Development Policy and HSEC Management Standards.

**HSEC Leadership Team**

The HSEC Leadership Team is the peak functional group and includes Corporate representatives and HSEC functional heads from each CSG. The Team is chaired by the Vice President Health, Safety and Environment and sets the direction for the HSEC function, identifies priority issues, measures HSEC performance and provides input to the HSEC Functional Business Plans.

**HSEC Networks**

Across the Company, various specialist networks have been formed to foster the sharing of knowledge. Each network consists of people from across the Company who share what they know about topics of common interest. Four specialist HSEC networks (Global Community Network, Environment Network, Occupational Hygiene Network and Global Safety Network) exist to manage the development of HSEC practices and the response to issues of Company-wide significance.
Dr Marcelo de Andrade  Doctor of Medicine

Chairman, Pró-Natura International

Experience:
Marcelo founded Pró-Natura International, one of the first international sustainability organisations based in the Southern Hemisphere that manages sustainable development and conservation projects funded by international organisations, governments and the private sector in South and Central America, Africa and Asia. Pró-Natura International was founded in Brazil and is active in 36 countries. Marcelo also founded the Pioneer Society, a communications group dedicated to innovative promotion of the successes of sustainable development, and the Social Capital Group, a consulting company dedicated to managing social and environmental issues and impacts brought about by large oil and gas, mining, forestry and infrastructure projects. He co-founded Terra Capital Fund, the first venture capital fund dedicated to investing exclusively in private-sector biodiversity businesses; Axial Bank/Azial Par, the first financial institution in South America dedicated to promoting investments in the sustainable development sector; and Eco Carbon, the first company to specialise in engineering aspects of forestry and agricultural carbon sinks. Marcelo is also involved with International Sustainable Finance and Sustainable Development Holdings and remains active in rowing, mountaineering and running following his eight-year membership of Brazil’s Olympic rowing team and his leadership of the first Brazilian TV broadcasted expedition to the top of Mount Aconcagua in the Andes in 1985.

Greg Bourne  BSc (Hons)

Chief Executive Officer, WWF-Australia

Experience:
WWF-Australia is part of the WWF International Network and is a not-for-profit organisation committed to find solutions to challenges facing the natural environment in Australia and the Asia Pacific region. Before taking up his current position as CEO of WWF-Australia in October 2004, Greg had a distinguished international business career at BP. His roles at BP included Regional President - Australasia, Regional Director - Latin America, and Director - Scotland, as well as earlier positions at BP with a petroleum exploration focus. In 1988 he was seconded to the UK Prime Minister’s Policy Unit at 10 Downing Street as the Special Advisor on Energy and Transport. Greg has been Chair of the Sustainable Energy Authority of Victoria, is a member of the Victorian Sustainability Advisory Council and until recently was Chair of the Environment and Natural Resource Management Sector Advisory Council for CSIRO. He was awarded the Australian Centenary Medal for services to the environment.
David Butcher  
**BVSc, MRCVS**

**Experience:**
David was appointed to his current position with Greening Australia in 2004. He is a practicing veterinarian and has worked in many fields of veterinary science. He was responsible for the construction and operation of the Western Plains Zoo, while working for the Zoological Parks Board of New South Wales. He became Assistant Director of Taronga Zoo, joined the RSPCA NSW as Director and then became CEO of WWF-Australia, a position he held for ten years to 2004. Through an innovative blend of practical experience, science, community engagement and commitment, Greening Australia addresses issues like salinity, declining water quality, soil degradation, climate change and biodiversity loss.

James Ensor  
**BEC, BAppSc, GradDipJournalism**

**Experience:**
James is Director of Public Policy and Associate Director for International Programs with international development agency Oxfam Australia. In these roles he has responsibility for Oxfam’s policy, advocacy, campaigning and stakeholder liaison functions and oversight of Oxfam’s long-term development and humanitarian response programs in 25 countries with a focus in East Asia, South Asia, Southern Africa, the Pacific and Indigenous Australia.

At a global level, James is one of 12 members of the Oxfam International Global Co-ordination Team with responsibility for Oxfam International’s global strategic and operational planning involving the work of Oxfam staff across 120 countries.

Prior to joining Oxfam, James spent seven years with the Central Land Council, a Commonwealth statutory authority established under the Aboriginal Land Rights Act to represent the interests of traditional landowners in the Northern Territory. James’ areas of focus with the Central Land Council included land purchase, land claims, enterprise development and representing traditional owners in the negotiation of exploration and mining activity on Aboriginal lands.

James is a past President of the Victorian National Parks Association and has degrees in Economics and Applied Science (Environmental Assessment and Land Use Policy) and post graduate qualifications in Journalism.

Graham Evans  
**AO, MA, MIPP (John Hopkins), DipEd**

**Experience:**
Graham is currently Chairman of the Victorian Competition and Efficiency Commission. He retired from his role as Vice President Government and Community Relations of BHP Billiton in 2003. From 1996 to 2002, he was Group General Manager, later Vice President, External Affairs, BHP Billiton.

Prior to joining the Company in 1995, he served in a number of senior positions in the Commonwealth Public Service, including Secretary to the Departments of Transport, Transport and Communications, Primary Industries and Energy, and Resources and Energy. He was also Principal Private Secretary to the Prime Minister from 1983 to 1986. Graham has previously served as a Director of Foster’s Brewing Group, Australia Post, Telecom and AIDC. He was awarded the Order of Australia in 1995.
Andrew Hewett

Executive Director, Oxfam Community Aid Abroad

Experience:
Andrew was appointed to his current position with Oxfam Community Aid Abroad (OCAA) in October 2001, having worked with OCAA since 1991. He initially established the agency’s advocacy program, with increasing focus on lobbying governments, public education and campaigning on social justice and development issues. Over the years, his responsibilities expanded to include OCAA’s domestic program and the coordination of Oxfam International’s response to the crisis in Timor from 1999 to 2001. Andrew is a member of the Executive Committee of the Australian Council for Overseas Aid, the peak council of non-government overseas development agencies. He has visited OCAA programs in East Timor, Mozambique, El Salvador, India, Cambodia, Bangladesh, South Africa and Sri Lanka.

Mokhethi Moshoeshoe  BA (Law)

Director, African Institute of Corporate Citizenship

Experience:
Mokhethi is the founder and director of the African Institute of Corporate Citizenship; Chairman of Sustainability Research and Intelligence that provides research for the Johannesburg Stock Exchange SRI Index; President of CIVA Innovation Management (providing sustainability solutions, corporate governance and corporate citizenship services and products for developing country contexts); and a partner at Feedback Research and Analytics, specialising in research on and development of sustainability performance measurement tools and action research. He is a member of the Intergovernmental Working Group on International Standards of Accounting and Reporting of the UNCTAD (Switzerland); a member of International Advisory Network of Business & Human Rights Resource Centre (UK) and a member of the international advisory council of the Ethos Institute (Brazil).

Sheena Boughen  MA (Anthropology), PhD Candidate

External Facilitator

Experience:
Sheena has been the external facilitator of the Forum on Corporate Responsibility for the last seven years. She is a Director of Diapason Pty Ltd, and her focus is in the area of social sustainability, working with the corporate and community sectors globally. With a background in education and anthropology, Sheena has worked with a range of companies locally and globally, including ANZ Bank, DuPont, Rio Tinto and Interface Floor Coverings. She is an active member of Women leading Sustainability, an initiative of the Society for Organisational Learning.
Malini Mehra

Founder and Director, Centre for Social Markets

**Experience:**
Malini is the founder and director of the India and UK-based Centre for Social Markets, an independent think tank that has pioneered triple bottom-line entrepreneurship focused on diaspora communities and developing countries. She is currently at the UK Department of Environment, Food and Rural Affairs where she is leading the UK’s emerging high-level dialogues on sustainable development with key emerging markets and on international sustainable development partnerships. Malini has worked with the United Nations and other multilateral agencies, as well as charities including Oxfam to Friends of the Earth International (FOEI) and People’s Decade for Human Rights Education (PDHRE).

At FOEI she managed the Sustainable Societies program, coordinated international campaigns and oversaw representation at key forums, including the World Trade Organisation (WTO), the OECD, the United Nations Conference on Trade and Development, the UN Commission on Sustainable Development and the Kyoto Climate Change Conference. As Director of PDHRE, she spearheaded the first internal NGO campaign on trade and human rights at the WTO Seattle conference in 1999. In 2003 she was appointed one of 12 eminent persons on UN Secretary-General Kofi Annan’s High Level Panel on UN-Civil Society Relations, under the chairmanship of President Cardoso of Brazil, to provide guidance on the UN’s relation with civil society.

Andrew Rouse

Program Manager - Resource Conservation, WWF-Australia

**Experience:**
In his role as Program Manager - Resource Conservation, Andrew works with governments, industry sectors and individual companies seeking the adoption of policies, programs and innovative approaches to improve natural resource management, including government and industry policy commitments, the development and implementation of market-based instruments (such as certification schemes), adoption of best management practices, and promoting credible sustainability reporting. Andrew has served on a number of government and industry advisory bodies, most recently the Australian Government’s Environmental Management Systems Working Group, the Advisory Committee for the Murray Darling Basin Commission’s Environmental Stewardship Project, and the Steering Committee for the Cotton industry’s Environmental Management System pilot project. Prior to joining WWF, Andrew worked for a multinational chemical company.

BHP Billiton Members

Edgar Basto

Vice President Health, Safety, Environment and Community

**Experience:**
In his current role, Edgar is responsible for the corporate HSEC and Sustainability functions. Prior to this, he was Vice President Base Metals and General Manager of the Tintaya copper mine in Peru, where he developed extensive experience dealing with community concerns. Previously he held various managerial positions with Cerrejon Coal and Cerro Matoso in Colombia, including responsibility for strategic planning; health, safety, environment and quality; and refining and smelting operations. Edgar has been President of the Tintaya Foundation and a board member of the San Isidro Foundation, both of which are community-related programs to foster development in some of the poorest areas in South America.
Charles Goodyear  BSc, MBA, FCPA, 49

Chief Executive Officer and Executive Director, Chairman of the Group Management Committee.

Experience:
Charles Goodyear joined the Group as Chief Financial Officer in 1999. He was appointed to the Boards of BHP Billiton Limited and BHP Billiton Plc in November 2001 and as Chief Executive Officer in January 2003. He previously held positions of Chief Development Officer and of Chief Financial Officer. He is a former President of Goodyear Capital Corporation and former Executive Vice President and Chief Financial Officer of Freeport-McMoRan Inc, and has extensive financial, corporate restructuring, and merger and acquisition experience. He is Deputy Chair of ICMM and a Member of the National Petroleum Council.

Marius Kloppers  BE (Chem), MBA, PhD (Materials Science), 44

Group President Non-Ferrous Materials and Executive Director, Member of the Group Management Committee, Executive Committee, Financial Risk Management Committee and Investment Risk Committee.

Experience:
Joined the Group in 1993 and appointed Chief Commercial Officer in December 2003. He was previously Chief Marketing Officer, Group Executive of Billiton Plc, and Chief Executive of Samancor Manganese, and held various positions at Billiton Aluminium, among them Chief Operating Officer and General Manager of Hillside Aluminium. His previous career was as a consultant with McKinsey Inc.

Ian Wood  BSc (Env Sc) (Hons)

Vice President Community

Experience:
In his current role, Ian manages BHP Billiton’s department responsible for developing the Company’s strategic response to global community relations issues, including the sustainable development agenda, corporate social responsibility, and public reporting on the Company’s HSEC performance. Ian is the Chair of the Community Contributions Panel and is a member of the HSEC Forum Leadership team. He represents BHP Billiton on the Executive Working Group of the International Council on Mining and Metals. Prior to his work on sustainable development and community relations in the corporate area, he was responsible for the provision of technical support to the Company’s minerals businesses with particular emphasis on the Asia Pacific region. From 1992 to 1995, he held the position of Manager Environment with Ok Tedi Mining Limited in Papua New Guinea. Before joining BHP Billiton, Ian had extensive site-based experience in the minerals industry.
J. Michael Yeager  BSc, MSc

Group Executive and Chief Executive Petroleum, Member of the Group Management Committee

Experience:
Michael joined the Group in April 2006 as Group President Energy. He was previously Vice President, ExxonMobil Development Company with responsibility for major joint venture projects. Other previous roles include Senior Vice President, Imperial Oil Ltd; and Chief Executive Officer, Imperial Oil Resources; Vice President – Africa, ExxonMobil Production Company, Vice President – Europe; ExxonMobil Production Company; and President, Mobil Exploration and Production in the United States.

Qualification Abbreviations

AO  Officer of the Order of Australia
AMP  Advanced Management Program
BA  Bachelor of Arts
BAppSc  Bachelor of Applied Science
BBus  Bachelor of Business
BEc  Bachelor of Economics
BEd  Bachelor of Education
B Eng  Bachelor of Engineering
BSc  Bachelor of Science
BVSc  Bachelor of Veterinary Science
DipEd  Diploma of Education
FCIS  Fellow Chartered Institute of Secretaries
FCPA  Fellow Australian Society of Certified Practising Accountants
GradDip Journalism  Graduate Diploma of Journalism
Hons  Honours
LLB  Bachelor of Laws
MA  Master of Arts
MBA  Master of Business Administration
MIPP  Master in International Public Policy
MRCVS  Member of the Royal College of Veterinary Surgeons
MSc
Master of Science

PhD

Philosophiae Doctor (doctor of philosophy)
Global Ethics Panel Members

See below for qualification abbreviations.

Internal Members

**Mike Anglin  BSc (Mining), MSc**

Chief Operating Officer and Vice President - Base Metals

**Experience:**
Mike joined BHP Billiton in 1986. During his extensive career with the Company, he has held senior operational and executive roles in Australia and South America (Chile and Peru), as well as senior development roles in the USA. In 2000, he was appointed to the position of Vice President Operating Excellence where he was responsible for driving the Operating Excellence initiative throughout the organisation. Mike is also a member of Fundacion Chile, which promotes innovative products and processes in Chile.

**Joined Global Ethics Panel:**
2006

**Ian Ashby  B Eng (Mining)**

President Iron Ore

**Experience:**
Ian joined the Group in 1987 and was appointed President and Chief Operating Officer for Western Australian Iron Ore in December 2004. He was previously Chief Operating Officer for BHP Billiton’s Base Metals CSG based in Houston and prior to this held a number of operating and project development roles within the Base Metals and Carbon Steel Materials CSGs. Ian is a Vice President of the Chamber of Minerals & Energy of Western Australia and a Member of AusIMM.

**Joined Global Ethics Panel:**
2006

**Stefano Giorgini  BBus (Accounting), FCPA**

Vice President Risk Management and Assurance, Member Customer Sector Group Risk and Audit Committees, Financial Risk Management Committee

**Experience:**
Stefano joined the Group in 1982 and was appointed to his current role in June 2003. He was previously Vice President and Chief Development Officer Carbon Steel Materials, President BHP Iron Ore and prior to this held commercial/financial roles within the Iron Ore, Copper and Steel businesses, as well as marketing roles. Stefano is a Fellow of the Australian Society of Certified Practicing Accountants and a member of the Australian Institute of Company Directors and Institute of Internal Auditors.

**Joined Global Ethics Panel:**
2006
Holly Lindsay  MA (Economics)

Experience:
Holly joined the Group in 1996 and was appointed to her current role in 2007. Holly is currently secretary to the Forum on Corporate Responsibility and is responsible for the day-to-day management of the Global Ethics system, as well as secretary to the Global Ethics Panel. Holly previously held roles with the economics department of the Company. Prior to joining BHP Billiton, she held roles at the Reserve Bank of Australia, the Canadian Federal Government Department of Finance and the Canadian Imperial Bank of Commerce.

Joined Global Ethics Panel:
2002

Dr Vincent Maphai  MA (Magna cum laude), PhD, AMP (Harvard)

Experience:
Dr Maphai was appointed to the position of Chairman of the wholly owned subsidiary BHP Billiton South Africa Limited on 1 May 2004. Based in Johannesburg, he is the most senior group executive located in southern Africa. Dr Maphai chairs BHP Billiton South Africa Limited and the Southern African Chief Operating Officer’s Council, which currently coordinates BHP Billiton’s activities in the region, including the aluminium, coal, chrome and manganese businesses. He also chairs the BHP Billiton Development Trust, the local corporate social investment arm; the Employment Equity Steering Group, which is working to ensure that BHP Billiton fulfils the requirements of the Employment Equity Act; and leads the BHP Billiton SA Public Policy Unit. Dr Maphai is also Corporate Affairs Director at SAB Miller based in Johannesburg.

Joined Global Ethics Panel:
2006

Stephen Mitchell  BEc, LLB

Experience:
Prior to joining the Group in September 2005, Stephen was a consultant to Cable & Wireless where he was involved in governance and compliance programs and managing significant litigation. From 1997 to 2003, Stephen was the Group General Counsel for Reuters in London where his responsibilities included the legal, compliance, company secretarial, internal audit and risk management functions. Previously, Stephen was a partner with Freehills in Melbourne.

Joined Global Ethics Panel:
2006
Marcus Randolph  BSc (Mining Engineering), MBA

Group Executive and Chief Executive Ferrous and Coal

Experience:
Marcus was previously Chief Organisation Development Officer, President, Diamonds & Specialty Products, Chief Development Officer Minerals and Chief Strategic Officer Minerals for BHP Billiton. His prior career includes Chief Executive Officer, First Dynasty Mines; Mining and Minerals Executive, Rio Tinto Plc; Director of Acquisitions and Strategy, Kennecot Inc.; General Manager Corporacion Minera Nor Peru, Asarco Inc; and various mine operating positions in the US with Asarco Inc.

Joined Global Ethics Panel:
2006

Karen Wood  BEd, LLB (Hons), FCIS

Group Executive and Chief People Officer; Chairman of the US Disclosure Review Committee, the Disclosure Committee and Global Ethics Panel

Experience:
Karen was appointed Chief People Officer in 2007. Previously she was Special Advisor & Head of Group Secretariat, having joined the company in 2001. She is a member of the Takeovers Panel (Australia), the Business Regulatory Advisory Group (Australia) and the JD (Juris Doctor) Advisory Board of the University of Melbourne. She is a Fellow of the Institute of Chartered Secretaries and a member of the Law Council of Australia and the Law Institute of Victoria. She chairs the Disclosure Committee of BHP Billiton. Before joining BHP Billiton, she was General Counsel and Company Secretary for Bonlac Foods Limited.

Joined Global Ethics Panel:
2006

External Members

Dr Simon Longstaff  PhD (Cambridge)

Executive Director, St James Ethics Centre

Experience:
Simon became Executive Director of the St James Ethics Centre in 1991. Prior to this he spent five years studying and working at Cambridge University. He was the inaugural President of the Australian Association for Professional & Applied Ethics, is a Director of a number of companies and serves on a number of committees. Simon is a Fellow of the World Economic Forum and a member of the International Advisory Committee of the Foreign Policy Association, based in New York. His first book, Hard Cases, Tough Choices was published in 1997. He is currently preparing a second book on the role of conscience.

Joined Global Ethics Panel:
1997
Graham Evans  AO, MA, MIPP (John Hopkins), DipEd

Chairman, Victorian Competition and Efficiency Commission

Experience:
Graham is currently Chairman of the Victorian Competition and Efficiency Commission. He retired from his role as Vice President, Government and Community Relations of BHP Billiton in 2003. From 1996 to 2002, he was Group General Manager, later Vice President, External Affairs, BHP Billiton. Prior to joining the Company in 1995, he served in a number of senior positions in the Commonwealth Public Service, including Secretary to the Departments of Transport, Transport and Communications, Primary Industries and Energy, and Resources and Energy. He was also Principal Private Secretary to the Prime Minister from 1983 to 1986. Graham has previously served as a Director of Foster’s Brewing Group, Australia Post, Telecom and AIDC. He was awarded the Order of Australia in 1995.

Joined Global Ethics Panel: 1997

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LLB  Bachelor of Laws
MA  Master of Arts
MBA  Master of Business Administration
MIPP  Master in International Public Policy
MSc  Master of Science
PhD  Philosophiae Doctor (doctor of philosophy)
Hierarchy of Systems and Documents

Sustainable development at BHP Billiton is put into practice through the effective implementation of our HSEC management system. This system is hierarchical, where documents and systems meet and support the requirements of those at higher levels, and has been established in a manner that permits its consistent application at local levels while meeting governance requirements specified at the Company-wide level.

BHP Billiton Hierarchy of Systems and Documents

There are also a number of other key management processes, which although managed by areas external to the HSEC function, are integral to our ability to contribute to sustainable development. These include business conduct, risk management, audit and investment.

Company Charter

Central to our business is our Charter, which states our ‘overriding commitment to health, safety, environmental responsibility and sustainable development’.

Sustainable Development Policy

Supporting the values of our Charter is our Sustainable Development Policy (PDF 28 KB). The Policy underpins our management systems and sets the foundation from which we operate.

While we strive to deliver strong financial returns to shareholders, we fully recognise and deliver on our wider responsibilities to our stakeholders: as the Policy states ‘our objective is to be the company of choice – creating sustainable value for our shareholders, employees, contractors, suppliers, customers, business partners and host communities.’ While the Policy broadly aligns with international conventions, such as the UN Universal Declaration of Human Rights, it also requires that we meet or, where less stringent than our standards, exceed applicable legal and other requirements.

See our Policy Guide (PDF 468 KB) for a detailed explanation on the rationale behind our Policy objectives.
HSEC Management Standards

The BHP Billiton HSEC Management Standards (PDF 148 KB) form the basis for the development and application of HSEC management systems at all levels in the Company and represent a key process through which we drive our contribution to sustainable development.

The Standards cover the entire life cycle of operations and all operational aspects and activities with the potential to affect our health, safety, environmental and community performance. They apply to all BHP Billiton sites and operations, including facilities and activities that are owned or operated by BHP Billiton, development projects, mergers, acquisitions, divestments and major activities by contractors on our sites or under our management. Where the Company has no operational responsibility but has an equity stake, or where significant Company assets are involved, the Standards are made available to the operator so that comparable HSEC standards can be applied.

The Standards support the implementation of the Charter, the Sustainable Development Policy and the Guide to Business Conduct across BHP Billiton and provide a risk-based HSEC management system framework, consistent with the BHP Billiton Risk Management Policy; ISO 14001, OHSAS 18001 and SA 8000; and other international policies, standards and management practices to which BHP Billiton has committed.

Expectations for the progressive development and implementation of HSEC management systems at all levels of BHP Billiton are defined by the Standards, and they provide auditable criteria against which HSEC management systems across BHP Billiton can be measured.

The Standards are audited to check the level of conformance and their effectiveness in meeting the needs of the Group and the business being audited. The Standards are also reviewed at least every three years. The next review will be in 2008.

Sustainability Training and Awareness

Our approach to training and awareness for sustainability issues is guided by our HSEC Management Standards:

- **Standard 5 (Awareness, Competence and Behaviour)** requires that employees, contractors and visitors are aware of relevant HSEC requirements, hazards and controls and are competent to conduct their activities and behave in a responsible manner.
- **Standard 8 (Business Conduct, Human Rights and Community Development)** requires that systems are in place to ensure that the Articles of the UN Universal Declaration of Human Rights are assessed, prioritised and implemented as they apply to the organisation’s sphere of influence. Employees and contractors receive training to ensure they are familiar with and abide by the Articles relevant to their activities. Where security personnel are required, systems are in place to ensure they are familiar with and operate in accordance with the US-UK Voluntary Principles on Security and Human Rights.

The HSEC Management Standards are further complemented by the Company’s Human Resources Strategy, which provides additional guidance on training and awareness for sustainability issues related to labor practices and decent work. Read more: Our People.

Monitoring and Follow-up

Our HSEC Management Standards guide our approach to monitoring and follow-up on sustainability issues. Specifically, Management Standard 13 (Incident Reporting and Investigation) requires that HSEC incidents, including near misses, are reported, investigated and analysed. Corrective and preventative actions are taken, and learnings are shared.

The HSEC Management Standards are reported by the Company’s Guide to Business Conduct, which provides additional guidance on monitoring, reporting and follow-up on sustainability issues related to business conduct, bribery and corruption.

Read more:

- Business Conduct
- Incident Reporting and Investigation
Company-Wide Procedures, Protocols, Guidelines and Toolkits

Company-wide procedures and protocols are mandatory to all BHP Billiton sites, operations and controlled activities. These documents address specific areas where it is important that activities are conducted consistently across the Company and cover such areas as corporate performance reporting, Fatal Risk Control Protocols and incident reporting and investigation.

Company-wide guidelines are advisory only and guide our businesses on effective implementation of the HSEC Management Standards. Company-wide toolkits are not mandatory but provide preferred methods for meeting the requirements of the HSEC Management Standards and the Company-wide procedures, protocols and guidelines.

Our Key Documents

- Charter
- Board Governance Document
- Sustainable Development Policy
- Sustainable Development Policy Guide
- Risk Management Policy
- Climate Change Policy
- Black Economic Empowerment (BEE) Procurement Policy
- Guide to Business Conduct
- Uranium Position Statement
- HSEC Management Standards
- Fatal Risk Control Protocols
- Closure Standard
- Safety Future State poster
- BHP Billiton Commentary on Energy Markets and Sustainable Development
- BHP Billiton’s United Nations Global Compact Commitment
- United Nations’ Letter to BHP Billiton, December 2003
- BHP Billiton Submission to the The World Bank Extractive Industries Review, October 2002
Key Management Processes

Wherever BHP Billiton operates, sustainability considerations are addressed in its decision-making processes, alongside other business considerations. This means that while we strive to deliver strong financial returns to shareholders, we fully recognise and deliver on our wider responsibilities to our stakeholders. Excellence in sustainability management is good business.

A number of key management processes exist across the Company to ensure there is a common approach to the consideration of sustainability in business decisions: Business Conduct, Risk Management: Incident Reporting and Investigation, Investment and Audit.

Business Conduct

BHP Billiton adopts an integrated approach to business conduct, comprising the BHP Billiton Guide to Business Conduct, regional helplines and the Global Ethics Panel.

Guide to Business Conduct

The BHP Billiton Guide to Business Conduct is founded on our Charter, which states that the Company cares as much about how results are obtained as it does about delivering good results.

The Guide to Business Conduct applies to our entire workforce regardless of the specific job or location. It provides employees and contractors with direction and advice on conducting business and interacting with governments, communities and business partners. This includes clear guidelines on general workplace behaviour, as well as policies, standards and guidelines on a wide range of ethical issues, such as conflict of interest, financial inducements and bribery, insider trading and political contributions.

The Guide and its principles are embedded throughout the organisation, with managers and supervisors held accountable for not only their actions but also the actions of their staff. This starts at the most senior level of the Company, with the CEO requesting annual confirmation from his direct reports that they and their direct reports have read the Guide and have discussed its contents.

Internal performance requirements regarding business conduct are included in our HSEC Management Standards (PDF 148KB). Distribution of the Guide to employees and contractors, as well as presentation and discussion of its principles, is monitored and reported through the Company’s HSEC audit program. The Guide is available in the eight languages commonly used at our sites.

Regional Helplines

Resolution of business conduct issues is encouraged at the local level. If this is not possible, the issue can be raised with regional points of contact or the telephone-based Business Conduct Helplines based in southern Africa (Johannesburg), Europe (London), Australasia (Melbourne), North America (Houston) and South America (Santiago). Confidentiality is respected by helpline advisors to the highest degree possible. Employees who raise genuine concerns will not be subject to retribution or disciplinary action. For issues related to fraud or bribery, the Group Audit Services Fraud Hotline can be contacted. Employees can escalate issues to the Global Ethics Panel.

Anti-trust Protocols

Anti-trust laws are designed to prohibit a variety of practices that restrain trade.

BHP Billiton has adopted Anti-trust Protocols that set out and confirm the minimum anti-trust compliance standards expected of all Company personnel regardless of their specific job or location. The Protocols reflect the Group’s ongoing commitment to its Guide to Business Conduct and corporate governance policies.

BHP Billiton has established a panel of both internal and external experts to deal with any anti-trust issues facing any employee, officer or representative of the Group.
Risk Management

Our approach to planning and risk management is designed to allow us to look ahead and consider an uncertain future with confidence.

As noted in our Risk Management Policy, risk is inherent in our business. Risk can manifest itself in many forms and has the potential to impact on the health and safety, environment, community, reputation, regulatory, operational, market and financial performance of the Group. The identification and management of risk is central to our success.

The Company uses a common risk management framework – called Enterprise-wide Risk Management (EwRM) – across all operations and functions to identify, assess and monitor risks associated with our assets, projects and other business opportunities. The processes covered by EwRM are consistent with Australian Standard AS4360 and our HSEC Management Standard 3 establishes the expectations of how HSEC risks are to be managed within the EwRM framework.

The EwRM framework requires all assets, functions and major projects to establish and maintain registers and management plans for their material risks.

Materials risks are defined as those having the potential to impact on the achievement of our Corporate Objective or Business Plans. At assets this relates to the achievement of 5-Year Business Plans and 2-Year Budgets. It also has the potential to impact the achievement of our Zero Harm aspiration. Risks are assessed and ranked using a common methodology that incorporates severity, exposure and probability factors and that allows direct comparison of risks across different assets and business groups, and across financial and sustainability risks. Risk registers are stored on a common, Company-wide database and include details of the individual risks and the measures in place for their management. Risk control measures include individual accountabilities, where appropriate. Risk reduction plans are implemented when risks are assessed to be unacceptable.

Our risk management methodology also includes an assessment of ‘country risk’ where the social, political, economic or other factors related to the countries in which we operate or plan to operate can potentially impact on our operations, business or reputation. Such risks include the potential for contravening international policies, standards and management practices to which BHP Billiton has committed; for example, the UN Universal Declaration of Human Rights; the World Bank Operational Directive on Involuntary Resettlement; and the US-UK Voluntary Principles on Security and Human Rights. The assessments are incorporated into the appropriate business plans and updated annually.

Our risk management approach also considers corruption. This includes such practices as bribery, fraud, extortion, collusion, conflict of interest and money laundering, which in this context include an offer or receipt of any gift, loan, fee, reward or other advantage to or from any person as an inducement to do something that is dishonest, illegal or a breach of trust in the conducting of our business. We recognise and actively work to address the risk that corrupt activities may be undertaken by management, employees or third parties, such as suppliers and customers.

We adopt a residual risk methodology that considers impact, exposure and probability. The Group operates global ethics and fraud hotlines and Group Audit Services reviews fraud-related controls as part of its audit scope. Our Asset Leaders provide half-yearly reports on all instances of fraud. Material cases, defined as those in excess of US$20,000 or involving persons in positions of managerial control, are specifically highlighted. Any regulatory disclosure requirements are considered as part of this process. The Fraud and Misappropriation Report is reviewed by the Chief Financial Officer, the Chief Executive Officer and the Board Risk and Audit Committee, as well as the Group’s Global Ethics Panel.

The integrated nature of the program is designed to ensure that material risks are not overlooked at any level of the organisation.

Annually, operations and business groups are required to review and update their risk registers and self-assess their risk management processes. A range of risk assessment and management guidelines supports this process. A network of Risk Champions and HSEC specialists is also available to assist operations and business groups achieve a high degree of consistency when applying the Company’s Risk Management Policy and Standards.

Every six months, operations and business group risk registers, risk management performance and risk management plans are reviewed during meetings of the respective Customer Sector Group Risk and Audit Committee. These meetings are attended by an independent Board member and senior executive management.
A Company-wide risk profile has been developed and is updated every six months. This profile includes the significant risks rolled up from the operations and business group risk registers. It also includes key strategic risks identified by executive management. This profile, and the plans to manage or mitigate the risks, is reviewed at least annually by the BHP Billiton Board.

Operations and business groups are also required to develop and maintain emergency response, crisis management and business continuity plans consistent with their business and HSEC risks. Exercises and simulations are routinely conducted at operations and within corporate groups to test our capacity to respond to emergencies and to manage crises. Read more: Security, Crisis Management and Business Continuity.

Plans to mitigate substantial operational and strategic risks are incorporated into asset strategic plans and budgets through our strategic planning process.

**Incident Reporting and Investigation**

As directed by our HSEC Management Standard 13, all HSEC incidents, including near misses, at BHP Billiton controlled sites and activities are reported, investigated and analysed. Corrective and preventive actions are then taken, and learnings are shared.

Incidents defined by the BHP Billiton Consequence Severity Table as a potential or actual significant HSEC incident are investigated using the Incident Cause Analysis Method (ICAM), a tool developed by safety representatives from across the Company with the assistance of the Australian Transport Safety Bureau.

ICAM provides a process to identify what led to the event, so that effective corrective and preventive actions can be implemented to prevent recurrence. It does not apportion blame or liability. The Company has, on average, four trained ICAM investigators per 100 site-based personnel. Investigators are drawn from all areas of the business, with a range of experience and knowledge.

In the event of a significant incident, it is our policy that associated work does not resume until actions have been taken to reduce the risk of recurrence and authorisation to resume work is given at the appropriate level.

Information gathered from near miss and significant incidents is analysed to identify lessons and to monitor trends and is reported to management to improve standards, systems and practices. Learnings are shared across the organisation and with stakeholders and others as appropriate. Systems are in place at all our operations to ensure that all remedial actions, including changes in procedures, are documented, communicated, followed up and completed.

**Investment**

We recognise the potential risks and opportunities that new investments pose to our commitment to sustainable development and have integrated these considerations into our investment processes and decision-making.

Our five-stage, phased approval process – Identification, Selection, Definition, Execution and Operation – ensures that investments, mergers, acquisitions and divestments meet the requirements of our Standards before progressing to the next phase of development. HSEC requirements are defined for each stage to reflect the Sustainable Development Policy and HSEC Management Standards. For example, HSEC risk assessment, baseline studies, impact assessment and closure planning are required in the early stages of project development, while control measures and management systems must be embedded prior to operation.

Independent peer reviews support the progression of investment proposals through the investment process while assisting with BHP Billiton’s governance requirements. They are undertaken by a cross-functional team of experts (one of which is an HSEC professional), independent of the investment proponents and generally from within the Company, who review the investment prior to the required approval phases. These reviews provide assurance that investment opportunities are robust and have undergone independent, rigorous and consistent reviews and add value by drawing on the global experience and perspective of the independent peer review team.

**Audit**

Our HSEC Management Standards include a requirement for an auditing process to check that our Charter, Sustainable Development Policy and HSEC Management Standards are being applied and to verify performance. The audits are designed to address the degree of implementation of our HSEC management systems and their effectiveness in meeting the Group’s needs and those of the business being audited. Recommendations for improvement are made as required.
The HSEC Audit Program is based on the HSEC Management Standards and systems and performance management principles. The audit program is a triennial peer review process, with audit teams drawn from the HSEC Function, operations personnel and external sources. It objectively identifies gaps in HSEC management programs, which are then addressed through monitored performance improvement plans. The process provides assurance to the Group and the Board that the HSEC Management Standards are being implemented and identifies leading practices that can be shared across the Company.

During any year, sites not scheduled for a Corporate HSEC audit complete a self-assessment against the Standards and prepare performance improvement plans to progress to full conformance with the Standards.

Results of the HSEC Audit Program results are reviewed by the Sustainability Committee of the Board. The operation of our internal control systems, including the HSEC auditing process, is reviewed by the Risk and Audit Committee of the Board.

**Security, Emergency Response and Business Continuity**

In line with our HSEC Management Standard 14 (Crisis and Emergency Management), all our businesses and sites have systems in place to:

- Identify potential emergency situations and their impacts.
- Define response plans, roles and responsibilities.
- Identify, maintain and test resources to ensure their availability.
- Train employees, contractors, visitors and external stakeholders.
- Conduct, document, share and follow up on learnings from emergency response drills.

The intent is that, in the event of a crisis or emergency occurring, procedures and resources are in place to effectively respond and re-establish full functioning as swiftly and smoothly as possible. A crisis or emergency may be an extreme climatic event, disease outbreak, security issue, or any other event that poses a threat to the safety or health of employees, contractors, customers or the public or that can cause damage to the environment, or our reputation.
2007 Performance

Message from the Vice President Health, Safety, Environment, and Community

Sound governance underpins our economic, environmental and social performance. Our goal is to foster a culture that values and rewards exemplary ethical standards, personal and corporate integrity, and respect for others.

In addition to BHP Billiton’s corporate governance practices, we have a number of documents that govern our approach to sustainable development. These include our Sustainable Development Policy, HSEC Management Standards and Guide to Business Conduct. Underpinning these are our Board Governance Document, which requires we consider all risk factors that could affect the Group; robust Charter values; and a mature organisational structure.

In 2007, the Sustainability Committee of the Board, chaired by Dr John Schubert, continued to oversee HSEC strategy and policy, as well as other important activities for the Group. Management continues to hold primary responsibility for HSEC performance and for driving our commitment to Zero Harm.

Our HSEC Management Standards continue to be a critical aspect of our approach to managing sustainability risks; and, as a result of some of the learnings from this program, we commenced three key projects in 2007 to further improve our HSEC performance with respect to catastrophic risk, emergency preparedness and contractor management.

As reported in our 2006 Sustainability Report, in early 2006 allegations were raised against BHP Billiton surrounding the payment by BHP Billiton Petroleum for a shipment of wheat delivered to Iraq in 1996. The allegations were part of a broader independent inquiry into dealings between the Australian Wheat Board and the Iraqi Government. The inquiry concluded in late 2006 and made no adverse findings against BHP Billiton or our current employees. A comprehensive review of our governance approach was conducted to ensure the effective implementation of the following improvement actions:

- Implementing a framework for operating effectively and ethically in countries where the standards of governance and conduct are less mature and generally lower.
- Adopting universal criteria for community investment programs and enhancing supporting processes. In developing the criteria, feedback was obtained from the Forum on Corporate Responsibility and other external stakeholders.
- Amending certain policies to ensure relevant business conduct and governance considerations were thoroughly incorporated.
- Enhancing our recruitment practices and our standard recruitment contracts.
- Review of the Guide to Business Conduct, which is on schedule for implementation in June 2008.

Going forward, we recognise that achieving our corporate objective of creating long-term value for shareholders will require pursuing opportunities in countries where the standards of governance and conduct are less mature. We will not compromise our standards of conduct when operating in such countries.

Edgar Basto
Vice President Health, Safety, Environment, and Community

Read more on the performance and key initiatives related to our sustainable development governance systems over the 2007 reporting period:

- Risk Management
- Management Systems Review
- Business Conduct
- Audit and Self-Assessment

Read Sustainable Development Governance for details on our governance systems for sustainable development.
Risk Management

The Company continues to apply its Enterprise-wide Risk Management framework to enhance business sustainability and to demonstrate effective governance over our substantive risks.

Asset and Customer Sector Group (CSG) risk registers continue to be updated regularly and presented to the respective CSG Risk and Audit Committees every six months. These reports include progress against respective risk management plans.

The Group-wide risk register continues to be updated every six months and is presented to the Board Risk and Audit Committee annually. The Group-wide risk register includes operational risks ‘rolled-up’ from asset, Customer Sector Group and project risk registers. It also includes strategic risks, such as climate change, and reputational risks, such as country risk and the risk of fraud.

Progress on risk management plans relating to the Group-wide risks has been reported to Executive Management.

The Company’s Risk Leadership Team, comprising CSG, asset and corporate risk managers, has continued to identify and progress opportunities to improve the Company’s risk management processes.

Since publication of our 2006 Sustainability Report, the Company’s Risk Management Policy and associated Standards have been updated, approved and launched. Updated supporting guidelines have also been released.

Included in the new material is a method for assessing risk control effectiveness. It is expected that this control assurance method will be progressively applied to significant risks across the Company’s managed operations and the results reported to senior management.

The update to the Policy and Standards builds on the development of risk management capacity throughout the Company since the initial deployment of our Enterprise-wide Risk Management framework in 2002. The updates also target simplicity, effectiveness and efficiency.

A series of regional training sessions will be undertaken during the second half of calendar year 2007 to support deployment of the updated material.

An objective of risk management is to improve business sustainability. As a measure of our risk management performance, in the past reporting year we achieved the lowest level of insurable losses as a proportion of total production since our enterprise-wide approach to risk management was launched.
Management Systems Review

HSEC Targets Review

The 2007 reporting year marked the end of our current five year HSEC targets; and, as of 1 July 2007, the Company will introduce new five-year HSEC targets. This followed an extensive review that acknowledged:

- A number of targets had been achieved or were close to being achieved
- A change was required to the metrics for measuring performance for several targets.
- Some targets lacked clear measurable criteria.

The review considered removing no longer valid targets, establishing new targets, and modifying existing targets. In doing so, the review adopted the following terms of reference:

- Any new targets to be a mix of leading and lagging indicators.
- No net increase in the overall total number of targets.
- Measurement methodology to be provided for any proposed new targets.
- Peer companies public HSEC targets to be reviewed.
- Effective date and achievement time periods (e.g. annual, five year, etc) to be provided.

The review was conducted by a Target Review Committee that was established with nominees from all CSGs. In its deliberations, the committee considered internal data, as well as peer company targets and White Papers. The process concluded with the targets being presented to the Executive Committee for approval.

Read more:

- 2007 HSEC Targets Performance

New HSEC Targets 2008-2012

As of 1 July 2007, BHP Billiton has introduced new five-year HSEC targets.

<table>
<thead>
<tr>
<th>Function</th>
<th>Target</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero Harm</td>
<td>Zero fatalities.</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Zero significant environmental incidents and zero significant community incidents (i.e. rated 3 or above on the BHP Billiton Consequence Severity Table)</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Management Systems</td>
<td>All operating sites to achieve and maintain conformance with the BHP Billiton HSEC Management Standards Issue 3 (score greater than 4 out of 5) by 30 June 2008.</td>
<td>30 June 2008</td>
</tr>
<tr>
<td></td>
<td>All operating sites to obtain and maintain ISO 14001 certification</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Health</td>
<td>All operating sites to finalise baseline health exposure assessments on occupational exposure hazards for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- airborne contaminants and noise by 30 June 2008, and</td>
<td></td>
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<tr>
<td></td>
<td>- physical exposures by 30 June 2010.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 per cent reduction in potential employee exposures over the occupational exposure limit by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
<tr>
<td></td>
<td>30 per cent reduction in incidence of occupational disease by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
<tr>
<td>Safety</td>
<td>50 per cent reduction in Total Recordable Injury Frequency Rate by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
<tr>
<td>Environment</td>
<td>Aggregate Group¹ target of 6 per cent reduction in greenhouse gas emissions per unit of production by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
<tr>
<td></td>
<td>Aggregate Group² target of 13 per cent reduction in carbon based energy use per unit of production by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
<tr>
<td></td>
<td>Aggregate Group target of a 10 per cent improvement in the ratio of water recycled or reused to fresh water consumed by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
<tr>
<td></td>
<td>Aggregate Group target of 10 per cent reduction in the land available for rehabilitation by 30 June 2012.</td>
<td>30 June 2012</td>
</tr>
</tbody>
</table>
1. All sites with greenhouse gas emissions greater than 100,000 t CO₂e per annum are required to have greenhouse gas reduction targets, projects and programs as part of their business plans.

2. All sites with energy consumption of greater than 0.5 PJ are required to have energy efficiency targets, projects and programs as part of their business plans.


Note: all targets are based on FY07 baseline year except energy use and greenhouse gas emissions, which are based on a FY06 baseline year.

Rationale for new HSEC Targets (PDF 51KB)

HSEC Documentation Review

As part of our commitment to using the best practices in our field, we constantly review, and revise as appropriate, our HSEC documentation that assists our sites to implement the Sustainable Development Policy, HSEC Management Standards and Fatal Risk Control Protocols.

In the current reporting year, we made revisions to documentation supporting our approach to aircraft travel, significant incident reporting, and the implementation of both our Fatal Risk Control Protocols implementation and Incident Cause Analysis Methodology (ICAM).

New documentation has been developed to support our approach to:

- Corporate Foundation Community Development
- Environmental and Social Impact Assessment
- Occupational Health and Occupational Hygiene Program Assessment and Review
- Community Relations Practitioner Competencies Framework
- Fatigue Management Plan toolkit
- Community Project Evaluation toolkit.

Community Aggregate Group target of 1 per cent of pre-tax profits to be invested in community programs, including in-kind support and administration, calculated on the average of the previous three years’ pre-tax profit.

Ongoing

All operating sites and development projects to undertake a human rights self-assessment and implement a risk-based human rights management plan by 30 June 2008.

30 June 2012

All operating sites and development projects to have a formal community engagement program in place by 30 June 2008.

30 June 2012

1. All sites with greenhouse gas emissions greater than 100,000 t CO₂e per annum are required to have greenhouse gas reduction targets, projects and programs as part of their business plans.

2. All sites with energy consumption of greater than 0.5 PJ are required to have energy efficiency targets, projects and programs as part of their business plans.


Note: all targets are based on FY07 baseline year except energy use and greenhouse gas emissions, which are based on a FY06 baseline year.
Business Conduct

During the year, all members of the Office of the Chief Executive (now the Group Management Committee) were required to confirm that:

- They had read and understood the BHP Billiton Guide to Business Conduct.
- They had assured themselves that those people directly reporting to them had read and understood the Guide and its relevance and importance to the success of the Company.
- They had discussed the Guide with their direct reports.

These discussions covered issues relevant to the local business environment, including gifts, travel, conflict of interest, bribery and facilitation payments. In addition, 601 personnel attended Company-wide anti-trust training seminars during the reporting year. Our HSEC Management Standard 8 (Business Conduct, Human Rights and Community Development) requires that a system to be in place at all of our owned and operated sites to ensure that employees and contractors are familiar with the BHP Billiton Guide to Business Conduct and abide by its requirements. All sites are subject to both annual self-assessment against this Standard and triennial independent review. This requirement is generally met through induction and annual refresher training on the Guide to Business Conduct.

Analysis of Business Conduct Enquiries

In 2006/07, 90 enquiries were made to our business conduct system, which was a 10 per cent increase on that recorded in 2005/06.

Analysis by category indicates:

- Twenty enquiries, or 22 per cent, related to human resource concerns, compared to 11 enquiries in 2005/06. This shows that the business conduct system is increasingly being used by employees and contractors as a means of seeking assistance with human resource issues when they are dissatisfied with the site or local level response.
- Twenty enquiries, or 22 per cent of calls, related to gifts and travel. Gifts and travel-related queries have represented an average of 20 per cent of all queries over the three years to 2007, suggesting that these are topics where employees find it helpful to seek independent advice in resolving uncertainties or concerns that they have about appropriate actions.
- 13 per cent of calls related to harassment or pornography.

Analysis by region reveals 61 enquiries, or 67 per cent of enquiries, were raised from our Australian-based sites and offices, with a further 10 per cent from Asia, 9 per cent from Southern Africa and 6 per cent each from North and South America. The predominance of Australian-based enquiries has existed since the helpline system was established. While we have internal evidence suggesting that Australian employees are less familiar with how to access the helpline than their colleagues overseas, the enquiries data show that Australians are more willing to use the system.
All sites keep active risk registers as part of our Enterprise-wide Risk Management system; this includes risks related to corruption. In addition, acts of corruption are tracked by our fraud and misappropriations reporting process, which is managed by Group Audit Services, which reports to the Risk and Audit Committee of the Board. One instance of corruption was reported with corrective actions including refresher training on the BHP Billiton Code of Business Conduct for all staff at the site concerned and disciplinary action against staff who abused their authority.

There were 15 calls made to the Fraud hotline in 2006/07, with the majority related to allegations of theft or conflict of interest.

There were no legal actions during the year in relation to anti-trust, anti-competitive behavior or monopoly practices. Read more: Risk Management.

Enquiry Management Assurance

At each meeting, the Global Ethics Panel reviews the nature and actions in relation to all enquiries (with appropriate regard for confidential information).

The Global Ethics Panel held four scheduled meetings over the reporting year, with one extra meeting convened to provide additional feedback on the improvement actions recommended by the internal review into the Commission of Inquiry into the UN Oil-For-Food Program. In addition to general input to the Company’s work in relation to the Commission of Inquiry, it provided specific input to the development of the framework for operating effectively and ethically in countries where the standards of governance and conduct are less developed and generally lower and to the development of the universal criteria for community investment programs and enhancing supporting processes. The Panel also contributed to the development of a framework for managing our hospitality program for the 2008 Beijing Olympic Games.

During the year, we also began implementing improvements to our system of reporting violations of our business conduct principles and policies. An on-line system for reporting is in the final stages of development, which should allow comprehensive recording across the Company in 2008.

Review of the Guide to Business Conduct

A project to review the Guide to Business Conduct was established in 2007. The project has three objectives:

- To deliver a revised Guide to Business Conduct that reflects changes in our business operating environment and to follow up on our commitments made in our internal review regarding the Commission of Inquiry into the UN Oil-For-Food Program.
- To deliver training and communication tools and processes to embed the Guide to Business Conduct within BHP Billiton.
- To deliver a robust compliance and reporting system.

The initial planning stage of the project was completed in 2006/07 and involved an industry benchmarking review to establish leading practice and an internal survey of employees and contractors designed to establish a baseline of understanding of employees’ and contractors’ perceptions about the business conduct system. Over 2700 of our people across all operations responded to the survey. Results were generally supportive of the existing system, while identifying a significant opportunity to improve awareness of the business conduct system through better communication and the development of training tools.

Commission of Inquiry into the UN Oil-For-Food Programme

In November 2005, a Commission of Inquiry (Cole Inquiry) was established by the Australian Government into certain Australian companies in relation to the UN Oil-for-Food Programme. The Report of the Cole Inquiry was issued on 27 November 2006. No adverse findings were made against BHP Billiton.

On 29 November 2007, we released the report of our internal review into matters raised in the Cole Inquiry and, in particular, the circumstances surrounding a shipment of wheat to Iraq in 1996. The conclusions of the internal review were consistent with Commissioner Cole’s findings. Even though no adverse findings were made against BHP Billiton, Chief Executive Officer Chip Goodyear adopted the internal review’s recommended improvement actions.

The improvement actions were designed to ensure that we meet the highest ethical standards in all our dealings. This is consistent with our Charter values and is fundamental to our licence to operate.
A project was established to ensure the effective implementation of the improvement actions. The project was completed in June 2007. All of the improvement actions have been effectively implemented, save for a review of the Guide to Business Conduct, which is on schedule to be implemented in June 2008.

In addition to reviewing the Guide to Business Conduct, the improvement actions included:

- Implementing a framework for operating effectively and ethically in countries where the standards of governance and conduct are less developed and generally lower.
- Adopting universal criteria for community investment programs and enhancing supporting processes. In developing the criteria, feedback was obtained from the Forum on Corporate Responsibility and other external stakeholders.
- Amending certain policies to ensure relevant business conduct and governance considerations were thoroughly incorporated.
- Enhancing our recruitment practices and our standard recruitment contracts.
Audit And Self-Assessment

The Company-wide HSEC Audit and Self-assessment Program is a triennial peer review process that assesses the level of implementation of our HSEC Management Standards. During 2006/07, 32 HSEC audits were conducted. As in previous years, operating sites not audited during the year were required to undertake self-assessments against the Standards.

The results from the 44 self-assessments have been combined with the audit results to give the range and average level of conformance for each of the Standards shown in the diagram below. This shows an overall conformance of 3.9 out of 5 against the HSEC Management Standards and indicates that we are on track to meet our target of greater than 4 out of 5 with the Standards by 30 June 2008.

Since the program commenced in September 2001, 138 site audits have been conducted, involving 391 BHP Billiton people and 31 external auditors. The breadth of the program has been invaluable in accelerating the rate of improvement in all aspects of our HSEC management through the identification of improvement opportunities and communication of leading practices.

The HSEC Management Standards are:

- Standard 1 Leadership and Accountability
- Standard 2 Legal Requirements, Commitments and Document Control
- Standard 3 Risk and Change Management
- Standard 4 Planning, Goals and Targets
- Standard 5 Awareness, Competence and Behaviour
- Standard 6 Health and Hygiene
- Standard 7 Communication, Consultation and Participation
- Standard 8 Business Conduct, Human Rights and Community Development
- Standard 9 Design, Construction and Commissioning
- Standard 10 Operations and Maintenance
- Standard 11 Suppliers, Contractors and Partners
- Standard 12 Stewardship
- Standard 13 Incident Reporting and Investigation
- Standard 14 Crisis and Emergency Management
- Standard 15 Monitoring, Audit and Review.
Stewardship

Stewardship is a principle that calls on all those involved in the product life cycle to share responsibility for minimising the environmental and human impacts that result from the production, use and disposal of the product.

Our Sustainable Development Policy commits us to ‘work with those involved through the life cycles of our products and by-products to promote their responsible use and management’.

As a member of the International Council on Mining and Metals (ICMM), we have also committed to implementing the ICMM Sustainable Development Framework, which requires that we ‘facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products’.

Our stewardship performance is assessed against HSEC Management Standard 12, which requires that ‘the life cycle HSEC impacts associated with resources, materials, processes and products are minimised and managed’. The Standard places particular emphasis on materials and resources efficiency, research and development, waste management, response to external influences and site closure.

In accordance with the International Standard for life cycle assessment, ISO 14043, we have completed life cycle assessments for all of our major commodities. Going forward, a number of our HSEC Targets 2008-2012 relate to stewardship, including the requirement for all sites to retain ISO 14001 certification; improved performance against our HSEC Management Standards and occupational exposure baseline; and targets for energy, greenhouse and water efficiency.

For the past three years, our focus has been directed to working with various stakeholders to build stewardship programs across our commodities. Stakeholders include non-government and industry associations, consumer groups and suppliers, as well as governing regulatory bodies.

Such industry-driven stewardship initiatives are designed to complement the various regulatory frameworks existing in our operating regions and confirm the importance of a collaborative approach to stewardship.

Types of Stewardship

There are four types of stewardship in the life cycle of our products:

- Material stewardship – refers to the different materials utilised to produce the product as the product moves through its life cycle. These include consumables ranging from tyres and fuel to water and energy. Material stewardship is about understanding and managing these materials (or inputs) in order to minimise harm to people and the environment.
- Resource stewardship – ensuring we maximise the value of the resource (e.g., an ore deposit) for both current and future generations.
- Product stewardship – understanding and managing our specific products or commodities in order to minimise harm to people and the environment, as a result of exposure to the particular product and commodities. This is a shared responsibility with others in the life cycle of our product and commodities.
- Process stewardship – refers to the different processes applied to the product (e.g., extraction, smelting) as the product moves through its life cycle and that have the potential to generate outputs (other than just the product). These could include greenhouse gases, waste and other emissions. Process stewardship is about understanding and managing these processes (or outputs) in order to minimise harm to people and the environment.

While material, process and product stewardship apply at all stages of the life cycle, resource stewardship is most prominent in the early stages of the life cycle. Common to all parts of the life cycle are the transport and marketing functions, as both play a critical role in stewardship.

The four types of stewardship are illustrated below, using a generic product life cycle.
The same model can be expanded upon for:

- Each individual stage of the overall product life cycle; for example, the extractive stage
- Individual sites; for example Olympic Dam
2007 Performance

Message from Manager Product Stewardship

The last year has been one of consolidation for our stewardship strategy, building on the momentum of the earlier two years when we initiated our strategy in 2004.

While the commodities we provide are fundamental to everyday life – imagine life without copper for all our wiring – we know that we must provide our products responsibly. At the same time, we are also concerned that other aspects of our products’ life cycle that we don’t control, such as transport, processing, manufacturing, use and disposal, are all undertaken safely and responsibly. While we can directly control what happens at our operations, we can’t do this beyond our ‘mine gate’.

What we are doing is continuing discussions and building commodity-specific stewardship programs with industry associations, suppliers and customers in order to minimise the opportunities for harm in the life cycle of our products. Such an approach is also opening up opportunities for business differentiation and for recycling and reuse.

The GreenLead™ program, which was initiated by our Cannington operation, has been adopted by several stakeholders in the lead industry, and a self-assessment tool is currently being trialled in a number of countries and sectors in cooperation with a number of United Nations Environment Programme battery-related programs.

We are actively involved in several industry initiatives, including COAL21, FutureGen and the Initiative for Responsible Mining Assurance, where we are working with other mining companies, industry and commodity associations, and retailers to develop a series of standards and a verification system to assure compliance by the mining sector with environmental, human rights and social standards.

Our customers represent the next sector in the life cycle of our commodities; and as a result of workshops with our marketing personnel, we have a clearer understanding of how we can work collaboratively with customers to reduce the impact of minerals production on the community and the environment.

We’re supporting our operations to build their knowledge on the European Chemicals Policy (REACH) and the Global Harmonisation System (the proposed standardisation of labelling and material safety data sheets), and we continue to take a leading stewardship role in a number of commodity associations. This includes proposing the establishment of an industry-based steel stewardship program, which would consolidate and further the stewardship work currently underway with the supply chain at our coal, iron ore and manganese operations. We chair the World Nuclear Association’s Uranium Stewardship Working Group and the Australian Uranium Association’s Uranium Stewardship Working Group, and we have been active in the development of global standards for members of the Council for Responsible Jewellery Practices.

We contributed to the writing of a Stewardship booklet, printed by the Australian Government (Department of Industry Tourism and Resources) which is part of the series of booklets of Leading Practice Sustainable Development Program for the Mining Industry. We have spent time in introducing the stewardship concepts to China, and were pleased that, earlier this year, our participation in the Asia Pacific Economic Cooperation (APEC) meeting of Ministers Responsible for Mining was acknowledged as contributing to the subsequent strong endorsement of the principle of product stewardship in their concluding Ministerial statement: ‘In partnership with all life cycle participants, ensure that materials and products made from minerals and metals are produced, consumed, recycled or disposed of in a responsible manner.’

Going forward, we will continue our strong leadership in developing stewardship programs across all of our commodities.

Mick Roche
Manager Product Stewardship
Working With Others

While BHP Billiton focuses on the extraction and processing stages of a product’s life cycle, we recognise that:

- The majority of the life cycle of our products occurs after the point of processing.
- There is strong business merit for implementing stewardship principles in collaboration with our key stakeholders, improving product differentiation, maintaining market access and maximising opportunities for recycling and reuse.

For the past three years, we have focused on working with various stakeholders to build stewardship programs across our commodities. Stakeholders include:

- Government and Intergovernmental Organisations
- Industry and Commodity Associations
- Customers
- Suppliers.

Government and Intergovernmental Organisations

A key component to our stewardship program has been to engage with government and intergovernmental organisations in their understanding and support for the stewardship principle. This occurs at a global, regional and national level.

Global Activities

Globally, we are working with the International Atomic Energy Agency (IAEA) in developing a series of principles for uranium mining that will enable the IAEA to assist those countries that do not have existing mining codes. We are also working with the United Nations Environment Programme (UNEP), the Secretariat of the Basel Convention and the United Nations Common Fund for Commodities on the GreenLead™ program.

Regional Activities

In 2007, BHP Billiton participated in the Asia Pacific Economic Cooperation (APEC) meeting of Ministers Responsible for Mining, organising and participating in a half-day workshop and panel discussion on ‘Stewardship and Life Cycle Partnerships’. The activity sparked a lot of interest and discussion in our current and proposed stewardship programs, with the concluding APEC Ministerial statement recognising and strongly endorsing the principle of product stewardship: ‘In partnership with all life cycle participants, ensure that materials and products made from minerals and metals are produced, consumed, recycled or disposed of in a responsible manner.’

National Activities

Examples of our national activities include:

- In Australia, we chair the Uranium Industry Framework’s Uranium Stewardship Working Group and are a Board Member of the Australian Uranium Association.
- We support the Australian Government in publishing a Stewardship booklet as part of the Leading Practices Sustainable Development Program for the Mining Industry. We actively contributed to the content of that booklet, which has now been translated into six languages.

Mining Industry Associations

In every country in which we operate, we are active in the respective national mining association; for example, the International Council of Minerals and Mining, the South African Chamber of Mines, the Mining Association of Canada and the Minerals Council of Australia.
Commodity Associations

We are active members of relevant associations specific to each of our commodities. Each of these associations has committees or working groups that are focused on product research and development, marketing and promotion. We are active members of these committees and contribute significant resources – people, time, technical input and financial assistance – into the effective running of these groups in order to achieve desired health, safety and environmental stewardship outcomes. For example:

- **Nickel.** We are working with the Nickel Development Institute to implement practical product stewardship guidelines, including the proposed European Union Chemicals Policy (REACH) that will require industry to demonstrate that ‘chemicals’ (which include metals in this context) are safely produced and managed through their life cycles.
- **Copper.** We are actively supporting the International Copper Association in developing definitions, principles and projects under the Copper Stewardship program. We also participate in their Health Environment and Safety committees.
- **Lead.** We are continuing to play an active role in the Green Lead™ an initiative originally conceived by our Cannington silver/lead/zinc operation and adopted in recent years by the lead industry. The vision of the GreenLead™ project is to independently certify that producers are applying best practice to all aspects of the product life cycle. We also participate in the International Lead Zinc Research Organisation.
- **Silver.** BHP Billiton was the foundation Chair of the Silver Research Consortium.
- **Diamonds and Gold.** BHP Billiton was an original signatory to the Early Adopters Program initiated by stakeholders in the gold and diamond life cycle. During 2005/06, the program developed into the Council for Responsible Jewellery Practices, which is aimed at reinforcing confidence in the gold and diamond supply chain. In addition, our Diamonds business is a member of the Kimberley Process Certification Scheme, an international diamond certification scheme aimed at halting the trade in ‘conflict diamonds’.
- **Energy Coal.** We support external research into greenhouse gas reduction technologies such as the US FutureGen project and the Australian COAL21, Cooperative Research Centre for Greenhouse Gas Technologies and Cooperative Research Centre for Coal in Sustainable Development.
- **Uranium.** We are active members of the World Nuclear Association and chair their Uranium Stewardship Working Group. In Australia, we chair the Uranium Industry Framework’s Uranium Stewardship Working Group, are a board member of the Australian Uranium Association and worked with the Federal Government’s Leading Practice Sustainable Development Program to develop a Stewardship information booklet in six APEC languages.

Customers

Our marketing personnel play a significant role in stewardship as they have the most contact with the next sector in the life cycle of our commodities – our customers. Recognising this, we have conducted commodity stewardship workshops for our global Marketing offices in Singapore, Johannesburg, The Hague, Houston and Pittsburgh.

We are becoming increasingly proactive in engaging customers on stewardship issues and opportunities, such as the GreenLead™ project and electrical energy efficiency and voluntary risk assessment initiatives within the European Copper Institute.

Our Energy Coal CSG conducts gatherings for major customers (purchaser of more than 1 Mtpa) twice a year. Presentations are given by BHP Billiton subject-matter experts, and customer feedback is sought on various subjects, including environmental issues and changing legislation, emerging products, carbon credit trading, clean coal technologies and waste management.

Health And Safety Impacts Of Products During Their Life Cycle

Our stewardship approach, and increasingly our approach to product marketing, is designed to improve health and safety and to reduce environmental impact across the life cycle of our products.

During the year, four stewardship workshops were conducted for our specialist marketing personnel across the globe. With representatives from each of our Customer Sector Groups, the workshops were designed to develop a clearer understanding of the role of marketing in the implementation of stewardship principles ‘beyond the mine gate’, and how we can work collaboratively with our customers to reduce the negative impacts of minerals productions on the community and the environment. As a result, a network of product stewardship marketing contacts for each of our commodities has been established.
In 2007 we believe that we have had no incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of our products during their life cycle.

**Product Information And Labelling**

Material safety data sheets are available for all of our products, and we generally sell to industrial customers who are knowledgeable in the handling and care of our products. We have been active in building knowledge about the European Chemicals Policy (REACH) throughout our operations, and we are involved in the Globally Harmonised System of classification and Labelling of Chemicals initiative that is aiming to provide international standards for classification and labelling of chemicals.

**Marketing And Communications**

Our customer-centric marketing model means we generally engage directly with customers rather than with brokers and agents. For our key relationships, our ability to provide face-to-face contact between the marketer and the customer aims to improve the result for both parties.

All public comment is vetted, and approval processes are in place to support our adherence to laws, standards and voluntary codes related to marketing communications, such as advertising, promotion and sponsorship. With the exception of diamonds, our advertising is limited to industrial users.

In 2006/07, we believe that we have had no incidents of non-compliance with regulations or voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship.

**Customer Privacy And Protection Of Customer Data**

Intellectual property, corporate and customer data are protected by our information technology infrastructure. Controls are in place to limit access to customer data and prevent unauthorised alterations.

In 2006/07 there were no substantiated complaints regarding breaches of consumer privacy.

**Assessing and Maintaining Customer Satisfaction**

Assessment of customer satisfaction is generally monitored via ongoing interaction with the customer base both at the day-to-day operational level, as well at the senior management level. At the discretion of our individual business units, extensive customer satisfaction surveys are periodically conducted on our worldwide customer base.

In 2006/07 we did not receive any fines for non-compliance with laws or regulations concerning the provision and use of our products.

**Suppliers**

Our suppliers of materials and labour are vital to our business and influence the full life cycle impact of our commodities. Read more about our supplier engagement activities in:

- Emerging markets
- Contractors in our main regions of operation
- Developing strategic alliances with major supply partners (see Material Stewardship – Working with Suppliers), and our 2007 case study on the use of biofuels.
Material Stewardship

Material stewardship is about understanding and managing the different material inputs – such as tyres, fuel, water and energy – used to produce a product as it moves through its life cycle in such a way that minimises harm to people and the environment. Such an approach recognises that the value of minerals to society is maximised when the various stakeholders along the value chain undertake activities that enhance the durability of minerals and metals and their ability to be recycled, increase the efficiency of their production and use, and minimise associated risks.

Water Efficiency

The efficient use of scarce water resources is a global responsibility and is one of the most significant aspects of materials stewardship. Many of our operations have effective water minimisation programs in place to meet our new HSEC Targets.

Read more:
- Water conservation
- Our 2007 case study on how our Olympic Dam copper/uranium mine in South Australia has reduced its consumption of Great Artesian Basin water by optimising water recovery and recycling opportunities.
- HSEC Targets Scorecard

Working with Suppliers

Our Supply Operations seek to ensure that the contracting of services; the purchase, hire or lease of equipment and materials; and activities with partners are conducted so as to minimise any adverse consequences on people and the environment. We also collaborate with our suppliers to optimise the use of consumables; for example, by investigating the use of recyclable components or efficient equipment. In 2003, BHP Billiton and Caterpillar formed a strategic alliance that enables the two companies to align their interests and work towards common sustainability goals. In 2006/07, we commenced a joint study to assess the potential of using alternative fuels in some or all of our off-road mining equipment globally by 2020. See our 2007 case study.

Transporting Our Products Safely and Responsibly

The transport of bulk raw materials to our sites is a shared responsibility between the receiving asset, the supplier and the transporting agent.

We seek to ensure that all transport is conducted in a safe and environmentally responsible manner; and for hazardous materials, our approach to the transport is guided by our Fatal Risk Control Protocol 5 (Hazardous Materials Management). Also see Uranium Transport and Export.

Shipping

Where this transport is by sea, RightShip Pty Ltd plays a major role in ensuring the safety of the ship, the crew, the cargo and the environment. Using an online system, RightShip vets every ship that we use to move our cargo. In 2006/07, this represented 3626 ships, some 310 million dead weight tonnage (dwt) of cargo, the inspection and assessment of 30 ships and the exclusion of 84 high-risk ships from clients’ supply chains.

Rail

Rail is used extensively by our operations to transport product to customers and port facilities.

Western Australian Iron Ore (WAIO) is an integrated mine, port and rail operation with more than 7,000 direct employees and contractors. With up to 14 trains per day to port and the same back to the mines, WAIO is pursuing opportunities to reduce greenhouse gas emissions across all mining, port and rail activities.

A recent WAIO Business Excellence project sought to improve our understanding of rail fuel costs, use and opportunities for efficiency. The project identified that while most fuel (88 per cent) is used moving from port to port, 6 per cent is also used in transverse, 4 per cent in shunt and work train and 2 per cent in idling. Different combinations of locomotives were also found to have a significant impact on fuel usage. Going forward, WAIO is investigating further options, such as improved data collection, additive trials and an alternative method for fuel delivery to WAIO mine operations.
At the same time, the WAIO Mt Whaleback mining operation is supporting fuel and energy research and development through the Western Australian Curtin University Technology Centre. This includes research into recycling treated waste engine oil as a blast rock fuel explosive supplement in place of virgin diesel. WAIO is also networking with other Company sites undertaking emission-related projects, such as the Nickel West Mt Keith operation (Western Australia) for their work on fuel catalyst trials on in-pit diesel fuel consumption efficiency.

**Air**

Wherever possible we encourage the use of telephone and video-conferencing to reduce the environmental impact of employee air travel and disruption to personal commitments outside of work. Due to the global nature, and often remote locations, of our business, Company air travel is still a significant indirect greenhouse gas emission by our Company. Read more: Greenhouse Gas Emissions

**Uranium Transport and Export**

Uranium production and transport to customers are performed in a safe and environmentally acceptable manner.

All transport of uranium product is conducted under Transport Plans approved and audited by the Australian Safeguards Non Proliferation Office (ASNO), and the South Australian and Northern Territory governments. Road, rail and ocean freight is approved by ASNO; and an integrated exports approval process involves a variety of national and international agencies.

Our emergency response programs have been developed in accordance with international, state and territory objectives. In accordance with normal practice, all transport of uranium product in 2006/07 was conducted safely.

All the countries to which our uranium product has been sold have been approved and monitored under bilateral agreements with the Australian government and are signatories to the international Nuclear Non-Proliferation Treaty. Our uranium sales by region are demonstrated in the graph above.
Process Stewardship

Process stewardship refers to the different processes applied to the product (e.g., extraction, smelting) as the product moves through its life cycle and that have the potential to generate outputs (other than just the product). These could include greenhouse gases, waste and other emissions. Process stewardship is about understanding and managing these processes (or outputs) in order to minimise harm to people and the environment.

Improving Our Processes

Our approach is to seek to reduce by-products where possible and improve the production rate of quality product. We do this by improving our processes and by developing new technologies internally or collaborating with others on research and development.

A number of our operations implement programs to reuse and recycle by-products where applicable to their processes.

- Cerro Matoso ferronickel operation (Colombia, 100 per cent BHP Billiton ownership). A management plan for domestic and industrial solid waste is utilising as much as possible of the mine’s generated waste and reducing the amount disposed of to landfill. Food waste is being used in the production of organic fertilisers for soil rehabilitation at the mine and as feed at small piggeries run by neighbouring communities. As a result of various initiatives, there has been a 20 per cent reduction in waste intensity (waste per tonne of ferronickel produced) for the period 2002 to 2006.

- Alumar aluminium operation (Brazil, 40 per cent BHP Billiton ownership). Coal fines from the refinery boilers are being reused as a substitute for the coke burned in the cement kilns at a nearby cement plant. Benefits include the elimination of fugitive emissions generated during ash handling and removal of the need to construct new storage areas for coal fines. See the case study from our 2006 Sustainability Report: Waste Recycling and Reuse.

- Samancor Metalloys (South Africa, 60 per cent BHP Billiton ownership). A R34 million process has been developed to convert hazardous manganese sludges and dusts into manganese alloy pellets. Benefits include the provision of a unique alternative to the traditional industry method of storing sludges in lined dams, which is environmentally unacceptable and expensive.

Biotechnology is also playing a strong role in the mining of low-grade ores. Our researchers have discovered how to extract metals from sulphur-containing ores or concentrates for gold and nickel and are now working on copper.

It has been known for many years that bacteria assists the slow weathering and oxidation of outcropping sulphide ores and, in the process, sometimes produces harmful acidic drainage. Our researchers have adapted and harnessed this natural leaching process. In a controlled manner, they have applied the process to ore in a simple but well-engineered heap and to problematic concentrates in a processing plant.

This approach has already been commercialised at our Cerro Colorado copper mine in Chile. At our Escondida copper mine (Chile) we are currently trialling the use of mesophile cultures on secondary sulphide ores. We are also demonstrating the application of thermophile leaching to extract copper from a 500-kilotonne heap of refractory primary chalcopyrite type ores.

Working with Others

We are participants in the COAL21 Alliance that was initiated by the Australian Coal Industry as a program aimed at fully realising the potential of advanced technologies to reduce or eliminate greenhouse gas emissions associated with the use of coal.

The program will also explore coal’s role as a primary source of hydrogen to power the hydrogen-based economy of the future and is a collaborative partnership between Federal and State governments, the coal and electricity generation industries, the research community and unions. Read more: Climate Change.
Product Stewardship

Product stewardship refers to understanding and managing our specific products or commodities in order to minimise harm to people and the environment, as a result of exposure to the particular product or commodity.

This is a shared responsibility with others in the life cycle of our products and commodities. It requires the establishment of a relationship between the different sectors in the life cycle of each of our products and, most importantly, has to include the transport component that links each of the sectors. These relationships are developed with:

- Our immediate customers.
- Through industry and commodity associations; for example, the Nickel Development Institute, the International Copper Association, the Silver Research Consortium and the World Nuclear Association
- Other established third party organisations – for example:
  - The GreenLead™ project – originally conceived by our Cannington silver/lead/zinc operation and adopted in recent years by the lead industry, the GreenLead™ Consortium has developed a series of protocols and guidelines and an assessment tool aimed to minimise the risk of lead exposure to people and the environment anywhere in the lead-acid battery value chain.
  - The Council for Responsible Jewellery Practices — BHP Billiton is a founding member of this not-for-profit organisation, whose aim is to reinforce confidence in the gold and diamond supply chain through the promotion of responsible, ethical social, human rights and environmental performance.
  - The Initiative for Responsible Mining Assurance (IRMA) – we are working with other mining companies, industry/commodity associations, and retailers as part of this voluntary, multi-sector effort to create a verification system in the mining sector to assure compliance with environmental, human rights and social standards.

These relationships are developed by our asset personnel, our marketing personnel and our corporate personnel in each CSG. In 2006/07 we established an internal Stewardship Network to share leading practices.

In 2006/07 we continued our product stewardship initiatives across our key commodity groups, including:

- The assessment of site performance against HSEC Management Standard 12 (Stewardship), resulting in an overall average Stewardship performance of 4 out of 5. Read more: Audit and Self Assessment.
- Five stewardship workshops were conducted at our assets and have enabled the initiation of stewardship programs for all of our commodities. For example, we have proposed the establishment of an industry-based Steel Stewardship program that would integrate stewardship work currently being done at our coal, iron ore and manganese operations with the supply chain.
- Four stewardship workshops were conducted for our Corporate leadership teams and nine workshops for our Marketing teams in Singapore and The Hague.
- We are working with government and intergovernmental organisations, such as the Asia Pacific Economic Cooperation and the Australian Government.
- We are working with industry and commodity associations, which has resulted in:
  - International Council of Mining and Metals (ICMM) release of the publication Maximising Value: Guidance on implementing materials stewardship in the minerals and metals value chain
  - Continued expansion of the GreenLead™ program by trialling the GreenLead™ self-assessment tool in a number of countries and sectors. This is being conducted in cooperation with a number of United Nations Environment Programme (UNEP) battery-related programs (see www.greenlead.com)
  - Significant enhancement of the Council for Responsible Jewellery Practices with over 70 members in all sectors of the life cycle of diamonds and gold. The establishment of standards for members of the Council are being finalised).
  - Establishment of the Australian Uranium Association a working group on uranium stewardship within that association and the inaugural and subsequent meetings of the Uranium Stewardship Working Group within the World Nuclear Association. Read more: Uranium case study.
Resource Stewardship

Resource Stewardship means ensuring we maximise the value of the resource (e.g. an ore deposit) for both current and future generations.

Valuing Our Resources

We constantly explore new ways to maximise the value of our resources. For example:

While a number of internationally recognised tools provide guidance on our approach to resource stewardship, including the Australasian Joint Ore Reserves Committee (JORC) code against which all of our assets and operations report, we also conduct our own research and development to develop a leading practice approach. For example, BHP Billiton Global Technology has developed a mine planning optimisation software tool called BlasorTM. By utilising optimal mine planning software, strategic planners can determine ultimate pit sizes and pit development plans that deliver maximum value over the life of the mine.

Others examples include:

- BMA Peak Downs Mine (Australia). A new process has been developed to reduce coal loss by approximately nine per cent and improve the mine’s sustainability performance through reducing the area disturbed, waste production and fuel consumption, the latter assisting to meet greenhouse gas emissions targets. See the case study from our 2006 Sustainability Report: Last Drop Coal Removal Program.
- Mt Arthur Coal (Australia). A comprehensive water management and recycling system has been developed and implemented in partnership with the local community, Council and neighbouring mines. The system aims to maximise capture and reuse of mine water and grey water from the local sewerage treatment works to reduce the need to draw from clean water sources, including the Hunter River. The reuse system is enhanced by artificial wetlands constructed from coarse reject, a waste product from coal processing, which filters the treated effluent prior to reuse on site. Each year approximately 800ML (some 90 per cent of total effluent) produced from local sewerage treatment works is reused.

Utilising Secondary Materials and Wastes

At the end of our products’ life cycle, they are reused, recycled or disposed of. While we support the use of secondary materials and wastes from sources external to the organisation, the amount we use at our operations is low as our primary business activity is resource (raw material) extraction and not downstream processing. The majority of our product tonnage (more than 95 per cent) is also sold in bulk form and has little or no packaging. We do, however, seek to maximise opportunities for utilising secondary material and wastes (where they exist) as demonstrated by the following:

Waste Water

Approximately 0.3 per cent of BHP Billiton’s water demand is provided by waste water from external sources:

- Mt Arthur Coal (Australia) used 671 ML of town effluent for coal processing in 2006/07.
- Kambalda Nickel Concentrator (Australia) used 200 ML of waste water from the municipal treatment plant in 2006/07.
- Mt Keith Nickel Operations (Australia) used 140 ML from waste water from municipal treatment plant in 2006/07.
- Crinum underground coking coal mine (Australia) provides waste water to a neighbouring mine for use in coal processing.

Waste Oil

Approximately 0.19 per cent of BHP Billiton’s energy demand is supplied by waste oil from external sources:

- Kalgoorlie Nickel Smelter (Australia) uses reprocessed waste oil for furnace fuel instead of diesel and natural gas.
- EKATI Diamond Mine (Canada) uses waste oil from neighbouring mines for heating.
Fly Ash

- Olympic Dam Mine (South Australia) used 130,830 tonnes of fly ash from the Port Augusta Power Station in cement aggregate fill.

Read more:
- Resource Conservation
- Resource Use.

We also continue to collect information related to the use of secondary materials and wastes from external sources. Read more: Recycling Rates by Commodity.
Healthy People

The health and wellbeing of people is central to the success of our business. Understanding the potential for health risks and establishing suitable mitigation measures are integral to the success of our journey towards Zero Harm.

Health risks continue to be an area where we are attempting to reduce both potential short and long-term impacts. These health risks are diverse in the areas in which we operate and are not only related to work processes. Significant community-based health risks also exist in our business, and we continue to contribute to the management of these issues on both a local and global basis.

Our approach to workforce and community health is incorporated in our Charter, which states that we have ‘an overriding commitment to health, safety, environmental responsibility and sustainable development’ and our Sustainable Development Policy, which states that we will:

- Strive to achieve leading industry practice.
- Meet or, where less stringent than our standards, exceed applicable legal and other requirements.
- Ensure we do not compromise our safety values, and seek ways to promote and improve the health of our workforce and the community.

Our Policy commitments are reflected in our Company-wide health targets.

Our HSEC Management Standards form the basis for our management systems and define our approach to employee health assessment and protection and to community health activities. Organisational knowledge about health issues is fostered by our Global Occupational Hygiene Network.

Some of the potential health risks present in the organisation include:

- Inherent occupational health risks associated with the nature of our operations, such as noise, dust, hazardous materials and gases, and vibration.
- Infectious diseases present in some of the countries in which we operate, including HIV/AIDS and mosquito-borne diseases.
- Travel-related risks.
- Ergonomic exposures relating to work requirements.
- General suitability for job criteria and fitness for work.

Fitness for work is an important area of employee health. For example, to ensure that health matters do not impact on the safety of the workplace, we have developed drug, alcohol and fatigue management programs at our operations.

To ensure a holistic approach to employee health, we have combined our Fit for Work program with a series of Fit for Life initiatives that include injury management, employee counselling and health promotion.

For details on our approach to the management of these aspects, see Employee Health and Community Health.

See a summary of our health performance for the year ended 30 June 2007.
Employee Health

Our approach to employee health recognises the need to establish a number of measures to reduce any potential for exposure to risk. Use of personal protection equipment (PPE) is vital; however, its use without the associated knowledge and expertise will create an environment where many potential exposures could occur. Our health initiatives are aimed at addressing a range of health management areas. See below for further details on:

- Exposure Management
- Hygiene Knowledge Base
- Fit for Work/Fit for Life.

See a summary of our health performance for the year ended 30 June 2007.

Exposure Management

The control of employee exposures and a reduction of occupational illnesses are the thrust of our approach to occupational health management. Our aim, consistent with the ‘hierarchy of control’ approach, is to remove or avoid hazards through engineering or design solutions wherever possible.

Hierarchy Of Controls

Our approach to exposure management uses a ‘hierarchy of controls’. In all situations, the primary aim is to decrease the source of exposure. As a secondary measure, we aim to minimise the potential amount of employee contact. Where engineering controls are not practicable, we make every effort to protect all employees potentially exposed from any adverse health effect through the use of PPE. It should be noted that all exposures monitored are potential exposures and do not take into consideration the use of PPE where utilised to mitigate exposure.

While we seek to eliminate or minimise hazards wherever possible, it is equally important to fully understand the nature of our occupational exposure hazards where they do occur. In support of this, we have focused our occupational health targets towards establishing baseline data on occupational exposure hazards and the consequent establishment of occupational hygiene monitoring and health surveillance programs. This is in addition to our focus on reducing occupational illness.

Exposure Limits And Systems

Occupational exposure limits are standardised across the Company and are based on our analysis of the most applicable international standards available. The standardised approach ensures consistent reporting on exposure. Each business and site is required to:

- Meet our public, Company-wide targets for health
- Ensure our Company-wide health procedures and guidelines are embedded into their operational systems
- Develop a strategy that addresses key health issues relevant to their operation, particularly the main three occupational exposure risks.

The objective is to help businesses achieve their exposure reduction targets by ensuring clear standards, consistent implementation, improved transfer of leading practice, and tracking of remedial actions, which will also enable standards to be reviewed and improved.
Position statements for key Company exposures provide further detail to professionals on how these should be managed. Key exposures include:

- Carbon monoxide
- Coal dust
- Coal tar pitch volatiles / polycyclic aromatic hydrocarbons
- Diesel particulate as elemental carbon
- Fluorides
- Lead, as inorganic dusts and fumes
- Manganese as dusts, compounds as manganese and fume
- Nickel
- Silica (crystalline as quartz and cristobalite)
- Sulphuric acid
- Noise

Many of these exposures have the potential to cause cancer, and it is vitally important that we manage them at a leading-practice level.

Going forward, our goal is to ensure that all of our owned and operated sites have completed a self-assessment for implementation of the Company-wide exposure management procedures by 30 June 2009 with a target of 95 per cent implementation throughout the Company.

Working With Others

We also collaborate with various health agencies on research projects that will assist us, and the broader industry, in addressing exposure risks.

Noise-induced hearing loss is a significant issue for BHP Billiton, and we are continuing our support of the Australian Garvan Institute of Medical Research’s project to investigate whether adult stem cells can be used to replace hair cells in the inner ear that have been damaged by sustained exposure to noise.

Read more examples of our collaborative efforts in our 2007 case studies on Exposure Management and Noise Exposure.

Personal Protective Equipment

The effective use of personal protective equipment (PPE) continues to be essential while we search for ways to reduce exposures in the Company. Our PPE Compliance Auditing and Respiratory Protection Guidelines provide sites with standard processes for PPE compliance across the organisation.

Despite the use of PPE, there are still potential pathways to exposure. These may include:

- Inadequate training in or incorrect use of the PPE equipment
- PPE equipment failure or poor maintenance
- Multiple similar exposures and surges of exposure that overwhelm protection.

Monitoring Potential Employee Exposures

Key to our approach to managing exposures is the monitoring of potential employee exposures expressed as a percentage of the workforce, if not for the use of PPE, recorded during the reporting period. We focus on three distinct categories for our exposure measurement data:

- Potential exposure of employees above the occupational exposure limit (OEL) for noise (85 dBA 8-hour time-weighted average)
- Potential exposure of employees above the OEL for other exposures
- Potential exposure of employees above the action level (50 per cent of the OEL) but below the OEL for other exposures.
We have established the requirement for reporting potential exposures above action levels but below occupational exposure limits to give us an understanding of the potential for harm and to enable us to establish proactive plans to mitigate exposures.

At levels above the occupational exposure limits, it is understood that harmful effects on health may eventually occur in a proportion of individuals if they are not adequately protected. While all operations provide PPE and other measures to reduce exposure, the reporting on employees in this category gives the Company a clear understanding of the exposures that need to be reduced to further minimise the chance of adverse health outcomes. The reporting of these two categories allows the tracking of our efforts to reduce on-site exposures over time and consequently reduce the incidence of occupational illness.

Our aim is to understand the nature of our occupational exposure hazards where they do occur and to remove or avoid hazards through engineering or design solutions wherever possible.

**Hygiene Knowledge Base**

We continue to support a graduate training program for occupational hygienists with Deakin University (Victoria, Australia) as one way of responding to an increasing need of skilled occupational hygienists.

The first intake occurred during 2005. In 2006, this initiative continued successfully with an increase in intake. Through our involvement, we are seeking to ensure course work reflects leading developments in hygiene practice and that graduates are exposed to our operations with the intent of attracting appropriately qualified occupational hygienists in the future. We will continue to monitor the success of the program and plan to expand the intake internationally with incorporation of South American graduates into the program in calendar year 2008.

**Fit for Work/Fit for Life**

Fit for Work/Fit for Life is a Company-wide initiative that was launched during 2004/05 to assist our drive towards Zero Harm. The initiative seeks to promote a consistent approach to the management of health issues in the work environment. The initiative recognises that many health issues not only have the potential to impact on our safety performance, but also can cause community issues and consequently impact on our ability to contribute to sustainable development.

The initiative is intended to provide guidance to sites in developing site-based health management programs covering:

- Drug and alcohol use
- Fatigue management
- Medical assessment
- Travel health
- Ergonomic analysis
- Occupational rehabilitation
- Health promotion
- Employee assistance.

By taking a holistic approach to health management, the initiative intends to ensure:

- We promote the well-being of our workforce and host communities in which we operate
- Our workforce is physically capable of performing all activities required of it
- Medical assessments are undertaken where work requirements change
- Family members are also involved in educational health programs.

Development of the program continues, and regular regional and business-based workshops provide opportunities to share leading practices.

The initial focus has been on fatigue management, as this has been identified as a primary factor in many safety incidents. Two Global Practice Leaders assist sites with the implementation of the program, with one of these positions specifically focused on fatigue management.
In the coming year, the focus will expand to include the standardisation of medical assessment processes throughout the Company; these will include important preventive and health promotional activities, support for our ageing workforce and general health support.

Going forward, our goal is to ensure that all of our owned and operated sites have completed a self-assessment for implementation of the Fit for Work/Fit for Life procedures by 30 June 2009 with a target of 95 per cent implementation throughout the Company.

Read our 2007 health case study on how we are implementing our Fit for Work/Fit for Life initiative.

For our progress in employee health management, read Healthy People•2007 Performance.
Community Health

Our focus in community health is directed towards the prevention and treatment of the three major infectious diseases that affect many of our operations, as members of the community, our employees and contractors can be significantly affected by communicable diseases.

A summary of our approach to these is discussed below, with details on our progress provided in 2007 Performance>Community Health.

HIV/AIDS

In the communities in South Africa and Mozambique where our operations are located, the incidence of HIV/AIDS is among the highest in the world. We continue to have a responsibility to manage the impact of the disease in order to care for our employees, protect the viability of our operations and support the well-being and development of our host communities.

For many years, we have adopted a proactive approach to managing the disease within our workplaces that draws upon the International Labour Organisation (ILO) Code of Practice on HIV/AIDS. This includes:

- Conducting education programs.
- Offering voluntary testing and counselling programs under the strictest confidentiality.
- Ensuring employees and their dependants have appropriate access to medical care.
- Reducing hostel-type accommodation for employees, known to be a risk factor for the disease.

We are now seeking ways to support initiatives that will help manage the disease in the wider population. An example of this commitment is our support of a clinical trial of a new HIV/AIDS therapeutic therapy in South Africa. The treatment is delivered in the form of a vaccination, and it is expected to offer new options for management of the disease in resource-restrained environments of the developing world. The trial is being financially supported by eight global mining companies led by BHP Billiton, which has provided cornerstone funding of US$2 million. The trial is now in the last stages of approval form the Medicines Control Council in South Africa, approval for the clinical trial is expected to be received in late 2007, ready for the trial to commence in early 2008. Read more 2007 Healthy People case study.

Malaria

Along with tuberculosis and HIV/AIDS, malaria is one of the major infectious diseases responsible for significant illness and mortality around the world. For our operations in southern Mozambique, Pakistan and northern Brazil and for several developing projects in Africa malaria is a significant health issue. The disease can impact on the ability of these regions to provide sustainable workforces. The health of employees also affects safety and productivity.

We are supporting the Medicines for Malaria Venture, a non-profit organisation created through the World Health Organization to discover, develop and deliver new anti-malarial drugs through effective public-private partnerships. We are among the first small group of global companies invited to become corporate supporters of the Medicines for Malaria Venture.

Avian Flu

The threat of a worldwide pandemic associated with the avian flu continues to be evident. BHP Billiton formed a Pandemic Working Group in mid-2005 to respond to this issue and assist in business continuity planning. Documentation has been developed to assist all businesses with this process and ensure that the issue is linked to standard contingencies and crisis and emergency response procedures. Read more: Security, Emergency Response and Business Continuity.
Other Community Health Initiatives

Tuberculosis
In the Northwest Territories of Canada, tuberculosis (TB) is a significant issue among the Inuit population, which as a consequence has an impact on our Ekati Diamond Mine operation. In an effort to limit development of the disease, we participate in a screening program to detect latent TB infection in our workforce and the local community.

RV2 Rotavirus Vaccine Production
We fund the Australian Murdoch Children’s Research Institute project to develop an effective rotavirus vaccine that is affordable for children in developed and developing countries. Rotavirus infection is the leading cause of severe dehydrating gastroenteritis for children under the age of five worldwide and contributes substantially to the mortality and morbidity of children in developing countries.

Kidney Disease
Going forward, we are engaging with Kidney Health Australia, with a view to supporting a targeted testing program for chronic kidney disease. The pilot program, which is likely to be run at a number of our Australian operations, will test the feasibility and cost effectiveness of early detection of the disease.
2007 Performance

Message from the Vice President Health

Key Successes and Shortcomings

In 2007 we have had mixed performance against our five-year health targets and improved participation in other health initiatives such as medical assessments and fitness programs. Exposure to noise continues to be a major challenge for our Company going forward, and we need to maintain our focus on the consistent use of personal protective equipment in the workplace.

During the year, we received the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria Commendation for Business Excellence on Malaria. The award recognises our continued support for the Medicines for Malaria Venture, established through the World Health Organization to provide affordable anti-malarial drugs to people in disease-endemic countries. Our long-term efforts in HIV/AIDS education and treatment in Africa are returning encouraging results; the HIV/AIDS rate in our employee workforce has stabilised in the last three years, 60 per cent of employees participate in testing and the prevalence rate for BHP Billiton employees in southern Africa is half the average prevalence rate of South Africans aged between 15 and 49 years. We believe our efforts in communication and counselling have significantly contributed to this lower prevalence rate.

Responding to the World Health Organisation’s assessment that we are still at significant risk of a global avian flu pandemic, we are continuing our proactive approach with the development of Company guidelines for business continuity planning and crisis management and practice drills at higher-risk locations, such as Indonesia and Singapore.

Health Risks and Opportunities

We recognise that a healthy workforce and supporting community is vital for business productivity and growth. Occupational exposures such as carcinogens, radiation and noise present a key risk to the vitality of our workforce. Our workforce is ageing; and while this in itself presents a risk to our ongoing viability, our experience tells us that people are motivated to stay in our industry for the long term. Our opportunity is to provide the support and advice they need to stay fit for their roles.

Community health issues such as HIV/AIDS, tuberculosis and malaria threaten a broadening scope of the global society. We recognise that our skills and knowledge in certain countries may be of benefit to other regions facing these challenges. Our opportunity is to continue to gain access to resources through improved capacity to work in areas where there are health risks and to demonstrate that this capacity contributes more broadly to the improved health of the communities where we operate.

Systems and Structural Improvements

We have created two new internal Communities of Practice (COP) to focus on ionising radiation and on HIV/AIDS, tuberculosis and malaria. The objectives of the ionising radiation COP are to firstly, define an exposure standard for the Company and secondly, explore the interface of people and ionising radiation, e.g. equipment such as in-stream monitors, products such as uranium, and process stages such as use by employees and contractors, storage, transport and disposal. The HIV/TB/Malaria COP will operate in conjunction with the International Council on Mining and Metals taskforce on the same health issues.

The Company-based Global Occupational Hygiene Network continues to develop and facilitate learning by sharing knowledge across the organisation. Face-to-face meetings occur in all regions of the world.

Key Strategies

Our businesses are diverse and face different health issues related to their production processes and locations. We are introducing a target of a 15 per cent reduction in potential employee exposures (i.e. noise and other exposures) over the occupational exposure limit by 30 June 2012. Currently these potential exposures necessitate strict use of personal protective equipment to avoid adverse health effects. We will also be targeting specific exposure reduction initiatives for the top three exposure risks in each of our Customer Sector Groups annually over this period.
Our five-year Health Strategy takes a holistic approach to medical assessment. We are stepping up our focus on fatigue management as part of our Fit for Work/Fit for Life program. We aim to create a leading practice working environment, where employees can expect regular medical assessments for their job and their general health to be part of the standard offering of their role.

Dr Peter Shanahan
Vice President Health

Read more about our 2007 performance against our objective at:

- Occupational Exposures
- Occupational Illnesses
- Personal Protective Equipment Compliance
- Health Fines
- Community Health

To understand the strategy, targets and systems we put in place to manage our health performance, read Healthy People. For examples of policy in action, read our Healthy People Case Studies.
Occupational Exposures

Over the last five years we have experienced year-on-year reductions in potential employee occupational exposures above regulatory limits with most exposures. We have not, however, experienced significant reductions in noise exposure. We are keenly aware of the need to move from a dependence on personal protective equipment to implementing significant engineering processes so as to reduce these exposures.

Going forward, we are targeting a further 15 per cent reduction in potential employee exposures above occupational exposure limits. Key to this approach has been the identification and targeted activity to address the top three risks faced by each of our Customer Sector Groups.

Company-wide, the major occupational exposure risks faced are noise, silica (quartz), coal tar pitch volatiles, diesel exhaust particulate, manganese, and respirable coal dust. The major health exposures faced by our Customer Sector Groups (CSGs) are listed below.

<table>
<thead>
<tr>
<th>By CSG</th>
<th>Risk 1</th>
<th>Risk 2</th>
<th>Risk 3</th>
<th>Risk 4</th>
<th>Risk 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium</td>
<td>Noise</td>
<td>Coal tar pitch volatiles (C)</td>
<td>Fluorides</td>
<td>Welding fumes</td>
<td></td>
</tr>
<tr>
<td>Base Metals</td>
<td>Noise</td>
<td>Diesel exhaust particulate (C)</td>
<td>Silica (quartz) (C)</td>
<td>Lead (C)</td>
<td>Sulphuric acid mist (C)</td>
</tr>
<tr>
<td>Iron Ore</td>
<td>Noise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metallurgical Coal</td>
<td>Noise</td>
<td>Diesel exhaust particulate (C)</td>
<td>Silica (quartz) (C)</td>
<td>Respirable coal dust</td>
<td></td>
</tr>
<tr>
<td>Manganese</td>
<td>Manganese</td>
<td>Noise</td>
<td>Silica (quartz) (C)</td>
<td>Coal tar pitch volatiles (C)</td>
<td></td>
</tr>
<tr>
<td>Diamonds &amp; Specialty Products</td>
<td>Noise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Coal</td>
<td>Noise</td>
<td>Silica (quartz)</td>
<td>Respirable coal dust</td>
<td>Coal tar pitch volatiles (C)</td>
<td>Diesel exhaust particulate (C)</td>
</tr>
<tr>
<td>Stainless Steel Materials</td>
<td>Noise</td>
<td>Nickel (C)</td>
<td>Coal tar pitch volatiles (C)</td>
<td>Diesel exhaust particulate (C)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Carcinogenetic exposures are marked (C).

These health exposures are selected on a priority basis of carcinogens; mutagens and agents toxic to reproduction (CMR); and agents that are chronic systemic toxins, and on the number of people exposed. Our Iron Ore CSG has only one agent listed while three CSGs have reported none. In each case, except the Manganese CSG, noise is easily the most prevalent exposure.

The graph below illustrates potential employee exposures, if not for the use of PPE, recorded during the reporting period.
While we are gratified that we are continuing to reduce most exposures in the workplace, we recognise that there is continuing work to be done; and, in particular, we have not had a major impact on reducing noise exposure in the workplace.

At levels above the occupational exposure limits, it is understood that harmful effects on health may eventually occur in a proportion of individuals if they are not adequately protected. With potential exposure above 50 per cent of the occupational exposure limit there is also the possibility of adverse health effects. The reporting of these two categories allows the tracking of our efforts to reduce on-site exposures over time and consequently reduce the incidence of occupational illness. Read more about our approach to measurement in exposure management.

In 2006/07, our Company-wide exposure assessment method was translated into a computer-based program for use by all our operations. The program is designed to allow sites to score their performance and track progress and will be rolled out across all sites in 2008.

We are continuing to support the hygiene industry with the expansion of our Hygienist Graduate Development Program to support new trainees in Africa, Australia and the Americas. Internally, we continue to drive leading hygiene practices through participation in regional workshops and an annual program of site assessment.

**Noise**

Noise-induced hearing loss is a significant issue for BHP Billiton. Measurement of noise-induced hearing loss in BHP Billiton is based on the U.S. Occupational Safety and Health Administration Standards, which are among the most stringent in the world and are focused on detecting noise-induced hearing loss at the earliest stage. We have had a strong focus on applying these standards at all operations, resulting in a large increase in diagnosed cases in 2007.

In the presence of a slight reduction in employee noise exposure against the baseline year 2002/03, we are confident that these figures indicate that we are detecting cases at an early stage. This should assist in preventing further deterioration of hearing in these cases.

In 2006/07, the Company-wide Noise Community of Practice promoted activities in noise reduction. A Company-wide survey was conducted to ascertain what processes and activities caused the highest noise exposure levels to significant workforce numbers. Following this survey, we have recognised underground ventilation fans and maintenance workshops to be key areas requiring focus; and, as a result, we have established a new Ventilation Community of Practice and are sharing best practice in noise management for maintenance workshops. Read more about various Company-wide projects to eliminate or minimise exposure in our 2007 case study.
Apart from work focused on specific sources of noise, guidelines have been developed for 'Buy Quiet' purchasing practices and Exposure (Noise) Management Planning. We have also continued to support the Australian Garvan Institute of Medical Research in investigating the use of adult stem cells as replacement hair cells in the inner ear that have been damaged by sustained exposure to noise.

Carcinogens

In 2006/07 we continued to investigate new forms of engineering to reduce exposure to potentially cancer-causing chemicals.

Our Diesel Particulate Initiative, which focuses on reducing exposure to diesel exhaust fumes, continues to deliver improvements in our underground mining operations where the potential for exposure is highest. We are also working with sites in promoting the benefits of aggressive vehicle maintenance programs as a mechanism to assist in controlling emissions.

We have initiated a research program with an external manufacturer to explore technology to further reduce acid mist exposure that occurs in some of our metal processing plants. Sulphuric acid mist is regarded as a potential cancer-causing substance if exposure is too high; if successful, this technology will dramatically reduce the potential exposure.

We have developed a new Ionising Radiation Community of Practice, with the objectives of defining an appropriate exposure standard and investigating the interfaces between people and ionising radiation, for example, in uranium mining, in-stream monitoring devices for a broader range of commodities, storage, disposal and use by contractors.

The presence of uranium in the mining and processing at our Olympic Dam (Australia) introduces specific challenges associated with radiation safety. Radiation protection is an integral part of all stages of work and includes consideration during exploration, mining, processing, marketing, transport, long-term closure plans, and storage and disposal of wastes. Personnel are monitored to ensure compliance with international and national guidance levels and state regulations. The doses to employees and the public are subject to stringent scrutiny by the regulatory authorities, and results are presented in quarterly and annual reports. In 2006/07, recorded doses to employees and the public continued to be well below regulatory limits.

Read more about our approach to minimising occupational doses in the operational environment in our 2007 case study featuring the smelter ventilation project at Olympic Dam that is designed to manage the inhalation of polonium-210.

Dust, Heat and Vibration

Other principal exposures include those related to dust, heat, vibration and welding fumes. Vibration exposures mainly occur in drivers of earthmoving equipment and, in the longer-term may result in back injury or pain. In addition to other health and safety modifications, we have continued to work to reduce vibration exposures as part of our strategic alliance with Caterpillar, our major earthmoving equipment supplier.

Looking ahead, in line with our current health target, occupational exposure baselines have been established and occupational hygiene programs are being implemented. Over the reporting period, we reviewed our health targets to further focus on reducing the number of people potentially exposed above the occupational exposure limit.

A number of our operations have been progressing initiatives to better understand and reduce occupational exposures. For examples of policy in action, refer to our case studies on Managing Exposure to Carcinogens and Managing Exposure to Noise.
Occupational Illnesses

An occupational illness is an illness that occurs as a consequence of work-related activities or exposure.

As previously indicated, in 2006/07 we had a strong focus on ensuring we had detected all early cases of noise-induced hearing loss. As a result, we have detected 156 new cases of noise-induced hearing loss compared to 40 cases in the previous year, which has been the major determinant in our total of 264 new occupational illnesses, compared with 124 in 2005/06.

This number of cases represents a 17 per cent increase from our baseline year; and, hence, we have not met our target to reduce occupational illness by 20 per cent through the Company by the end of full year 2007. We are, however, gratified that our stringent diagnostic criteria for noise-induced hearing loss will ensure we are managing this impact at the earliest stage.

We have recommitted for a further five years to a stretch target of a 30 per cent reduction in occupational illness. In the coming period, we are aiming for a larger reduction than the previous five years and are working from a lower baseline figure. The breakdown of new illnesses in 2006/07 is illustrated above.

Our medical surveillance program requires a standardised approach to diagnosis, which results in an increased awareness of conditions and better diagnostic programs. In 2006/07, we focused on enhancing our holistic approach to medical surveillance, including health promotion, supporting our ageing workforce, improving functional task capacity and supporting general health.

We have improved our coverage of the workforce in this area by five per cent from the previous year. This improvement assists in the detection of occupational illness at an early stage and allows application of health screening and preventive health activities to a greater proportion of the workforce.

As shown above, 89 per cent of employees requiring medical examinations completed those examinations in 2006/07, compared to 84 per cent in the previous reporting period.
Fit for Work/Fit for Life

Efforts to implement our highly successful Fit for Work/Fit for Life initiative continued in 2006/07, with particular focus on fatigue management.

This year, we conducted a technical review and pilot program with the Caterpillar strategic alliance for new technology to detect the early signs of worker fatigue.
Personal Protective Equipment Compliance

While the elimination of exposure risks is our key driver, often this is not readily possible or feasible, and personal protective equipment (PPE) is used.

It is critical that PPE is used effectively and that compliance is checked through a formal program that ensures that not only the correct PPE is available but also that it is properly fitted and maintained.

PPE compliance has essentially remained stable in the Company over recent years. At the end of the reporting period, the status of overall PPE compliance in the Company was reported as 93 per cent, compared to 95 per cent in the previous reporting period, as shown in the graph.

![PPE Compliance 2002/03 to 2006/07](graph.png)

**Note:** The graph only includes data for those sites that have a formal PPE monitoring system. Diamond and Specialty Products’ monitoring system is currently under review against the Company’s PPE Compliance Auditing Guideline so did not report in 2006/07.

This is an area where we continually seek improvement; and in 2007/08, we are continuing to encourage operations to implement formal audit programs of PPE compliance.

We recognise that our formal auditing programs for PPE compliance do not, in all cases, meet strict Company requirements. Operations are becoming increasingly aware of this issue and reviewing the processes by which they measure PPE compliance.

There is a strict Company guideline on this process, and all operations are required to report evidence of appropriate PPE compliance auditing on the elements in this guideline. As a consequence, this parameter continues to be low at 63 per cent; however, we are confident that the drive in this area will lead to improved reporting of PPE compliance and increased protection for employees.
Note: The graph presents a ratio of the number of Yes responses to the number of HSEC questionnaire responses received. Some BHP Billiton sites do not submit an HSEC questionnaire and are therefore not included.
Health Fines

Regrettably, we did not meet our goal this year of zero health fines or prosecutions. The table below outlines the health fines for the 2006/07 reporting period. Note: Fines reported may relate to incidents that occurred in previous years.

Health Fines 2006/07

<table>
<thead>
<tr>
<th>Site</th>
<th>Customer Sector Group</th>
<th>Description</th>
<th>Fine (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khutala Colliery, South Africa</td>
<td>Energy Coal</td>
<td>August 2006 - Fine received for overdue medical examinations. Additional control procedures have since been implemented to ensure compliance with the medical surveillance program requirements.</td>
<td>8,256</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>8,256</td>
</tr>
</tbody>
</table>
2007 Performance - Community Health

Global Community of Practice

In 2006 we established a Global Community of Practice to coordinate our efforts and share leading practice in HIV/AIDS, tuberculosis and malaria management.

We are working with the International Council on Mining and Metals to develop benchmark occupational exposure limits for the mining industry, and we participate in their taskforce on malaria, tuberculosis and HIV/AIDS.

Malaria

During the year, we were awarded the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria Commendation for Business Excellence on Malaria. The award recognises our continued support for the Medicines for Malaria Venture. Established through the World Health Organization, the Venture aims to provide affordable antimalarial drugs to people in disease-endemic countries. The program has proved very successful and is ahead of schedule in its aim to produce new anti-malarial medication. We have continued our strong support for the malaria eradication program in southern Africa by collaborating in an extensive mosquito-spraying program. We have also partnered with the Guinean Government to expand the spraying program into their country.

Tuberculosis

Last year we reported on a study to be conducted at our EKATI Diamond Mine (Canada) to help in limiting the spread of tuberculosis (TB). The study did not progress at our site as the technology was approved by the Canadian Government prior to the start of our study. The intention is that we will now incorporate this approach into our standard TB screening procedures.

HIV/AIDS

Following on from our HIV/AIDS immunotherapy project outlined in previous reports, this year we committed US$2 million in cornerstone funding over the next three years to trial the HIV therapeutic vaccine in South Africa.

If successful, this treatment will potentially provide an approach to the epidemic that can be delivered to a wider number of the affected population and reduce the often significant compliance issues and costs associated with anti-retroviral medication.

Our funding commitment led the way in developing an international consortium for further support of the project. At the time of this report, the project is in the final stages of review by the South African Medicines Control Council, with clinical trials likely to proceed in 2008.

During the year, our approach to HIV/AIDS was presented to, and well received by, our Forum on Corporate Responsibility. We also commenced a collaborative partnership with the Asia-Pacific Business Coalition on HIV/AIDS. Using our African experience, we aim to assist the Coalition in the development of potential programs for such locations as Papua New Guinea, Laos, Thailand, China and Cambodia.

For more on our approach to helping manage the impact of this disease, read our 2007 case study.
Case Studies

The following case studies are examples of issues, initiatives, projects and programs across the Group that highlight some of the health opportunities and challenges faced by our operations. Case studies are also on safe workplaces, environmental commitment, social responsibility, our people and our socio-economic contributions.

Fit For Work/Fit For Life

We continue to promote our Fit for Work/Fit for Life program at operations. Examples include: a Musculo-Skeletal Injury Prevention Program to promote sport and fitness (Cerro Matoso, Colombia); a Functional Capacity Evaluation program to detect current and future employee health risks (Yalubu Refinery, Australia); and a pilot fitness program for Emergency Response Teams (Mt Arthur Coal, Australia).

'A Day In The Life Of A BMS Shift Worker' - A Fatigue Awareness Video

A video program about shift work has been produced to raise awareness of the health risks of fatigue at our Aluminium operation in Suriname.

Providing Clean Drinking Water To Remote Communities

Following a successful pilot project in 2004, a total of 120 water pumps have been installed in 87 remote villages in the Dadu District surrounding the Zamzama Gas Plant in Pakistan, providing sweet drinking water to over 10,000 people in the region.

Managing Noise Exposure

A Company-wide noise survey has resulted in various projects to eliminate or minimise noise exposure. For example, a digital real-time noise display has been installed to increase awareness in the maintenance workshop at our Khutala Colliery in South Africa.

HIV Treatment And Management Programs In Southern Africa

We are contributing US$2 million cornerstone funding for clinical trials to test a potential new vaccine for the treatment of HIV in southern Africa. Our Mozal operation in Mozambique has embarked on an HIV management program for employees, spouses and contractors.

Smelter Ventilation Project At Olympic Dam Management Of The Inhalation Of Polonium-210

Engineering projects are achieving substantial reductions in occupational exposure to radiation at our Olympic Dam copper/uranium mine in South Australia.
Fit For Work/Fit For Life

Functional Capacity Evaluation Program At Yabulu Refinery

Yabulu Refinery in Queensland, Australia, has introduced a Functional Capacity Evaluation (FCE) program, designed to detect current and future health risks and help ensure employees’ ongoing fitness for work. Yabulu, 100 per cent owned by BHP Billiton, is part of the Stainless Steel Materials Customer Sector Group and produces nickel and cobalt.

Conducted by a qualified occupational therapist, the FCE is a systematic process of assessing an individual’s physical capacities and functional abilities; it matches human performance levels to the demands of a specific job or work activity. Limitations and restrictions can be identified, and we can then assist the employee to manage them.

Preliminary results from the program are providing valuable insights into the health and fitness of our employees.

An employee who participated in the FCE program, control room operator Gavin Koch, said: "After failing some components of the FCE due to elbow problems I had been ignoring for some time, I was sent by the Company for proper diagnosis and treatment. Since the first treatment, my injury has improved and hopefully will continue to do so. The FCE proved to me that my injury was worse than I thought and my strength had been severely affected. So far I am happy with the Company’s response and concern. I was at first a little hesitant in participating in the health surveillance program, but I was impressed with its format and impressed with the Company’s actions."

The Challenge

To develop and implement the FCE program, we had to achieve two objectives. The first was to assess the work environment and evaluate loads, postures, repetitive movements, tools and personal protective equipment (PPE). The second was to undertake the different tests required to assess human performance levels to the demands of a specific job or position.

How We Did It

Preparatory procedures in the FCE program include a standard blood test, electrocardiogram, physical examination, breathing and hearing tests, and general health questionnaires. These assess general health and ensure the employee can undertake the FCE’s fitness tests without risk.

An FCE training area has been set up close to the Medical Centre, where the tests include:

- Grip strength.
- Ladder climbing competency.
- Postural tolerance such as kneeling, squatting, and balancing when working in awkward positions.
- Mobility, flexibility, carrying and lifting capabilities.
- Cardiovascular fitness.

The 200 FCEs conducted to date found that 75 per cent of participating employees were overweight and 39 per cent had below average cardiovascular fitness. Healthy lifestyle advice has been provided, with a focus on diet and exercise.

In the grip strength test, 29 per cent were below average. Postural tolerance tests showed some employees (14.4 per...
cent) were restricted or unable to work in such positions, and they have been provided with individual health management plans.

Going Forward

Based on the FCE findings, we will be implementing preventive workplace measures, such as engineering modifications, improvements to work surfaces and tools, and changes in the organisation of work.

We are also encouraging employee participation in our 'Sprain and Strains' preventive program, which contains:

- A stretching program.
- Clinics addressing shoulder issues, back problems, knee injuries etc.
- Correct manual handling techniques.
- Workstation self-assessments based on ergonomic standards.
- Toolbox talks.

Program To Prevent Musculo-Skeletal Injuries During Sport Activities At Cerro Matoso

Cerro Matoso’s Occupational Health Department has implemented a Musculo-skeletal Injury Prevention Program, a groundbreaking interaction between occupational health programs and the sports committee’s activities.

The 100 per cent owned Cerro Matoso ferronickel mining and smelting operations in Colombia is part of the Stainless Steel Materials Customer Sector Group. In 2006, musculo-skeletal injuries ranked first among injuries sustained at Company sports events. During training prior to the 2007 volleyball championship, four musculo-skeletal injuries occurred. It was decided to carry out physical assessments and to educate people about their risk profile.

A total of 271 Cerro Matoso employees, their spouses, and contractors participated in the assessment process, conducted by an occupational health doctor and physiotherapist. Some participants were assisted to increase their fitness levels while others were advised not to play; and, as a result, musculo-skeletal injuries were avoided during the tournament.

Ivan Enrique Pupo Malabet, a maintenance planner in the minerals preparation section, says: 'In taking part in this program, I received professional advice on starting and gradually increasing my physical conditioning. Initially I was given an exercise program and there were a few sessions where the medical people were present and they made a variety of assessments. I had not taken part in a program like this before, and I believe that it is very important for the participants'.

The Challenge

Our challenge is to address health issues that not only have the potential to impact on our safety performance, but also can affect the local community and consequently impact on our ability to contribute to sustainable development. Through the Company-wide Fit for Work/Fit for Life initiative, we aim to promote a consistent and holistic approach to the management of health issues in the work environment and encourage participation in healthy and safe activities that support our people’s overall general health.

How We Did It

In performing the assessments, physical characteristics (strength, flexibility, balance) were determined, along with injury risk factors.

The sports skill levels of participants were classified, and individuals who required greater physical preparation were identified. Participation categories were then established, taking into account the physical skill levels of the
participants and their volleyball abilities.

Of the 271 participants assessed, 163 were Cerro Matoso employees, 26 were spouses and 82 were contractors.

Potential for musculo-skeletal injuries during the tournament was attributed to the following risk factors:

- Cardiac background.
- Musculo-skeletal pathology background.
- Body mass index.
- Diagnosis of musculo-skeletal condition.
- Symptomatology (presence of pain, edema, inflammation).

These factors were determined from the participants’ case histories following the physiotherapist’s assessments. Based on the results of the assessments, each participant was classified as being fit, restricted or not recommended to take part in the tournament.

Of the 271 participants, 204 (75.3 per cent) were classified as fit to participate. Fifty-nine (21.8 per cent) were classified as restricted and took part in a preparation program before participating at a less physically demanding level. Eight (2.9 per cent) were not recommended for tournament participation and were provided with a physical preparation plan and advice on appropriate, lower-risk sports.

Going Forward

We will introduce further musculo-skeletal injury prevention initiatives, such as a program that allows physical exercise programs to be prepared for individual employees to improve musculo-skeletal and cardiopulmonary (heart and lungs) condition, reduce fatigue and set out proper ways to prepare for sports events.

Improving The Health Risk Profile Of Mt Arthur Coal’s Emergency Response Team

At our 100 per cent owned Mt Arthur Coal in New South Wales, Australia, we recognise that our Emergency Response Team is in a specific health risk group. This is because team members may become involved in a protracted rescue or firefighting situation where they may be required to perform sudden and sustained physical exertion.

There are defined health and fitness standards for most emergency services groups in the public sector, and we have developed a pilot fitness program to help our Emergency Response Team meet similar standards. The results are currently under evaluation, but the team’s enthusiasm for the program is already evidenced by the additional training they undertake in off-duty hours.

A particular benefit comes from encouraging personal responsibility for fitness; it is observed that those employees who manage their own health risks are more aware of other personal risks in their workplaces.

A member of the Emergency Response Team, plant operator Darren Hamilton, commented: “The benefits of this program have included setting and achieving personal goals, e.g., weight loss and increasing endurance levels, [and] working together as a team to prepare ourselves to do the best for our workmates if required to respond to an emergency situation. My fitness levels and eating habits have all changed for the better from the introduction of this program.”

The Challenge

The periodic health assessments carried out for all mining industry personnel have shown over recent years that industry employees exhibit a number of modifiable risk factors for cardiovascular disease at a higher rate than the national average, based on National Heart Foundation data. The most concerning of these factors include being overweight and having insufficient physical activity.
Emergency Response Teams represent a cross-section of personnel in terms of their health and fitness status. In emergency situations, they may be required to exhibit sustained exertion beyond their normal stamina, strength and fitness, and this could create health risks to themselves and those who rely on them.

**How We Did It**

The program developed for our Emergency Response Team includes:

- Fitness assessments.
- Setting individual improvement goals.
- Undergoing physical training with an exercise physiologist.
- Nutrition education with our site Health Coordinator.

The program is conducted utilising a practical approach in an active setting, showing individuals what they can achieve with regular exercise and nutritionally balanced food choices.

**Going Forward**

All Emergency Response Team members will be scheduled for medical assessments against defined health and fitness standards. This will determine if any individuals have specific health risks related to emergency response activities, and, where necessary, plans will be developed to assist them to manage those risks.

Evaluation of this pilot program will help determine if it could be of value for other workgroups at Mt Arthur Coal.
Providing Clean Drinking Water To Remote Communities

Following a successful pilot project in 2004, a total of 120 water pumps have been installed in 87 remote villages in the Dadu District surrounding the Petroleum’s Zamzama Gas Plant (BHP Billiton 38.5 per cent), providing clean drinking water to over 10,000 people in the region.

The program is based on providing the villages with traditional hand pumps, learning from an earlier project with a high-tech reverse osmosis unit. That experiment was not as successful because the unit was complex and costly for the villagers to maintain.

The key to the hand pump program’s success is consultation with the communities; the formation of local committees (comprising both men and women) to manage and maintain simple technology pumps; and collaboration with tribal heads, district governments and local NGOs, such as the Kachho Foundation.

Ghulam Hyder Siyal of the Kachho Foundation said: "Access to potable sweet drinking water is considered one of the most important issues in the community. Due to restrained water resources, the community is compelled to drink infected water from ponds, which is a major health hazard. Also, precious time is wasted on collecting water from far-off locations. The combined effort of Kachho Foundation and BHP Billiton to facilitate water through traditional hand pumps has provided the community with accessible water opportunities at their doorstep; that saves time, is easy to manage and has brought much needed relief."

The Challenge

In the Dadu District, access to sweet drinking water is very limited, which has a serious negative impact on the health of local people. Most women have to spend a large part of their already busy days fetching water. This duty is also imposed upon children of the villages.

Due to the limited access to clean drinking water, local people fetch water from contaminated stagnant ponds, leading to the eruption of such diseases as cholera and hepatitis.

Needs assessment surveys conducted under our community development plan identified the lack of clean drinking water as a critical issue. The challenge was to provide a sustainable solution in collaboration with the communities and local NGOs while playing a neutral role and being respectful of local culture and traditions.

In 2001, the Company installed a reverse osmosis pump in a local village. We learnt, however, that such high-tech equipment is not easy for communities to maintain and has less chance of being a sustainable solution. After conducting further community discussions and investigating many options, we decided the most effective solution was to install traditional hand pumps.

A key requirement was to build the capacity of our host communities and local NGOs. A further challenge arose when information about the project spread through the area and every village wanted to be included.

Our approach was to support the NGOs to develop an implementation process based on establishing village committees, comprising both men and women, to undertake the project at a local level.
How We Did It

In 2004, a pilot project was initiated with a local NGO, the Kachho Foundation. They worked with communities in the region to collectively select locations where hand pumps would be located. Sites were chosen where it was known that clean underground water sources existed and would be easily accessible by most villagers. Subsequently, 30 hand pumps were installed in 21 villages.

The project won a BHP Billiton HSEC Award, and the prize money was contributed to another local NGO, JORDAN, for the installation of a further 50 hand pumps in 46 distantly located villages.

Abdul Majeed Panhwar of the village of Daud Panhwar UC Bahawalpur said: "The newly installed hand pump in our village has benefited all, especially me. I have grown seasonal vegetables for personal use on a piece of land where trickled water from the hand pump is collected. I am now able to make some income through this activity."

The third phase of the project has begun, which will see the installation of another 50 hand pumps in 18 additional villages.

To sustain the program, we support each beneficiary village to establish a Water and Sanitation Committee. The main responsibility of these committees is to manage the functioning, repair and maintenance of the hand pump units and ensure they provide maximum benefit to the local people.

The communities are also encouraged through educational programs to plant trees and gardens, use waste water productively and care for their local environment.

A continuous monitoring system is in place, with the NGO field staff being responsible for conducting regular visits to the communities and providing us with monthly progress reports.

Going Forward

We are committed to continuing to improve access to clean drinking water, particularly for remote communities.
Managing Noise Exposure

Global Noise Management Program

Noise is a significant exposure risk for our employees and contractors. We manage noise by introducing, wherever possible, engineering controls that seek to eliminate or minimise hazards.

Where such controls are not practicable, we make every effort to protect all employees who are potentially exposed by issuing personal protective equipment (PPE) and conducting noise management training. Our Global Noise Community of Practice also plays a pivotal role in promoting noise management practices.

A Company-wide survey has indicated that a number of our significant noise exposures were related to noise sources that are intermittent rather than constant, such as maintenance activities. We have studied some of these work activities and applied engineering controls to eliminate or minimise the exposures.

The Challenge

Our annual reporting has indicated that there are occasions on which around 46 per cent of our employees may potentially be exposed to noise above the occupational exposure limit and therefore require PPE to prevent noise-induced hearing loss.

To address this challenge, we conducted a survey across the Company to improve our understanding of how loud the noises are and what noise sources people are exposed to.

How We Are Doing It

Project teams have been established within our Global Maintenance and Mine Operations Networks to work on mitigating these intermittent noise sources. The aim is to lessen these noises at source by engaging people who work at the operations (and who deal with these issues on a daily basis) to help find solutions. An example is the development of large-scale digital noise displays for use in the main surface workshop and other work areas at Khutala Colliery in South Africa (see case study below).

Additionally, a project team established under our Earthmoving Equipment Alliance with Caterpillar is investigating the design of mobile equipment cabins to not only ensure better noise attenuation for the operators but also make the attenuation maintainable in the longer term.

Guidance material has been prepared to assist sites to mitigate noise exposure through a 'Buy Quiet' program. The thrust of this initiative is to build quieter plant and buy quieter equipment so that, where possible, noise is 'engineered out' at the procurement stage.
Visual Noise Awareness in the Workplace — Digital Real-Time Noise Display

An innovative approach to the management of exposure to noise in the workplace has been initiated at Khutala Colliery in Witbank, South Africa. A digital real-time noise display has been developed at the 100 per cent owned Energy Coal operation, which indicates real-time sound levels generated throughout the day. The large display can easily be seen.

A prototype was installed in the main surface workshop and positively accepted by the workshop employees. Subsequently, 18 additional noise displays have been purchased for installation in other noisy work areas.

Key benefits and learnings of the digital real-time noise display:

- Employees can now ‘see’ the noise levels of activities performed within their work area.
- Statistics for noise levels at any time of the day can be downloaded for analysis.
- The display promotes constant awareness of noise levels in the workplace.
- It helps foster a more positive employee attitude to health.
- Employees are exploring new ways to produce less noise during work.

The Challenge

Time-weighted average noise levels in the main surface workshop typically range between 89 and 110 dBA. The occupational exposure limit is 85 dBA.

Hearing protection devices are issued to workshop employees. Intensive noise management training is also conducted annually, and compliance with the Company’s PPE Guidelines is checked regularly. However, the challenge remains to further assist employees to determine when noisy operations become too loud and to take appropriate remedial measures.

How We Did It

During noise surveys that are conducted regularly in all work areas, it was found that employees were interested in knowing the measured noise levels.

When shown the actual levels (on a hand-held digital sound level meter), most workers indicated they did not realise they were as high as the readings revealed. This led to the idea of developing a large-scale digital noise display that would allow all employees to ‘see’ the level of noise at any time.

As no large-scale digital noise displays were available, the concept was presented to one of the colliery’s instrument suppliers, and they developed a unit based on the latest noise monitoring instrumentation. Over and above the real-time display functionality, the device can be monitored and settings can be checked and adjusted on site or remotely via modem.

When the noise level rises above 85 dB, colleagues inform each other and either use their hearing protection devices, change the way they work, or look for ways to quieten the equipment.

Since the introduction of the unit, employee responses have included: "It triggers the brain. You can see what the noise levels are during the job you are performing." "Now I know how much noise the different equipment makes." "Great display...it focuses your attention on noise and you are thinking of your ears."

Going Forward

All noisy areas where installation of the digital noise display is appropriate have been identified (19 in all), and units are presently being installed.

Projects to follow this initiative include the application of sound-dampening paint to metal structures within the work areas and colour coding of tools according to the noise emitted by each tool.
HIV Treatment And Management Programs In Southern Africa

Southern African HIV Therapeutic Vaccine Project

Since mid 2005, the Company has been sponsoring the establishment of clinical trials to test a potential new vaccine for the treatment of HIV. The clinical trials, taking place over three years, are to be conducted in southern Africa. This initiative is an extension of our involvement in the HIV/AIDS issue, from the implementation of quality programs for our employees and their dependants to community-based activities that offer more widespread impact.

The vaccine - VIR201 - developed by Virax, a biotechnology company based in Melbourne, Australia, is designed to stimulate the immune system to destroy HIV-infected cells. It is administered via periodic injections.

Virax completed two early-stage clinical trials in conjunction with the National Centre for Epidemiology and Clinical Research at St Vincent’s Hospital in Sydney, Australia. These trials confirmed the safety profile of the vaccine and indicated its ability to control the amount of HIV in the blood.

The Challenge

Our operations in South Africa and Mozambique are located in areas where the incidence of HIV/AIDS is among the highest in the world. Managing the impact of the disease is a key sustainability challenge for our Company as we have a responsibility to care for our employees, protect the viability of our operations and support the well-being and development of our host communities.

How We Are Doing It

The southern African trials were designed by local HIV clinicians under the direction of Dr Des Martin, the then President of the Southern African HIV Clinicians Society, who will be the National Principal Investigator. The Medicines Control Council approved the trials in early 2007.

A public benefits (not-for-profit) organisation has been established to conduct the trials, which will be managed by a contract research organisation. Five separate HIV clinics located in the provinces of KwaZulu-Natal, Mpumalanga, North West and Western Cape have been selected as trial sites. These have been selected because they provide good geographical coverage of regions with high rates of HIV/AIDS and medical expertise is available to operate the clinics.

An estimated 140 HIV-infected men and women are targeted for enrolment in the trials, including some who are on anti-retroviral treatment (and will remain on treatment during the trials) and others who are not yet eligible to commence anti-retroviral treatment.

Virax will also be conducting clinical trials in the US and Australia using VIR201.
Going Forward

Traditionally, funding in this field has primarily focused on preventive vaccines rather than treatment vaccines. With Virax, we are pioneering the funding of early-stage clinical trials for treatment vaccines targeted at diseases that are more prevalent in the developing world.

Corporations that have significant regional exposure to the impact of a target disease (either directly through workforce exposure or indirectly by it having an effect on their ability to maintain assets or retail markets) are being invited to co-fund the trials. It is anticipated that good results from early-stage trials will open a broad range of funding options for later, more expensive trials.

The donor syndicate we have organised comprises eight major corporations, including ourselves and Gold Fields Limited, Harmony Gold Mining, Lonmin, Mitsubishi Materials, Nippon Mining & Metals, Rio Tinto and Sumitomo Metal Mining. This syndicate is also unique in global coverage, representing Australia, Japan, South Africa and the United Kingdom. BHP Billiton provided US$2 million in cornerstone funding.

Voluntary Counselling And Confidential Testing Program Initiated At Mozal

In 2003 Mozal, our 47 per cent owned Aluminium operations in southern Mozambique, embarked on an HIV management program for employees, spouses and contractors, which has included:

- Knowledge, attitude and practices (KAP) surveys on site.
- Saliva testing.
- Individual counselling sessions by external counsellors.
- Condom distribution on site.
- Awareness campaigns.

This program established that the most critical step towards effective prevention is ‘knowing your status’; and so, in 2006, a voluntary counselling and confidential testing (VCCT) program was initiated.

To date, 1035 (86 per cent) of our 1204 employees have been tested, as well as 597 (62 per cent) of 963 spouses. Our 1250 contractors are now being invited to participate in the VCCT program.

Carlos Mesquita, Mozal General Manager, said: “I’d like to reaffirm my commitment to implement at Mozal an HIV program that will be seen as a model for Mozambique and Africa. My goal is that we don’t have to attend any funeral of a Mozal family member due to HIV/AIDS.”

Key success factors in the implementation of the VCCT program include:

- Effective planning of the program from the outset.
- Senior management commitment and support.
- Assurance of confidentiality, as HIV is still a highly sensitive issue.
- Effective disease management to ensure support to those who require it.
- Involvement of all relevant stakeholders in planning and implementation.

We have also learnt that this is a process not to be rushed. The results are important, but so is how we go about obtaining those results.
The Challenge

Addressing stigma and fear resulting from lack of knowledge about the disease was seen to be critical to the program’s success. An intensive training program called ‘Preparing to Live Tomorrow’ was put in place for every employee, spouse and contractor. Prior to commencement of the program, issues addressed included:

- Maintaining confidentiality by organising an outside organisation to manage the process and utilising a numbering system for personal identification
- Reviewing the medical aid scheme to incorporate HIV/AIDS treatment, including the provision of anti-retroviral drugs
- Ensuring contractor companies establish HIV/AIDS policies in the workplace
- Establishing partnerships through our linkage programs with local NGOs to assist contractors to implement sustainable HIV programs
- Engaging the media and relevant government authorities to gain support for the program.

How We Did It

Once we were confident about the effectiveness of the training, we decided to roll out the VCCT program in three phases:

- February to May 2006 – Testing of employees
- August to December 2006 – Testing of spouses

Other activities included:

- Training of Mozal peer counsellors
- Steering committee meetings.
- Use of a wide range of interactive and static communication tools to disseminate information in both English and Portuguese.

The effectiveness of the program is expressed by Ms Diléria Massingue, a Mozal cleaning contractor, who said: “I have learnt from the course presenter, who is HIV positive and has been on anti-retrovirals for eleven years, that we can live a normal life with this disease if we know our status and follow the treatment.”

Going Forward

The challenge now is to find a way for HIV testing to become a way of life. The key is to determine an appropriate and acceptable process whereby HIV testing can be incorporated into the Company’s annual routine medical tests.
Smelter Ventilation Project At Olympic Dam

Management Of The Inhalation Of Polonium-210

In uranium mining, one of the risks to occupational health is exposure to airborne particles of polonium-210 (Po210), which is part of the natural uranium decay process.

At our 100 per cent owned Olympic Dam copper/uranium operation in South Australia, a smelter ventilation project is resulting in substantial reductions in exposure to Po210, while allowing production to be maintained at a sustainable rate. Olympic Dam is part of the Base Metals Customer Sector Group.

The project, implemented in May 2005, is based on integrating occupational hygiene monitoring with process controls and improved ventilation.

Since the project began (as shown in the graph below), airborne concentrations of Po210 have remained under the regulatory limit for radiation exposures.

Kathryn Taylor, the senior radiation safety officer advising on radiological issues, said: "The project demonstrates how optimised radiation protection can co-exist with safe production targets. Doses are currently below half of the annual dose limit, and this has been made possible through improved engineering controls combined with a proactive monitoring program."

The Challenge

Po210 is a volatile radionuclide (atom with an unstable nucleus). When material containing low concentrations of Po210 is heated, the Po210 is released into the fume. Inhalation can contribute to occupational radiation exposure.

This has been a major focus for occupational exposure management at Olympic Dam and is a particularly important consideration during the processing of revert. Revert is a copper-rich slag that is formed as a result of flash furnace smelting and contains Po210. From late 2004 through to mid 2005, increases in airborne concentrations in the smelter were monitored. This increase was traced to the processing of revert in the electric furnace.

Radiation Exposure Measurement

The international unit for assessing the risk of human radiation dose is a sievert (Sv), with measurement usually in thousandths of a sievert (millisieverts) per year (mSv/y).

The becquerel (Bq) is a quantitative measure of radioactivity, with one becquerel of activity being equal to one nuclear decay (atomic disintegration) per second.

The regulatory limit for radiation exposure is 20 mSv/y, which corresponds to people being exposed to an average airborne Po210 concentration of 1.33 becquerels per cubic metre (derived air concentration), assuming full-time occupancy of an area and no respiratory protection. Actual doses would be lower due to lower occupancies and the compulsory use of half-face respirators during tapping operations.
How We Did It

The project involved stopping the feeding of revert into the furnace, developing improvements to the ventilation systems and intensively monitoring potential exposures. Once ventilation improvements were implemented, the feeding of revert was reintroduced in phases.

Initially, revert was reintroduced at very low rates over a period of one month, and intensive airborne monitoring was conducted. The scope of the monitoring program extended beyond standard occupational hygiene practices and included workplace observations to help ensure the ventilation was effective and that any areas where fumes could be released were identified.

To judge whether the process controls and improved ventilation were effective, a target of half the annual regulatory limit for radiation exposure was set. It was only when monitoring confirmed that airborne concentrations were below the target limit that approval was given for an increase in the revert feed rate.

Trends were closely monitored, and any potential concerns triggered rapid mitigation actions. Results of the monitoring were also provided to the workforce through toolbox talks conducted by the ventilation project team.

This process continued until revert could be fed into the furnace at a rate that enabled sustainable production to be maintained while ensuring that exposures would remain as low as reasonably achievable.

Going Forward

The close linking of production with occupational health management is being applied in a number of other business improvement projects at Olympic Dam. An example is optimisation of a dust bleed from the flash furnace off-gas system. By optimising the level of bleed, we can increase the recovery of copper while ensuring that radiation and hygiene aspects are kept within acceptable levels.
'A Day In The Life Of A BMS Shift Worker' - A Fatigue Awareness Video

A video program has been produced by 45 per cent owned BHP Billiton Maatschappij Suriname (BMS) to create awareness of the health risks of fatigue. The program documents a day in the life of two shift workers to show how they can self-manage the risks.

The video was originally planned for a BMS presentation to a Fatigue Workshop to be conducted by the Company's Aluminium businesses in October 2006. It has since been used as a useful tool for fatigue awareness training in the broader workplace.

**The Challenge**

Through the Company-wide Fit for Work/Fit for Life program, fatigue has been identified as a primary factor in many safety incidents.

Innovative ways have been sought to address this challenge, including the raising of awareness of fatigue risks and communication of effective management approaches.

BMS addressed this challenge by engaging workers and their families in the production of an education video. Voluntary participation was sought, and filming was planned around shift rosters and family commitments. An important part of the approach was to showcase both day and night shifts, in order to highlight differences in work conditions and home situations.

**How We Did It**

Once a suitable filming schedule had been agreed, site management, supervisors and the relevant work crews were informed. The script was written, and logistical requirements relating to the film crew were organised, including HSEC inductions and supply of personal protective equipment.

Filming took place over four days, covering the participants' homes and workplaces during both day and night shifts.

**Story 1**

Wisnu Pardi is a heavy mobile equipment operator at our new Kaaiman Grasie Mine. He is a supervised contractor who works shifts transporting bauxite ore from the mine pit to the stockpiles.

Wisnu has a wife and a two-year-old son. His wife also works shifts as a nurse at the hospital in town, about 10 kilometres from where they live. Wisnu takes care to sleep well before going to work. When he and his wife wake, they prepare for the day and drive with their son to a pick-up point where Wisnu joins his shift crew on the bus to the mine. His wife and child then travel to the day care centre and her work.

Wisnu’s bus trip to the mine takes about one and a half hours. After arrival, the work crew attend a safety meeting, receive instructions from their supervisor and complete all the critical documents, including the Personal Fatigue Checklist. The crew then conducts safety inspections of their trucks before driving to the pit to begin transporting the ore to the stockpile.

During the video, Wisnu comments that he and his crewmates know shift work is difficult, especially night shifts, and they understand the importance of good sleep before they begin work. As they commute to work in the bus, they chat about how they have rested at home and motivate each other to alert their supervisor if anyone experiences fatigue. They also know that, if at anytime they feel tired on their shift, they must stop their truck safely and report in by radio.
After work, Wisnu is picked up again at the bus stop by his wife and child and the family drives home. Wisnu eats a nutritious meal before retiring to have a good rest for the next day.

**Story 2**

Terence Pinas is also a supervised contractor who works night shifts as a surface mobile equipment operator at our Coermotibo Mine. He has a wife and six-year-old daughter.

Each work day, Terence’s wife prepares his meal and his daughter helps him pack his bag before he rides his bicycle two kilometres to the bus stop. After a half hour journey to the mine, he and his crew meet with their supervisor, attend the safety talk and fill in their Personal Fatigue Checklists.

Terence is a Maroon (one of the ethnic groups of Suriname), and English is not his first language. He has received training so that he can complete the checklist for safe performance of his job. The crew undertake the equipment safety inspection and begin work.

Terence explains that he knows that sleeping well and having adequate rest is very important, because fatigue can cause accidents that can potentially be fatal, or, in his words, “if you meet with sleep while operating your equipment, you will meet with big problems”.

His wife and daughter say they understand he has a risky job, and they contribute by preparing his meal and ensuring a quiet home environment so he can have his necessary sleep before work.

**Completing Production**

The video was produced in English and Dutch for use in the Fatigue Workshop.

On 5 February 2007, we officially thanked Wisnu and Terence and their families at a special on-site screening of the video that they attended with their work crews. They were presented with safety tokens, gifts and a DVD copy of the video.

**Going Forward**

We are now looking to incorporate the video into the annual refresher fatigue management training courses on site.
Safe Workplaces

The safety of our employees, contractors and the communities in which we operate is an integral part of our business. Our goal is Zero Harm. Decision-making and thinking for safety is directed by 'Our Future State' (PDF 202 KB), which sets the vision for BHP Billiton as an organisation.

We seek to create a mindset and an environment where people believe it is possible to work injury free – regardless of where they are in the world, what role they undertake, or in which business they work.

Our approach to safety is incorporated in our Charter, which states that we have an 'overriding commitment to health, safety, environmental responsibility and sustainable development' and our Sustainable Development Policy, which states that we will:

- Ensure we will not compromise our safety values
- Identify, assess and manage risks to employees, contractors, the environment and our host communities.

These Policy commitments are reflected in our Company-wide safety targets.

Across the organisation we manage safety through our risk-based HSEC Management Standards (PDF 148 KB). Our line managers are accountable for the implementation of these Standards and responsible for ensuring that supporting systems and procedures are in place. We are confident our Standards and associated systems are the right ones, and have directed our efforts towards the effective and consistent implementation of these across the organisation. We call this Operating Discipline.

In seeking to achieve Zero Harm we have learnt that:

- Low injury frequency rates do not mean low fatality rates – we cannot and should not draw any comfort from low injury rates in terms of our capacity to eliminate fatalities.
- Injury reduction programs alone will not prevent fatalities – a complementary, focused effort is required on fatal risk. This is why we have implemented the Fatal Risk Control Protocols.
- Our fatalities often have similar underlying causes.
- High near miss reporting often correlates with declining injuries or fatalities – our ability to take heed of the signals from near miss events is crucial to our efforts in eliminating fatalities.
- Leadership visibility in the field is vital – our current state of safety maturity relies heavily on leadership energy to deliver improved performance.
- Effective contractor management is essential.
- Hazard identification and risk awareness are fundamental to success.

Our safety focus areas are:

- Fatal Risk Control Protocols
- Leadership, Behaviour and Awareness
- Safety Indicators
- Safety Incident Reporting
- Contractor management.

See a summary of our safety performance for the year ended 30 June 2007.

Fatal Incidents

- Fatal Incidents - 2007/2008
Fatal Risk Control Protocols

At BHP Billiton we aspire to achieve zero harm to people, our host communities and the environment. To support this, we have our mandatory Fatal Risk Control Protocols (FRCPs) (PDF 1.1 MB).

The Fatal Risk Control Protocols establish minimum performance expectations for managing potential fatal risks associated with the following activities commonly conducted at BHP Billiton operations:

- Light vehicle use
- Surface mobile equipment use
- Underground mobile equipment use
- Underground ground control
- Hazardous materials management
- Molten materials management
- Equipment safeguarding
- Isolation
- Working at heights
- Lifting operations.

The FRCPs were developed after a rigorous, internal analysis of past fatalities and significant incidents, and are regularly reviewed. The FRCPs do not, however, cover all risks faced by our operations. The HSEC Management Standards (PDF 148 KB) provide the framework for managing such other risks.

BHP Billiton has introduced a number of initiatives to support the implementation of the Protocols. These include:

- An online assessment and tracking tool
- A dedicated intranet site and Community of Practice for each FRCP
- Workshops in key regional operating areas for both site and business representatives
- Dedicated global facilitators to represent each FRCP
- Guidelines on effective implementation
- An online leading-practice library.

For details on the implementation of the FRCPs, see Fatal Risk Control Protocols.
Leadership, Behaviour and Awareness

Everyone’s behaviour contributes to an injury-free workplace. Leadership, in particular, can have a powerful impact on the transition to an interdependent safety culture. The journey towards Zero Harm requires strong leadership, the involvement of all employees and the need to develop a genuine and active approach to caring for all employees, contractors, communities and the environment.

Safety Leadership

Our approach to safety is based on management being accountable for the safety culture and performance of their business, the implementation of the Sustainable Development Policy (PDF 28 KB) and meeting the performance requirement of the HSEC Management Standards (PDF 148 KB).

Effective safety leadership is a prerequisite for promotion. Managers at all levels – from executive to front-line management – are expected to lead by example by demonstrating a visible commitment to safety behaviour and awareness and making every effort to engage employees and contractors in embedding safe behaviour throughout all operations and activities.

Safety Behaviour And Awareness

A variety of workplace interactions, observations and audits are implemented to encourage all employees to think and act safely. Three components critical to improving employees’ awareness of their safety behaviour are:

- Safety contacts – everyday discussions and interactions about improving safety in the workplace. They occur at all levels of the organisation.
- Safety observations – people observe each other to identify good practices, as well as unintentional at-risk behaviours, hazards and situations. The greatest benefit of safety observations is the discussion that takes place following the observation, where employees reinforce the safe activities and identify better ways of controlling the associated hazards.
- Critical task observations – critical tasks are observed against the standards in place to ensure they are understood, valid, reliable and followed.

Beyond the three components, to confirm the effectiveness of the employe awareness processes, we also conduct:

- Workplace condition audits
- Themed audits
- Safety management systems audits.

Sharing Knowledge - Global Safety Network

Our Global Safety Network is our primary mechanism for bringing together our collective knowledge, wisdom and experience around safety.

With more than 700 members Company wide, feedback indicates it is helping both employees and contractors to access best practice, understand issues that other sites face and what improvements could be made at individual sites. In 2007, network regional meetings were held in each of our key operating regions. All operations were represented, and approximately 32 per cent of attendees were contractors. The major work streams discussed were fatigue, risk management, contractor engagement, the Fatal Risk Control Protocols and behavioural safety.
Safety Indicators

BHP Billiton uses a mix of both leading and lagging indicators to measure overall safety effectiveness and performance.

Leading indicators are designed to drive and measure critical safety activities. When measured and monitored effectively, the data from the leading indicators enables effective intervention to address or reverse a negative trend before it results in injury, damage or loss.

Lagging indicators, such as injury statistics, provide an overall estimate of the progress required to achieve our vision of Zero Harm, but they do not measure the effective implementation of safety programs, proactive action plans and preventive activities in place.

If lagging indicators are used as the only index of safety achievement (or failure), they can do more harm than good, as people are not empowered to take control of safety and to develop an effective organisational safety climate.

The use of a larger proportion of leading indicators at individual and department levels reinforces personal involvement and improves the perceptions that individuals and work teams have about their ability to control and manage injuries. Key to this has been the introduction of Safety Incident Reporting.

A guideline document has been developed to help increase knowledge, create discussion and promote the wider use of leading indicators as a driver of safety improvement across BHP Billiton.

Examples of Leading Indicators used by BHP Billiton:

- Field visits conducted
- Observations/audits/inspections conducted versus planned
- Face time in field versus planned
- Number of safety contacts
- Safety communications conducted
- Implementation of site safety action plan
- Implementation of Fatal Risk Control Protocols
- Implementation of action plans resulting from HSEC audit findings
- Percentage of Incidents investigated
- Number of positive rewards and recognition given
- Number of near misses reported
- Number of repeat incidents
- Percentage of Job Safety Analyses completed for critical activities
- Percentage of safe behaviours observed
- Percentage of actions implemented from observations
- Percentage of significant incidents reviewed and closed out from circulation lists
- Percentage of hazards rectified
- Ratio of near misses to accidents reported
Safety Incident Reporting

Fundamental to achieving Zero Harm is our ability to take the lessons learnt from past safety incidents and apply them as corrective interventions before the same underlying causes manifest as more serious incidents. Our approach to safety incident reporting is aligned with the Mine Safety and Health Administration (USA Department of Labour) Standards.

The efficacy of such an approach is based on a longitudinal study of our safety performance that revealed:

- High near miss reporting often correlates with declining injuries or fatalities.
- Injury reduction programs alone will not prevent fatalities – a complementary, focused effort is required on fatal risk.
- Hazard identification and risk awareness are fundamental to safety success.
- Low injury frequency rates do not equate to low fatality rates.

We therefore encourage the reporting of near miss and significant incidents (i.e. a close call event).

When analysis of reported safety data indicates the potential for danger, we use a system of alerts:

- Repeat Significant Incident Alerts – issued when a trend of similar incidents, whether internal or external to BHP Billiton, is identified.
- Zero Barrier Incident Alerts – issued after a close call event where key preventive barriers were breached. Such incidents represent our most critical learnings and our ability to take heed of the signals from these near miss events is crucial to our efforts in eliminating injuries and fatalities.

Each alert is distributed across BHP Billiton and provides a summary of the event/s and learnings, contains links to further information, and acts as a catalyst for safety toolbox talks that help to foster greater safety awareness by everyone in the workplace.

Read more: Safety Incident Reporting.
2007 Performance

Message from the Vice President Safety

Key Successes and Shortcomings
Despite all our efforts, we are saddened to report that eight fatal accidents occurred during the year at our controlled operations. Each of these incidents has been thoroughly investigated, with lessons learnt shared and acted upon across the Company. We remain determined to eliminate fatalities from our organisation, and we know we will not be truly successful until we do so.

Safety Risks and Opportunities
Growth and demand in the resources sector is immense, and we need to ensure focus so that safety is not compromised as we look for ways to continue to meet this demand. We believe we have the right balance of good science to identify and understand the nature of risks, engineering and processes to remove or reduce the risks, and systems to create and embed safety values, habits and behaviours.

Systems and Structural Improvements
We do not need to introduce more systems; what we need to do is to continue to support our people – be they employees or contractors – in ensuring that our systems are embedded and well executed at all of our operations.

Contractors, in particular, are telling us they face specific challenges in achieving this, so to address this we have continued our contractor workshops and are in the final stages of developing an extranet for contractors that will provide easy and secure access to our controlled HSEC documents, as well as links to relevant legislative information.

We also know that, while everyone has a role to play, safety performance is directly related to leadership attention and focus. The recently released BHP Billiton Leadership Model reinforces our belief that good safety leadership is good business leadership. The model is built from our behavioural safety processes, with the leadership attributes and styles based on proven safety excellence.

Key Strategies
Our primary focus is on the elimination of fatalities, and our key mechanism for this is our Fatal Risk Control Protocols. During the year, we released an updated self-assessment tool, which will enable sites to better measure current gaps and improvement opportunities against the Protocols. During the year, we also initiated a project to address catastrophic safety risk. This is an important complement to our overall suite of tools as it specifically addresses the effective management of those risks that can threaten our licence to operate. We also progressed a global project on the supply of light vehicles, in recognition that everyday some 100 000 people are exposed to the risks associated with light vehicles, whether in working at our sites or simply driving to and from work.

Learning from experience is critical, and we have continued to encourage the reporting of near misses. By analysing this data, we are able to communicate to our operations potential sources of future danger. We have also reviewed our Incident Cause Analysis Method (ICAM) guidelines to improve the effectiveness of corrective action close out.

During the year, we conducted three very successful regional Global Safety Network workshops in Australia, Africa and the Americas for our employees and contractors. These workshops were instrumental in sharing and improving traction, alignment and focus on key safety areas, such as leadership, fatigue, risk management, contractor engagement, significant incidents, Fatal Risk Control Protocols and behavioural safety. While our experience continues to confirm that low injury frequency rates do not mean low fatality rates, we are pleased to report that in 2006/07 our performance against other safety metrics was encouraging, particularly our 16 per cent reduction in total injury rates.

Our Total Recordable Injury Frequency Rate (TRIFR), which represents the total number of fatalities and injuries resulting in lost time, restricted work duties or medical treatment per million work hours, decreased from 8.7 in 2005/06 to 7.3 in the current year. Our Classified Injury Frequency Rate (CIFR) also decreased from 4.8 to 4.3.
Going forward, our focus is on understanding the 'free lessons' gained from the reporting of our near miss incidents. We remain determined to eliminate fatalities from our organisation; and, as a result, key performance indicators for 2007/08 are primarily directed at eliminating fatalities. We are committed to safety excellence, and we have a clear focus and strategy based around leadership, understanding and managing operational risks, and engaging our people.

**Barry Formosa**  
BHP Billiton Vice President Safety

Details on our safety performance during this reporting period can be viewed at:

- **Fatalities** – reports on fatal incidents that occurred during the reporting period and identifies strategies to eliminate further fatalities.
- **Injury Frequency Rates** – reports on two key measures of injuries per million work hours.
- **Safety Fines** – outlines the safety fines for this period.
- **Fatal Risk Control Protocols** – outlines our progress in implementing and reviewing the protocols across the organisation.
- **Contractor Partnering and Engagement** – outlines the processes we have in place to ensure that the standards and procedures adopted by our contractors are consistent with our Standards.

Further details on our approach to safety management can be viewed at Safe Workplaces. For examples of policy in action, see Safe Workplace Case Studies.
Fatalities

Despite an improvement in our overall safety efforts, we are saddened to report that eight fatal incidents occurred during the reporting period at our controlled operations. Each of these incidents has been thoroughly investigated, utilising our Incident Cause Analysis Method (ICAM), with lessons learnt being shared across the Company. A summary of fatalities that occurred during controlled operations is shown in the table below.

Fatalities at Controlled Operations 2006/2007

<table>
<thead>
<tr>
<th>Date of Incident</th>
<th>Site/Country/CSG</th>
<th>Nature of Incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 August 2006</td>
<td>Khutala Colliery, South Africa, Energy Coal</td>
<td>An employee was struck by a failed section of sidewall as a continuous miner was being repositioned.</td>
</tr>
<tr>
<td>1 November 2006</td>
<td>Escondida, Chile, Base Metals</td>
<td>An employee was run over after exiting the grader he was operating.</td>
</tr>
<tr>
<td>25 November 2006</td>
<td>Optimum Colliery, South Africa, Energy Coal</td>
<td>A contractor suffered fatal injuries when the light vehicle in which he was a passenger collided with a rear dumper on a haul road.</td>
</tr>
<tr>
<td>15 December 2006</td>
<td>Cannington Mine, Australia, Base Metals</td>
<td>A contractor was fatally injured when the riding basket detached from a telescopic book forklift and hit the ground.</td>
</tr>
<tr>
<td>2 February 2007</td>
<td>Mozaal Port, Mozambique, Aluminium</td>
<td>A contractor was fatally injured when the crane being operated was driven over the edge of a pier.</td>
</tr>
<tr>
<td>17 February 2007</td>
<td>Douglas Colliery, South Africa, Energy Coal</td>
<td>A contractor was fatally injured when trapped between the blade of a dozer and a diesel refueling truck.</td>
</tr>
<tr>
<td>25 March 2007</td>
<td>Escondida, Chile, Base Metals</td>
<td>A contractor was found unconscious inside a shovel and subsequently died.</td>
</tr>
<tr>
<td>17 June 2007</td>
<td>Escondida, Chile, Base Metals</td>
<td>An employee was fatally injured when a truck collided with another truck.</td>
</tr>
</tbody>
</table>

We remain determined to eliminate fatalities from our organisation and will continue to implement the strategies that we have in place, as we are confident that their thorough implementation will support the elimination of fatalities.

The incidents described in the table highlighted a number of issues which we have made strong efforts to respond to in 2007 including:

- Fatal Risk Control Protocols (FRCPs) - In 2007/08, we will conduct an FRCP verification process at our assets.
- Leadership, training and awareness - Our three regional Global Safety Network workshops in Australia, Africa and the Americas were important in reiterating various safety drivers such as leadership, fatigue, risk management, contractor engagement, significant incidents, FRCPs and behavioural safety.
- Incident investigation and corrective action – Review of ICAM guidelines to improve the effectiveness of corrective action close out, including the targeted use of higher-order safety controls such as elimination (i.e. remove the safety risk entirely) and substitution (i.e. reduce the safety risk by substituting with a less hazardous process, material or approach).
- Remuneration incentives to meet safety performance - In 2007/08, the allocation for HSEC performance incentive in employee scorecards will be primarily directed to fatality performance.
Injury Frequency Rates

A classified injury is any workplace injury that results in the person not returning to their unrestricted normal duties after the day on which the injury was received. The Classified Injury Frequency Rate (CIFR) is the number of classified injuries per million work hours. Our CIFR has improved, decreasing from 4.8 in 2005/06 to 4.3 in 2006/07.

CIFR does not include medical treatment cases so we have moved to measurement of Total Recordable Injury Frequency Rate (TRIFR) with the aim of improving the visibility of all workplace incidents. The diagram below defines the difference between the two metrics.

The TRIFR represents the total number of fatalities and injuries resulting in lost time, restricted work duties or medical treatment per million work hours. Our TRIFR has also improved, decreasing from 8.7 in 2005/06 to 7.3 in 2006/07.

Going forward, a new target of a 50 per cent reduction in TRIFR by 30 June 2012 has been set.

Against indicative performance benchmarks relevant to our industry, these rates are relatively good; however, we take no comfort from this and our goal remains Zero Harm. For more on our approach to safety indicators, see Safety Indicators.

Near Miss Reporting

We encourage the reporting of near miss and significant incidents (i.e. a close call event), as our ability to learn from these events and apply them corrective interventions before the same underlying causes manifest as more serious events is a key to our success, and is fundamental to achieving Zero Harm.

In 2006/07, the number of near misses reported increased from those reported in the previous year, reflecting good safety reporting maturity. Analysis against our Fatal Risk Control Protocols categories indicates that the key exposures and areas for improvement remain surface mobile equipment, isolation and working at heights.

During the year, we improved our practice of issuing alerts when analysis of reported safety data indicates the potential for danger by consolidating information into a regular monthly alert. In the current year, 16 per cent of all significant incidents were classified as zero barrier events (close call events where key preventive barriers were breached), and 26 per cent of these incidents were repeats at the same operation.

Looking ahead, we will seek to reduce the rate of zero barrier events. A first critical step has been reviewing our Incident Cause Analysis Method (ICAM) process, with a view to improving our ability to close out corrective action.
We have also initiated a pilot project designed to address catastrophic safety risk. Driving the need for this project was a demand from some parts of the business for guidance in this critical area. Secondly, poor-quality hazard identification and risk assessment are among the most common causal factors identified in internal ICAM investigations into significant incidents. Externally, mining industry legislation in many parts of the world is increasing focus on major hazard management.

**Near Misses and Significant Safety Incidents**

**Reported by Fatal Risk Control Protocol and Major Incident Types**

- Surface Mobile Equipment 25%
- Isolation 19%
- Working at Heights 15%
- Lifting Operations 8%
- Equipment Safeguarding 7%
- Light Vehicles 7%
- Molten Materials Management 3%
- Underground Mobile Equipment 3%
- Hazardous Materials Management 2%
- Underground Control 2%
- Major incident - Explosives 4%
- Major Incident - Surface Ground Control 1%
- Major incident - Other 4%

**Near Miss Reporting**

2002/03 to 2006/07
Safety Fines

This year, we did not meet our goal of zero safety fines or prosecutions. The table below outlines the safety fines for this period. Note: Fines reported may relate to incidents occurring in previous years.

**Safety Fines 2006/07**

<table>
<thead>
<tr>
<th>Site</th>
<th>Customer Sector Group</th>
<th>Description</th>
<th>Fine (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olympic Dam, Australia</td>
<td>Base Metals</td>
<td>September 2006 – A fine of A$153,000 was issued for three charges under the Occupational Health, Safety and Welfare Act arising from the incident that led to the death of Karl Eibl at Olympic Dam on 19 July 2005.</td>
<td>122,046</td>
</tr>
<tr>
<td>Navajo Coal Company, USA, and San Juan Coal Company, USA</td>
<td>Energy Coal</td>
<td>A total of 133 safety fines occurred during the reporting period; 45 fines for Navajo Coal Company and 88 fines for San Juan Coal Company.</td>
<td>64,050</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>186,096</strong></td>
</tr>
</tbody>
</table>
Fatal Risk Control Protocols - Performance

In the current reporting year, we continued our focus on ensuring compliance with the Fatal Risk Control Protocols (FRCPs) as, while strong evidence remains of their potential to help avoid fatalities, they are only effective if employees and contractors have access to and understand how to adhere to them, act safely and do not allow complacency to set in.

Our immediate objective is for all sites to conduct annual self-assessments against the FRCPs. During 2006/07, the self-assessment tool that enables sites to measure gaps against the FRCPs and identify improvement opportunities was revised to ensure it fully aligns with our HSEC Management Standards.

Our Global FRCP Facilitators continue to offer assistance to our sites in meeting and understanding the FRCP requirements. The Global Safety Network, and its associated Safety Communities of Practice, are also providing valuable leverage to the knowledge of our employees and contractors about the FRCPs, with the FRCPs constituting some 80 per cent of the Network’s enquiries and discussions.

A number of projects have been initiated to support the efficient and effective implementation of the FRCPs, including the Global Light Vehicle Project, a joint initiative between Group Supply and Corporate Safety that has been underway for the past 18 months.

All of our people are exposed to the risks associated with light vehicles, whether while working at our sites or simply driving to and from work. Across our business, there are different approaches to driver safety and a range of vehicle suppliers, each offering varying fit-outs and product support. The Global Light Vehicle Project aims to address the selection, acquisition, modification, equipment fit-out and ongoing product support of light vehicles in a uniform and consistent manner across the Company. In doing so, we not only expect our costs associated with light vehicles to reduce but, most importantly, for the number of safety incidents involving light vehicles to decline.

Read more:

- 2007 Case Study: Setting The Standard For Supplier Light Vehicle Safety
- 2007 Case Study: Working At Heights – Step Change At Yabulu Refinery
Contractor Partnering and Engagement

Some 60 per cent of our workforce is made up of contractors, and a key focus of our safety management systems is working closely with them to ensure their safety approach and management systems align with ours.

During the year, we conducted additional contractor workshops in Africa, the Americas and Australia to discuss our safety approach and how we can work together to drive improvement. Feedback revealed that, while we are good at developing and implementing strong safety management systems, we can still do better in assisting contractors to access and consistently apply them.

In response to this, we are in the final stages of developing an extranet for contractors that will enable easy and secure access to our controlled HSEC documents, as well as providing links to relevant legislative information. Currently being piloted in the African region, it will be progressively rolled out to other regions.

Concurrently, our three regional training leaders are continuing to conduct Contractor Safety Training Seminars and provide ongoing assistance. Contractors are also encouraged to access our Global Safety Network as a forum for sharing leading practice.
Case Studies

The following case studies are examples of issues, initiatives, projects and programs across the Group that highlight some of the safety opportunities and challenges faced by our operations. Case studies are also on healthy people, environmental commitment, social responsibility, our people and our socio-economic contributions.

HSE Productive Ideas Program - Creativity For All, Safety For All
The HSEC Productive Ideas Program at our Cerro Matoso nickel operations in Colombia encourages employees and contractors to raise and implement ideas that improve HSEC performance.

Setting The Standard For Supplier Light Vehicle Safety
Our global ‘whole of life’ vehicle supply agreements with three major vehicle manufacturers aim to ensure that each vehicle is adequately maintained within defined quality assurance levels and that the lead time for new vehicle delivery and vehicle downtime due to breakdowns and repairs are reduced.

BMA Introduces Collision Avoidance System
At our BMA coal operations in Australia we have developed a Collision Avoidance System to eliminate blind spots and provide automatic warning of other vehicles or objects in the path of large equipment.

Measuring The HSEC Performance Of Contractors At New Mexico Coal
Our New Mexico Coal operation in the US has introduced a Contractor Management Plan to control contractor access into our sites and improve their health and safety protection.

Working at Heights - Step Change At Yabulu Refinery
Yalubu Refinery in Australia has adopted the Company’s Working at Heights Safety Program to raise awareness, improve the reporting of potential incidents and revise working procedures.
HSE Productive Ideas Program - Creativity For All, Safety For All

At our 100 per cent owned Cerro Matoso nickel operations in Colombia, innovation has been identified as one of the key differentiators and generators of value. Cerro Matoso is part of the Stainless Steel Materials Customer Sector Group. This has given rise to the HSE Productive Ideas Program, which promotes a creative environment by means of acknowledging the employees and contractors who formally propose original ideas that, when implemented by their business units, significantly contribute to the strengthening of the Company’s competitive position in HSEC matters.

The general objective of the program is to motivate the participation of individuals or teams in developing innovative ideas and initiatives that can be implemented to contribute to continuous improvement in HSEC performance at Cerro Matoso.

Since the introduction of the program in late 2005, more than 180 ideas from employees and contractors have been implemented and acknowledged. Initiatives have included machinery and equipment improvements, as well as workplace and work method changes, that have mitigated or eliminated risks and improved productivity.

The success of the program contributed to Cerro Matoso receiving a Safety Excellence Award from the BHP Billiton CEO, Chip Goodyear, in 2006.

Pilar Vivero, HSE Facilitator in the Calcination Business Unit, said: "The Cerro Matoso HSE Productive Ideas Program for its employees and contractors has aroused a great deal of interest among the people, with a view to doing their jobs in an easier, safer, and more efficient manner. This has brought about the reduction of errors when performing tasks that may cause accidents to people, processes or the environment.

"This program shows that the employees are taking their work seriously, are concerned about being safe, and make efforts to increase their efficiency. Hence, they have transformed their work areas and have turned them into places where work can be carried out in an easier and safer way.

"Many times we believe that the solution to a safety or production problem calls for a considerable investment, but it is our employees in the field who perform the tasks that give us solutions to minor problems that can end up being unmanageable or of a high risk for the people and the process.

"Cerro Matoso workers and contractors who have been acknowledged with awards or who have ideas in the process of being implemented have become more enthusiastic at work. They get involved in implementing the idea successfully and ensure that their co-workers use them.

"The Productive Ideas Program is an additional step towards Cerro Matoso achieving the Zero Harm objective."
The Challenge

HSEC matters have traditionally been compliance focused; driven by policies, standards and procedures. While this approach is absolutely necessary and justified, it is not always inspiring or motivating for our people. Our greatest challenge was to introduce a sense of creativity to the HSEC management process, so as to foster innovation and enthusiasm among employees and contractors alike.

How We Did It

The HSE Productive Ideas Program is based on voluntary participation, focused on encouraging individuals or teams to identify and implement ideas that contribute to the continuous improvement of HSEC performance at Cerro Matoso.

The program promotes:

- Implementation of control measures to manage safety and health risks by eliminating, substituting or redesigning hazardous equipment or practices at the source.
- Acknowledgment of group and individual initiatives in HSEC matters.
- The reinforcement of positive behaviour in HSEC matters.
- Innovation and creativity as a source of development and competitiveness.
- The replication and extension of successful ideas and models throughout the Company.
- Improvements in working conditions.
- Using people’s experience to improve their working conditions.

Ideas that are submitted are assessed by an Evaluating Committee. When an initiative is selected for implementation, the contributing individual or team receives acknowledgment.

A very important aspect of the program is that the motivation to participate is not for economic reward. Rather, the greatest motivational factor is the acknowledgment and sharing of individual and group achievements with everyone in the organisation.

To date in 2007, a total of 138 ideas (including 36 from contractors) have been implemented in business areas across Cerro Matoso (see chart below).

The program has become another tool to effectively meet the Company’s objectives for HSEC, quality and loss control. It is helping to generate a perceptible culture of continuous improvement in the workplace, taking a proactive approach to eliminating or minimising risks to individuals and to the Company’s operation and sustainability.
The program promotes continuous improvement in HSEC, reinforcing positive behavior and incorporating creativity as part of the Company’s acknowledgment system. Importantly, it acknowledges the initiative of employees and contractors who not only comply with the Company’s expected standards but also contribute to the improvement of working conditions and, subsequently, to improvements in health, safety and the environment.

The model of the HSE Productive Ideas Program can be broadly applied. In fact, one of the Evaluating Committee’s grading factors when scoring the ideas is the ease of replicating or adapting them to other areas of Cerro Matoso or other businesses within the BHP Billiton Group, and this has occurred in a number of instances.

**Going Forward**

The aim is to increase the capacity for employees and contractors to submit ideas for improvements in HSEC performance, particularly those that increase risk control at the source.

The approach will continue to be one of raising the profile of HSEC matters within Cerro Matoso by promoting a sense of enjoyment, innovation and enthusiasm around HSEC performance and acknowledging the value of initiatives that can be effectively implemented.
Setting The Standard For Supplier Light Vehicle Safety

We are currently finalising three separate five-year agreements with major vehicle manufacturers for the global supply to the Company of light vehicles and associated services relating to 'whole-of-life' vehicle activities.

Whole-of-life activities focus on ensuring that adequate support is provided to the Company to ensure that:

- Each vehicle is adequately maintained within defined quality assurance levels.
- Lead time for new vehicle delivery and vehicle downtime due to breakdowns and repairs is reduced.

This series of agreements will result in the culmination of phase one of the Global Light Vehicle Safety Project, a Business Excellence project, which is a joint initiative between our Corporate HSEC and Global Supply functions.

The project supports the efficient and effective implementation of the Fatal Risk Control Protocol for Light Vehicles (FRCP 1). It includes the selection, acquisition, modification, equipment fit-out and ongoing product support of light vehicles in a uniform and consistent manner across the Company.

The Challenge

In 2006, light vehicles were involved in approximately seven per cent of safety incidents across the Company globally. To address this, the Global Light Vehicle Safety project was established, comprising representatives from Corporate HSEC, Global Supply and a selection of assets.

Historically, assets have sourced and managed light vehicles independently, leading to an inconsistent interpretation and application of FRCP 1.

The project’s primary objective and key business driver is to reduce serious incidents involving light vehicles, improve light vehicle safety and facilitate the consistent application of FRCP 1.

How We Did It

The first phase of the project involved employees from 25 of our assets in Australia, South Africa, North America and South America. Representatives included experts from Corporate HSEC and Global Supply, as well as HSEC, technical, maintenance and supply personnel from the local assets. Unlike other previous supply initiatives, the project focused on whole-of-life vehicle activities.

A secondary driver of the project was to improve business efficiency. Previously there was a duplication of effort and resources in this area, which resulted in cost inefficiencies as well as inconsistent application of FRCP 1.

Through the series of agreements with the select group of vehicle manufacturers, the project will deliver global partnerships for the supply of fit-for-purpose light vehicles and support services to enable us to better address the requirements of FRCP 1.
As a result of the agreements:

- We will globally implement fit-for-purpose, standardised vehicle specifications and focus on whole-of-life vehicle management.
- Relationships with light vehicle manufacturers will be enhanced to improve the safety of our fleet.
- After-sales support service levels will be improved to better meet our diverse operating environments.
- Contractors’ vehicles will be more easily aligned with FRCP 1.
- Cost and efficiency gains will be achieved through improved standardisation of the global light vehicle fleet.
- Implementation of leading-practice roll-over protective structures, in-vehicle management systems and third-party accessories will be further supported.

A key part of the project has been the development of an interactive web-based vehicle/equipment selection system. A pilot of the system was trialled with two demonstration programs: Vehicle Selection and Configuration and Is My Vehicle Compliant?. The first program supports the selection and configuration of a vehicle within the constraints of the FRCP, concluding with a system-generated order form. The second program allows an employee or contractor to check whether their current vehicle is FRCP compliant.

It is planned to include the system on our extranet, where it can be readily accessed from anywhere in the world. General user feedback has been overwhelmingly positive. Comments included:

- "The system has captured our FRCP requirements."
- "All the accessories are listed, the safety protocol taken into account, easy to access."
- "Does not let you forget anything mandatory."
- "If you’re a new contractor, it pretty much gives you all the requirements. A contractor can stop and fix the issues before entering the site."
- "That’s what I want to know – does my car meet the protocol."

**Going Forward**

Phase two of the Global Light Vehicle Safety project, currently nearing completion, focuses on delivering project goals regarding roll-over protection structure designs and in-vehicle management systems.

Phase three of the project is intended to focus on establishing a global partnership with an organisation to deliver third-party (non-genuine) light vehicle equipment and accessories, in turn delivering project goals of a one-stop-shop approach and enhanced standardisation, with leading-practice outcomes.

Major benefits pertaining to safety, process improvements and additional cost savings can be expected in the second and third phases.

The web-based vehicle/equipment selection system will be further developed following feedback from participants in the phase one project.
BMA Introduces Collision Avoidance System

BHP Billiton Mitsubishi Alliance (BMA), our 50 per cent owned coal operations, has several hundred items of large surface mobile equipment (SME) operating across eight surface mines in central Queensland, Australia. While infrequent, haul truck collisions with other heavy mobile equipment and light vehicles over the last few years have resulted in personal injury, equipment damage and production losses.

An historical review of significant incident statistics completed by BMA in June 2005 identified road watering and SME collisions as two key areas that required attention. In response, a team of BMA employees and contractors developed a Collision Avoidance System that utilises specialised technology.

The aim is to provide a safer operating environment by eliminating blind spots and providing automatic warning of other vehicles or objects in the path of large equipment.

A 2006/07 pilot project was successful; and, going forward, the system will be fully trialled and implemented across all BMA sites.

The Challenge

Incidents involving poor visibility from large SME are not a new safety hazard. Over the past four years, more than 45 per cent of all BMA significant safety incidents have involved SME.

While a number of preventive measures have been implemented, such as no-go areas for light vehicles and audible reversing sirens, SME collisions still present significant risk factors.

It is believed that the introduction of collision avoidance technology will not only protect the safety of BMA employees but will also reduce production and operation losses at BMA mines.

Safety Systems Manager Ron Groenland explains that blind spots prevented SME operators from detecting other mobile equipment and light vehicles that were in close proximity to their haul trucks. ‘People sometimes incorrectly assume that they can be seen, often with dire consequences,’ says Ron.

How We Did It

A team of BMA mine representatives and contractors devised the Collision Avoidance System after a comprehensive review of available technologies, including global positioning systems, cameras, proximity detection, radar and radio frequency.

The system utilises video cameras with LCD displays together with radio frequency transmitters and receivers that detect objects in near proximity.

According to Ron Groenland, the system was the most appropriate for BMA’s immediate and longer-term needs. He said, “After thorough trials of the Collision Avoidance System at BMA Blackwater Mine and reviews of other prevention technology, we have found this system best meets our demands for the purpose of improving safe interaction between SME, light vehicles and stationary objects.”
How The Collision Avoidance System Works

- Colour video camera with an LCD video display unit functions as a blind spot vision aid.
- The display unit will automatically switch between camera views and will alert the driver to other at-risk objects.
- Radio frequency transmitters and receivers are used for automatic vehicle and object detection.
- Radio frequency tags can be fitted to heavy vehicles, light vehicles, stationary objects and other equipment.
- The ‘detection area’ extends 80 metres and can vary for different object types, directions of travel, speed and location.
- Only heavy vehicles initiate alarms as they create the greatest risk of collision.
- A haul truck will be fitted with four cameras (front, rear, off-side and driver side) to provide vision of the high-risk blind spots. It will also have a number of radio frequency tags.
- Light vehicles will be fitted with one radio frequency tag to provide an alarm to the driver when it is in the at-risk zone of large mobile equipment.

Going Forward

A full site trial of the Collision Avoidance System will be conducted in late 2007, with cameras fitted to large equipment and radio frequency transmitters installed on all BMA and contractor vehicles. Subject to the trial being successful, the system will be fully implemented across all BMA sites.

The rollout will be closely monitored to address any problems or issues. Other BHP Billiton sites will also be observing the implementation to assess the practical use of the Collision Avoidance System elsewhere in the organisation.
Measuring The HSEC Performance Of Contractors At New Mexico Coal

New Mexico Coal, our 100 per cent owned operations in the USA, has introduced a Contractor Management Plan that is intended specifically to:

- Control contractor access into our sites.
- Categorise contractors based upon risk assessment of the work they are to perform.
- Assign a site representative to each contractor while performing work on site to ensure HSEC compliance.

Of all worked hours at New Mexico Coal, 15.2 per cent are performed by contractors. The Contractor Management Plan has progressed well since implementation but site key performance indicators (KPIs) for contractors, which are the same as for employees, have not reflected improvement.

We have developed a process to measure the HSEC performance of our contractors and have commenced a project to implement the process to improve performance.

The Challenge

Safety performance is measured using:

- Classified Injury Frequency Rate (CIFR) - the number of classified injuries per million work hours, and
- Total Recordable Injury Frequency Rate (TRIFR) - the total number of fatalities and injuries resulting in lost time, restricted work duties or medical treatment per million work hours. (Note: CIFR does not include medical treatment cases.)

While the TRIFR for employees at New Mexico Coal had reduced by approximately 35 per cent in 2006/07, contractor TRIFR had increased by approximately 4 per cent.

The CIFR for the same period for employees had reduced by approximately 55 per cent but had increased for contractors by approximately 45 per cent.

While the significant difference in hours being performed by contractors compared to employees had an effect on results (one incident creates a much larger effect), the rates were unacceptable.

It was clear that progress had been made in the area of managing contractors, but the results of contractor TRIFR and CIFR showed that this management had not been effective to the extent that our efforts had been for our employees.

We needed a way to measure contractor performance and determine how we can help them to work safely at our mine sites.

How We Did It

We determined that we needed to develop a process by which we could begin measuring contractor performance in three areas:

- Site representative engagement in the HSEC activities of contractors assigned to them.
- Overall perception of contractor performance while working on site.
- Identification of training needs for the contractor.
Robin Irwin, senior foreman for Fatal Risk Control Protocols implementation, said: “The site representatives really need to be engaged with the contractor and know their roles, responsibilities and requirements.”

We use First Priority enterprise (FPe) as our HSEC reporting system. FPe is designed to manage HSEC to ensure that incidents are reported, investigated, closed out and signed off by site management. Other modules of FPe have the ability to manage training records and all site and company documentation. All actions are assigned to individuals to complete within a specified timeframe, and a complete audit trail of tasks is maintained by the system.

We engaged our FPe team to determine if the system could enhance our efforts, and they subsequently developed a process by which we can:

- Send a questionnaire to our site representatives through FPe requiring a response to a series of questions that will measure our three performance areas identified.
- Run a series of reports from the questionnaire feedback that will identify contractor performance in each of the performance areas.

The FPe development has recently been piloted with excellent results. We verified that the system will provide the reports we require to better manage and understand our contractors’ performance on site and their training needs. Scott Hunsinger, FPe administrator, said: “This process shows how we can continue to push the envelope in utilising FPe to bring added business value to our operations.”

**Going Forward**

We are now developing the process by which the information gathered will be used to improve our contractor performance. We anticipate positive results in our contractor KPIs because we will be able to:

- Identify training needs for our site representatives.
- Give direct feedback to our contractors about their performance.
- Include contractors in our training sessions as needs are identified.
- Develop special training sessions for our contractors if required.

The project was endorsed by the New Mexico Coal management team on 16 March 2007.
Working at Heights - Step Change At Yabulu Refinery

Yabulu Refinery, our 100 per cent owned cobalt nickel operation in Queensland, Australia, has embraced the Company’s Working at Heights Safety Program, which was introduced in October 2005. Yabulu Refinery is part of the Stainless Steel Materials Customer Sector Group.

Of all significant incidents reported at the refinery during that year, 12 per cent involved persons being exposed to the risk of falling two metres or more. During the rollout, this increased to 19 per cent and peaked at 40 per cent immediately after the rollout. It is thought these increases in reported incidents were due to greater awareness of the safety requirements as a result of the safety program.

By February 2007, the risk of fatality or injury while working at heights had been reduced, with a fall to below eight per cent in reported incidents of persons being exposed to the risk of falling two metres or more. This is attributed to increased knowledge and application of the Working at Heights methods and controls.

There has been a step change from a workforce that did not recognise the hazards of working at heights to one that has been empowered to implement a variety of control measures to eliminate the risk of injury or fatality.

Kevin Fraser, Operational Support Manager with the engineering consulting firm Hatch Associates, said: “Assisting the Capital Projects Group at Yabulu in the control and execution of capital projects, as part of the on-site Hatch OpSupport Team, we have seen a marked reduction in incidents involving working at heights breaches. The changes started with the increased awareness by the project teams and indeed the contractors themselves. With the continual focus by the project, Yabulu HSET and management teams, this has moved to one of behavioural change; and we now see less exposure of our teams whilst working at heights. The most difficult lesson has been the awareness of exposure at two metres or less.”

The Challenge

National coronial data had shown that, of all falls reported in Australia (2000 to 2003), 55 per cent occurred between heights of two and three metres and these accounted for the greatest number of deaths.

In 2006, we entered a period of intense construction activity that would require works to be carried out from elevated working platforms, scaffolding and other equipment above ground level.

Recognising the importance of the coronial statistics, we began the process of developing and implementing a system to manage the risk of injury or fatality from working at heights.
How We Are Doing It

The step change in safety consciousness has been achieved through the delivery of a planned and structured safety program, based on the following steps:

- Subject development is prioritised from a review of the site-wide risk register, significant incident history, Fatal Risk Control Protocol and legislative requirements.
- A program coordinator is nominated based on knowledge, skill, experience and project coordination skills.
- Subject matter experts develop documentation and coordinate rollout of the program. Area personnel were involved in developing the following documents:
  - Working at Heights Standard
  - Working at Heights Guided Risk Assessment
  - Working at Heights Permit
  - Four-hour and eight-hour Working at Heights training packages
  - Toolbox talks
  - Self-assessment checklists
  - Posters and pocket cards.
- The HSEC team supports the subject matter experts in delivering the various types of training in the work areas. For this program, this included:
  - Practical demonstrations of fall protection gear
  - Delivery of 150 toolbox talks to 800 personnel in their respective work areas.
- A structured program format is developed to ensure consistency and appropriate resource allocation, including a project scheduling and communications strategy.
  - Regular memos advise personnel of upcoming milestones including the ‘Go Live’ date.
- Area personnel are involved in all steps of the program to promote a sense of ownership and accountability.

Going Forward

A smaller project team led by an alliance contractor has been formed, and our scaffolding standards have been modified to align with Working at Heights requirements.

Other areas for improvement identified by the program coordinator, such as utilising resource developers instead of subject matter experts to develop training programs, are being incorporated into the restructure.

It is recognised by this team that a structured and planned approach to safety programs is essential to effecting sustainable change.
Environmental Commitment

Global Context
We own and operate a diverse range of businesses in different countries and ecosystems around the world. These businesses, by their nature, have the potential to affect the environment. This can occur in a variety of ways, including:

- emissions of gases and particulates, such as carbon dioxide and oxides of sulphur and nitrogen, associated with combustion and smelting processes; methane from exposed coal seams, fluorides from aluminium smelting; and particulates from ore handling
- consumption of water and impacts on water quality as a result of salinity or acid rock drainage or from the handling, use and production of hazardous materials
- impacts on land associated with land disturbance, land-use changes and habitat removal
- alterations to biodiversity within terrestrial, fresh water and marine environments, either directly or indirectly as a result of our operations
- indirect impacts encompassing any of the above as a result of the products and services we purchase, lease or provide.

Policy, Targets and Management Systems
Our approach to environmental management is incorporated in our Charter, which states that we have 'an overriding commitment to health, safety, environmental responsibility and sustainable development', and our Sustainable Development Policy (PDF 28 KB), which states that we will:

- Strive to achieve leading industry practice.
- Meet or, where less stringent than our standards, exceed applicable legal and other requirements.
- Set and achieve targets that promote efficient use of resources and include reducing and preventing pollution.
- Enhance biodiversity protection by assessing and considering ecological values and land use in our activities.

Our commitment to reducing greenhouse gas emissions is expressed in our Climate Change Policy, and our Policy commitments are reflected in our Company-wide environmental targets.

Our operational sites are required to have an environmental management system certified to ISO 14001. While we generally do not require certification at exploration and development projects, sites being divested, closed sites or corporate offices, a number of these sites have chosen to seek certification.

Our HSEC Management Standards (PDF 148 KB) form the basis for our management systems and cover the entire life cycle of operations, including exploration, project development, operations, decommissioning, closure and rehabilitation.

Environmental Network
Our Global Environment Network exists to foster the sharing and learning of information and leading practices among our environmental professionals and other interested employees. To further facilitate the professional exchange of information, online Communities of Practice have been established to improve our Company-wide approach to environmental management and include tailings, water, greenhouse gas, closure and rehabilitation, HSEC data reporting and biodiversity management.
Detailed Management Approach and Performance

Refer to the following for details on our approach to environmental management:

- Closure Planning
- Climate Change
- Biodiversity
- Resource Conservation
- Wastes
- Air Emissions.

Read more:

- Stewardship for details on our approach to product stewardship
- 2007 Performance for a summary of our environmental performance over the reporting period.
Closure Planning

Comprehensive planning for closure and beyond is an important element in the life cycle of our operations. The cost of implementing closure plans in the future has the potential to affect cash flow for assets and incremental investments, accounting provisions, residual liabilities and access to future resources. Our Closure Standard has been developed in response to these issues.

Mandatory requirements of our Closure Standard include estimating the Company’s expected cost and financial provisioning for closure. Provision is made for reclamation and closure of the Group’s mining and processing facilities along with decommissioning of offshore oil platforms and infrastructure associated with petroleum activities. Read how we are progressing our closure plans: 2007 Rehabilitation, Remediation and Closure.

As a requirement of the Closure Standard, closure planning should commence in the earliest stages of a project (concept, pre-feasibility and feasibility) and continues through the operating, decommissioning and closure phases. This ensures that closure requirements are integrated into our business systems from the outset and are regularly reviewed and updated to ensure they continue to remain relevant and accurate.

A fundamental aspect of the planning process is the development of a post-operating plan. This forms a critical part of our sites’ consultation and participation process, by which we seek to understand stakeholder needs, aspirations and concerns, particularly those of regulators and local communities. Whether or not a property will require ongoing care, maintenance and monitoring will also feature in the long-term closure plan and affect the ultimate end land use.

Training and information sharing is a key component on improving our approach to closure planning and networks, both internal and external to the Company, exist to share information and discuss leading closure practices.

Around the world, we are responsible for a number of sites that are in the closure phase of their life cycle. The manner in which we manage closure depends on the number and locality of closure sites. For example, Base Metals Closed Mines Group is responsible for 21 sites across North America, and BHP Billiton Energy Coal South Africa (BECSA) Mine Closure Operations in South Africa is closing or caretaking for 18 defunct collieries in South Africa. In other cases, an individual closure site is managed directly by the responsible operation. In all situations and locations, closure is treated as a project and managed by experienced professionals.
BHP Billiton acknowledges the risks of climate change, and the need for accelerated action to stabilise greenhouse gas concentrations at acceptable levels.

In June 2007 BHP Billiton finalised and adopted a new Climate Change Policy to replace the Company’s existing policy, in place since 2002. We acknowledge the risks of climate change, and the need for accelerated action to stabilise greenhouse gas concentrations at acceptable levels. The new policy represents a significant step forward for us and includes new greenhouse gas and energy targets and measures, a major investment in research and development of low carbon emissions technologies, and a commitment to participate in the design of effective national and international climate change policies.

The effort to renew the policy was led by a team of senior business leaders including five of our business presidents, and assisted by members of the sustainable development function. The team decided that we were beyond debating the science and instead focused on stakeholder attitudes, changing government policies, and potential business opportunities to guide the development of a new policy that is consistent with BHP Billiton’s aspirational goal of Zero Harm to employees, communities and the environment.

Engagement and Disclosure

External and internal engagement with stakeholders was essential to the policy development process. Feedback was obtained from groups and individuals representing a range of opinions and expertise. The draft policy was discussed with representatives of the socially responsible investment community, the financial community, governments, non-government organisations and academia in a formal stakeholder dialogue. Company employees from around the globe were introduced to the draft Policy in a series of meetings and video conferences where they were encouraged to provide feedback. Peer company positions, policies, and public commitments were also reviewed in an effort to position BHP Billiton among the leading companies in the resources sector for addressing climate change.

We plan to take an active role in climate change policy development in key regions where we operate and market our products, including promoting such key principles as market-based measures and international emissions trading. The new Policy commits the Company to work with governments and other stakeholders on the design of effective, equitable and efficient climate change policies; and in 2007, Chris Lynch, former BHP Billiton Executive President, served as Chair of the Australian Government’s multi-stakeholder Task Force on Greenhouse Gas Emissions Trading and led the Company’s internal process to prepare formal input to the Taskforce.

For the past five years, BHP Billiton has participated in the Carbon Disclosure Project (CDP), which provides a secretariat for the world’s largest institutional investor collaboration on the business implications of climate change. In addition, BHP Billiton has been selected to the CDP Climate Leaders Index for the past three years, representing the ‘best in class’ responses to the CDP questionnaire and revealing for investors which companies have the most comprehensive climate disclosure practices in place.

BHP Billiton also reports extensively on its climate change policies, practices and performance to the Dow Jones Sustainability Index each year.

Greenhouse Gas Emissions Reporting and New Targets

In 1995, we were one of the first participants in the Australian Greenhouse Challenge program, which was designed to encourage reductions in greenhouse gas emissions. We started measuring greenhouse gas emissions from our global controlled operations in 1993 and have publicly reported our greenhouse gas emissions data since then. Beginning this year, our reporting will include greenhouse emissions associated with employee business air travel to bring greater focus on this aspect of our carbon footprint.

We exceeded our original target of a 10 per cent reduction in greenhouse gas intensity between 1995 and 2000 and have again exceeded our current target of a further 5 per cent reduction between 2002 and 2007. Greenhouse gas intensity is measured by emissions per unit of production, including the purchase of electricity, at operated sites.

On 18 June 2007, BHP Billiton announced new global targets of a 13 per cent improvement in energy intensity and a 6 per cent improvement in greenhouse gas intensity to be achieved by the year 2012 from a base year of 2006. Energy intensity is measured as total energy consumed divided by total tonnes of production, and greenhouse gas intensity is measured the same as previously. The targets were developed based on production forecasts and plans for greenhouse gas reduction projects from individual facilities and businesses. The individual forecasts were combined
to achieve a weighted corporate target. Stretch reductions beyond the business forecasts were incorporated in the targets at the request of senior management. Although strong growth is expected for our businesses, this will be mitigated by energy conservation and greenhouse gas emissions reduction efforts to ensure our energy and emissions intensity continues to improve.

Research and Development

A very significant element of our new policy is a US$300 million financial commitment to support research, development and demonstration of low emissions technologies with relevance to our businesses, customers and communities, and to invest in energy efficiency improvements and alternative energy for our operations. We will build on existing partnerships with customers, governments, peer companies and academia and develop new projects and partnerships. We are currently involved in projects that seek to advance low-to-zero carbon emissions technologies for fossil-fuel derived energy such as Australia’s COAL21, the US-based FutureGen, the Cooperative Research Centre for Greenhouse Gas Technologies and the Cooperative Research Centre for Coal in Sustainable Development. These projects cover such technology areas as coal gasification, oxyfuel, and carbon capture and sequestration.

BHP Billiton is also sponsoring a project by students from the University of Michigan Business School to investigate sources of clean renewable energy. The students are exploring a range of alternatives, including wind, bio-fuels and solar energy, in search of a solution that creates financial, environmental and community benefits, while ensuring a secure source of power and fuel at market competitive rates.

Energy Excellence

The strategy to achieve the new energy intensity target is highlighted by the Energy Excellence Program. BHP Billiton has appointed a full-time coordinator to manage this program, which aims to identify and implement energy efficiency, energy conservation and alternative energy programs. Our target is to have greenhouse gas management programs and energy conservation plans at all of our sites with annual emissions greater than 100,000 tonnes of carbon dioxide equivalent. Sites will conduct formal energy management evaluations and energy assessments, identify opportunities and implement improvements. This effort should significantly reduce the company’s greenhouse gas emissions, as well as its US$2.3 billion annual fuel bill.

Carbon Pricing

BHP Billiton businesses assess the potential impacts of climate change through our Enterprise-wide Risk Management process.

The potential physical impacts of climate change on our operations are highly uncertain and will be particular to the geographic circumstances. These may include changes in rainfall patterns, water shortages, changing sea levels, changing storm patterns and intensities, and changing temperature levels. These effects may adversely impact the cost, production and financial performance of our operations. Read more: Company Risk Factors.

In addition our Carbon Pricing Protocol requires the businesses to plan a range of carbon price scenarios into business plans. Carbon pricing sensitivity analysis is required to be included in the cost structure for investment decisions on new projects and acquisitions that would emit more than 100,000 tonnes of carbon dioxide equivalent per annum. This analysis includes a range of prices for developed and developing countries based on likely scenarios of government requirements and technology deployment, as well as the associated costs and economic impacts over an extended period of time. Our price series for carbon is revised regularly and has appropriately high and low ranges to reflect the uncertainty associated with forecasting the price of carbon credits. The price series are also intended for use in strategy development.

Carbon Trading

In addition to controlling emissions associated with production at our sites and evaluating the potential impact of future regulation of carbon, we also undertake activities to address the current and future needs of our customers in regards to greenhouse gas emissions associated with the consumption of our products.

We have identified emissions trading as an area of opportunity. We have developed expertise in emissions trading in Europe to offer support to our customers in meeting their obligations arising from the European Union Emission Trading Scheme (EU ETS). From a strategic perspective this is also helping us to understand better the market dynamics of the emerging carbon market and how it interacts with markets for energy. Our Energy Marketing group is trialling coal bundled with Certified Emission Reduction units (raised via clean development mechanism projects) to our coal customers in Europe. This allows us to develop knowledge and skills in emissions trading and enables us to...
better package the fuel supply requirements of our customers. Our Energy Coal Customer Sector Group has also included the potential implications of greenhouse gas emissions regulation in its base case supply and demand forecasts and in its business strategy.

Find out more:

- BHP Billiton Climate Change Policy
- Climate Change Related Activities and Priorities
- Our Sustainability Challenge - Greenhouse Gas Emissions
- Carbon Disclosure Project
- Address by Ian Wood, VP Sustainable Development, to the Greenhouse Challenge Plus Conference, 15 September 2005 Canberra, Australia
Biodiversity

Loss of biodiversity due to competing land use is an issue of global concern. We recognise this concern in our Sustainable Development Policy (PDF 28 KB) commitment to ‘enhance biodiversity protection by assessing and considering ecological values and land-use aspects in investment, operational and closure activities’.

In conjunction with the International Council on Mining and Metals (ICMM) and the World Conservation Union (IUCN), we have made an undertaking not to explore or mine in World Heritage listed properties. We have also made a commitment to take all possible steps to ensure that the effects of operations adjacent to these areas are not incompatible with the outstanding universal values of World Heritage properties.

We seek to recognise and manage the values of biodiversity that may be adversely affected by our direct or indirect activities. A number of our sites operate in or near areas that have high biodiversity values, including internationally recognised biodiversity hotspots, underscoring the importance of our biodiversity assessment and management programs. Further internal guidance is being developed to support the implementation of these programs.

In the longer term, we see an opportunity beyond our site-specific activities to engage in regional biodiversity issues. We will continue to work with the communities in which we operate and with other stakeholders to develop our approach to biodiversity offsets, with our primary aim being to avoid or minimise any harm to biodiversity.

Sites are required to maintain land management plans, and many are actively engaged in biodiversity-related programs.

Read our 2007 case study: Turtle Village Trust in Trinidad and Tobago.

For details on our 2007 performance, see 2007 Performance>Biodiversity.
Resource Conservation

Beyond the extraction of ore and petroleum resources, the major resource requirements of our businesses are land, energy and water. We create waste as a by-product of our activities.

Land

We clear land for access to resources, and for construction of waste rock dumps, tailings facilities and associated refining and processing infrastructure. We also manage significant tracts of land for exploration leases, for future development, and as a buffer from neighbouring land uses.

BHP Billiton exploration activities are required to meet our HSEC Management Standards, as well as internal exploration standards. These standards require exploration teams to undertake environmental assessment and impact analysis for target areas and to develop an environmental management plan that describes the planned activities and the controls to ensure land disturbance is minimised. The methods of exploration depend on the resource target and the level of investigation required.

Where disturbance to land is necessary to provide safe access for equipment and drilling activities, rehabilitation plans are required that include the sealing of all drill holes and reclamation of drill pads and access tracks to the satisfaction of regulatory authorities and local stakeholders.

Our sites are required to have land management plans in place to guide decisions on land management in order to protect and manage the land to meet agreed beneficial uses. The plans address a broad range of issues, such as ecosystem and biodiversity management, erosion control, feral animals, weeds and fire management. In addition, we actively seek the best options for rehabilitating disturbed land and determining post-closure land use, consistent with agreed closure criteria.

Energy

We use a number of energy sources to operate mobile and fixed plant at mining and petroleum operations; to operate milling, smelting and refining operations; to generate electricity; and to transport product. To optimise energy efficiency, where our operations are over a certain threshold (more than 100,000 tCO2e per year), they are required to have energy management plans and, where opportunities exist, to look for cleaner sources of fuel as part of their energy mix.

Energy Excellence Program

In our revised Climate Change Policy, we state that we ‘will take action within our own businesses and work with governments, industry and other stakeholders to address this global challenge and find lasting solutions consistent with our goal of Zero Harm’.

Improving the management of energy and greenhouse gas emissions across our businesses is one of four areas in which we believe we can achieve significant improvement. Supporting our approach is our Energy Excellence Program, which we initiated in March 2007.

Energy Excellence is about reducing our contribution to global greenhouse gas emissions while contributing to improved bottom-line performance through identifying energy efficiency and energy substitution opportunities.

In 2006/07, 84 per cent of BHP Billiton’s greenhouse gas emissions resulted from energy consumption. Improving energy efficiency and identifying energy substitution opportunities are real ways in which we can reduce our greenhouse gas emissions for the life of our operations.

Energy is also a major cost driver in our business. Our annual energy costs in 2005/06 represented 24 per cent of operating costs. While recognising that some of our businesses are highly energy efficient, identifying ways we can further improve energy management and reduce our energy requirements has huge potential in terms of business returns.

In seeking to use the most effective means possible of managing our energy use, our approach is based on a hierarchy of controls. This is: eliminating the need for energy, reducing energy consumption, considering substitution opportunities to reduce greenhouse intensity, and mitigating greenhouse gas emissions when no further reductions to energy use or greenhouse gas emissions can be achieved.
The program will initially focus on Australian sites and specifically address the newly introduced Australian mandatory Energy Efficiency Opportunities legislation.

**Water**

Access to clean water is an issue of growing international importance and a key challenge for sustainable development. We use water in mining, smelting, refining and petroleum processes, and our activities are often located in remote, arid environments where access to high-quality water is limited.

We continue to identify business risks and opportunities for water access, reuse or recycling, efficient use and responsible wastewater disposal. Going forward, we have set an aggregate Group target of 10 per cent improvement in the ratio of water recycled/reused to fresh water consumed by 30 June 2012.

Read our 2007 resource conservation performance at [Resource Use](#).
Wastes

Wastes are generated at various stages throughout resource extraction and processing. Wastes include those associated with mineral and petroleum extraction (waste rock, tailings and drilling muds) and non mineral wastes (hazardous and general wastes, waste water and effluent discharge).

Waste Rock and Tailings

Mining and processing operations produce large quantities of waste rock (material moved to obtain access to the economic ore resources) and tailings (non-economic material produced after the ore has been processed). These materials are either returned to the open pits or underground workings from where they originated or placed into engineered stockpiles, waste rock dumps or storage dam facilities.

Our HSEC Management Standards (PDF 148 KB) require strict controls on tailings management, heap leach residues (i.e., waste residue remaining after minerals have been chemically removed from ore) and waste rock stockpile construction. The aim of this approach is to minimise the disturbance of land, ensure its physical stability and manage potential impacts to soil, surface and ground water. When designing new tailings facilities, we use a range of international standards, such as those developed by the International Commission on Large Dams, as well as internal guidelines and procedures.

We will not commit to a new mining project that disposes of waste rock or tailings into a river. This does not apply to the disposal of waste rock and tailings materials in conventional waste rock dumps or tailings dams, which may be constructed within the catchments of a river system where such structures are designed to retain and store the waste materials. It also does not apply to the discharge of water from tailings dams or waste rock dumps that is of a quality acceptable for downstream beneficial uses.

In addition, we also do not pursue deep sea tailing placement (DSTP) as a potential tailing disposal option for any of our current prospects. We also believe that, given the very specific circumstances where DSTP could be considered appropriate, it is unlikely that the technology will be pursued in any of our future developments.

Non-Mineral Waste

Non-mineral waste includes hazardous and general wastes. Hazardous waste includes waste oil, materials contaminated with hydrocarbons, chemical waste, spent pot linings and hazardous bag-house dust, but excludes hazardous mineral residue, which is generally consistent with the classifications for hazardous waste under the Basel Convention. General waste types include domestic waste, tyres, paper, batteries, cardboard, and building and construction material.

To increase the efficient use of resources, we require all our operations to implement waste minimisation programs that include reducing the types, quantity and hazard of wastes produced; reusing materials; and recycling of waste streams. To achieve these outcomes, sites conduct a thorough evaluation of process inputs with a view to identifying process modifications and other opportunities to reduce the life cycle impacts of our products and services.

Water and Effluent Discharge

Surplus water and effluent are produced in our operations through the collection of disturbed area rainfall runoff from our mining activities, groundwater dewatering and processing operations. This surplus water is discharged to rivers, lakes and wetlands in line with our Sustainable Development Policy. Through our site Water Management Plans we aim to minimise high quality water use, maximise water recycling and seek opportunities for our surplus water to be used by external parties.
Emissions

The key air emissions generated by the Company’s activities include greenhouse gas emissions, oxides of sulphur and nitrogen, ozone-depleting substances and fluoride.

Primary greenhouse gases of concern to us are:

- Carbon dioxide (CO₂) - a product of energy use and the use of fluxes
- Methane - occurs at coal mines and from oil and gas production facilities.

Less significant are emissions of perfluorocarbons associated with our Aluminium Customer Sector Group.

Read our approach to climate change to see how we manage these emissions and our contribution to climate change.

Oxides of sulphur (SOx) and fluoride emissions are generated chiefly from smelting operations and can have an adverse effect on human health. The latter can also affect vegetation and thus enter the food chain.

Oxides of nitrogen (NOx) emissions are produced by the combustion of fuels and may have an adverse impact on the environment.

Dust can typically be generated by such activities as earthworks, excavation, blasting, transportation and product processing and can be exacerbated by dry climatic conditions and winds. Measures to control dust are important aspects of both operational and environmental management systems at our sites.

We are committed to reducing our air emissions by putting in place sound engineering and operating practices. Read more: Emissions and our 2007 case studies on the use of biofuels and dust management.
2007 Performance

Message from the Vice President Environment

Key Successes and Shortcomings
Over the last five years we have experienced year-on-year improvements in environmental performance against most of our targets in land management, energy and water efficiency, greenhouse gas emissions and waste reduction. Going forward, we recognise that emerging environmental risks means that we must respond with renewed vigour and innovation.

Environmental Risks and Opportunities
While scientists, governments, our local communities and NGOs continue to tell us that mitigating climate change, accessing clean water and preserving the biodiversity of the planet remain their critical environmental concerns, we also understand that these challenges are converging. In managing a response, we must set and achieve strong individual targets, as well as work collectively with governments and non-government organisations with strong public support.

Systems and Structural Improvements
We have a mature system to actively manage environmental impact at all phases of operation from exploration and development through to operation, closure and rehabilitation.

Going forward, our targets for the five-year period to 2012 strengthen our commitment to reducing energy use and greenhouse gas emissions per unit of product and improving our water recycling and land rehabilitation rates.

Key Strategies
During the year, we revised our Climate Change Policy to reflect the concerns and aspirations of a range of stakeholders. In addition to increasing our research and development funds, we have committed to targets to reduce the intensity of our emissions in production, improve energy efficiency, improve our understanding of life cycle emissions, and work collaboratively with others. Effectively reducing our total greenhouse gas emissions, however, presents an ongoing challenge as our mines age and we use more energy to dig further and deeper to extract the resource.

We are enhancing our commitment to the responsible management of water with a new aggregate Group target of a 10 per cent improvement in the ratio of water recycled or reused to fresh water consumed by 30 June 2012.

We are taking a proactive approach to biodiversity protection by linking our internal biodiversity mapping systems to our Enterprise-wide Risk Management (EwRM) System. As a result, biodiversity impact risks will automatically be flagged in relevant site and project risk registers. We are also seeking opportunities to address regional biodiversity impacts outside the footprint of our assets.

Refer to the following sections for details on our environmental performance over the reporting period:

- Environmental Incidents and Fines
- Environmental Spending
- Closure
- Biodiversity
- Resource Use - covering land, energy, water and other consumables
- Wastes
- Emissions – covering greenhouse gases, ozone-depleting substances, oxides of sulphur and nitrogen, and fluoride.

Charles Taylor
Vice President Environment
Read more:

- Our Approach to Reporting Report Parameters for the explanation of how this data is being reported.
- Environmental Commitment for further details on environmental management.
- 2007 Case Studies for examples of policy in action.
Environmental Incidents And Fines

Environmental Incidents

The reporting and follow up of significant HSEC incidents is a crucial part of our approach to HSEC management. A significant environmental incident is an occurrence that has resulted in or had the potential to cause significant environmental harm. Our definition of ‘significant’ is conservative to ensure all learnings are captured from relevant HSEC incidents. Such an incident is rated at level 3 or above on the BHP Billiton HSEC Consequence Severity Table. Read more: Incident Reporting and Investigation.

No significant environmental incidents occurred during the reporting period.

Accidental Discharges

Accidental discharges of hydrocarbons to either land or water totalled 33,390 litres for the reporting period, a decrease from the 128,940 litres reported in the previous year.

Additionally there was a rupture of a third-party oil pipeline that crosses through the Klipspruit mining area (BHP Billiton Energy Coal South Africa Ltd) which resulted in a 129,000 litre spill.

The management of the spill, and the subsequent remediation of the soil and water contamination, was undertaken by the company that owns both the pipeline and the easement through which the pipeline travels. The incident has been included in this report as it impacted on land that we own and manage. The incident, while significant, is not included in our numbers of significant incidents as it was not under the Company’s control.
Environmental Fines

This year, we did not meet our goal of zero environmental fines or prosecutions. The following table outlines the environmental fines for this period. Note: Fines reported may relate to incidents occurring in previous years.

Environmental Fines 2006/07

<table>
<thead>
<tr>
<th>Site</th>
<th>Customer Sector Group</th>
<th>Description</th>
<th>Fine (US$)</th>
</tr>
</thead>
</table>
| Western Arctic Coal      | Energy Coal           | May 2007 - Notice and fine received for six violations (US$1000 each) of the Borough Regulations and BHP Billiton Permits. A Compliance Plan was required within 30 days of receiving the Notice. The six violations were:  
  • Unreported 20 to 30 gallon spill on Omalik ice strip.  
  • Pink dye not being used in fuel.  
  • Open burning refuse without open burn permit.  
  • Drip pans not being properly used beneath a generator.  
  • Unreported tundra damage by dozer at south end of ice airstrip.  
  • Unapproved helicopter landings – outside  
  • Point Lay airport apron. | 6,000      |
| Cerro Colorado, Chile    | Base Metals           | November 2006 – Infringement and citations received for breach of DS148/04 (handling of hazardous waste) regarding incorrect container labelling.  
April 2007 – Fine received regarding the condition of the Hazardous Waste Warehouse roof and lack of information in the Hazardous Waste Container Register. | 30,253     |
| Dendrobium Colliery, Australia | Metallurgical Coal | December 2006 - Penalty notice received from the Department of Environmental and Conservation: Non-compliance with licence condition 02 (Maintenance of plant and equipment at the ventilation shafts 2 & 3 construction site). | 1,134      |
| Total                    |                       |                                                                                                                                             | 37,387     |

Former Operations – Ok Tedi Mining Limited

BHP Billiton transferred all of its shareholding in OTML mine (Ok Tedi Mining Limited) to PNG Sustainable Development Programme Company Limited in February 2002.

During the year, we were advised that seven individual plaintiffs, said to be representing the members of seven clans from the vicinity of the Ok Tedi mine, had obtained an order of the National Court of Papua New Guinea joining BHP Billiton Limited as a defendant to proceedings against the shareholders of Ok Tedi Mining Limited (OTML) and its current managing director.

The plaintiffs seek unspecified damages for numerous matters, including contamination of the environment and adverse affects to fishing, drinking water, irrigation of crops and washing and also seek US$3.75 billion in exemplary damages.

The originating summons was filed in October 2006. BHP Billiton filed a Notice of Intention to Defend in June 2007. Along with all other defendants, we are bringing an application in the National Court to have the proceedings struck out on the basis that due process has not been followed and our belief that the plaintiffs’ allegations cannot be sustained against BHP Billiton. Hearing of those applications has been adjourned to 13 September 2007.
Environmental Spending

Over the reporting period, environmental expenditure for the Company totalled US$288 million. This compares with US$309 million spent in the previous year.

The following table summarises the environmental spending of our Customer Sector Groups allocated to the categories of Research and Development, Site Rehabilitation, Environmental Monitoring, and Other Expenditure, such as environmental impact assessment and training. Research and Development spending includes collaborative work undertaken with academic institutions to improve environmental management at our operations, as well as product improvement initiatives.

These costs exclude expenditures associated with the capital cost, operation and maintenance of pollution control equipment and the like.

<table>
<thead>
<tr>
<th>Customer Sector Group</th>
<th>Research &amp; Development</th>
<th>Site Rehabilitation¹</th>
<th>Environmental Monitoring²</th>
<th>Others³</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHP Billiton Total ⁴</td>
<td>$13,983</td>
<td>$150,163</td>
<td>$23,007</td>
<td>$100,930</td>
<td>$288,083</td>
</tr>
</tbody>
</table>

Unit: Thousand US Dollars (US '000)

1. Spending associated with ongoing current or progressive rehabilitation, excluding provisions for closure.
2. Spending associated with environmental monitoring activities, such as air and water monitoring.
3. Other spending includes costs related to environmental management, such as environmental impact assessment and training
4. The BHP Billiton Total figure is inclusive of data from our closed Beenup site in Western Australia.
Closure

In 2006/07, all of our owned and operated sites reported conformance against our Company Closure Standard. Conformance includes a rigorous assessment of site-specific closure risks, identification of risk management actions and development of reasonable and accurate closure cost estimates.

Over the reporting period, a number of actions were taken in support of improved closure planning including web-based networks and facilitated closure workshops.

The Closure Standard will be subject to its triennial review in 2008.

Closure Activities and Provisions

In 2006/07, we continued to implement closure activities at our closed operations. For example:

San Manuel Mine and Plant Site Rehabilitation Project - Base Metals Closed Mines Group

San Manuel copper mine and processing facility in Arizona, USA, was constructed in 1952 and production ceased in 1999. Surface rehabilitation activities at the mine site were completed in May 2006, eighteen months ahead of the original closure project schedule and well below the original budget.

Rehabilitation of the plant site, which included a large-scale concentrator, tailings storage facilities and smelter, was essentially completed in May 2007. The demolition of the smelter stacks in January 2007 (illustrated in the photograph) was marked by a well-attended community ceremony.

The combined San Manuel Mine and Plant Site Reclamation Project has worked in excess of 1.5 million man-hours with only one lost time injury and was US$39 million below budget.

The approach went beyond simply stabilising a site. The closure team utilised a plan based on reducing long-term risk, minimising maintenance costs, addressing community concerns and meeting regulatory requirements. The overall design approach blends the reclaimed facilities into surrounding landforms.

Transvaal Navigational Collieries (TNC) Site - BECSA Mine Closure Operations

An innovative approach has been taken to managing storm water on closed coal discard dumps at the the TNC site in Mpumalanga, South Africa. As illustrated in the photograph, a spiral drainage system, which starts at the top of the dump and gently winds downward in a spiralling manner until it reaches the natural ground level, allows water to be effectively dissipated. The design has been in place for several years, and continued monitoring in 2007 has found the approach to be sustainable and cost effective for this environment.

Boodarie Hot Briquetted Iron (HBI) Facility

The Company announced on 24 August 2005 that it would permanently close the HBI facilities at Port Hedland. The Company’s Rehabilitation Plan was approved by the Western Australian State Government in January 2007.

The demolition and removal work is a large-scale, specialist activity that will require a relatively small crew of approximately 10 to 20 skilled people. This work is expected to be completed in late 2008, and then the impacted areas of the site will be rehabilitated.

Read our 2007 Annual Review for specific information on closure cost provisions.

For further background on the Closure Standard, see Environmental Commitment >Closure Planning

BHP Billiton 2007 Full Sustainability Report
Biodiversity - Our Performance

The Company’s risk profile with regard to impacts on biodiversity is increasing due to our interest in projects that occur in or near areas of high biodiversity conservation value.

Land Management

Aggregate land and biodiversity-related data for the Company is provided below. Due to the large number of sites and area of land that we manage, it is difficult to present aggregated site-specific biodiversity impacts in this Report. The data indicates the scale of our activities but does not provide qualitative information on the relative biodiversity value of the land disturbed, rehabilitation conducted or areas that we are managing for biodiversity conservation purposes. More detail on regional and site-level biodiversity impacts and initiatives can be found in sustainability reports produced by our operations.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land owned, managed or leased.</td>
<td>Hectares</td>
<td>48,488,330</td>
</tr>
<tr>
<td>Net land currently disturbed by our activities. (Disturbed land less rehabilitated land)</td>
<td>Hectares</td>
<td>107,310</td>
</tr>
<tr>
<td>Land that we are managing for biodiversity conservation purposes.</td>
<td>Hectares</td>
<td>10,849</td>
</tr>
<tr>
<td>Sites that we own or manage that are adjacent to a designated protected area.</td>
<td>Number of sites</td>
<td>18</td>
</tr>
<tr>
<td>Land that we own or manage that is considered to have a biodiversity rich habitat. Major areas include: Canada – 332,432 hectares Suriname – 287,665 hectares South Africa 21,520 hectares Australia – 13,717 hectares</td>
<td>Hectares</td>
<td>657,852</td>
</tr>
<tr>
<td>Land area rehabilitated.</td>
<td>Percentage of total disturbed land area</td>
<td>28</td>
</tr>
</tbody>
</table>

Risk Management

To assist new projects, our Biodiversity Community of Practice developed a Biodiversity Checklist that evaluates biodiversity risks and formulates an action plan consistent with our Enterprise-wide Risk Management framework. The tool utilises information contained within the ICMM Good Practice Guidance for Mining and Biodiversity.

As a result, biodiversity impact risks will be integrated into relevant site and project risk registers. We are also seeking opportunities to address regional biodiversity impacts outside the footprint of our assets. To provide geographic context to our biodiversity risk profile, we have mapped the location of our operations in relation to World Heritage (Natural) Sites and internationally recognised biodiversity hot spots.

We are working with Proteus Partners, a partnership between industry, the World Conservation Monitoring Centre and the United Nations Environment Programme (UNEP), to assist in the redevelopment of the global database of Protected Areas.

Activities, Research and Development

Over the reporting period:

- Our sites were engaged in a range of biodiversity-related activities (in addition to our ongoing rehabilitation). This includes biodiversity-related research and development funding that totalled US$3.48 million. Activities and research and development included:
  - Camera trapping and environmental impact assessment studies at Billiton Maatschappij, Suriname.
  - Wetland weed management programs at Hillside Aluminium, South Africa.
  - Biomonitoring of the Upper Oliphants River catchment at Middelburg Mine, South Africa.
  - Monitoring of plankton and benthos in surface waters at Cerro Matoso, Colombia.
  - Support of the Maputo Elephant Research Program at Mozal Aluminium, Mozambique.
  - Hyperspectral survey of the Ningaloo Reef, Petroleum, Western Australia

- Substantial funds were also contributed to other biodiversity initiatives, including:
  - Revive our wetlands program with Conservation Volunteers Australia
- The *Growing Together* giant panda conservation initiative in partnership with the China Conservation and Research Centre in south-west China. This initiative was launched to assist panda habitat preservation, breeding, care and education programs. The primary focus of the partnership will be providing life-long care for twin panda cubs that were born at the Wolong Nature Reserve in 2006, as well as the creation of panda education programs for local schools in the Pilbara region of Western Australia.
- A turtle conservation program in Trinidad and Tobago with the Turtle Village Trust.
- The Arid Recovery Program in South Australia.

- For further examples of policy in action, read our *Biodiversity 2007 case study*.  

Resource Use

Our Sustainable Development Policy states that we will ‘set and achieve targets that promote efficient use of resources’. The following discusses our performance with regards to this commitment in the areas of:

- Land
- Energy
- Water
- Other Consumables.

Land

As demonstrated in the graph below, the amount of land requiring rehabilitation has decreased over the reporting period. This is largely due to the sale of some Stainless Steel Materials and Base Metals Customer Sector Group (CSG) sites. Land rehabilitated increased by 67 per cent to 4,020 hectares, largely due to additional rehabilitation at closed sites in the Base Metals Customer Sector Group. The land requiring rehabilitation, includes open pits, infrastructure and areas of active operation which can only be rehabilitated at closure.

Going forward, we have established an aggregate Group target of a 10 per cent reduction in the land requiring rehabilitation by 30 June 2012. The target will focus those Customer Sector Groups with large areas of land requiring rehabilitation on reviewing their rehabilitation plans. The target aims to reduce closure cost liability, increase the likelihood of successful rehabilitation programs, improve the quality of surface and ground water, improve the Company’s reputation as a responsible land steward and enable an earlier return of land to a post-mining beneficial use.

The total area of land owned, leased or managed by our operations in 2007 was 48.5 million hectares, of which approximately 45.2 million hectares is constituted by exploration rights, leases and permits held by our Exploration group.

Details of land use performance by CSGs are presented in the Environmental Data Summary.

<table>
<thead>
<tr>
<th>Land Use as at 30 June 2007</th>
<th>Percentage of total land use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land disturbed by infrastructure</td>
<td>0.05%</td>
</tr>
<tr>
<td>Land disturbed by mining</td>
<td>0.13%</td>
</tr>
<tr>
<td>Other disturbed land</td>
<td>0.04%</td>
</tr>
<tr>
<td>Total rehabilitated land at 30 June 2007</td>
<td>0.1%</td>
</tr>
<tr>
<td>Area intended for future operation or expansion</td>
<td>0.4%</td>
</tr>
<tr>
<td>Buffer zones and areas not intended or planned for operation</td>
<td>4.9%</td>
</tr>
<tr>
<td>Onshore exploration leases excluding above</td>
<td>94.4%</td>
</tr>
</tbody>
</table>
Energy

Our energy consumption decreased slightly from 304 petajoules in the previous reporting period to 302.5 petajoules.

The Aluminium, Stainless Steel Materials and Manganese CSGs are the major consumers of energy, as presented in the graph below.

The major increase in energy use was from the Aluminium CSG; however, this was offset by changes to the Petroleum assets ownership and the sale of Southern Cross Fertiliser.

Details of energy performance by the CSGs are presented in the Environmental Data Summary.

Purchased electricity and coal and coke were the two major energy types used, followed by distillate and natural gas. Renewable energy from hydroelectricity accounted for approximately two per cent of total energy (6.2 PJ) and is included in the purchased electricity category.

The primary fuel sources and renewable energy component of the purchased electricity are illustrated in the graph below. Renewable energy is primarily from hydroelectric sources in Tasmania (Australia) and Colombia.

The businesses represented in the graph produce our most energy-intensive (energy use per tonne of product) products. This does not directly relate to our largest energy users, as some sites have a lower energy intensity but a higher total energy use due to large production volumes. For details on energy consumption of some of our products, read the Environmental Data Summary.
For 2006/07, our energy intensity index was 1 per cent below the 2002 base year. Going forward, we have established an aggregate Group target of a 13 percent reduction in energy use per unit of production by 30 June 2012. The target aims to have an immediate positive impact on our rate of greenhouse gas emissions and our operational cost structure (energy currently account for more than 20% of global operating costs). To support this target, we have developed an Energy Excellence program.

**Energy Excellence**

Energy Excellence is about reducing our contribution to global greenhouse gas emissions while contributing to improved bottom-line performance through identifying energy efficiency and energy substitution opportunities.

Since commencing the program in March 2007, our focus has been on establishing the framework and putting in place the requisite resources, including:

- Appointing Energy Excellence Champions at key Australian assets
- Developing a process to identify and assess potential Energy Excellence projects that would drive improvement in energy usage and, therefore, greenhouse gas emissions
- Developing a self-assessment tool that will help sites to identify current gaps in energy management and implement improvement processes designed to make energy efficiency a fundamental way of how we do business.

To date, sites have commenced undertaking energy self-assessments to identify opportunities for reductions in usage. While we are still in the early phase of the process, the opportunities explored to date appear promising.

**Water**

Total high-quality water (High-Quality Water is defined as having total dissolved solids (TDS) less than 5,000 mg/L and Low-Quality Water as having a TDS greater than 5,000 mg/L or being sourced from a waste water treatment plant) use amounted to 161,670 megalitres (ML), an increase over the 160,230 ML reported in the previous reporting period, as shown in the following graph. The main changes were an increase in Base Metals (Escondida) and a decrease in Diamonds and Specialty Products (sale of Southern Cross Fertilisers). Base Metals continues to be the major consumer, comprising 59 per cent of our high-quality water use.

High-quality water consumed by the CSGs is presented in the Environmental Data Summary.
Our high-quality water intensity index (the intensity index has been developed as a Company-wide performance indicator on environmental parameters, such as energy use, greenhouse gas emissions and high-quality water consumption. The 'index' concept allows performance from different business groups or sites, all of which may have different operating conditions and product mixes, to be added together to form an overall indicator per unit of production. The baseline year for the intensity indices is BHP Billiton’s Fiscal Year 2001/02 and, as such, has a value of 100) and sources of high-quality water are shown in the following graph and chart. We did not meet our target of a 10 per cent reduction in high quality water consumption per unit of production by June 2007 compared to the 2002 base year but achieved a 4 per cent reduction. While we achieved improvements in the Manganese operations, Cerro Matoso (Colombia), Yabulu (Australia) and our BMA coal operations (Australia), these improvements were offset by an increase in high-quality water use intensity at our Escondida operation (Chile).

Sources of high-quality water for our operations are mainly ground and municipal water. Low-quality water use amounted to 25,600ML for the period. Stainless Steel Materials operations in Western Australia are the major users comprising 50 per cent of our low-quality water use. Low-quality water was primarily derived from mine dewatering and ground water drawn from bores.

Recycled water is water that has been through the processing circuit and recovered for re-use but does not include water used for heat exchange. Recycled water use amounted to 161,530ML compared to 168,660ML for the previous reporting period. The main reason for the reduction in recycled water use was the sale of the Tintaya copper mine in Peru.

Major users of recycled water are the Stainless Steel Materials, Metallurgical Coal and Base Metals CSGs. For an example of our policy in action, read our 2006 case study Emalahleni Water Reclamation Project.

![Water Use by Classification](image1)

![High-quality Water Use by Source](image2)
Going forward, we have established an aggregate Group target of a 10 per cent improvement in the ratio of water recycled or reused to high-quality water consumed by 30 June 2012. This target aims to focus our operations on improving water recycling rates and looking for opportunities to substitute recycled or low-quality water into processes that currently use high-quality water. Total high- and low-quality water consumption and water use efficiency will continue to be measure and reported.

**Other Consumables**

Due to the diversity of our operations, we seek to report only consumables of significant quantities. Over the reporting period, we consumed the following (excluding fuels, which are reported in Energy):

<table>
<thead>
<tr>
<th>Consumable Item</th>
<th>Amount (Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>980,140</td>
</tr>
<tr>
<td>Caustic soda</td>
<td>407,830</td>
</tr>
<tr>
<td>Explosives</td>
<td>584,070</td>
</tr>
<tr>
<td>Purchased gas other than natural gas (i.e. ammonia, oxygen, hydrogen and nitrogen gas)</td>
<td>240,870</td>
</tr>
<tr>
<td>Limestone and dolomite</td>
<td>55,030</td>
</tr>
</tbody>
</table>
Wastes - Our Performance

Our Sustainable Development Policy states that we will ‘set and achieve targets that promote efficient use of resources’. The following discusses our performance with regards to this commitment in the areas of: Overburden, Waste Rock and Mineral Wastes, Hazardous Waste, General Waste, Wastewater and Effluent Discharge.

Read more in 2007 case study on waste management and recycling.

Overburden, Waste Rock and Processing Wastes

In mining processes, 1,220 million bank cubic metres (bcm) of overburden (or waste rock) were moved over the reporting period. Overburden is generally disposed of on site in waste rock dumps but is also used as a source to backfill mined voids, used as a substrate for rehabilitation or as minesite road base or is sold for secondary use off site.

Mineral processing wastes include tailings, sludges and slags from mineral processing and drilling muds and cuttings from petroleum operations. During the reporting period, around 179 million tonnes of non-hazardous mineral processing wastes and around 28 million tonnes of hazardous mineral processing wastes were disposed of. Hazardous mineral processing wastes include those mineral wastes classified as hazardous in some regulatory jurisdictions or due to their leaching characteristics and includes certain tailings, sludges and slags. Mineral processing wastes are placed in engineered structures or backfilled into mined voids, providing both physical and chemical stability.

General Waste

General waste (or domestic waste) types include paper, cardboard, and building and construction material. In 2006/07, our operations generated 215,650 tonnes of general waste compared to 235,460 tonnes in the previous reporting period. The decrease is due largely to a reduction in generation of general waste at Base Metals operations.

The chart below shows the methods of general waste disposal. Our general waste disposal to landfill decreased from 158,970 tonnes in 2006 to 132,820 tonnes in 2007 due to the Spence operation in Chile transitioning from construction to operation phase.

Our general waste intensity index increased by 21 per cent in 2007 to be 3 per cent below the 2002 base year, which means we did not meet our target of 20 per cent. This was due to increases in general waste in 2006/07 at the Iron Ore and Stainless Steel Materials CSGs compared to their base years.
Hazardous Waste

Hazardous waste is categorised into waste oil and other hazardous waste but excludes hazardous mineral processing waste. Hazardous waste includes materials contaminated with hydrocarbons, chemical waste, spent pot linings and hazardous baghouse dust, which is generally consistent with the classifications for hazardous waste under the Basel Convention. Hazardous wastes comprise around 29 per cent of the total Company waste to landfill.

In 2006/07, our operations generated 179,540 tonnes of hazardous waste, compared to 148,040 tonnes in the previous reporting period. The increase is largely due to increased spent pot lining and other wastes from our Aluminium smelters in South Africa.

The chart below shows the methods of hazardous waste disposal. Our hazardous waste disposal to landfill increased from 43,850 tonnes in 2005/06 to 55,330 tonnes in 2006/07 due to demolition of the oxygen plant at the Kalgoorlie Nickel Smelter. Of the waste oil generated, the majority was either reused as fuel for energy recovery on site or sent for recycling, reuse or energy recovery off site.

Our hazardous waste intensity index decreased by 12 per cent in 2006/07 due to completion of the refurbishment of underground infrastructure at the Cannington mine. We exceeded our overall target of a 20 per cent reduction against the 2001/02 baseline, achieving an overall 50 per cent reduction.

Our operations continue to implement programs to improve hazardous waste management. For example, Manganese (South Africa) has developed a leading-practice hazardous waste landfill. Read more.
Waste Water and Effluent Discharge

The total amount of waste water and effluent discharged to various end points was 80,430 megalitres (ML) compared to 92,120 ML in the previous reporting period. This decrease is largely due to decreased discharges from the Energy Coal sites in South Africa, Groote Elyandt Manganese in Australia and the Base Metals sites.

Footnote to graph: 'Other' includes evaporation, seepage, irrigation, and waste water sent offsite for other uses.

While most wastewater and effluent was discharged to rivers, lakes and wetlands as shown in the graph, in line with our Sustainable Development Policy commitments, we seek to ensure that any potential impacts resulting from this discharge are managed and minimised over time.

In addition to reporting quantity, we also require our sites to report on key constituents of discharged waste water and effluent. In 2006/07 we discharged 1,620 tonnes of total suspended solids, 5.9 tonnes of key metals, 83.5 tonnes of biological chemical demand materials and 1,300 tonnes of chemical oxygen demand materials.

The quantities of these key constituents were derived by estimation, calculation, measurement, or a combination of the three methods. It should be noted that any potential environmental impacts associated with this data can only be inferred when considered in relation to the specific receiving environment and associated mass and concentration discharge levels.
Emissions - Our Performance

Environmental emissions are a part of our operations; however, in line with our commitment to continual improvement, we require our sites to ensure that emissions are identified and managed to reduce potential impacts over time.

This section describes our emissions at an aggregated Group level. Detailed information on emissions from major mobile sources and on-site stationary sources and management of fugitive emissions is addressed at an operational level.

The following discusses our performance with regards to the significant environmental emissions across our businesses of:

- Greenhouse Gases
- Ozone-Depleting Substances
- Oxides of Sulphur Oxides of Nitrogen
- Fluoride

Emissions - Greenhouse Gases

Emissions From Mining And Production

In 2006/07, our total greenhouse gas emissions were 52 million tonnes of carbon dioxide equivalent, a slight increase on that reported in the previous reporting period. Major contributions were from aluminium smelters, Metallurgical Coal and Base Metals. A breakdown of greenhouse gas emissions by the CSGs is presented in the Environmental Data Summary.

During the year our greenhouse gas intensity index increased by 2 per cent.

The intensity index has been developed as a Company-wide performance indicator on environmental parameters, such as energy use, greenhouse gas emissions and high-quality water consumption. The ‘index’ concept allows performance from different business groups or sites, all of which may have different operating conditions and product mixes, to be added together to form an overall indicator per unit of production. The baseline year for the intensity indices is BHP Billiton’s Fiscal Year 2001/02 and, as such, has a value of 100.

Overall, we have achieved a 6 per cent reduction against our 2001/02 baseline, exceeding our Company target of an overall 5 per cent reduction. Note: Global warming potential factors were changed to be consistent with the Second Assessment Report (IPCC (1996)) values in 2006/07 which decreased the greenhouse gas intensity by 0.6 per cent.

Going forward, we have established an aggregate Group target of 6 per cent reduction in greenhouse gas emissions per unit of production by 30 June 2012. The target will extend us beyond ‘business as usual’ and will challenge us to identify new opportunities to reduce emissions. It is anticipated that most savings will be achieved through improved emission controls and energy efficiency programs with associated cost savings.

Emissions Due To Company Air Travel

Due to the global nature and often remote locations, of our business Company air travel is a significant indirect greenhouse gas emission by our Company. Indirect emissions have not been included in our total greenhouse gas emissions reported for Mining and Production.
Commercial flights - Total commercial air passenger kilometres travelled in the reporting period were 462,983,189 and total flight segments were 213,068. This data is supplied by our Group Travel Agency. Applying US Department of Energy estimates for carbon dioxide equivalent emissions (i.e. 0.27kg of CO₂ per airline passenger kilometre, which includes CO₂ plus other greenhouse gases from jet fuel combustion), total CO₂ equivalent emissions from BHP Billiton air travel in the reporting period is estimated to be 126,350 tonnes.

Charter flights - Total charter flight miles travelled in the reporting period were 9,062,216 statute kilometres. Based on the manufacturer’s fuel efficiency performance data for the different types of aircraft, the total estimated CO₂ equivalent emissions from the charter flights in the reporting period was 46,100 tonnes.

Emissions From the Use Of Our Products

An estimated 360 million tonnes (330 million tonnes on an equity basis) of carbon dioxide equivalent were emitted as a result of our products being used. This figure is estimated based on standard conversion rates for 2005/06 production levels. Several parameters are estimates from our purchasers, and this figure is thus not verifiable.

Emissions – Other

The amount of ozone-depleting substances discharged or leaked to air increased from 1.74 tonnes of chlorofluorocarbon (CFC) equivalent in 2005/06 to 2.8 tonnes in 2006/07. We continue to phase out the use of ozone-depleting substances across our operations in compliance with legislative requirements.

Oxides of sulphur (SOₓ) emissions to air decreased, largely due to sale of Southern Cross Fertilisers.

Oxides of nitrogen (NOₓ) emissions to air dropped significantly since the one-off purge at Boodarie Iron as part of the decommissioning process in 2006.

Fluoride emissions to air decreased, largely due to the sale of Southern Cross fertiliser operations. The aluminium smelters reported slightly increased emission levels per unit of production to the previous reporting period. These operations continue to seek opportunities to reduce these emissions.

A breakdown of these emissions to air by CSG is presented in the Environmental Data Summary.
Case Studies

The following case studies are examples of issues, initiatives, projects and programs across the Group that highlight some of the environmental opportunities and challenges faced by our operations. Case studies are also on healthy people, safe workplaces, social responsibility, our people and our socio-economic contributions.

Waste Management In South Africa and Colombia

At Samancor Manganese in South Africa the active involvement of specialists facilitated the development of a hazardous waste facility and a management plan for domestic and solid waste has been in place at Cerro Matoso in Colombia since 1998.

Olympic Dam Water Savings Project Delivers A Sustained Change

Our Olympic Dam copper/uranium mine in South Australia has reduced its consumption of Great Artesian Basin water by optimising water recovery and recycling opportunities.

Turtle Village Trust Established To Support Community Development In Trinidad And Tobago

Our close working relationship with various local turtle conservation groups and other community stakeholders in Trinidad and Tobago has revealed the potential for community-based nature tourism initiatives.

Dealing With Dust In Port Hedland, Western Australia

We have made a formal commitment to reduce ambient dust levels and improve water use efficiency as part of our business growth strategy at Iron Ore, Western Australia.

Salar de Punta Negra Sustainable Conservation And Use Of A Wetland Site

An artificial surface water recharge system and groundwater monitoring program has been established to protect the Salar de Punta Negra, a critical feeding and nesting site for the endangered Andean Flamingo near our Escondida copper operations in Chile.

Alternative Fuels For Sustainable Development - A Holistic Review

We are conducting a study with Caterpillar, our major earthmoving equipment supplier, to assess the potential of using alternative fuels in some or all of our off-road mining equipment globally by 2020.
Waste Management In South Africa and Colombia

Obtaining A Permit For A Hazardous Waste Management Facility

The pre-conditions for success in achieving a permit for a hazardous waste site are numerous and varied, often requiring parallel rather than sequential processes. They can be summarised as follows:

- The project strategy is designed and adapted on an ongoing basis.
- Adequate resources and funding are provided to attain the information requested by the authorities and interested and affected parties as the project proceeds.
- Adequate provision is made for the time required to coordinate the processes and facilitate decision-making.
- The advice and guidance of the authorities is sought from the start and throughout the process.
- Stakeholders are assisted, through information sharing, to understand the various processes and decision-making framework and their role in these.
- Stakeholder concerns and recommendations are captured as conditions in the various authorisations.

The Challenge

The process of manufacturing electrolytic manganese leaves a residue that must be disposed of in a residue management facility. In 1995, Manganese Metal Company (MMC) began seeking a replacement for its existing facility, which had been in operation since 1985.

A new site was duly identified at Kingston Vale, 10 kilometres east of Nelspruit, and authorisation sought for a hazardous waste site permit (H-site). To dovetail with the critical milestones in MMC’s waste strategy timeframe, during 2000 and 2001, MMC had to put a process in place to integrate the Environmental Impact Assessment (EIA), rezoning process and landfill permitting process.

Greg Beyers, an independent environmental advisor to MMC said: "MMC has shown its commitment to sustainable development in the process of obtaining a permit for the construction of the Kingston Vale hazardous waste management facility. Through the active involvement of specialists, MMC has achieved a balance between managing the social, economic and environmental aspects."

How We Did It

MMC formed a project team of technical, legal and EIA specialists to determine the technical, procedural and legal authorisation requirements to re-permit the site to an H-site and to conduct the required feasibility assessments and other studies.

The four key requirements to obtain approval for a H-site permit were:

- Approval of an EIA of the site and an authorisation to conduct hazardous management.
- A permit to dispose of hazardous waste.
- Approval of an application to rezone the site for use as a hazardous waste site.
- A water licence.

An overall project plan was developed; and a protocol document was compiled, viewed and accepted by the key regulatory authorities.
The permit application steps were integrated with the legislative steps for an EIA, as well as with procedural steps required for the rezoning process. A Public Tribunal Hearing was required, which would determine the outcome of the permit application and the EIA consideration for approval.

An extensive stakeholder consultation and engagement process was conducted, a major part of which was a report that captured every stakeholder issue and provided a response.

Key concerns were directly addressed in the specialist technical studies and incorporated into the conditions of approval of the EIA, the draft permit and the rezoning application. The outcome was that the land use was approved and a permit was issued. The facility was duly constructed and commissioned in 2004. The previous residue management facility that it replaced is currently undergoing rehabilitation.

Going Forward

The project serves as a model of how effective integration and coordination can overcome the obstacles in gaining a permit for a hazardous waste site.

Waste Management At Cerro Matoso As An Integral Aspect Of Business Operations

A management plan for domestic and industrial solid waste has been in place at our 100 per cent owned Cerro Matoso ferronickel operations since 1998. The aim is to maximise opportunities for waste reuse and recycling and ensure that non-recoverable wastes are disposed of properly.

The plan involves engaging our neighbouring communities, generating direct employment opportunities and placing a value on waste.

A key to the success of the plan is creating awareness among employees that waste management is an integral aspect of business operations.

Major benefits of the plan include:

- Support of a local company to handle waste management and disposal, which generates 65 permanent and 20 temporary jobs.
- Monthly donations of 100 tonnes of waste materials to Fundacion San Isidro (the Company's community support foundation), with sales income being invested in community programs.
- Use of food waste for the production of organic fertilisers for soil rehabilitation at the mine and feed at small piggeries run by neighbouring communities.
- The design and construction of a sanitary landfill facility.

Gregorio Torres, a supervisor with the local waste contractor REASER, said: “The Cerro Matoso waste management has been improving continuously, and each day more of the workers consider it as an integral part of the operations and they understand that the environment and the community are receiving benefits from this program. I am a worker from the neighbouring community of Montelibano, and I and my family are very happy because I have a good job and I am helping to preserve the environment.”

The Challenge

Our challenge was to find ways to utilise as much as possible of the generated waste and reduce that disposed of to landfill. There was a large volume of waste from which no economic benefit could be obtained, such as wood residues, food, used oils and scrap. We also wanted to look at innovative ways to dispose of hazardous waste.
How We Did It

We went through the following process:

- Conducting an analysis of waste generation and its final disposal.
- Developing and implementing a domestic and industrial solid waste management plan, which included:
  - Building of infrastructure (sanitary landfill, gathering yards, warehouses for recyclable waste, hazardous waste, scrap and wood).
  - Providing environmental education for employees on waste identification and classification.
  - Supporting a company in the region to collect, transport and dispose of waste.
  - Implementing educational signage with photos of waste to improve waste classification.

Outcomes

Since the plan has been in place, there has been:

- A reduction of waste disposed of in the sanitary landfill and benefits from recoverable waste.
- Strengthening of a local waste management and disposal enterprise.
- Generation of direct and indirect employment.
- Mitigation of environmental impacts from waste.

There has also been a reduction in waste intensity (waste per tonne of ferronickel produced). As shown in the graph below, over the last five years waste intensity has reduced by 20 per cent, from 90 kilograms per tonne in 2002 to 72 kilograms per tonne in 2006.

![Graph showing waste intensity reduction]

Going Forward

Cerro Matoso is to implement a management plan for hazardous waste in accordance with new Colombian regulations. The principles of the regulations focus on reducing the generation of hazardous waste, either through reductions or substitutions in the purchase of hazardous materials.

The classification of waste at the plant is to be improved. This will involve continuing to make improvements in waste management infrastructure and in the training of employees in classification procedures.
Olympic Dam Water Savings Project Delivers A Sustained Change

Water is an essential component of mining and metallurgical processing.

Our 100 per cent owned Olympic Dam copper/uranium operations in South Australia uses water from the Great Artesian Basin (GAB), which is pumped from two wellfields approximately 110 kilometres north and 200 kilometres north-east of the operation.

GAB springs are found along the margin of the GAB. A diverse endemic invertebrate fauna occurs in these springs, and the distribution of the salt pipewort (*Eriocaulon carsonii*) is restricted to the habitats provided by the springs. The persistence of these aquatic invertebrates and the salt pipewort is linked to the availability of free-flowing water, with changes in spring flow and wetland area having the potential to affect these populations.

A Water Savings Project has been developed to reduce the consumption of GAB water by optimising water recovery and recycling and substituting poor-quality local groundwater in some areas.

Over 90 per cent of the Olympic Dam site’s water consumption occurs in three main processing areas: the concentrator, hydromet and smelter plants. Further processing of GAB water is carried out at the on-site desalination plant to produce a potable (i.e. drinkable) water supply for both the mine site and nearby townships of Olympic Dam, Roxby Downs and Andamooka.

The water savings realised have improved the water use efficiency (kilolitres of water used per tonne of ore treated) of the operation. Improvements in water use efficiency identified will be incorporated into future growth of the operation. While future growth may result in an overall increase in water usage, GAB water will be used efficiently so that growth is sustainable.

### Water Use Reduction Planned for FY07

<table>
<thead>
<tr>
<th>Process</th>
<th>Achieved</th>
<th>In Progress</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7,000</td>
<td>6,500</td>
<td>700</td>
</tr>
<tr>
<td>Coke Hydro</td>
<td>1,600</td>
<td>1,000</td>
<td>200</td>
</tr>
<tr>
<td>Slag Mill Conc</td>
<td>1,000</td>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>Coarse Conc</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lysa Filter Conc</td>
<td>800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2 Dilution</td>
<td>1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecco Furn Smelter</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HC Tails Thick Conc</td>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gland WR UDI Hydro</td>
<td>700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gland WR CSI Hydro</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gain Water Utilities</td>
<td>700</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BHP Billiton 2007 Full Sustainability Report
The Challenge

We recognise that the responsible use of GAB water is essential to protect the environmental values of the GAB springs, a key concern for some of our stakeholders.

We monitor the rate at which we extract water from the two wellfields to ensure that we are always within prescribed limits and that adverse impacts are not occurring. Our ongoing challenge is to continue to meet these limits while providing the opportunity to optimise plant production rates.

A key to meeting this challenge is to improve water use efficiency in line with the Company’s Sustainable Development Policy.

How We Are Doing It

A dedicated team was created to assess:

- Current industrial water use volumes and purposes.
- Particular process streams and plant areas with substantial increases in production-based water consumption.
- The potential for reductions through increases in efficiency, recycling and reuse of process streams.

A series of water use maps, including numerical balances and comparisons of both current and historical data, was created for the concentrator, hydromet and smelter plant areas.

Water savings projects were then identified through discussions of water map data with area personnel or suggestions from area personnel.

Outcomes Of Water Saving Projects

The project confirmed the importance of regular inspection, testing and calibration of process indicators. Significant water savings have been identified and implemented in the three key production areas:

Concentrator

- 1.6 megalitres per day (ML/day) saving (or 70 per cent of demand) in the slag milling circuit due to a collaborative project implemented by the Water Savings Initiative team and the concentrator metallurgists.
- 0.5 ML/day saving (or 50 per cent of demand) in the concentrate filtration plant following a suggestion by an area technician.

Hydromet

- 1.2 ML/day saving (or 55 per cent of demand) in the counter-current decantation area due to a procedural review and re-education program. Further opportunities for this area are under investigation, including control systems review and further recycling options.

Smelter

- 0.3 ML/day saving (or 65 per cent of demand) in the electric furnace gas scrubbing system due to improved operation of the control valve. Further opportunities to reuse the remaining gas scrubber waste water in other process areas are under review.

Other Savings

- Other savings - totalling 2.9ML/day have been achieved or are planned in other sub-areas of the plant.

John Holland, a process technician in the concentrator, nominated the water saving idea for the Lasta Filter No. 1 and worked with the Water Saving Project team through implementation. John said: "As a long-time environmentalist I was very pleased to participate in this project, which has contributed to saving over two hundred megalitres of water per year."
Going Forward

Further water saving initiatives are anticipated from the following ongoing activities:

- The identification and reclamation of reusable or recyclable process streams.
- The identification of ‘leading-practice’ use of water for individual plant areas.
- Future changes to the operations continue to consider the requirement to maintain or increase water efficiency.
Turtle Village Trust Established To Support Community Development In Trinidad And Tobago

Petroleum’s 45 per cent owned Angostura oil operation is in a region of Trinidad that is home to the majestic leatherback turtle (Dermochelys coriacea), the world’s largest marine turtle. Our close working relationship with various local turtle conservation groups and other community stakeholders has revealed the potential for community-based tourism and nature tourism initiatives.

One such initiative is the creation of the Turtle Village Trust to promote the conservation of the leatherback turtle as a catalyst for eco-tourism.

Establishment of the Trust has provided new opportunities; when fully operational, it will create jobs for tour guides, taxi drivers, cultural performers, handicraft operators, cooks, hospitality workers, conservation biologists and others.

This project is also improving our communication with the local communities, providing valuable insight into their aspirations and the issues that matter to them.

The Opportunity

The central processing platform of the Angostura operation is 32 kilometres off the north-east coast of Trinidad. In addition to hosting the second-largest nesting ground for the leatherback turtle in the world, the area has many beaches and rivers and high levels of biological diversity.

Turtle watching began in 1980 in the coastal villages of Matura, Trinidad and Tobago, Grande Riviere and Fishing Pond in Trinidad. Community groups focusing on turtle conservation have developed in these areas, as well as the smaller island of Tobago. These groups include Nature Seekers (Matura), Grande Riviere Nature Tour Guide Association, Fishing Pond Turtle Conservation Group and Save Our Sea Turtles Tobago.

We regularly meet with these four groups under our community relations program and help them to promote nature and community-based tourism, a key economic activity for the area. Through these meetings, the concept of the Turtle Village Trust was initiated.

The Challenge

The major challenge was to bring together the four conservation groups to work collaboratively and establish a common vision. Historically, the groups had to compete for limited funding from donors. Each of the groups also had internal difficulties to overcome, including the reality of limited resources.

Developing an understanding of the potential of the project has taken time, as will building the capacity of the group members to take it forward and ensure its sustainability. But the signs are positive. Len Peters, President of the Grande Riviere Nature Tour Guide Association, has commented: ‘BHP Billiton challenged us to work together and helped us recognise the true potential that is resident with our people. They (BHP Billiton) were very open with us and gave us free access to their human resources at all levels’.
How We Did It

- A trained economist and a range of staff were engaged to assist the community groups to research and develop a comprehensive business plan for the project.
- The business plan addressed the tourism industry, market analysis, strategies, critical success factors, gap analysis, financial planning and policy development.
- A representative of the Forestry Division (government agency) acted as a coordinating link among the four groups.
- Face-to-face meetings and coaching sessions with the community groups provided honest and detailed feedback during the preparation of the plan.
- The groups were encouraged to take full ownership of the plan, with the Company providing direction and coaching where necessary.
- Our Leadership Team and independent advisors were engaged to review the plan and identify gaps and issues that required addressing.
- A sense of identity was created by involving the four groups in the design of Turtle Village T-shirts, which were given to group members and staff.
- The Company accepted chairmanship of the Trust board and also recommended other board members.
- We helped design the framework for the Turtle Village Trust by assisting with review of the constitution, the partnership agreement and the Trust’s registration as an non-government organisation.
- We contributed our knowledge of the environment, our human resource capabilities and our community expertise to develop the process.

Going Forward

A board of directors is in place and meets on a monthly basis to provide direction. An executive director has been appointed to manage the day-to-day running of the Trust.

Future plans for the community, with the support and guidance of the Trust, include the establishment of a wildlife park, construction of an underwater sea aquarium, a marine museum, a sea taxi service and eco-friendly guesthouses.
Dealing With Dust In Port Hedland, Western Australia

Few, if any, environmental issues in the Company's Iron Ore operations (BHP Billiton 85 to 100 per cent) at Port Hedland have a higher priority than dust management. As reported in previous case studies, this issue is the community's principal industry concern, particularly among households and businesses near the port area and our Nelson Point facilities.

Against this background, we have made a formal commitment to reduce ambient dust levels and improve water use efficiency as part of a major business growth strategy. The planned benefits from the program in place include:

- Real evidence of reduced dust levels
- A comprehensive approach to research and management of dust issues
- Extensive community and government environment, health, planning and development agency involvement
- Improved public engagement, reporting and information
- Incorporation of dust control priorities in planning
- A complementary focus on water use efficiency.

New targets have been set for improvements in air quality, community amenity, operational response and water use efficiency (see table and graph below).

The Mayor of Port Hedland, Stan Martin, commented: "Dust has been an issue in Port Hedland for more than 40 years. It won't be solved overnight, but I think the program put in place by BHP Billiton is making some progress. At the same time, people have a much better understanding of the problem and the way it is being tackled."

The Challenges And Opportunities

Company plans for business growth create a combination of challenges and opportunities. The challenges come from the inherent potential for increased airborne dust levels as production and shipping increases. The opportunities are based on the introduction of new technology and operating strategies for continuous improvement in dust management per tonne of production.

The health-related challenge associated with dust is to understand how iron ore dust compares with other dusts in relation to potential impact on human health. To this end, over the past two years we have been assisting a three-part study with the Western Australian Department of Health (DoH) and the Department of Environment and Conservation (DEC) to further this understanding.

Results to date from ongoing research have indicated a low level of any health risk from dust in Port Hedland. The draft literature review, which includes a review of international literature, has theorised that there may be vulnerable groups within the population that may experience 'short-term' effects, such as irritation of the airways, as a result of exposure to both fine and coarse particulate matter. It is our intention to continue to work collaboratively with the DoH and DEC and to independently pursue research to further our scientific knowledge and understanding of any potential health impacts associated with our operations.
How We Are Doing It

Our commitment to reduce ambient dust levels and improve water use efficiency has demanded a comprehensive approach based on the following key initiatives:

- A new environmental agreement with the state government to meet specified dust targets
- Capital projects:
  - Moisture conditioning technology.
  - State-of-the-art crushing and screening equipment near our Newman mining operations
  - Enclosed car dumpers
  - Direct loading of ships
  - Decommissioning and removal of old stockpiling and processing facilities
  - Rehabilitation of former stockyards
- Workforce education
- Additional monitoring equipment
- A 'cleaning and greening' program
- Water recycling and conservation programs

Technology Advances

A key advance in dust management has been the development and refinement of iron ore moisture conditioning. Moisture helps to reduce dust; however, too much moisture makes handling difficult and inefficient. It also wastes a precious resource in the arid Pilbara region.

To find the right balance, our own technology centre and the CSIRO have combined to develop reliable tests, effective spray systems and low-frequency measuring technology for optimum moisture regimes.

Involving The Community

We have involved local residents and business operators through:

- Detailed community surveys and consultation to identify key issues, impacts and options for improvement.
- Workshops to set priorities and develop communication, information and response strategies
- Information packs and public reporting initiatives.

Community representatives set the following priorities:

- Reduced dust emissions
- Central business district clean-up
- External building cleaning
- Landscaping and tree planting
- Car cleaning and covers.
## Setting New Targets – The Way Ahead

The following table outlines our dust and amenity performance targets.

<table>
<thead>
<tr>
<th>Performance Aspect</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air quality related – long-term average</td>
<td>Improvement in the annual average number of airborne particles with a</td>
</tr>
<tr>
<td></td>
<td>diameter less than 10 micrometres (PM$_{10}$) monitored at the Port</td>
</tr>
<tr>
<td></td>
<td>Hedland monitoring site to a long-term target of 30 μg/m$^3$ (see</td>
</tr>
<tr>
<td></td>
<td>graph below).</td>
</tr>
<tr>
<td>Air quality related – short-term average</td>
<td>Improvement in the 24-hour average PM$_{10}$ monitored at the Port</td>
</tr>
<tr>
<td></td>
<td>Hedland monitoring site to a long-term target of 70 μg/m$^3$ with</td>
</tr>
<tr>
<td></td>
<td>less than 10 exceedences per year.</td>
</tr>
<tr>
<td>Amenity related</td>
<td>Improvement in the annual average total suspended particles (TSP)</td>
</tr>
<tr>
<td></td>
<td>monitored at the Port Hedland monitoring site to a long-term target of</td>
</tr>
<tr>
<td></td>
<td>65 μg/m$^3$.</td>
</tr>
<tr>
<td>Amenity related – community perception</td>
<td>Improvement in amenity (relating to the Company’s iron ore dust)</td>
</tr>
<tr>
<td></td>
<td>within the western end of Port Hedland.</td>
</tr>
<tr>
<td>Amenity related – community satisfaction</td>
<td>Improvement in community satisfaction with Company management of dust</td>
</tr>
<tr>
<td></td>
<td>impacts.</td>
</tr>
<tr>
<td>Functional response</td>
<td>Effectively employ real-time dust event mitigation process.</td>
</tr>
<tr>
<td>Water use efficiency</td>
<td>A 10 per cent reduction in fresh water consumption per tonne of iron</td>
</tr>
<tr>
<td></td>
<td>ore (produced) during the period 2006 to 2012.</td>
</tr>
</tbody>
</table>

![Graph showing PM$_{10}$ data](image)

**Anticipated number of PM$_{10}$ events greater than 70 μg/m$^3$ associated with growth to approximately 165 Mtpa at Port Hedland Hospital monitor (conceptual).**

## Going Forward

We will be continually implementing and monitoring our comprehensive dust management program to reach the new targets.
Salar de Punta Negra Sustainable Conservation And Use Of A Wetland Site

The Salar de Punta Negra, which measures 250 square kilometres, is in the Atacama Desert approximately 75 kilometres from Minera Escondida’s copper operations. Escondida (BHP Billiton 57.5 per cent) obtains most of its process water from the ground water below the salt flat through a network of extraction wells. On the surface are lagoons that cover about three square kilometres. Escondida is part of the Base Metals Customer Sector Group.

The Salar is a critical feeding and nesting site for the endangered Andean flamingo (Phoenicoparrus andinus). We are investigating whether, over the long term, water levels in the Salar could be affected, which may have a consequent impact on the flamingos and other flora and fauna in the area.

In 1989, before operations at Escondida began, the Company commenced detailed baseline studies to establish the conditions under which ground water extraction could occur. The studies recommended the establishment of a monitoring and research program; and in 1996, a biodiversity management plan for the Salar was developed. The plan includes intensive monitoring and research directed at studying the Salar’s hydrology, assessing the effects of the extraction of ground water and implementing initiatives to maintain the salt balance in the lagoon ecosystems.

In 2000, Minera Escondida installed an artificial surface water recharge system that replenishes the lagoons. The Company has also implemented a ground water monitoring program consisting of 21 observation wells that record the changing levels of underground water in the areas adjacent to the salt flat and in the area of the wellfields. The physical, chemical and biological parameters of the lagoons on the salt flat are also monitored. These comprise a large part of our long-term commitment to the monitoring program and to the investigation and mitigation program at the Salar de Punta Negra.

Fernando Novoa from the Centre of Applied Ecology and a member of the flamingo conservation project team commented: "The conservation program for the Andean flamingo has been one of Minera Escondida’s priorities since the beginning of the operations. As a result of this, the Company has developed several lines of investigation aimed at the conservation of this species. These include studies of incubation and artificial feeding, migrations, recharges of lagoon systems, studies of sediments, characterisation of algae and natural predators. The knowledge and information acquired during the development of these projects, have enabled the Company to maintain the conditions that are necessary for the conservation of the Andean flamingo in the Salar de Punta Negra."

The Challenge

The Salar de Punta Negra is situated about 2900 metres above sea level. The saline systems of greatest biological importance are made up of an area of fertile land and canals that connect the land with the lagoons.

The canals and lagoons are of vital importance to the Andean flamingo as their waters contain the necessary elements for the development of their food source (delicate algae called diatoms) and the construction of their nests.

Local fauna is well represented on the salt flats and lagoons and in the adjacent mountains. As well as the Andean flamingo, the Salar is home to the following rare and endangered species:

- Chilean flamingo (Phoenicopterus chilensis) – vulnerable
- Rufous bellied seedsnipe (Attagis gayi) – rare
- Vicuña (Vicugna vicugna) – endangered
- Guanaco (Lama guanicoe) – endangered
- Puma (Puma concolor puma) – endangered
Andean tuco-tuco (*Ctenomys fulvus*) – vulnerable

Notable among the highland mammals are vicuñas, guanacos, foxes and pumas.

Minera Escondida’s rate of water use from the ground water below the salt flat represents more than 40 per cent of BHP Billiton’s total fresh water use.

**How We Did It**

The baseline studies were conducted in 1989 and 1990 to survey and research the ecosystems in the area of Escondida’s planned water extraction, with emphasis on the Salar’s lagoon system.

These studies identified flora and fauna species and measured their population sizes as the basis for development of the biodiversity management plan. Under the plan, several initiatives have been developed and implemented (see table below).

<table>
<thead>
<tr>
<th>Project</th>
<th>Development/Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate water replenishment regimes for continental salt lake systems</td>
<td>Designing and testing methods for the artificial management of salt lake systems.</td>
</tr>
<tr>
<td>Artificial nesting colonies for flamingos</td>
<td>Discovering the response of flamingos to the offer of alternate nesting areas. Ninety-two per cent occupation of artificial nests and a 65 per cent hatching rate has been achieved.</td>
</tr>
<tr>
<td>Incubation and artificial feeding of flamingo chicks</td>
<td>Designing and testing methods for the incubation, artificial feeding, and reinsertion into natural habitat of flamingo chicks. This project has been in operation for approximately six years, achieving the survival of more than 90 chicks.</td>
</tr>
<tr>
<td>Artificial farmland</td>
<td>Determining the conditions necessary to establish artificial farmland.</td>
</tr>
</tbody>
</table>

**Going Forward**

The biodiversity management plan will continue to be implemented and monitored. The knowledge acquired in the studies has been shared with the Chilean Government and is available to all industries operating in the area.

An integral part of our responsibilities to environmental protection and biodiversity management is the long-term commitment in Salar de Punta Negra. Monitoring and mitigation programs, and particularly the surface water recharge system, will be maintained long after abstraction of ground water ceases. In that way, biophysical changes induced by the abstraction of water can continue to be mitigated as the natural system recovers.

The Salar de Punta Negra ground water resource is one of four of Escondida’s water supply sources. Our driving commitment is the responsible use of these valuable water resources. Specifically, going forward, Escondida is implementing projects to optimise the recycling of water throughout operations and to enhance the use of manufactured water (desalination) to reduce our fresh water demands.
Alternative Fuels For Sustainable Development - A Holistic Review

The European Union has proposed a target that, by 2020, alternative fuels will represent over 30 per cent of total fuel usage. In the US, 20 states have a target of 5 to 20 per cent alternative fuel usage by 2020.

In line with this target, we are conducting a study with Caterpillar, our major earthmoving equipment supplier, to assess the potential of using alternative fuels in some or all of our off-road mining equipment globally by 2020. Key drivers for considering alternative fuels are energy security, possible cost savings and reductions in hydrocarbon emissions. It is estimated that using biodiesel, for example, could reduce vehicle greenhouse gas emissions by up to 80 per cent.

Our Energy Excellence Leader, Erika Korosi, said: “Energy Excellence is about creating value while contributing to climate change mitigation. Assessing alternate fuel options is a key component of understanding fuel substitution opportunities across the Company.”

The study comprises two phases. Phase 1 is a holistic review of alternative fuels in relation to off-road mining applications. Three fuel categories have been identified, and each has been studied for compatibility with current technologies, challenges and possibilities. Phase 2 will involve a more detailed analysis of selected alternatives, including equipment field trials to verify results and promote product development.

The Challenge

There is a growing need to assess and better understand alternative fuel options. Several studies have been undertaken by the on-highway truck industry, but little has been done to develop a holistic overview in the mining industry.

The Caterpillar off-highway engines (e.g. 3500 series) are designed to comply with Tier 3 emission targets stipulated in US regulations. The graph below illustrates US regulations emission targets in terms of particulate matter and nitrogen oxides for the 450 to 560 kilowatt power range. These regulations are represented by Tier 1 to Tier 4 targets that commenced in 1996.

![USA Emissions Standards (450 - 560 kW)](image)

Tier 3 levels have been achieved via better engine technology and have led to the development of engines based on advanced combustions emissions reduction technology (ACERT), which will replace current engine platforms. Tier 4 levels will require after-treatment solutions and alternative fuels.

Our challenge is to understand and set proactive targets for the mining industry.
How We Did It

Working with Caterpillar personnel, we identified key machine types and regions for alternative fuel consideration. A European research group, TNO, was commissioned to help evaluate current and emerging alternative fuels, together with opportunities for engine development.

The study is proceeding in two phases. Phase 1 assessed ten alternative fuels across five power-train configurations for large mining trucks and building construction machines. Three fuel categories/solutions were identified:

- **Category 1** — gas-to-liquid, biomass-to-liquid and coal-to-liquid. These fuels are most compatible with current engine and vehicle technology. However, costs to establish process facilities are high and dependent on regional factors.
- **Category 2** — Biodiesel, bioethanol and pure plant oil. These fuels require minor engine and vehicle modifications and provide benefits on overall emissions. Feedstock sustainability is dependent upon regional factors and technology advances.
- **Category 3** — Liquified natural gas, compressed natural gas, biogas and hydrogen. Fuels such as these require significant vehicle technology changes.

The Phase 1 review of alternative fuels for off-road mining applications identified:

- Impacts on emissions for each fuel type.
- Engine and vehicle development implications. Key issues included adaptation to current combustion technology, seals and materials and fuel vessel requirements.
- Technology requirements to produce the required alternative fuels. This included both current and future processing methods being developed.
- Transport and storage requirements.

It is important to note that we may select alternative fuel options for further consideration that are likely to reduce emissions and provide energy security.

Results

Compatible Technology Options

The solutions that are closest to current technology and infrastructure are gas-to-liquid (GTL), biomass-to-liquid (BTL) and coal-to-liquid (CTL). These fuels are most compatible with current engine and vehicle technology.

The production pathway of these fuels includes the Fischer-Tropsch (FT) synthetic petroleum substitute process. In the FT process, which was developed in Germany in the 1920s, feed gas is converted into liquid organic compounds, carbon dioxide and water. Sasol, a South African company, has been using this process since the 1950s to convert coal to liquid; and there are other smaller plants that convert natural gas to liquid. Shell Deutschland Oil is combining its FT synthesis process with a biomass gasification process and plans to build a BTL plant.

In general, GTL, BTL and CTL processes are energy intensive, but the FT liquids produced are clean and free of sulphur and aromatics.

Minor Change Options

Fuel solutions that require relatively minor engine and equipment development are the biodiesels. They provide a smooth transition into the renewable fuel market. While tailpipe emissions of CO$_2$ from the combustion of biodiesel is generally neutral or even higher than low-sulphur diesel, total generation of CO$_2$ is lower (i.e. taking into consideration the life cycle of production, refining and transport, as well as combustion).

Major Change Options

Alternative fuels or replacement technology requiring the most significant engine or machine development include liquified natural gas, compressed natural gas, photovoltaic cells and hydrogen. These solutions offer good opportunities to lower emissions, with some options also having high potential for lowering engine-running costs. Emission impacts over the fuel life cycle (i.e. from fuel production to tailpipe emissions) can vary depending upon processing methods.
Going Forward

Phase 2 of the study will select the most promising alternative fuels identified in Phase 1 and will focus on planning of engine and vehicle development projects, including equipment field trials.
Social Responsibility

The Company owns and operates a diverse range of businesses in different countries and cultures that, by their nature, may affect the community. Our objective is to minimise potential negative social impacts while maximising the opportunities and benefits for our host communities. In order to achieve this outcome, we engage in a range of sustainable development and community relations activities, including:

- Building and maintaining effective stakeholder relationships with people who are directly affected or interested in our operations in an effort to build trust and robust dialogue.
- Upholding and promoting the human rights of our employees and contractors, our suppliers, and the communities in which we operate, incorporating such issues as freedom of association, the exclusion of child labour, the prohibition of forced labour and appropriate use of security forces.
- Building social and human capital through community development and community investment programs. Our aim is to place local people at the centre of development by building their capacity to control their own development. We value local community knowledge and perspectives over and above those of outside ‘experts’.
- Recognising and respecting Indigenous people’s culture, heritage and traditional rights and supporting the identification, recording, management and protection of Indigenous cultural heritage. There are many Indigenous communities around the world that are traditional owners of land impacted by our operations or live nearby.
- Monitoring, measuring and managing our social and economic impacts, which incorporate positive impacts, such as increased economic opportunities through employment, training and business spin-offs, as well as potential negative impacts, such as resettlement, impacts on food and water supplies, and loss of cultural sites or values.
- Supporting the sustainable development initiatives of our employees through our HSEC Awards and Matched Giving Programs.

For more on Community, see our Sustainability Report (PDF 4.6 MB) and our Community Report (PDF 3 MB) or go to:

- Working With Communities
- Community Investment Strategy
- Community Projects
- Community Programs and Foundations
- Involving Our Employees
Working With Communities

Our HSEC Management Standards (PDF 148 KB) and Guide to Business Conduct provide the overall framework for our interaction and with communities at our operations.

HSEC Management Standard 7 forms the basis of our approach to communication, consultation and participation with stakeholders, with the intent that 'effective, transparent and open communication and consultation is maintained with stakeholders associated with Company activities. Stakeholders are encouraged to participate in and contribute to sustainable development through HSEC performance improvement initiatives.'

HSEC Management Standard 8 recognises the importance of ethical corporate behaviour, adherence to human rights and effective community development by requiring that 'activities and operations are conducted in an ethical manner that supports fundamental human rights and respects traditional rights, values and cultural heritage. Opportunities are sought for contributing to sustainable community development.'

Stakeholder Relationships

BHP Billiton is committed to building strong stakeholder relationships through regular, open and transparent communication designed to ensure effective problem solving and opportunity identification for the Company and its key stakeholder groups.

Effective stakeholder relationships are crucial to BHP Billiton for a number of reasons, including:

- Maintaining our licence to operate
- Ensuring access to resources and future business opportunities
- Enhancing and protecting our corporate reputation
- Mitigating potential social, environmental and business risks.

Positive stakeholder relationships are a reflection of our Charter values, which drive us to achieve integrity, win-win relationships and respect for each other in all business activities. Regular engagement in relationship-building activities and open dialogue with our key stakeholder groups are vital parts of ensuring a successful and prosperous business operation.

Regular, open and transparent communication with our key stakeholders is achieved through a variety of engagement activities. These include meeting people with specific interests (e.g. environmental aspects or residents groups, site tours, information sessions for government and regulatory authorities, public open days, participation in civic events, stakeholder forums, complaints tracking and management, perception surveys, newsletters, newspaper articles and public sustainability reporting (through corporate and site-based reports).

A key aspect of this engagement process is ensuring that we listen carefully and measure the value and effectiveness of our community activities, from the perspectives of all key stakeholders.

To assist in the management of our engagement activities, all sites are required to have community relations plans addressing the social elements of the HSEC Management Standards.

Community Development

Community development at BHP Billiton refers to specific Company activities and provision of support designed to improve the social and economic circumstances of the communities in which we operate. Community development seeks to empower individuals and groups by providing skills to assist them in effecting sustainable positive change. This is most commonly achieved through the following mechanisms:

- Building capacity within the community
- Access to basic health care and recreational facilities
- Provision of quality education
- Employment opportunities
- Sustainable access to food and clean water
- Provision of suitable housing
- Support for Indigenous peoples, women, children and minority groups.
BHP Billiton maintains that best-practice community development adopts a rights-based approach, which is implemented by the people, rather than for the people, and requires significant skills and resources. Rights-based approaches to development place much of the decision-making in the hands of the individuals or groups within the community. Following this rationale, our goal is to empower people by implementing participatory and sustainable community development, which is underpinned by the challenge to assist in achieving an enhanced quality of life without compromising core values, culture or heritage and without creating dependency on our activities. For more information on community development activities, go to our Community Report or Community Investment Programs.

Social and Economic Impacts

In the context of our business, social and economic impacts are best described as the positive and negative consequences that arise from the existence of, or change to, a particular project or operation.

Just as mining and its associated activities have obvious impacts on the natural environment in the area of development, new projects and infrastructure can also create a wide range of implications for local social and economic conditions. Examples of social and economic impacts that may result from our business activities include, but are not limited to, the following:

Potential Positive Impacts

- Job creation
- Infrastructure development
- Provision of support services (health, education, utilities)
- Royalties and tax payments
- Demand for products and services from local businesses.

Potential Negative Impacts

- Increased housing and commodity costs (as a result of inflated wages)
- Environmental damage that impacts local economies (e.g. agricultural economies)
- Health risks (increased levels of toxicity, introduction of diseases)
- Increased substance abuse and crime
- Disruptions to cultural heritage and practice
- Increased population and traffic for outside local area
- Impacts of mine closure.

Given the nature of our business, Company activities have the potential to impact and influence local communities and natural environments in a range of ways (see above). In many cases, these impacts can be positive, bringing new employment opportunities and service providers to regional and rural areas. On the other hand, large increases in population and wealth can drive up housing and commodity prices and introduce negative influences (such as substance abuse and crime) into local communities. It is for these reasons and many others that the Company is committed to monitoring our social and economic impacts on local communities to ensure that, wherever possible, negative impacts are mitigated and positive impacts are encouraged and reinforced.

Indigenous Peoples' Culture, Heritage and Traditional Rights

The Company recognises and respects the importance of Indigenous peoples’ culture, heritage and traditional rights and supports the identification, recording, management and protection of Indigenous cultural heritage sites.

Indigenous cultural heritage is broadly defined to include matters that are significant to either Indigenous peoples or under legislation, such as dreaming, ceremonial, sacred and burial sites; archaeological sites where evidence of the past occupation and use by Indigenous peoples can be found; more contemporary historic sites; and traditional knowledge.

We recognise that Indigenous peoples have a vital role to play in identifying and properly managing cultural heritage, especially where it could be affected by our activities.

At our operations and projects, we undertake early consultations and assessments with Indigenous peoples to ascertain whether our proposed activities are likely to impact cultural heritage values and, in conjunction with Indigenous peoples and relevant authorities, how best to plan and undertake those activities to avoid or minimise...
such impacts.

Our preference, wherever possible, is to avoid disturbance to significant sites, as well as to ensure that Indigenous peoples have access to them. We also actively seek to utilise traditional knowledge in the development of site-based practices, such as environmental management plans.

**Black Economic Empowerment in South Africa**

BHP Billiton supports broad-based black economic empowerment in South Africa. We believe it is imperative to both the growth and stability of the South African economy and the company’s strategic objectives and long-term sustainability in that country.

We have established the transformation and empowerment technical committee comprising senior managers with diverse skills to ensure the transformation and empowerment agenda is coordinated and comprehensive. Find out about our progress in the [Transformation 2007/8 brochure](#) (PDF 2MB).

**Global Community Network**

In order to achieve the goals outlined above, BHP Billiton’s community relations activities include building the professional capacity of our community relations practitioners to ensure that they can accurately and effectively execute the requirements of their jobs. One of the ways this capacity is achieved is through our Global Community Network, which is a group of community professionals and interested employees committed to achieving excellent community relations and community development practice across BHP Billiton.

The purpose of the Global Community Network is to:

- Encourage and facilitate knowledge transfer across the organisation
- Build the professional capacity of the community function
- Continuously improve the outcomes of community relations and community development activities for all stakeholders.

In particular, the Global Community Network has developed working groups and associated project work plans designed to address the five key social issues mentioned above.
Community Investment Strategy

We aim to make a valuable contribution to our local communities, not only by providing employment opportunities, but also by supporting organisations that help to create a healthy and sustainable social fabric in those communities.

Our Principles

We operate in many different countries and cultures, so we do not administer our community programs under one set of guidelines. Consideration is generally given, however, to the following principles:

- **Sustainability.** Initiatives that will be sustainable beyond the life of the project are preferred, and we are careful to avoid creating dependency on our support. For example, by building an organisation’s capacity through training and development, the community benefit can be long-lasting and have flow-on benefits long after the program has been completed.

- **Community participation and engagement.** It is critical that the selection and delivery of community programs is a participative process. Community ownership of development programs is one of the keys to their success.

- **Long-term relationships.** Any good working relationship takes time, so rather than getting involved in one-off commitments we generally look to develop longer-term relationships with not-for-profit organisations. This enables a rapport to be established between the organisations and provides an opportunity to explore creative opportunities for the organisations to assist each other.

- **Specific projects.** We try to avoid providing general funding where there is no clear identification of how the money will be spent. Specific projects with agreed objectives assist evaluation and enable the success of the project to be measured.

- **Leverage.** Projects that leverage our support by attracting additional resources, such as government funding, are considered favourably. In many cases, capacity-building projects or start-up projects will fall into this category.

- **Employee involvement.** The involvement of our employees in the delivery of community programs enables them to gain a better understanding of the contribution the Company is making to the community.

- **Reporting and evaluation.** It is essential not-for-profit partners are transparent, have good governance structures in place, can develop indicators that clearly demonstrate the outcomes of their programs and are open to independent evaluation of their programs.

Although not-for-profit organisations require cash to deliver their programs, we recognise that other forms of assistance are highly valued and that many of these can be provided at a relatively small cost to the Company. Where we can, we offer in-kind assistance, such as the use of meeting facilities, access to communication networks and business-related expertise and skills.

The Framework

Our community programs are operated at four levels across the Company – local, provincial or regional, national and global.
Local
The majority of our efforts occur at our operations, where our businesses implement programs to develop and support the local communities.

At our operations, the asset manager or local community relations professionals are responsible for managing their community support programs, operating within the parameters of our Charter, Guide to Business Conduct and the HSEC Management Standards (PDF 148 KB). Sites around the world operate their local community programs in different ways. Most sites have a formal decision-making group to receive proposals from community organisations and determine which of these is appropriate to support. These committees generally comprise employees and management and often involve community representation.

Provincial, Regional and National
The Corporate function of the Company also operates on a provincial and national level in countries where we have a number of businesses and play a major role in the resources sector of that country – examples include South Africa, Australia and Chile. These programs generally focus on a small number of larger-scale projects that are of interest to the broader community within the country of interest.

Global
Although the majority of our community expenditure is budgeted and managed by the businesses at a local or regional level, we have also established a Global Community Programs Panel to approve projects of global significance and a small number of projects in countries where we have new business opportunities.

Read more about our Community Programs around the world.
Community Programs and Foundations

Where BHP Billiton’s presence in a region or country is significant, we often participate in provincial or national social programs in addition to local community activities.

In some instances, the company has established community foundations. These foundations include external representation, often a community representative, to ensure a full understanding of the community’s needs and an ability to identify appropriate projects to address the issues.

Examples of foundations and programs include:

Chile
- Fundación Minera Escondida/Minera Escondida Foundation has a founding mission to contribute to improving the quality of life of low-income groups, principally in Antofagasta and the Second Region but also nationally.

Colombia
- The San Isidro Foundation in Colombia is an independent body supported by our Cerro Matoso nickel operation. The Foundation aims to improve the quality of life of the communities within the operation’s area of influence by focusing its efforts on building a robust local economy that will continue to develop and thrive beyond the life of Cerro Matoso.
- The Montelíbano Educational Foundation in Colombia focuses on education provision for Cerro Matoso employees and their families and also provides places for students from the surrounding communities.

South Africa
- The BHP Billiton Development Trust in South Africa implements, coordinates and manages the Company’s corporate sustainable development initiatives and those of our operations, such as Samancor Manganese, BHP Billiton Energy Coal South Africa and BHP Billiton Aluminium, which participate in the Trust.

Mozambique
- The Moza Foundation in Mozambique was created in August 2002 by the shareholders of Moza to fulfil the corporate social responsibilities of the Moza smelter. Support focuses on five key development areas defined by the Board of Trustees, namely small business development, education and training, health and environment, sport and culture, and community infrastructure.

India
- The BHP Billiton SEWA Society (referred to as the BHP Billiton India Development Foundation) was established in early 2005 to invest in the development of human and social capabilities in India. While the first projects are in Orissa, attention will be given to Andhra Pradesh, Chhattisgarh and Jharkhand in the coming year. Areas of focus include education, health, rural development and integration of indigenous peoples in development and respecting and preserving indigenous people’s cultural and natural heritage.

Australia
- Within Australia, all BHP Billiton businesses manage their own local social and community programs. Community organisations should contact their nearest operation (see Locations) for guidelines and to understand the application process.
- Community organisations interested in partnering with us in Western Australia should visit WA Community Programs, a collaborative initiative of BHP Billiton’s Western Australian Assets.
- The Corporate Centre in Melbourne manages a small number of national partnerships in Australia in the areas of community development, Indigenous programs, education, health and environment. Programs are generally supported for up to three year periods.

Australian organisations interested in applying for funding from the BHP Billiton Corporate Community Program,
should download our guidelines (PDF 86 KB) and the application form (MS Word).

Find out about the Ok Tedi Sustainable Development Program.
Involving Our Employees

People And Employment

BHP Billiton is committed to developing a diverse workforce and to providing a work environment in which everyone is treated fairly and with respect.

See our Employment Principles for more information.

BHP Billiton Employee Matched Giving Program

BHP Billiton has established an Employee Matched Giving Program through which the Company will match the community contributions made by employees.

Every employee (whether full and part-time) is entitled each year to match their contributions to not-for-profit organisations that benefit the community. These contributions can be employee volunteering, fundraising or cash donations (including payroll donations). Through the Employee Matched Giving Program, our employees influence how BHP Billiton makes donations and help direct funds to areas of greatest community benefit.

The program is available to all BHP Billiton sites.

See our Information Brochure (PDF 103 KB) for community organisations.

See the Matched Giving Newsletter - April 2007 (PDF 210 KB)

BHP Billiton HSEC Awards Program

The BHP Billiton HSEC Awards recognise those employees and their teams who openly embody the values expressed in our Charter and go beyond what is required in their day-to-day jobs to care for their fellow employees, the community and the environment.

In 2007, the Awards will be presented in four categories of Health, Safety, Environment and Community. In addition to these awards, the CEO’s Sustainability Excellence Award and CEO’s Sustainability Most Improved Award will be presented to the sites with the best overall performance or improved performance. Each category of nomination is assessed by a separate judging panel, comprising one representative from the Company and experts from the non-government, government and academic sectors. The CEO’s Awards are nominated by the Customer Sector Group presidents and selected by the CEO.

The judges select a short list of eight finalists in each category. From these, the recipients of Excellence, Highly Commended and Merit awards will be chosen. In recognition of their initiative, each Excellence award and Highly Commended award recipient will be presented with a specially designed sculpture, and each Merit award recipient will receive a certificate. The finalists nominate a charity or not-for-profit organisation to share in their award. These organisations will receive a donation of US$10 000 (Excellence), US$5 000 (Highly Commended) or US$2 000 (Merit).

For information about the 2007 Awards, see BHP Billiton HSEC Awards Program.
Human Rights

Human rights are the basic standards of treatment to which all people are entitled, regardless of nationality, gender, race, economic status or religion. The United Nations Universal Declaration of Human Rights recognises that the inherent dignity and the equal and inalienable rights of all individuals is the foundation of freedom, justice and peace throughout the world.

Our Public Commitments

We recognise that our activities have the potential to impact human rights in many ways, including labour conditions, activities of security forces, scope of local community programs, and complicit in the abusive activities of others with whom we interact.

The BHP Billiton Sustainable Development Policy states that 'wherever we operate we will...ensure ... we understand, promote and uphold fundamental human rights within our sphere of influence, respecting the traditional rights of Indigenous peoples and valuing cultural heritage'.

In addition, we have made a number of voluntary public commitments to human rights including:

- United Nations Universal Declaration of Human Rights
- United Nations Global Compact
- US / UK Voluntary Principles on Security and Human Rights

UN Global Compact Sphere of Influence

BHP Billiton manages human rights across our various relationships according to the UN Global Compact’s ‘Sphere of Influence’ model.
At the centre of our sphere of influence are our employees and contractors, for whom we play an important role in the protection of their rights. This is demonstrated through our commitment to providing a safe and secure workplace.

When engaging with our local host communities, we have a responsibility to protect those human rights directly affected by our activities. These include the right to a clean environment by minimising the impact of environmental pollution from our operations and the promotion of other basic human rights, such as access to clean water and basic health services.

When engaging security forces, we seek to ensure that human rights principles are upheld through addressing contractual requirements, establishing guidelines on the use of force and identifying relevant training needs.

When engaging suppliers and business partners, we endeavour to avoid being complicit in or encouraging any activities that may result in human rights abuses. Where possible, we also seek to influence the behaviour of our suppliers and business partners by drawing attention to human rights issues, such as safety in the workplace.

While recognising the national sovereignty of host governments, we have a responsibility to promote human rights by contributing to public debate, supporting international agreements and commitments, and identifying opportunities to constructively engage government on human rights issues relevant to our business in the host country.

Self-Assessment and Management

Integral to meeting these commitments are our HSEC Management Standards, which require that human rights aspects (encompassed by the ‘C’ component) are considered on a risk basis by our operations and integrated into business planning and review processes as appropriate. In particular, HSEC Management Standard 3 outlines our approach to HSEC risk identification and management across our businesses, while Standard 8 directs the considerations that need to be made with regards to human rights. Our operations are required to demonstrate:

- The assessment and prioritisation of human rights issues as they apply to our sphere of influence
- Training of employees and contractors with regards to our human rights commitments
- Systems to abide by the US-UK Voluntary Principles on Security and Human Rights
- Resettlement plans, where required, consistent with the World Bank Operational Directive on Involuntary Resettlement.

Our HSEC Guideline on Human Rights and a Human Rights Self-assessment toolkit support our sites in understanding these requirements.

The toolkit is intended to assist sites in appraising their human rights exposures and developing plans to manage these risks as appropriate. Furthermore, the toolkit aims to ensure that we achieve our Company’s target of no Company transgressions of the principles contained within the UN Universal Declaration of Human Rights. The toolkit is aligned with the Company’s Enterprise-wide Risk Management approach to ensure that human rights issues are readily identifiable and comparable along with the spectrum of Company social, environmental and financial risks.

A guide to, and supporting presentation on, human rights is available to our sites to assist in educating our people about their roles and responsibilities in this area. The BHP Billiton Global Community Network, a group of community relations professionals and interested employees, has been established to define leading practice and support capacity building in such areas as human rights.

Land Compensation

Our approach to land compensation is undertaken on a case-by-case basis.

Firstly, consideration is given to what land we need; our possible impacts on that land, both short- and long-term; the present and past use of the land; and the effects that our use may have on existing land owners and occupiers.

We include consideration for peoples with recognised legal interests in land, as well as those that do not have such an interest. For example, Indigenous peoples may not have a recognised legal interest but nonetheless are connected to the land by tradition and custom. These peoples may also be leading a traditional lifestyle and be dependent, to a greater or lesser extent, on the land for their existence.

Secondly, our approach takes into account relevant legislative requirements, industry practices, standards or norms that may exist within a country or region and special circumstances that may apply.
In some countries and jurisdictions, legislation prescribes in some detail who has to be paid land compensation, the amount, what it is for and how it is calculated. In other jurisdictions, compensation may be by negotiation with the affected parties, for example, in Australia where Native Title rights and interests may be impacted by a resource project. In this situation, legislation also provides, if required by any party, mediation and arbitration processes to achieve an outcome.

Finally, consideration is given to the views of land owners and occupiers as to the form that compensation may take, for example, whether cash, in-kind or a mix of both.

Our strong preference is to have a substantial portion of any compensation payments dedicated to sustainable socio-economic projects or programs that will leave tangible and long-term benefits for the community or peoples receiving the compensation. In this situation we also try to ensure that benefits are provided to as many people as possible who may be entitled to them. Where substantial sums of money are involved, we work to put in place appropriate governance structures so that these monies are managed in a responsible, transparent and accountable manner.

Read the Community Case Study in our 2006 Sustainability Report: Community Consultation and Engagement.

Complaints and Grievances

Our Business Conduct governance procedures consider complaints and grievances filed by customers, employees, and communities concerning human rights, including provisions for non-retaliation.
2007 Performance

Message from the Manager Social Responsibility

Key Successes and Shortcomings
As a resources company, our social licence to operate and grow depends on the responsible operation of all aspects of our business, including our ability to work effectively with the communities in which we operate. Responsible social performance also has the potential to create competitive advantage and reduce business costs. Community goodwill can mitigate the risk of interruptions to our business, facilitate regulatory approvals, enhance our reputation as a responsible and caring employer, and help to position us as the company of choice, even in areas where we may not have previously operated.

This year, our Forum on Corporate Responsibility continued to provide valuable advice and to challenge our views on broad sustainable development issues. Through our internal Global Community Network, we have continued to foster knowledge throughout the business. We continued to work closely with Indigenous peoples to best plan how to avoid or minimise impacts on cultural heritage values.

Risks and Opportunities
Companies have always been required to act in accordance with laws and regulations. Today, companies are also facing heightened public scrutiny; and increasingly, our social and moral obligations are being shaped by stakeholders’ expectations. In addition, laws and regulations continue to change to reflect and follow societal values.

As the world’s largest resources company, we have significant exposures to human rights–related issues, and these present us with many challenges. Nevertheless, ensuring that we uphold peoples’ fundamental rights in our day-to-day business is paramount.

No transgressions of the principles of the UN Universal Declaration of Human Rights were identified in this reporting period. To assist sites to appraise their potential risks in relation to human rights issues, we have introduced a target for all sites to undertake a human rights self-assessment and implement a risk-based human rights management plan by 30 June 2008. Similarly, all sites are to have a formal community engagement plan in place by 30 June 2008.

Systems and Structural Improvements
We understand that we need to continue our focus on ensuring transparency in all our community investment programs, particularly in countries where we do not have significant operations. We take care to choose community investment projects that will contribute to long-term sustainable development and not create dependency. We also accept responsibility for seeing our community project commitments through to completion, even if our exploration or development projects do not become operational businesses. In consultation with key stakeholders, this year we reviewed our Community Investment Principles.

Key Strategies
We continue to voluntarily spend 1 per cent of our pre-tax profits on community investment programs to ensure our host communities share in our success.

During 2006/07, our voluntary community investment in community programs totalled US$103.4 million, comprising cash contributions, in-kind support and administration costs. This amount equates to 1.1 per cent of pre-tax profit (three-year rolling average), which meets our target of 1 per cent. Over the last five-year period, our total investment in community programs exceeded US$330 million.

In 2006/07, BHP Billiton employees personally donated or fundraised around US$1.8 million and contributed 69,000 hours of their own time volunteering to some 880 not-for-profit organisations worldwide. BHP Billiton matched their efforts by providing around US$2.4 million to these charities.

Based on the work of the International Council of Mining and Metals, this year we developed and are trialling a method to measure the socio-economic contributions of our assets. We expect this method to be available for use in 2008.
Melinda Buckland
Manager Social Responsibility

For further details on our 2007 performance, read:

- Community Relations
- Community Investment
- Human Rights
- Our case studies
Community Relations

Our HSEC Management Standard 7 forms the basis of our approach to communication, consultation and participation with stakeholders. The intent is that ‘effective, transparent and open communication and consultation is maintained with stakeholders associated with Company activities. Stakeholders are encouraged to participate in and contribute to sustainable development through HSEC performance improvement initiatives.’ Read more on our approach to Working With Communities.

Community Planning

One of the requirements of HSEC Management Standard 7 is for sites to have a community relations plan in place; and for the past five years, this requirement has also formed one of the Company’s HSEC targets. During this reporting period, all sites required to have community relations plans have operational plans in place or are covered by a regional plan developed by the business group. This is the same result as for the last reporting period. One site’s community relations plan was deemed not to meet the Company’s standards during our HSEC audit process and the second site had a plan in place but it was outdated and had not been revised by the required date.

Stakeholder Engagement

A total of 80 of our sites have a formal stakeholder consultation process in place. These processes range from site visits and open public meetings to the involvement of representatives on advisory groups. Examples of formal consultative groups that are operated by our businesses include:

<table>
<thead>
<tr>
<th>Business</th>
<th>Country</th>
<th>Consultation</th>
<th>Frequency of Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS</td>
<td>Suriname</td>
<td>Bakhuis Forum meeting with community leaders and local government</td>
<td>Fortnightly</td>
</tr>
<tr>
<td>Mozal</td>
<td>Mozambique</td>
<td>Community Leaders Meeting</td>
<td>Monthly</td>
</tr>
<tr>
<td>Gregory Crinum</td>
<td>Australia</td>
<td>Mine Life Planning Stakeholder Work Group</td>
<td>Annually</td>
</tr>
<tr>
<td>Mine</td>
<td>Chile</td>
<td>Development Local Table with people from Maminya, Parca, Cancosa, Iquiuca, Quispica, Macaya, Lirima, Pozo Almonte, La Tirana, Coyacagua communities</td>
<td>Three-Monthly</td>
</tr>
<tr>
<td>Cerro Colorado</td>
<td>Australia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minerals</td>
<td>Chile</td>
<td>Meetings with communities from the Gorda and Baquedano mountain ranges</td>
<td>Bi-monthly</td>
</tr>
<tr>
<td>Exploration</td>
<td>All</td>
<td>Consultation with landowners and occupiers wherever land access or overflying is undertaken</td>
<td>Prior to all relevant activity</td>
</tr>
<tr>
<td>Spence</td>
<td>Chile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dendrobium</td>
<td>Australia</td>
<td>Community Representatives, environmental group representatives and Wollongong City Council</td>
<td>6 to 8 weekly</td>
</tr>
<tr>
<td>Colliery</td>
<td>Chile</td>
<td></td>
<td></td>
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<tr>
<td>Cerro Matoso</td>
<td>Colombia</td>
<td>Information and Planning Zonal System</td>
<td>Annual</td>
</tr>
<tr>
<td>Mt Keith Refinery</td>
<td>Australia</td>
<td>Engagement meetings with Indigenous and Traditional Owner groups</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Navajo Coal</td>
<td>United States</td>
<td>District 13 - Local Navajo Communities</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Company</td>
<td>Canada</td>
<td>Meeting with Indigenous groups about Impact and Benefit Agreements (IBA), environmental agencies and Yellowknife residents</td>
<td>Annual</td>
</tr>
</tbody>
</table>

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The range of topics discussed during these stakeholder consultation processes covers all areas of sustainable development (health, safety, environment and community issues).

Issues discussed in the ‘Other’ category include mine planning (including closure), land management and amenity, business updates on growth projects, regional development, crime, contractor management, security, human rights and land issues, indigenous issues and cultural heritage, and social and cultural development.

During the reporting period, 18 operations undertook general stakeholder perception surveys to better understand their performance from their stakeholders’ perspective, and the same number of operations undertook employee satisfaction surveys.

Community Development Project Evaluation and Assessment

Our industry continues to be challenged to improve measurement and evaluation of our community investment activities and our longer-term socio-economic impacts.

During the year, we furthered our work on developing consistent methods to assess and evaluate community development opportunities by finalising a simple, but effective, Community Development Project Evaluation toolkit. The toolkit is designed to assist sites to measure the effectiveness of their local community programs and projects through a series of three questionnaires aimed at different stakeholder groups (the Company, the implementation team, and the beneficiaries).

Using the International Council on Metals and Mining document ‘Mineral Resource Endowment to Foster Sustainable Development’ as a basis, we have also developed a measurement process and toolkit for our operations to measure their socio-economic contributions. The process and toolkit have been trialled with a small number of operations and are expected to be available to our businesses in the year ahead.

Continuing our prudent approach to risk management, we have developed a guidance document on conducting Environmental and Social Impact Assessments (ESIA). The ESIA guideline is designed to provide support to sites and project teams conducting an ESIA and contains information on appropriate content, time frames and processes, as well as links to the BHP Billiton Capital Investment Standard.

We have also developed a simple, but what we believe to be effective, Human Rights Self-Assessment toolkit that will assist sites to identify their exposures to human rights–related issues, such as security and resettlement, and to manage the risks accordingly.
Public Reporting

This year, 100 per cent of sites required to prepare public HSEC or sustainability reports have produced them or they are included in business level reports, which meets our target. The requirement for sites to produce annual sustainability reports is integrated into our HSEC Management Standards. Ten sites that are not included in our target also completed reports, and these included Minerals Exploration; Technology; projects such as Cabrillo Port, USA, and the Pilbara LNG project in Australia; and a number of closed sites including Beenup and Boodarie Iron, Australia, South African Energy Coal Closed Mine operations; and Elliot Lake, USA. View our operations reports.

Community Complaints

All sites are required to have community complaints registers in place to record and track the management of community concerns.

During the year, 43 of our sites received a total of 543 complaints, a decrease from 603 in 2006.

Similar to the previous reporting period, the single largest type of community complaint was noise-related with 232 of the total complaints registered on this issue. The second highest area of concern continues to be dust, which attracted 112 complaints across the Company. This compares to 88 and 104 in 2006 and 2005 respectively.

Illawarra Coal (New South Wales, Australia) received 200 noise-related complaints and 20 traffic-related complaints (captured in the ‘Other’ category) primarily associated with noise generated by trains hauling coal and traffic movements (primarily from trucks). In 2006, Illawarra Coal engaged the services of an internationally recognised rail noise expert, Dr Stephen Marich, to recommend ways to reduce noise emissions. These recommendations informed a A$1.5 million rail infrastructure improvement program; and in February 2007 this program was completed. There has been a substantial reduction in the number of complaints as a result. Illawarra Coal continues to work collaboratively with the community to address stakeholder concerns through the Community Consultative Committee and regular meetings with complainants.

Community Relations Capacity Building

We continue to look for opportunities to build the capacity of the community relations professionals in the function.

During the year, we finalised a framework of key community-related competencies designed to provide direction for our current and future community relations employees. The framework outlines eight key technical competencies required for different level positions with community relations responsibilities. These competencies will not only assist in supporting current recruitment practices to ensure that we attract the right people to the right jobs, but will also provide the basis for development planning for current employees to ensure that our people are adequately equipped with appropriate community-related skills.
An online knowledge warehouse for each of our four key social issues was created on the Company’s intranet. This site contains key publications and best practice resources to facilitate knowledge transfer.

We continued our relationship with Oxfam Australia to deliver development training programs for our practitioners. During 2006/07, we ran five courses in Australia, Trinidad and Tobago, Pakistan, Peru and Chile. The feedback from these activities continues to be extremely positive.

**Global Community Network**

BHP Billiton’s Global Community Network continues to be an effective vehicle for improving knowledge sharing across the business and identifying business improvement opportunities within the function.

Throughout 2006/07, BHP Billiton’s Global Community Network continued to grow and provide an avenue for improved knowledge sharing and capacity building across the business. The Network’s four key areas of focus continue to be human rights, stakeholder relationships, socio-economic impacts and community development, with project workgroups established to address each of these key issues.

In the coming year, the Network will focus on human rights awareness and education, including further guidance on the US-UK Voluntary Principles on Security and Human Rights and further development on the socio-economic toolkit which has been piloted during 2007.
Community Investment

Community investment programs are operated at four levels across the organisation – locally, provincially or regionally, nationally and globally. Read more: Community Programs.

Community Investment Programs

The Company supports community initiatives in the locations where it operates. Our voluntary community investment during 2006/07 totalled US$103.4 million, comprising cash contributions, in-kind support and administration costs. This amount equates to 1.12 per cent of pre-tax profit (three-year historic rolling average), which meets our target of 1 per cent. This compares to contributions of US$81.3 million, or 1.45 per cent of pre-tax profit, over our last reporting period.

The amount includes the BHP Billiton component of our voluntary contribution to community programs at joint venture operations but does not include payments to communities that form part of mandatory licensing agreements. Our voluntary contributions have been steadily increasing in line with profits over the past five years, and in this way our host communities have been sharing in the financial success of the Company.

<table>
<thead>
<tr>
<th></th>
<th>Voluntary Community Investment</th>
<th>Per cent of Pre-tax profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003/2004</td>
<td>46.5</td>
<td>1.56</td>
</tr>
<tr>
<td>2004/2005</td>
<td>57.4</td>
<td>1.59</td>
</tr>
<tr>
<td>2005/2006</td>
<td>81.3</td>
<td>1.45</td>
</tr>
<tr>
<td>2006/2007</td>
<td>103.4</td>
<td>1.12</td>
</tr>
</tbody>
</table>

The distribution of our funding by category, by geographic region and by locality is presented in the graphs below.

Employee Matched Giving Program

The Employee Matched Giving Program aims to strengthen local communities by supporting and encouraging employees who volunteer, fundraise or donate to not-for-profit organisations. Through the program we are able to support those not-for-profit community organisations our employees support through their volunteering efforts, fundraising or personal cash donations. The BHP Billiton Employee Matched Giving Program means that BHP Billiton increases employee community contributions, by giving a ‘matching’ amount to the not-for-profit organisations its employees support.
During 2006/07, the BHP Billiton Employee Matched Giving Program was rolled out globally to all BHP Billiton managed sites. BHP Billiton contributed US$2.4 million to around 880 not-for-profit organisations through this program to match its employees’ cash, volunteering and fundraising activities. The program matched some 69,000 hours of volunteering by employees in their own personal time.

**Mapping our Contribution to the UN Millennium Development Goals**

As part of our commitment to the UN Global Compact, we know that some of the developing countries in which we operate face critical sustainability issues. We have continued mapping our community investment spend against the UN Millennium Development Goals, recognising that the intent of the Goals aligns with our sustainability values and presents a consistent global framework for measuring tangible progress.

In 2006/07, our sites reported spending US$33.1 million on programs to help achieve the Millennium Development Goals (MDGs), which is about one third of the Company’s total community investment. Of this amount, the goals that received most focus were MDG Goal 1: Eradicate extreme poverty and hunger, (31 per cent of the total) and MDG Goal 4: Improve maternal health (28.4 per cent of total).

<table>
<thead>
<tr>
<th>Millennium Development Goal</th>
<th>Area of Focus</th>
<th>2006/07 US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDG 1</td>
<td>Eradicate extreme poverty and hunger</td>
<td>11,576,126</td>
</tr>
<tr>
<td>MDG 2</td>
<td>Achieve universal primary education</td>
<td>4,360,452</td>
</tr>
<tr>
<td>MDG 3</td>
<td>Promote gender equality and empower women</td>
<td>168,379</td>
</tr>
<tr>
<td>MDG 4</td>
<td>Reduce Child mortality</td>
<td>10,400,281</td>
</tr>
<tr>
<td>MDG 5</td>
<td>Improve maternal health</td>
<td>1,637,864</td>
</tr>
<tr>
<td>MDG 6</td>
<td>Combat HIV/AIDS, malaria and other diseases</td>
<td>2,139,176</td>
</tr>
<tr>
<td>MDG 7</td>
<td>Ensure environmental sustainability</td>
<td>2,467,867</td>
</tr>
<tr>
<td>MDG 8</td>
<td>Develop global partnerships for development</td>
<td>320,166</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>33,070,311</td>
</tr>
</tbody>
</table>

Key areas of focus in MDG1 were contributing to small and medium business development (with significant contributions in Colombia and Peru), skills development projects for communities and support for NGOs addressing key causes of poverty.

Key areas of focus in MDG4 were sanitation and hygiene projects, nutrition projects and HIV/AIDS orphanages.
2007 Performance - Human Rights

The BHP Billiton Sustainable Development Policy states that 'Wherever we operate we will...ensure we...understand, promote and uphold fundamental human rights within our sphere of influence, respecting the traditional rights of Indigenous peoples and valuing cultural heritage'. Read more on our approach to Human Rights.

No transgressions within the Company’s activities of the principles embodied within the UN Universal Declaration of Human Rights were identified in the reporting period.

With much of our exploration and development occurring in developing countries, some of our greatest human rights risk occurs in the areas where our employees and contractors are working in conflict and post-conflict zones. Corruption and security issues also remain a concern in some regions. We manage this risk by undertaking thorough country due diligence, coordinating security processes, maintaining dialogue and community engagement with key stakeholders and ensuring project teams are trained on our associated operating protocols.

Training and Development

The Global Community Network is a group of community professionals and other interested employees committed to achieving excellent community relations and sharing community development practices so that the communities where we operate value our presence. One of the key social drivers for this Network is to improve employee understanding of and commitment to universal human rights.

During 2006/07, 24 sites reported that they had undertaken some form of human rights training, an increase from 17 sites in 2005/06. The training was delivered to 9,500 employees (2006: 6,300) and 11,400 contractors (2006: 9,270). Forty-two sites, or about 50 per cent of our sites, currently have cultural awareness programs in place; and 18 sites have conducted employee satisfaction surveys.

The majority of the human rights training was undertaken in South Africa, Australia, South America and Pakistan.

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Employees Trained</th>
<th>Number of Contractors Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>4,992</td>
<td>2,053</td>
</tr>
<tr>
<td>Australia</td>
<td>1,775</td>
<td>1,118</td>
</tr>
<tr>
<td>South America</td>
<td>1,070</td>
<td>3,097</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1,245</td>
<td>1,155</td>
</tr>
</tbody>
</table>

Twenty-seven of our sites report that they have security forces operating, and 18 of these sites have advised that these forces have undertaken human rights training.

Human Rights Self-Assessment

A Human Rights Self-assessment toolkit is available to assist sites in appraising their potential exposure to human rights issues. The toolkit is aligned with the Company’s Enterprise-Wide Risk Management approach. This ensures that human rights issues are readily identifiable and comparable, together with the Company’s social, environmental and financial risks.

Read more: Risk Management.

In 2006/07, 36 sites reported completing the human rights self-assessment, comparable to last year’s results. We continue to recognise that this is a key area requiring improvement, and it will be addressed by establishing a target for all sites to complete this assessment next year; and for those sites with significant human rights exposures, a management plan will be required to be in place.

During the year, we have been developing a toolkit to assist operations to implement the US-UK Voluntary Principles on Security and Human Rights, and this will be available early in 2007/08.

Resettlements

There were no reported resettlements during the reporting period.
Traditional Rights

The Company recognises and respects the importance of Indigenous peoples’ culture, heritage and traditional rights and supports the identification, recording, management and protection of Indigenous cultural heritage sites. We believe we have not violated these rights during the reporting period.

Read more: Employee Relations

Complaints and Grievances

Cerrejón Coal Mine, Colombia

Further to our case studies in previous years, the Company has continued to work with Cerrejón coal mine, Colombia, on the management of community relations issues at the mine. In July 2007, the Company received notice from the Australian Foreign Investment Review Board alleging a breach of the OECD Guidelines for Multinational Enterprises. Since becoming an equal one third shareholder with Anglo American and Glencore International in Cerrejón in 2001 we have been sensitive to human rights allegations raised against the mine before, and during, our involvement with the operation.

We understand that these concerns must continue to be recognised and addressed as part of our ongoing management approach. We have indicated our willingness to assist the OECD with their assessment of the issues and have provided a detailed submission outlining the role we have played in advancing the Company’s approach to community engagement.

Cerrejón management has actively engaged with the workforce, host community and host government as follows:

- The community resettlement activities at Cerrejón have been undertaken in full compliance with Colombian law. These laws provide extensive recognition and protection of the rights of the local communities.
- Cerrejón has an active program of seeking to ensure that the communities in La Guajira benefit from the Company’s activities. We have also facilitated the transfer of technology between Cerrejón and our other Colombian asset, which has led to a number of new community initiatives.
- Cerrejón’s security force is largely drawn from La Guajira communities and, consistent with the Company’s commitment to the adoption of the US-UK Voluntary Principles on Security and Human Rights, these employees have received extensive training. (Read more in our 2007 Case Study on Security Forces at Cerrejón)
Case Studies

The following case studies are examples of issues, initiatives, projects and programs across the Group that highlight some of the social responsibility opportunities and challenges faced by our operations. Case studies are also on healthy people, safe workplaces, environmental commitment, our people and our socio-economic contributions.

'Front End Loading' Of HSEC In Indonesia Coal Projects

Our Indonesia Coal Projects business took a comprehensive and integrated approach to developing Health, Safety Environment and Community practices and processes before mining commenced.

The Municipal Educational Resource Centre In Montelibano

Our Cerro Matoso operation in Colombia took a lead role in promoting and developing an alliance of public and private sector organisations and the community to establish the Municipal Educational Resource Centre (Centro de Recursos Educativos Municipales or CREM). CREM facilitates a network of educational resources and services to improve the education and quality of life of vulnerable people in Montelibano.

Ensuring 'GREEN' Projects In The Community

Project GREEN was developed at our Bayside/Hillside Aluminium operations in South Africa to help assess and ensure the environmental sustainability of community projects selected for support by the operations.

Human Rights Training Program At Cerrejon Coal

Cerrejon Coal’s human rights training program for employees and other critical stakeholders in Colombia is resulting in a positive change in the attitude and vision of the public security forces, as well as a growing sense of trust between the community and the authorities.

Antamina’s Mining Fund: Contributing To Sustainable Development Of Our Host Communities

The Antamina Mining Fund manages our significant contribution to the Peruvian mining industry’s voluntary contribution program which is aimed at enhancing corporate support for social programs in the poorest areas of the country.
Making Roads To Development In Dadu District

The Dadu District in Pakistan is largely underdeveloped and suffers from widespread infrastructure degradation. The Company has developed a program to address the critical need for provision of the most basic amenities for local communities in the Johi area around Petroleum’s Zamzama gas plant (BHP Billiton 38.5 per cent).

A major project is the construction of vital farm-to-market access roads. Through the provision of link roads, remote villages will have time-saving access to urban centres and to the main roads leading to nearby industrial cities. The roads will also provide for easier movement of agri-based vehicles, such as tractors and mobile harvester machines.

In addition, much-needed employment opportunities for local people will be provided by the road building project, along with other direct and indirect benefits for the more than 10,000 people who live in the area.

The project is a positive example of public-private partnership with the involvement of all relevant stakeholders. The Company has been able to forge stronger relationships with local communities, institutions and governments by collaborating with them in the project’s development and construction processes.

Haji Ghulam Nabi Panhwar of Village Allah Bachayo Panhwar says: "I support the initiative BHP Billiton has taken to construct roads for our far off villages, and I am proud to support by donating my land for this cause. It has now become easy for us to commute and save time. I hope the company will take this program further by constructing more roads."

The Challenge

Once the project had been conceived, the main challenge was to motivate community involvement and build the capacity of local villages and institutions to participate in the project.

Rather than the Company purchasing or leasing land for the roads, it was decided to invite the villagers to donate portions of their farmland. While this is a more challenging approach, it offered the benefit of instilling a sense of local ownership and involvement in the project, thereby supporting its sustainability.

A key step was to negotiate an agreement with the district government to construct the roads with our financial support and, upon their completion, take on ownership and the responsibility for their future maintenance.

How We Did It

A survey of our host communities highlighted the desire for farm-to-market access roads to enable people in remote villages to more easily commute to urban centres. The project concept was presented to senior management by our community development team and duly approved by the steering committee for community development.

Our land department, in consultation with professional consultants, did detailed planning for the construction of the roads. The local district government was then presented with a proposal to assist the Company in providing this much-needed community infrastructure project.

Following agreement, six villages around our plant were selected to be the first beneficiaries of the project. In line with our policy of maximising local involvement, local contractors were invited to bid for the project through a tender process coordinated by the district government.
A management committee has been formed, comprising members of the Company project team, government officials, contractor staff and community members. The committee’s responsibility is to plan, implement and monitor the project. A civil engineer has been inducted into our project team to oversee construction and ensure it complies with our HSEC standards and practices.

The first stage of the project has now been completed with the construction of approximately five kilometres of concrete roads around the six villages.

**Going Forward**

We will continue working with the district government and community groups to construct link roads for more local villages in the coming years.
Human Rights Training Program At Cerrejon Coal

Concerned by internal conflicts in Colombia and their potential impacts, in 2003 Cerrejón Coal (BHP Billiton 33.3 per cent) initiated a human rights training program for employees and critical stakeholders, including public security forces, private security contractors and the neighbouring community. The program includes training, awareness, humanitarian actions and communication strategies.

Generally considered to be the leading program in the international mining industry in Central and South America, the results of the initiative are significant. As well as a positive change in the attitude and vision of the public security forces, there is a growing sense of trust between the community and the authorities.

The Challenges

As Cerrejón is undertaking a major strategic economic activity in Colombia and is the largest mining operation in the country, security challenges are not unexpected; and the Company requires measures to protect its employees, their families and its assets.

To try to ensure that these measures have no negative impact on the human rights of the local population, Cerrejón bases its security policy on the US–UK Voluntary Principles on Security and Human Rights.

The Company is committed to the promotion and protection of the human rights of the people in its host communities, particularly the Indigenous Wayuu population.

How We Did It

To promote the understanding of human rights issues, Cerrejón developed a training and qualification program in collaboration with:

- The Costa Rican Human Rights Training, Qualification and Analysis Centre, a specialist regional training organisation
- The Colombian Red Cross and the International Red Cross Committee
- The Fundación Ideas para la Paz (Ideas for Peace Foundation), a ‘think tank’ founded in 1999 by Colombian business leaders
- International NGOs.

The training began in 2004 and initially focused on public security forces. In 2005, it was extended to include other state security organisations, private security contractors, the community and Company employees; and in 2006, it was further extended to include Indigenous authorities and leaders and civil and government authorities, as well as greater numbers of public and private security forces.

The program provided training for 592 people in 2004, 486 in 2005 and 2102 in 2006 (see table below).

<table>
<thead>
<tr>
<th>Human Rights Training 2006</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public security forces</td>
<td>704</td>
</tr>
<tr>
<td>Private security forces</td>
<td>832</td>
</tr>
<tr>
<td>Indigenous leaders and authorities</td>
<td>148</td>
</tr>
<tr>
<td>Civil and government authorities</td>
<td>15</td>
</tr>
<tr>
<td>Cerrejón employees</td>
<td>403</td>
</tr>
<tr>
<td>Total</td>
<td>2102</td>
</tr>
</tbody>
</table>
The principles of human rights, international humanitarian law and Colombia’s judiciary system are taught through a combination of drills, case studies, games and awareness-building exercises, with the aim of enabling people to apply the values of human rights in their regular activities. The training methodology is based on a participative approach that allows an easy interaction between trainer and audience.

**Stakeholder Response**

The following comments on the human rights training program and its consequences have been provided by a range of Cerrejón’s stakeholders.

- “The fact of being born gave me a right without which I could not live, as it comes embedded in my nature; that is why, as a human being, I deserve it. It has no limitations, it is an obligation for all to respect and honour it, as they are indivisible and equal in worth. It is natural to every human being.”

  *Native song lyrics inspired by one of the training sessions at the Trupio Gacho Indigenous Reservation*

- “I am very thankful for the talks on human rights given to us by Cerrejón, as they have been very useful in our institution. We have shown it both here as well as in the community; therefore, we hope this will not be the last time, but that it will continue.”

  *Police Aide Emidio Guevara Ibarra, Substation E44, National Police of Colombia*

- “I thank Cerrejón for the talks on human rights that they have given here in the Matamoros Group. They have benefited us in the contacts that we have with the civilian population. This helps us respect the rights of everyone, and we can also identify possible violations. It helps us change the image of the institution. All this, thanks to the knowledge of human rights.”

  *Regular Soldier José Luis Ramirez Mejía, Gustavo Matamoros D’Costa Mid Armoured Group*

- “I feel proud to have taken part in the talks on human rights and international humanitarian law. Thanks to Cerrejón and the Red Cross, today I have understood how to interact and to learn to live in an Indigenous community. Thanks to these concepts I have also been able to change as a person. Thanks to Cerrejón for thinking about the soldiers, because during our surveillance duties on the roads and in the communities we are always trying for things to come out all right.”

  *Regular Soldier Carlos Fabián Martínez Ochoa, Gustavo Matamoros D’Costa Mid Armoured Group*

- “The human rights program that is promoted by Cerrejón has been beneficial for the community, mainly for the Indigenous community. With respect to the authorities [public security forces] and their behaviour, they recognise the way the treatment of the members of the community should be, respecting their customs, their environment and, specifically, their rights as human beings. The complaints that were informally filed have diminished by a large percentage in our office, thanks precisely to the training given by Cerrejón on human rights.”

  *Alicia Abshana Campanela, Municipal Public Ministry, Albania*

As well as applying the US–UK Voluntary Principles on Security and Human Rights, Cerrejón collaborates with the National Ombudsman’s Office and has integrated their Human Rights Early Warning System into the training program.

The Early Warning System was developed by the National Ombudsman’s Office as a means of preventing massacres and forced displacement. To date, information provided by Cerrejón through this system has prevented two potentially criminal events from being carried out.

**Going Forward**

Cerrejón is continuing to extend the scope of its human rights training program to include young people and others and further promoting discussions and opportunities to promote civilian harmony and peace.

The Company is also working on a pilot program of Conflict-Sensitive Business Practice, based on operational standards for countries with the risk of armed conflict.
Ensuring 'GREEN' Projects In The Community

Project GREEN was developed by our Bayside/Hillside Corporate Social Investment (CSI) department to help assess and ensure the environmental sustainability of community projects selected for support. The 100 per cent owned Bayside and Hillside aluminium smelters are located in Richards Bay, South Africa, and are part of our Aluminium CSG.

The objectives of Project GREEN are to:

- Create opportunities for environmental education
- Raise awareness and understanding of environmental issues and risks
- Take action on environmental issues and risks
- Ensure the sustainability and conservation of natural resources.

Project GREEN has been embraced by participants, and there is evidence that they have developed a broader environmental understanding, which they are applying not only in their community projects but also in their personal lives.

This is reflected in comments from the Zululand Crafters Association, whose members received training from the Zululand Craft Action Body with support from Project GREEN (see table below). Khushu Dlamini, Chairperson of the Association, said: “Crafters need raw materials such as grasses and wood. If these raw materials are used irresponsibly or destroyed, their livelihood will be taken away. After receiving this training, we realise the importance of conservation. If we look after our environment, it will look after us.”

Another program participant is the Ethembeni Care Centre, where initiatives have ranged from medical waste management to the cultivation of medicinal plants (see table below). Sally Tsipa, Facility Manager at the Centre, said: “The project has made us all realise that without a healthy planet you cannot have healthy people.”

The Challenge and Opportunity

Many environmental problems are related to social issues, and many environmental solutions are dependent on social processes. For example, local actions for sustainability rely upon an educated and engaged community, and a breakdown in a community’s cohesion and prosperity can inhibit its capacity to act sustainably.

Our challenge is to help address these environmental problems through our corporate social investment programs. Our approach is to focus mainly on poor rural communities that are situated in areas rich in biodiversity, albeit ecologically sensitive. By linking environmental factors to community projects, they want to achieve environmental sustainability for their projects through community awareness and acceptance.
A snapshot of Project GREEN outcomes includes:

<table>
<thead>
<tr>
<th>Project Supported</th>
<th>Outcomes Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kati Primary School (a rural school constructed by BHP Billiton)</td>
<td>Achieved Eco-School status. Children learned about water conservation, waste management, indigenous plants and cultural heritage issues. They also planted vegetable food gardens and learned about permaculture.</td>
</tr>
<tr>
<td>Aquadene Secondary School (constructed by BHP Billiton in a disadvantaged community)</td>
<td>Achieved Eco-School status. These teenagers planted indigenous medicinal gardens, participated in a cultural heritage program and identified and dealt with social problems that impact the environment.</td>
</tr>
<tr>
<td>Ethembeni Care Centre (an HIV/AIDS clinic in rural Zululand)</td>
<td>The staff looked at medical waste management, the planting and use of medicinal plants, permaculture, conservation of natural resources (water and energy) and sustainable health.</td>
</tr>
<tr>
<td>Phoenix Zululand (a restorative justice program operating in prisons in Zululand)</td>
<td>This was a unique project where prison inmates were taught about the environment, particularly indigenous plants, and how to start and run an indigenous nursery. The project had many positive outcomes ranging from creating good relationships between inmates and wardens to teaching business skills and entrepreneurship.</td>
</tr>
<tr>
<td>Zululand Craft Action Body (a training body that teaches and empowers local traditional crafters)</td>
<td>Crafters were taught about the environmental impact of harvesting natural resources (grasses for weaving, mud for pottery, wood for carvings) and how to start their own indigenous gardens to maintain the natural environment.</td>
</tr>
</tbody>
</table>

How We Did It

Each project was evaluated according to its own dynamics and structure, and then a tailor-made implementation strategy was developed.

The evaluation process started with planning meetings and workshops with the project participants to identify environmental issues and risks and provide a framework for applying the principles of Project GREEN.

The workshops addressed the following themes:

- Water
- Waste
- Energy
- Increasing environmental awareness, or ‘greening’
- Soil
- Resources
- Health and safety
- Social impact
- Public awareness and education
- Infrastructure

A series of interviews was then conducted with project and community members to discuss concerns and issues relevant to the project. A key part of the interviews was an environmental audit, including site visits.

According to the findings from the interviews and audit, environmental issues were prioritised and recommendations for ‘greening’ were developed. Environmental goals were established and formulated into action plans, which were implemented in line with our environmental policies and management plans. Training in current sustainability theories and practices was also provided.

All these activities were undertaken with the agreement and collaboration of the project participants and interested and affected parties.

Going Forward

The approach of linking social and environmental processes has underpinned the success of Project GREEN, which can serve as a model for helping to assess and ensure the environmental sustainability of future community projects.
Antamina's Mining Fund: Contributing To Sustainable Development Of Our Host Communities

After months of intensive negotiations, in December 2006 the Peruvian Government and the mining industry agreed to establish a general contribution program aimed at enhancing corporate support for social programs in the poorest areas of the country where mines operate. Our 33.75 per cent owned Antamina copper/zinc operations was one of the companies leading the negotiations and became the first to sign an individual agreement with government. Antamina is part of the Base Metals Customer Sector Group.

Under the agreement, companies will contribute 3.75 per cent of their pre-tax profits to specially created associations or separate trusts that will operate under individual company control. Based on last year’s earnings, Antamina’s contributions are expected to reach around US$60 million in 2007.

Recognising that our funding contribution is significant (40 per cent of the total funds to be made available from the mining industry), we have established the Antamina Mining Fund (AMF), staffed with a small group of internally recruited professionals who have experience in project management and community relations.

In line with the agreement, the AMF has established two facilities, one for the local area of influence and the other for the rest of the region. The former, which includes the poorest communities closer to the operations, will absorb two thirds of the funding. The remainder will be used to underwrite region-wide programs.

The Opportunity

Pablo de la Flor, Vice President of Corporate Affairs at Antamina, says: "The AMF’s main objective is to contribute effectively to the sustainable development of the Ancash region, through a consensus-based approach that involves local authorities and key stakeholders. The Fund seeks to improve the quality of life of the Ancash community while strengthening relationships with the state and representative community organisations. Its main objective is to complement, not substitute, local government action. Thus, one of the key goals of the AMF will be to help build the capacity of local governments to access and use additional available state funding."

How We Are Doing It

The agreement can be extended for a total of five years and will be in force as long as mineral prices remain above a threshold agreed by the government and participating companies. The agreement can be terminated if the government imposes new specific taxes on mining activities or modifies existing ones.

Antamina’s contributions will not be kept in the Company’s accounts but will be transferred to a separate AMF trust, which will be subject to yearly reviews from independent auditors. Unspent contributions will not revert to the Company but will be rolled over to the following fiscal year to underwrite Fund programs.

When prices drop below threshold levels, contributions to the Fund can cease; however, Antamina would continue with its normal funding efforts for community development, currently based on 1 per cent of pre-tax profits (on a historic three-year rolling average).
Going Forward

In concert with government priorities, the AMF will concentrate its activities in four specific areas: education, health and nutrition, productive development, and local government capacity building.

To implement program activities, the Fund will establish strategic partnerships with NGOs and consulting firms with demonstrated track records and extensive field experience in Peru. To assess the impact of its programs, the Fund will underwrite a baseline study that will provide specific indicators against which results will be measured.

The focus of education programs will be improving the quality of primary education. The health and nutrition programs will seek to reduce chronic malnutrition in children under three years of age, working with families and health agencies.

The AMF will work directly with small farmers and businesses in Ancash to build their productive capacities and enhance their involvement in national and international markets. Likewise, the Fund will seek to bolster managerial capabilities to help improve the performance of municipal governments for the benefit of local communities.

According to Pablo de la Flor: "The establishment of the voluntary contribution agreement provides the mining industry with a unique opportunity to have a significant and lasting impact on the life of the poorest communities of the country. Antamina is fully committed to make this process work."
'Front End Loading' Of HSEC In Indonesia Coal Projects

Our Indonesia Coal Projects (ICP) business took a comprehensive and integrated approach to developing health, safety, environment and community (HSEC) practices and processes – all before the first shovel of coal. This ‘front-end loading’ approach involved acting immediately on challenges associated with our license to operate, delivering sustainable benefits, managing risks and engaging key stakeholders, all while still in the exploration and feasibility study stages.

The ICP’s business case was based on a complex mix of country-specific social, legislative, behavioural, administrative and environmental risk considerations and thus indicated a clear necessity for addressing these issues ‘up front’.

Comprehensive risk assessments using our Enterprise-wide Risk Management (EWRM) methods were conducted at all project stages to identify and mitigate all business risk issues prior to advancing to the execution and construction stages. Identifying the risk issues also provided an indication of research and study programs required to move forward.

The Challenges And Opportunities

While establishing the ICP business, numerous cultural, social and environmental issues were addressed. For example, thorough environmental baseline studies were initiated early in the pre-feasibility stage, including an extensive biodiversity study of the project footprint. Several new species of fauna were discovered, giving rise to the need for a transparent and forward-thinking biodiversity management plan.

As many as 80 per cent of the ICP’s workforce are local people, and their medical histories indicated a range of public and occupational health issues. To better understand these issues and to assist in identifying the priority health challenges for intervention programs, the Health Research Centre of the University of Indonesia (PPKUI) was commissioned to conduct a comprehensive baseline public health survey.

This survey involved regional government health service providers and led to the establishment of a community, government and Company partnership in a long-term and targeted regional public health program. Areas targeted by the program include:

- Basic hygiene.
- Maternal and child health (immunisation, nutrition, family planning, etc.).
- Communicable diseases.
- Clean water.
- Sanitation.
- Provision of basic medical services.
- Health service infrastructure.
- Health practitioner training.

The findings of the survey were presented by the Health Research Centre in June 2006. At the presentation, Willy Yosef, the Bupati (head) of our host regency of Murung Raya, said: "We thank BHP Billiton for conducting a comprehensive occupational and public health baseline survey. Although some of my health staff members disagree with some findings, I found the survey results represent the current public health condition in my kabupaten (district), although it was only conducted in one kecamatan (sub-district). The challenge ahead of us is how we can together address the health problems presented in the report and take actions based on the recommendations presented by the researchers. The investment that the Company is making in public health will in the long run benefit the Company, because most of its employees are coming from the surveyed area."
The results of the survey have also helped in the development of occupational health and hygiene standard operating procedures and of training and educational programs and the integration of HSEC considerations into design processes.

To research and understand how our Fit for Work/Fit for Life principles could be applied to the ICP, present-day and historical cultural behaviours in the host community were analysed in depth. These studies helped us find a workable balance between cross-cultural considerations and the operational systems necessary for the long-term sustainability and profitability of the ICP and future remote-location projects. Recommendations have been formulated for the development of a practical and appropriate Fit for Work/Fit for Life program for Indonesian employees.

How We Did It

We quickly established communications tools and processes for the purpose of identifying key stakeholders and developing appropriate procedures for their consultation and engagement.

Key stakeholders identified include government at various levels, 17 village communities (representing around 14,000 people), NGOs and the media.

Comprehensive socio-economic, public health and cultural impact and baseline studies were undertaken and immediately acted upon. As some of the studies required considerable lead times, community development practitioners were commissioned to undertake up-front ‘rapid rural appraisals’ across all key village communities.

The recommendations from this work were formally addressed at consultative meetings and the resulting agreements, framed as Memoranda of Understanding, defined much of the ICP’s ongoing community investment program.

As the results of other more comprehensive baseline studies and research came in, this was fed back into the stakeholder consultative process and in turn into the ICP’s community investment activities.

From the outset, we have involved our host communities, NGOs and government in our impact assessment research, in the identification and selection of priority areas for community investment and in the delivery of the resulting programs.

Going Forward

We are now overseeing the management of ICP/stakeholder partnerships that have been developed to deliver a comprehensive range of programs covering public health, education, behaviour management, essential infrastructure (including water and sanitation), micro-finance, business development, food security, poverty alleviation, vocational skills training, risk sensitisation, agricultural improvement and village-level governance and administration.
The Municipal Educational Resource Centre In Montelibano

The Municipal Educational Resource Centre (Centro de Recursos Educativos Municipales, or CREM) facilitates a network of educational resources and services to improve the education and quality of life of vulnerable people in the Montelibano region of Colombia.

Cerro Matoso, our 100 per cent owned Stainless Steel Materials ferro nickel operation, took the lead in promoting and developing an alliance of public and private sector organisations and the community to establish CREM. CREM opened its doors in June 2002 under the auspices of the Municipal Education Secretariat.

In 2006, the beneficiaries of the Centre included 13,167 students (63.2 per cent of the student population of Montelibano), 664 teachers (100 per cent of the teacher population), 44,051 community members, 28 schools and 5 universities.

The key benefits include:

- Increased standards of education: for the past four years, Montelibano has been ranked in first place in the Cordoba province in terms of quality of education
- Improved quality of teachers and teaching systems
- Community engagement with the Centre as an educational and cultural focus for the region.

CREM has been widely acknowledged in Colombia for its financial and administrative capacity and is recognised as a model for educational resource sharing, with several other institutions based on the Centre having been established in the region.

Jesús Burgos Arteaga, Director of Educational Nucleus, said: "The Educational Resources Centre at Montelibano has produced an about-face in education in its organisational and educational aspects. It has allowed us to go from 3,800 students served in the first year to 15,000 in the sixth year by the different services offered. We have also gone from 350 teachers to 707 giving training sessions, workshops, consultations, courses, and conferences to a significant percentage of the population.

"The entire process is framed within the Master Plan for Education and the Three-year Plan for Educational Excellence, which has led the municipality of Montelibano to hold first place for four consecutive years in educational quality in Córdoba, according to the results of the ICFES exams. This has been thanks to support from and involvement by Cerro Matoso and the San Isidro Foundation (supported by Cerro Matoso) and their great alliance with the Office of the Municipal Mayor of Montelibano, the Office of the Governor of Córdoba, the Montelibano Dioceses, and the educational communities. All of these entities have understood that supporting and promoting social impact projects generates better services, quality of life, and social fabric in the community, and therefore progress and development.

"Personally, and on an employment level, CREM has been for me a school and a strategy to offer our young people efficient and effective educational services for their development process, in accordance with scientific and technological advances.

"In the name of the educational sector of Montelibano, I want to thank you for believing in us, for nurturing our ideas, and for contributing to making them a reality. I think that the future awaiting the educational sector and society in Montelibano is wide-open, prosperous, and promising if we continue to plan and evaluate with a vision of the future."
The Challenge

There were a number of early difficulties in establishing CREM, including:

- Slowness of official agency processes in assessing and approving the concept.
- An initial reluctance among teachers and church leaders to accept the concept because of fear their role in the community might be diminished.
- A lack of municipal procedures and regulations to facilitate establishment of the institution, the first of its kind in the province.
- A lack of educational policies in place to support a project of this nature.

How We Did It

CREM is the result of a strategic alliance between the Municipality of Montelibano, the Diocese of Montelibano, the Government of Cordoba, the Ministry of Education, local teachers, the community and Cerro Matoso.

In 1999, with the support of Cerro Matoso, a committee of teachers from schools in the province was formed to define the scope of the project and develop a plan for development of the Centre.

It was determined that US$500,000 would be required to establish an institution that operated as a shared central educational resource, and the teachers submitted requests for organisational and financial support.

The Mayor’s office donated the land, the teachers and the administrative personnel and contributed US$100,000. The Governor’s office contributed US$100,000. Cerro Matoso contributed the design cost of the Centre; an expert advisor in strategic planning to develop, in conjunction with the teachers; a five-year plan for the project; and an additional US$300,000.

The stated objectives for the CREM project were to:

- Monitor the quality of local education and develop actions for its continuous improvement.
- Encourage the development of science, technology, research, culture, sports and recreation.
- Promote diversification of basic and intermediate education according to the region’s productive needs.
- Develop training programs and strengthen the depth and quality of teaching.
- Achieve the sustainability of the Centre by focusing on transparency, quality and results.

Community involvement in the alliance to establish and operate the Centre is reflected in the cross-section of people involved in its administration, which has helped underpin its success to date, as reflected in the table below.

CREM Operation 2002 to 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students who used CREM services</td>
<td>3,657</td>
<td>5,509</td>
<td>10,539</td>
<td>11,039</td>
<td>13,167</td>
</tr>
<tr>
<td>% student population served</td>
<td>21.10</td>
<td>30.00</td>
<td>57.30</td>
<td>59.06</td>
<td>63.19</td>
</tr>
<tr>
<td>Trained teachers</td>
<td>363</td>
<td>510</td>
<td>630</td>
<td>650</td>
<td>664</td>
</tr>
<tr>
<td>% trained teacher population</td>
<td>85.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Benefited persons (community)</td>
<td>1,286</td>
<td>7,854</td>
<td>8,214</td>
<td>42,287</td>
<td>44,051</td>
</tr>
<tr>
<td>Affiliated schools</td>
<td>12</td>
<td>14</td>
<td>22</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>User universities</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Laboratories</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Information Technology</td>
<td>NA</td>
<td>98.00</td>
<td>99.00</td>
<td>99.55</td>
<td>99.63</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>NA</td>
<td>81.98</td>
<td>99.00</td>
<td>99.10</td>
<td>99.12</td>
</tr>
<tr>
<td>Physics</td>
<td>NA</td>
<td>83.4</td>
<td>97.00</td>
<td>98.20</td>
<td>99.89</td>
</tr>
<tr>
<td>Training rooms</td>
<td>NA</td>
<td>60.00</td>
<td>75.00</td>
<td>82.00</td>
<td>96.00</td>
</tr>
</tbody>
</table>
Going Forward

Sustainability of CREM is grounded on the following factors:

- Interested and supportive community.
- A strategic alliance of the public and private sectors and the community provides leadership for the project. Its participative management model represents the interests of all sectors and drives fulfilment of its mission.
- The project planning phase attracted new partners, enabled the forecasting impacts and strengthened local leadership. The project sets new public sector paradigms as it is based on the values of quality, innovation, transparency, effectiveness and sustainability.
- Management is not limited to the local area; national and international stakeholders have an interest in its success and sustainability.

<table>
<thead>
<tr>
<th>Number of CREM employees</th>
<th>13</th>
<th>19</th>
<th>21</th>
<th>19</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct</td>
<td>18</td>
<td>13</td>
<td>17</td>
<td>14</td>
<td>17</td>
</tr>
</tbody>
</table>
Our People

At BHP Billiton, our objective is to be the company of choice – creating sustainable value for our shareholders, employees, contractors, suppliers, customers, business partners and host communities.

We are committed to open, honest and productive relationships with our employees based on the values of our Charter. This includes earning the trust of employees by being forthright in our communication, consistently delivering on commitments and maintaining an equal opportunity work environment based on merit. We aim to be consistent, fair and transparent in recruiting, assessing, and promoting and rewarding our people.

The precise nature of our relationships with employees is determined locally but is consistent with our BHP Billiton Charter, Human Resources Strategy, Sustainable Development Policy, Guide to Business Conduct, our commitment to the UN Universal Declaration of Human Rights and relevant legislative requirements. Our commitment to open communication with our employees is reiterated through our Directors’ Report contained within the Company Annual Review.

Human Resource Strategy

In January 2007, we revised our Human Resources Policy and codified our Human Resources Strategy and Standards.

The Human Resources Strategy connects our values and culture (as defined by our Charter) and our business requirements to the way we manage our people and assess our human resources performance. As outlined in our Corporate Strategy, people are the foundation on which all activities rely and to be successful, we must identify, recruit, train, develop and retain a talented, diverse, mobile and motivated workforce.

Our Human Resources Management Standards establish our objectives on each of the major components of people management, and are aligned with our HSEC Management Standards. Each Standard also has performance requirements and metrics that are used to guide and assess human resources performance.

A significant portion of our workforce is contractor-based, and we work closely with our contracting companies, in particular those whose activities materially interact with direct employees in terms of culture, standards and behavioural expectations, to ensure their approach to human resource management, including employee relations, is consistent with that of the Company.

Leadership and Culture

Strong leadership is a cornerstone of organisational success. Our intent is to foster a culture where globally diverse and often remotely located leaders behave in a manner that models the Charter, drives superior performance and allows every employee to start each day with a sense of purpose and end it with a sense of accomplishment.

Our Leadership Model provides guidelines on what it takes to be a BHP Billiton leader. Importantly the leadership attributes and styles are based on proven safety excellence and fully integrate and reinforce our belief that good safety leadership is good business leadership.

Refer to the following for details on our approach to Human Resources:

- **Attraction and Recruitment**, including an overview of our graduate programs, freedom of association and child and forced labour
- **Training and Development**, covering such aspects as work/life balance, the employee assistance program, grievance mechanisms and managing transition
- **Reward and Recognition**, addressing priorities for financial and non-financial rewards programs.
Attraction and Recruitment

Our workforce requirements are assessed and forecast for a five-year period, in alignment with our business plans.

Diversity of skill, thought, ethnicity, language, gender, experience and relationships is a source of competitive advantage. Effective recruitment processes help us to ensure a steady flow of high-potential people, in both developed and developing countries.

Applicants are treated in line with our Human Resources Standards, the Guide to Business Conduct and the Charter values; and our employment decisions are based on merit.

Selecting the 'right' candidate includes an assessment of the team balance and the individual’s mix of skills, experience and capability. Decisions based on attributes unrelated to job performance may constitute discrimination and are prohibited. We recognise, however, that in special circumstances affirmative action may be required to address historical issues of inequity or other situations outside of our control. Read more.

Harassment in any form is unacceptable, and perpetrators will be subject to disciplinary action.

The current strong commodity cycle and our pipeline of development projects have increased demand for highly skilled executives and staff with relevant industry and technical experience. Read more about our understanding of the potential implications of human resources skills shortages in the Company Risk Factors (2007 BHP Billiton Annual Report).

BHP Billiton Group Graduate Development Program

The Company offers a two-year structured graduate development program that is designed to provide participants with the challenges, skills and experiences to develop tomorrow’s leaders.

- Professional Graduate Recruitment Program. Operating in Australia since 2004, this program successfully recruits graduates across a range of disciplines, including engineering, science and business functions. Read more.
- International Graduate Recruitment Program. As part of the Company’s overall business strategy, we have future growth opportunities in areas including Russia, Africa, India, Indonesia, China, Mongolia and Brazil. As a result, in 2006 we introduced a program that seeks high calibre graduates from these areas that we can develop in our global operations and ultimately return to their home country. Read more.

Freedom of Association

We fully recognise the right of our employees to freely associate and join trade unions.

The Company’s policy is to consult with employees on major organisational changes that affect their position and ensure processes are in place at all locations to equitably address any issues. Consultation is to occur in within the timeframe specified by local regulation and terms of employment.

Across our locations we have a mix of collective and individually regulated employment arrangements and common law contracts. While collective bargaining is not universally practiced across our operations, this does not affect the rights of employees to choose to belong to trade unions. Prospective employees are made aware of employment arrangements prior to joining the Company. Currently, approximately 49 per cent of employees are covered by collective bargaining agreements. Read more: Our People>2007 Performance.

Child and Forced Labour

In line with our policy commitment to the UN Universal Declaration of Human Rights, we prohibit the use of child labour or forced labour at our operations. All sites are required to report the age of their youngest employee and the corresponding minimum working age in their jurisdiction.
Training and Development

Employees have clear job requirements, and we are committed to working with all our people to develop career paths that will enable them to reach their full potential, achieve job satisfaction, and maximise their contribution to the Company.

It is our goal that all employees participate in at least one performance review per financial year, which is typically conducted by the employee’s immediate manager or supervisor. The process is designed to provide balanced and realistic feedback and helps identify each individual’s development and training needs. The process works to differentiate, reward and manage an individual’s performance. Specific technical skills training and HSEC training are managed within the businesses. The Company offers leadership development programs across all levels of the business in order to develop capability and align leaders with our leadership model. Attendance at professional events is encouraged if such attendance will enhance the employee’s job skills or otherwise benefit the Company.

Employees are also provided with opportunities to create career development plans, and employees may discuss career or job concerns with their supervisor at any time. An internal job posting process helps employees identify potential career moves. Critical vacancies and development opportunities are identified and filled through a talent management process that occurs every six months.

In accordance with our HSEC Management Standards, all of our workforce is represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety matters and programs. Read more: Safe Workplaces.

Work/Life Balance

The Company recognises that employees have a wide range of personal obligations that can have an impact on their ability to balance work and personal life demands. The global nature of our operations also poses specific challenges for some employees.

We endeavour to implement policies and practices that help employees to balance these demands; and, wherever appropriate, businesses consider flexible work arrangements in the context of their requirements. Guidelines are available for all employees in order to develop and maintain flexible work practices where appropriate. Read more: Fit for Work/Fit for Life.

Employee Assistance Program

Our people facing personal and work-related problems can access free confidential, independent counselling via the Employee Assistance Program. Managers and supervisors can also seek advice with respect to staff that could benefit from the program.

Grievance Mechanisms

Our Guide to Business Conduct provides the overall framework for reviewing any decision or action that may be inconsistent with our Charter, policies or standards. The course of action required to resolve a concern will depend on the nature of the issue and its severity and ranges from simply resolving the issue with the affected person’s immediate supervisor to seeking a review by our Global Ethics Panel. In all cases, confidentiality is maintained to the highest degree possible. Employees who raise concerns will not be subject to retribution or disciplinary action where the concern is genuine. Read more: Business Conduct.

Managing Transition

From time to time, it is inevitable that changes to operations may be required as a result of economic, technological or structural impacts, which may result in redundancies.

Our policy is to consult with employees in a timely manner on major organisational changes that affect their position and ensure processes are in place at all locations to equitably address any issues. Consultation occurs according to the process and timeframe specified by local regulation and terms of employment.

To be lawful, redundancies must not be harsh, unjust or unreasonable, and we must be able to demonstrate that such action is supported by a valid business reason. All reasonable alternatives to redundancy are considered, including retraining employees to assume new roles and providing opportunities for transfer to different business units.
Redundancies will always be managed in a manner consistent with the requirements of our Charter, local legislation and the conditions of employment agreements. In addition, we will generally provide further support in the form of monetary payment, transition counselling and/or ongoing career management.
Reward and Recognition

We recognise that our reward and recognition policies and practices have a significant impact on our people, their performance and the development of their capabilities. We use a total compensation approach that incorporates base and variable pay, benefits, other incentives where appropriate, and non-financial rewards. We ensure that our compensation meets or exceeds the legal minimum wage requirements and is in full compliance with all applicable laws and the Company’s Guide to Business Conduct.

Individual remuneration packages are based on merit, aligned to our business requirements and sufficiently attractive to recruit and retain the best people.

Superannuation and Pension Plans

The BHP Billiton Group operates or participates in a number of defined contribution and defined benefit pension plans throughout the world. The more significant schemes relate to businesses in Australia, South Africa, the US, Canada and Europe. The plans are internally governed to ensure that both Company and external regulatory requirements that apply to the plans are fully met. Read more: 2007 Performance>Superannuation and Pension Plans.
2007 Performance

Message from the Chief People Officer

At BHP Billiton, our objective is to be the company of choice, by creating sustainable value for all our stakeholders. Achieving this objective requires us to recruit, develop and retain talented and motivated employees who share our Company’s vision and values.

Like our peers, attracting the right people to the right location at the right time continues to present challenges. But with challenges come opportunities, and as we expand our activities into less traditional regions, we are introducing new strategies for attracting and developing talent. Our International Graduate Recruitment Program is testament to this approach. Going forward, diversity in all forms will increasingly provide broader sources of talent and competitive advantage which we will seek to exploit.

While our values and culture have long been defined by our Charter, we recognised that the link between our Charter and how we managed our people was not always clear or consistently applied across our Company. In early 2007, this changed with the launch of our Human Resources Strategy and supporting Management Standards. The strategy clearly enunciates how we connect our values and culture, as defined by our Charter, and our business objectives, as defined by our corporate strategy, to the way we manage our people and assess human resources performance.

Strong leadership is a cornerstone of organisational success; and during the year, we introduced the BHP Billiton Leadership Model, which provides guidelines on what it takes to be a BHP Billiton leader. Importantly, the leadership attributes and styles specified within the Model are based on proven safety excellence and reinforce our belief that good safety leadership is good business leadership.

We’ve continued to work with our contracting companies to encourage similar human resource management practices to ours. We’ve also been pleased to introduce our employee share plan, SharePlus, across the Company, where local regulatory frameworks permit. The plan recognises the contribution made by our people to the Company’s success and is designed to provide an opportunity for them to build a personal financial stake in the Company and share our future growth and success.

In the year ahead, we will continue to embed our people strategy, directing particular attention to accurately identifying and addressing our current and future workforce requirements and improving our approach to managing the careers of our people.

Our desire for superior performance is matched by our goal, and processes to ensure, that each of our people starts their day with a sense of purpose and ends it with a sense of accomplishment. We believe we have the way to do this.

Karen Wood
Chief People Officer

For further details of our people performance during this reporting period, see Employee Relations.
Employee Relations - 2007 Performance

Refer to the following for detail on our employee relations performance over the reporting period:

- Employee Profile
- Turnover
- Training and Development
- Diversity
- Remuneration
- Superannuation and Pension Plans
- Employee Relations
- Child and Forced Labour

For further detail on how we manage employee relations aspects, refer to Socio-Economic > Our Approach.

Employee Profile

In 2007, we employed approximately 39,000 people across the Company (including our owned and operated facilities, as well as our share of unincorporated joint ventures). Of all employees, 99 per cent are employed on a full-time basis.

A breakdown of our employee profile by region and Customer Sector Group is presented in the following graphs.

A total of around 59,000 contractors was engaged at our owned or operated sites in 2007. This compares with some 66,000 in the previous reporting period. This decrease is primarily due to the completion of a number of major projects.
**Turnover**

Total employee turnover in 2006/07 was 12 per cent, or 5,327 employees. As illustrated below, turnover by various employment categories was influenced by the following:

- **Gender** – dominated by male turnover, reflective of the higher percentage of male employees in our workforce
- **Age Group** – no clear differentiation in relation to age
- **Region** – dominated by turnover in Australia, Africa and South America, where the majority of our sites are located.

**Training and Development**

The Company is committed to working with employees to develop career paths that will enable them to reach their full potential, achieve job satisfaction, and maximise their contribution to the Company. As part of this process, BHP Billiton provides employees with on-the-job experience and supports employees in advancing their education and training via internal or external training programs or both.

It is our goal that all employees participate in at least one performance review per financial year, which is typically conducted by the employee’s immediate manager or supervisor. The process is designed to provide balanced and realistic feedback and helps identify each individual’s development and training needs. The process works to differentiate, reward and manage an individual’s performance.
Diversity

The Company is committed to developing a diverse workforce and to providing a work environment in which everyone is treated fairly and with respect and has the opportunity to contribute to business success and to realise their potential. In real terms, this means harnessing the unique skills, experience and perspectives that each individual brings and recognising that these differences are important to our success. As a result, 112 nationalities are currently represented throughout our global workforce.

In the year ending 30 June 2007, some 14 per cent of full-time employees at operated sites and offices were women, which is a similar level to that reported in 2006. Approximately 8 per cent per cent of management positions are held by women.

The Company has identified some specific sites and countries where diversity issues are particularly sensitive. Examples of some ongoing policies or programs undertaken to address employment diversity issues are described below.

Employment Equity in South Africa

To address historical issues of inequality in South Africa, BHP Billiton South Africa supports BEE legislation through the implementation of an Employment Equity Policy. The Policy aims to redress previous disadvantages, disempowerment and employment imbalances through accelerated development, training and education programs.

As an outcome of this policy, we have set targets to increase representation of those people who are classified as ‘designated groups’ by the South African Employment Equity Act. Designated groups include African, coloured and Indian people, disabled people and white females. In 2007, our representation rate of designated groups in positions ranging from Chief Operating Officer to middle management level was 43 per cent, which exceeds our target of 40 per cent.

Current designated group representation across our South African management levels is as follows:

- 50 per cent representation at top management level (FY06: 40 per cent)
- 29 per cent representation at senior management level (FY06: 27 per cent)
- 46 per cent representation at middle management level (FY06: 40 per cent).

While we have made significant progress, the external pool of skilled and experienced executives in our industry is limited. Our focus is geared towards developing the pipelines of talent into the organisation, and we have launched a
number of supporting initiatives.

All operations in South Africa have apprenticeship programs that provide technical and personal training for tradespeople (artisans) and technical university students. These courses are generally one to two years in duration, depending on a student’s individual project. Tailored programs are designed at the assets rather than enforcing a standard approach across the Company.

Indigenous Employment and Training

We recognise Indigenous employment and training as an important issue with many of the communities in which we operate; and, as has been reported in previous years, we undertake a number of initiatives including:

- BHP Billiton Iron Ore is committed to achieving 12 per cent Indigenous employment by 2010. A range of programs has been developed to assist in achieving this target, including education partnerships to support local Indigenous students, support for local Indigenous business partnerships and targeted selection for entry level positions, including traineeships and apprenticeships. Major contractors and service providers are also required to commit to achieving the 12 per cent goal, and Indigenous contracting guidelines have been developed to further identify and assess business opportunities for Indigenous contracting businesses. During the year, Iron Ore’s Indigenous employment rate reached 8.23 per cent for employees and 9.59 per cent for contractors. Read more: Indigenous contracting 2007 case study.
- Groote Eylandt Mining Company has approximately 17 per cent of its permanent workforce from Indigenous descent. A specific employment strategy is in place in the Rehabilitation and Mine Services department that combines employment and training activities.
- The EKATI Diamond Mine, in the Northwest Territories (NWT) of Canada, has a number of initiatives related to Indigenous employment and training. The operation has exceeded its target of 31 percent of Northern Aboriginal people employed within its workforce, with 92 per cent of those employed occupying semi-skilled, skilled and professional positions. BHP Billiton and its contractors are committed to the development of Aboriginal and other Northern residents of the NWT. To help meet this commitment, BHP Billiton sponsors a wide range of employee training programs and provides apprenticeships; and in 2006, 90 per cent of the apprentice employment places was occupied by Aboriginal and other Northern residents. Read more about EKATI’s approach to employee education in our 2007 case study.
- New Mexico Coal operation in the United States has legal and contractual obligations to ensure that positions at our Navajo Mine are filled with Navajo tribal members, where a suitably qualified candidate is available. The operation has voluntarily extended Native American preference across the San Juan Coal Company and also for any New Mexico support services.

Remuneration

Our approach to remuneration seeks to ensure that remuneration is aligned to market conditions relevant to the industry and location where we are operating and enables individuals to see the link between their performance and the level of reward they receive.

During the reporting period, all Company employees earned greater than the stipulated minimum wage in the countries where they worked. The Company’s remuneration policy and practices do not differentiate based on gender.

Superannuation and Pension Plans

Defined benefit pension schemes

The BHP Billiton Group has closed all defined benefit schemes to new entrants. Existing defined benefit pension schemes remain operating in Australia, the Americas, Europe and South Africa. Full actuarial valuations are prepared and updated annually to 30 June by local actuaries for all schemes. The Projected Unit Credit valuation method is used. The Group operates final salary schemes that provide final salary benefits only, non-salary related schemes that provide flat dollar benefits and mixed benefit schemes that consist of a final salary defined benefit portion and a defined contribution portion. The following sets out details in respect of the Group’s defined benefit pension schemes, as recognised in the Company’s 2007 balance sheet:
Defined benefit post-retirement medical schemes

The BHP Billiton Group operates a number of post-retirement medical schemes in the Americas and South Africa. Full actuarial valuations are prepared by local actuaries for all schemes. All of the post-retirement medical schemes in the Group are unfunded. The following sets out details in respect of the Group’s post-retirement medical schemes, as recognised in the Company’s 2007 balance sheet:

### Year ended 30 June 2007

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<td>Net liability recognised in the balance sheet</td>
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<td>55</td>
<td>(45)</td>
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#### Amounts in the balance sheet as at 30 June 2007

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<tbody>
<tr>
<td>Assets</td>
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<tr>
<td>Liabilities</td>
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#### Year ended 30 June 2006

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<tr>
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<tr>
<td>Adjustment for employer contributions tax</td>
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<td>Net liability recognised in the balance sheet</td>
<td>31</td>
<td>147</td>
<td>79</td>
<td>(26)</td>
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#### Amounts in the balance sheet as at 30 June 2006

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<table>
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<tbody>
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<td>Assets</td>
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<tr>
<td>Liabilities</td>
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<tr>
<td>Net liability recognised in the balance sheet</td>
<td>381</td>
<td>147</td>
<td>79</td>
<td>(26)</td>
</tr>
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</table>
Employee Relations

In line with our commitments to uphold the UN Universal Declaration of Human Rights and the UN Global Compact, we fully recognise the right of freedom of association by our employees.

The graph provides a breakdown of the percentage of employees at operated sites and offices in each region who are covered by collective bargaining agreements. In 2006/07, around 49 per cent of our global workforce were covered by collective agreements, which is similar to that reported in 2005/06.

Our policy is to consult with employees in a timely manner on major organisational changes that affect their position and ensure processes are in place at all locations to equitably address any issues. Consultation occurs according to the process and timeframe specified by local regulation and relevant terms of employment.

Child and Forced Labour

We are not aware of any BHP Billiton owned or operated site using child or forced labour during the reporting period. All sites are conscience of, and apply, the requirement to not employ anyone under minimum working age in their jurisdiction.
Case Studies

The following case studies are examples of issues, initiatives, projects and programs across the Group that highlight some of the health opportunities and challenges faced by our operations. Case studies are also on safe workplaces, environmental commitment, social responsibility and our socio-economic contributions.

International Graduate Recruitment Program

Our International Graduate Recruitment Program aims to recruit high calibre engineering and science graduates from the emerging regions and diverse cultures.

High School Upgrading Course At EKATI Supports Employee Development

Our EKATI diamond mine’s Workplace Learning Program assists employees to gain the essential skills needed to do their jobs safely and effectively.
High School Upgrading Course At EKATI Supports Employee Development

A Workplace Learning Program at our 80 per cent owned EKATI Diamond Mine in the Northwest Territories, Canada, assists employees to gain the essential skills they need to do their jobs safely and effectively. This initiative allows employees to work towards completing their high school (secondary school) equivalency through the Canadian General Educational Development (GED) testing program.

Over the eight-month GED course, participants attend classes and sit for tests that evaluate their skills in reading, writing, mathematics, social studies and science. Those who pass receive a High School Equivalency certificate of Grade 12.

One of the successful candidates, Darrell Tremblay, overcame significant barriers to achieve his long-time goal of gaining the certificate. Darrell has subsequently undertaken higher education and has become a coach and mentor to other employees - particularly Northern Aboriginal employees.

The Opportunity

The effort employees put into achieving their high school certificate is respected by the Company. They can gain more independence and are often motivated to further their formal education and pursue a specific career path. Outside work, they can be more confident about participating in local community initiatives and can serve as role models in encouraging children to stay at school.

For the Company, the benefits include an increase in skills at the work site, with a consequent boost in mentoring opportunities that can assist with maintaining a safe and healthy work place.

The Darrell Tremblay Story

Darrel is a heavy equipment trainer at EKATI who, at age 53, applied for the GED course. He had left school at 16 and, while obtaining practical skills, often felt he was of less value than work colleagues with academic qualifications. He says: "There was always the thought that one day I would finish my studies but there never seemed to be enough time. Now here I am 40 years later with a chance of a lifetime, to possibly be the inspiration for my grandchildren to be the best that they can be, and to show them that if you believe in yourself, you can succeed in anything that you desire."

During the course, Darrell encouraged shy employees who felt they lacked ability and shared with them, and many others, the stories of how he overcame his struggles. Since gaining his certificate, Darrell has enrolled in an Adult Education program so that he can combine his equipment training experience with teaching adults.
Quotes from key EKATI Personnel

"Darrell worked so hard. Things did not come easy to him. If he didn’t get something the first time, he stuck with it and kept positive until it made sense to him. He encouraged the other students in the group to push themselves harder and further."

Susan Devins, Adult Educator

"Darrell is a prime example of a coach who leads by example. The dedication, commitment and perseverance that he has shown to improve his theoretical skills go a long way towards his desire to help others aspire to their full potential."

Rene Liebaert, Mine Operations Team Leader

"I have the utmost admiration for someone who, on his own personal time and on his own personal initiative, invests the energy to return to school after a 40-year absence. Darrell has always been a role model on the job and he is now a role model off the job."

Roy Lenardon, Vice President Human Resources, External Affairs and Training

How We Did It

The GED high school equivalency course is open to EKATI employees and contractors. EKATI is part of our Diamonds and Speciality Products Customer Sector Group. Participants attend 24 hours of classes over eight months on their own time. They are allowed 10 hours of Company time to sit final exams.

Since the initiative began in 2003, 48 employees have completed the GED course. Of these, 40 per cent (19 candidates) are Northern Aboriginal employees. This is a significant achievement for all these individuals as not only have they performed a full-time job but also, through their dedication, undertaken studies and gained their High School Equivalency Certificate.

Going Forward

The opportunities that have opened up for Darrell Tremblay have paved the way for others to come forward and have a go at developing their skills. The GED course will continue as a key component of the Workplace Learning Program at EKATI.
International Graduate Recruitment Program

The resources sector has, over recent years, been experiencing strong market demand for raw materials. This has led to significant increases in project activities across the sector, bringing with it challenges in recruiting and retaining skilled labour.

The issue has not been unexpected. While labour shortages have not caused delays on Company projects, they have created additional cost pressures; and we have been working to mitigate these effects wherever possible.

Our overall business strategy includes the development of future growth opportunities in areas including Russia, Africa, India, Indonesia, China, Mongolia and Brazil. To support this strategy, an International Graduate Recruitment Program was developed and commenced in 2006.

The program aims to recruit high-calibre engineering and science graduates from the emerging regions and also to develop graduates from diverse cultures who can gain international operating experience with the intention of returning to our sites in their home regions.

Since its implementation in 2006, the program has received considerable attention and direction from the Company’s senior management as a means of addressing the labour skills shortage currently being experienced in the resources industry. It is also a strategic initiative to assist in our workforce planning in future growth regions. The program supports the Charter and our value of respect for each other – the embracing of diversity, enriched by openness, sharing, trust, teamwork and involvement.

Chief Executive Officer, Charles Goodyear, says: "The International Graduate Recruitment Program helps ensure that the Company’s recruitment targets are consistent with current and future workforce planning requirements and that we are effectively attracting and retaining people. The recruitment strategies aim to broaden our access to a greater number of candidates from a more diverse range of regions and industries. People are the foundation of any organisation. By attracting and retaining a globally diverse, highly motivated and first-class workforce, we secure and strengthen the future of our company for our shareholders, communities and employees."

The program’s intake targets have been exceeded; and most of the graduates have already commenced work in our established operations in Australia, South Africa, Canada and South America.

The Challenge

Our challenge is to secure the skills and labour resources required for the future of our operations and growth of our business.

A shortage of skilled labour across the global resources sector has been a growing issue since the global economic boom, which has resulted in higher-than-expected demand for commodities.
For example, competing projects in Australia and overseas have put considerable pressure on Australian labour markets, particularly skilled labour. Research conducted by the Minerals Council of Australia indicates that:

- By 2015, the minerals sector in Australia will need to employ an additional 70,000 workers.
- The largest shortages will be in non-professional occupations, which are also likely to be the slowest growing.
- The fastest jobs growth will occur between 2006 and 2010 creating potential for a rapid onset of significant labour shortages and causing shortages to continue as labour demand exceeds supply.
- There is a commodities boom - KPMG has reported that 256 projects valued at US$1.31 trillion are planned to commence.
- Demographic studies indicate a continuing decrease in labour force growth and an ageing workforce.
- Education is the key to increasing the number of skilled workers.

**How We Are Doing It**

A list of emerging regions has been determined by our Business Development group and approved by the Office of Chief Executive. Research has been conducted within each region to determine:

- The graduate pool.
- Universities and disciplines offered.
- Scholarship and sponsorship opportunities.
- Processes for establishing key relationships with educational institutions and industry bodies.

The Company supports universities with sponsorships and scholarships to help underpin the sustainability of the education infrastructure that supplies engineering and science graduates. Student support ranges from secondary school bursaries through to PhD level scholarships.

The students who enter our International Graduate Recruitment Program are provided with an extensive cultural transition program that has been tailored specifically for the requirements of the graduates and the Company.

The program is designed to facilitate the international graduates’ transition and integration:

- From their role as a student to that of employee.
- From their home country to the country in which they will be employed.
- Into their local social environment.

Following the completion of the cultural transition program, the graduates commence their employment and become part of the Assets Graduate Program, including the Company’s two-year graduate development program.

**Going Forward**

Given its success in recruiting graduates in emerging regions during 2006, the program will continue in 2007 and the graduate intake will be substantially increased.
Socio-Economic

The socio-economic aspects of our operations relate to how we manage our people and contribute to the economies within which we operate. Our priorities are:

- Our relationships with our employees and contractors: development of our leaders; diversity, including indigenous employment; training; remuneration and other benefits of our employees.
- Our relationships with our suppliers: adopting a fair and equitable procurement process in existing and emerging markets, monitoring performance against our HSEC Management Standards, fostering local suppliers and engaging in dialogue.
- Our economic contribution to society: the payments we make to governments, including taxes and royalties, and the added value we provide as a result of our operations and their broader contributions through aspects such as payments to suppliers and employees.

For details on our approach to the management of these aspects, see:

- Supply
- Economic Contributions
Supply

We recognise that our supply chain can make a significant contribution to our sustainability and that our supply relationships can add to or detract from our reputation. Therefore, we endeavour to support and engage our suppliers and contractors in the importance of meeting the requirements of BHP Billiton’s Sustainable Development Policy (PDF 28 KB).

Governance

Our approach to the management of HSEC aspects within the supply chain is specified within HSEC Management Standard 11 (Suppliers, Contractors and Business Partners). We seek to ensure that ‘the contracting of services, the purchase, hire or lease of equipment and materials, and activities with partners are carried out so as to minimise any adverse HSEC consequences and, where possible, to enhance community development opportunities.’

The BHP Billiton Guide to Business Conduct is referenced in all local, regional and global supply contracts. Our Group Audit Services conducts annual reviews of key supply staff members to confirm their knowledge and appropriate application of the Guide and acceptance of the Guide requirements by their suppliers.

Selection Process

BHP Billiton operates a fair and equitable procurement process. Our selection process aims to clearly inform potential suppliers of our expectations, our policies and processes, and our requirements of them in relation to HSEC.

Prior to entering a particular market or region, we conduct a broad assessment of supplier capability and performance standards, including sustainability performance. Based on our broad assessment, contractual agreements with specific suppliers require them to adhere to all applicable laws, regulations, and industrial awards and agreements, including all applicable health, safety, environment and community laws and regulations.

Suppliers and contractors are provided with our HSEC Management Standards (PDF 148 KB) before work commences, with the expectation that the Standards will be met and that key HSEC compliance requirements will be noted in contractual agreements. Our HSEC Management Standards require our contracted suppliers to adhere to Standard 8, Business Conduct, Human Rights and Community Development, including specific requirements to demonstrate compliance with the UN Universal Declaration of Human Rights and our Guide to Business Conduct.

This process is our way of assessing whether our standards for environmental performance, occupational health and safety, product and service quality, and human rights are understood.

Monitoring Performance

Performance monitoring of our suppliers and contractors is an important aspect of our ongoing relationships. Managing contractors and suppliers more effectively at our operations has been identified as an improvement opportunity for the Company. Our objective is to ensure that standards and procedures adopted by suppliers and contractors are consistent with our standards. Steps to ensure improved consistency in this area include:

- The contract work is to be assigned a BHP Billiton manager or supervisor as the single point of reference.
- BHP Billiton line management is to allocate adequate time and resources to manage the day-to-day activities of the contract.
- Line management is to sign off on the work standards and how they are to be carried out and shall ensure via timely workplace inspections that the work is being carried out according to the agreed standards.
- Line management is to ensure that BHP Billiton’s expectations are clearly and effectively communicated to all contractors and their respective organisation’s leadership.
- Line management is to ensure that each contractor’s on-site manager is introduced to the responsible BHP Billiton supervisor who has single-point accountability and that effective systems of communication are in place.

Line management is to ensure that each contractor’s on-site manager is introduced to the responsible BHP Billiton supervisor who has single-point accountability and that effective systems of communication are in place.
We have a defined process of managing and escalating any issues of contact breach, including agreed remedial action plans to address systematic performance issues and a defined dispute process.

Critical supply relationships are managed by dedicated supply managers. These managers take advice from BHP Billiton Legal and HSEC functions on the appropriate treatment of confirmed cases of contract breach.

**Fostering Local Suppliers**

We recognise the value to local economies that can be delivered through our activities and, wherever possible, encourage the development and the use of local suppliers and contractors. We define a "local" supplier as either from the community where the mine is located, or where an operation is fly-in/fly-out, from the nearest appropriate regional centre.

Another facet of our approach is the flexibility to recognise site- and region-specific procurement needs and adapt accordingly. This is exemplified by the Preferential Procurement Policy for BHP Billiton in South Africa.

**Region-specific Supply Initiatives**

**South Africa**

Black Economic Empowerment (BEE) legislation has been introduced in South Africa to address inequalities created by past history, particularly the exclusion of black African people from participating in the country’s economy. The Company has been responding to the legislation through the implementation of our BEE Procurement Policy, which was introduced in 2003, and the establishment of a central BEE Supply Unit. The BEE Procurement Policy ensures that a standard set of BEE definitions and classifications are applied in the region and details how BEE spending will be calculated. The objectives of the BEE Supply Unit are to:

- Provide access by black African suppliers to the Company’s procurement activities
- Ensure that all buying organisations within the Company have the support to successfully achieve legislated procurement targets.

The BEE Procurement Policy makes provision for BEE development and support. The BEE Supply Unit has entered into a Memorandum of Understanding and 50:50 funding arrangement with South African International Business Linkages (SAIBL), a USAID-funded NGO with experience in developing small, medium and micro enterprises. SAIBL, which has a network of service operators, evaluates the development needs of BEE suppliers and facilitates appropriate training intervention. The success of intervention is evaluated and monitored by BHP Billiton contract managers.

Going forward, our approach to reporting on BEE vendor status will be aligned to the Codes of Good Practice, promulgated on 9 February 2007. Read more about our approach to Employment Equity in South Africa.

**Emerging Markets**

Our Emerging Markets Team aims to identify potential emerging market suppliers exhibiting high-capability credentials.

An emerging market supplier is a supplier that, as a result of operating in a growth-oriented regulatory or industrial framework and relatively low-cost business environment, is able to offer goods and services more competitively than suppliers operating within more mature markets.

The Emerging Markets program is a long-term strategy. The Company does not intend to source all products and services from emerging markets. We recognise that certain commodities and categories are better candidates for emerging market sourcing than others. The Emerging Markets Program also presents an opportunity to seek greater transparency from current suppliers. Where current suppliers can demonstrate that they are buying from emerging markets, we can use this to demonstrate to relevant governments that we are supporting local economies.

Our emerging markets focus is on developing resources, systems and processes that will enhance our ability to screen the sustainability performance of potential suppliers in emerging markets, enabling us to effectively engage with these suppliers.
Building on a broad supplier screening process, we are further developing our approach to business conduct and human rights screening of suppliers in emerging markets.

The application of our HSEC Management Standards when identifying suppliers from emerging markets is critical. Our approach demonstrates we select suppliers after careful consideration of both commercial factors and observed sustainability performance.

The initial supplier identification process seeks evidence of dedicated management and systematic attention to human resources, safety and environmental issues before proceeding to site visits. Where our assessment of supplier performance in emerging markets indicates an elevated level of human rights risk, we conduct further proactive screening in accordance with our HSEC Management Standard 8 (Business Conduct, Human Rights and Community Development).

Indigenous Supply

We recognise that our support of Indigenous contractors and businesses is important for many of the communities in which we operate. We have Indigenous supply programs and targets in place at many of our global operations. Read more in our 2007 case study.

Human Rights and Supply

Potential human rights issues are identified and addressed at various phases of the supplier selection, engagement and monitoring process as described in the preceding sections.

While our mandatory requirement to consider the BHP Billiton Guide to Business Conduct and HSEC Management Standards in all supply contracts at an asset, regional and global level addresses a broad range of potential supply chain human rights issues, we recognise that further work is required to assure and assess our performance in this area.

In 2008 we aim to investigate appropriate means of promoting human rights within our sphere of influence, with a focus on specific high-risk areas. For example, we are further developing our approach to business conduct and human rights screening as part of our site assessment program for emerging markets.
Economic Contributions

BHP Billiton recognises that the socio-economic impact of the extractive industries sector can be significant; and in recent years, there has been an increasingly intense debate on and scrutiny of the broad sustainable development and socio-economic implications of the mining, minerals and petroleum sectors.

Socio-economic impact assessment

We actively seek to understand our socio-economic impact on local communities and host regions through our participation in the International Council of Mining and Metal’s multi-stakeholder Resource Endowment Initiative (REI). Launched in 2004 in partnership with the United Nations Conference on Trade and Development (UNCTAD) and the World Bank, the Initiative aims to enhance industry’s socio-economic contribution to the countries and communities where companies, like BHP Billiton, operate by better understanding the factors that either inhibit or promote social and economic development linked to large-scale mining projects.

The findings from our initial assessments are presented in Economic Contributions>2007 Performance.

Transparency in Payments to Governments

BHP Billiton supports the Extractive Industries Transparency Initiative (EITI), a global initiative to improve governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas, and mining. The Initiative works to build multi-stakeholder partnerships in developing countries in order to increase the accountability of governments.

Over 20 countries have now committed to the EITI principles and criteria, including two countries in which we operate, namely Peru and Trinidad and Tobago. Both countries are in the process of establishing procedures and institutions to implement EITI, and we are committed to supporting and cooperating in the implementation of their Country EITI Work Plans. In the interim, our payments to governments are disclosed on a regional basis in Economic Contributions>2007 Performance.
2007 Performance

Message from the Senior Management on Socio-Economic Contributions

Key Successes and Shortcomings

The current minerals boom is good for our shareholders and our host communities. Our host communities are benefiting from the greater levels of taxes and royalties paid to host governments, our commitment to using local labour where feasible and through our commitment to spending 1 per cent of our pre-tax profit on community programs. In 2006/07, this commitment has resulted in a significant increase in community investment spending as our profits increased.

The boom has been, in part, initiated by a growth in demand in developing countries. Our commodity products are a critical input to this development process. However, we remain mindful that we operate in a cyclical industry and that local mineral resources are finite. We are committed to ensuring that our community programs leave a positive, lasting legacy to our host communities.

Socio-economic risks and opportunities

As we continue to further expand our interests in developing countries, we recognise the opportunity to assist in the socio-economic development of certain regions by increasing our local supply spend. The ongoing strong demand for commodities, however, has resulted in shortages of supply across a number of inputs for our businesses. To alleviate the impact of these constrained supply markets, BHP Billiton is proactively seeking alternate sources of supply, including those in emerging market economies. In addition to securing supply from these markets, focus has been on actively monitoring HSEC standards with our selected suppliers to support positive socio-economic impact through our in-bound supply chain.

Systems and Structural Improvements

In 2006/07 we have continued to implement projects to enhance our compliance with the requirements of the US Sarbanes Oxley legislation. We also continue to review the processes and systems through which our reporting data is collated and consolidated within the Group. Some of these initiatives have been piloted in the production of the 2006/07 financial information for our Annual Report, Annual Review and this Sustainability Report, with the intent to improve the quality of financial data within the Group, the efficiency of production and the internal control over financial reporting.

This year, despite definitional inconsistencies, we have continued to report our economic contribution using the Economic Value Generated and Distributed model outlined in the Global Reporting Initiative (GRI) 2006 Sustainability Reporting Guidelines. Where possible, data have been extracted from our audited financial statements.
Key Strategies

Working closely with our suppliers and contractors continues to be a major focus for us. Some 60 per cent of our workforce are contractors, and it is essential that our values and standards are aligned. This year we sought to actively engage with our contractor workforce on supply and safety improvement opportunities.

In conjunction with the International Council of Mining and Metals, we are developing our approach to measuring and understanding our socio-economic impact in our host communities around the world. Trialled at two of our operations in 2006, with further pilot work planned with our operations in 2007, we aim to adopt the lessons from these preliminary activities into a Company-wide approach to measurement, assessment, reporting and improvement.

Ian Wood
Vice President Sustainable Development and Community Relations

Nigel Chadwick
Group Financial Controller

Chris Crozier
Vice President Global Supply
Supply 2007 Performance

By creating opportunities for local businesses to work with BHP Billiton, we foster socio-economic sustainability in the areas in which we operate. We recognise the importance of engaging and encouraging our stakeholders, including our suppliers, to share responsibility for meeting the requirements of our Sustainable Development Policy and HSEC Management Standard 11 (Suppliers, Contractors and Partners).

Throughout BHP Billiton, significant effort is put into honouring our Sustainable Development Policy commitments. Examples of our work in this area can be read in our 2007 case studies:

- Black Economic Empowerment Supplier Development Programs in South Africa
- Accelerating the culture of HSEC in Chinese supply markets
- Indigenous contracting in the Pilbara, Australia.

Supply Spend

Total Company spend on goods and services during the 2007 reporting period (chart below right) was in the order of US$17 billion, on an equity share basis. The US$4 million increase in spend from the previous reporting period was due to rising prices of supplies, increases demand for our product and associated capital expenditure on expansion projects.

Distribution by our businesses of our total spend on goods and services occurs at a local, national and international level (chart below left). Local spend refers to spend within the communities in which we operate and the regions, such as states and provinces, where our operations are located. National spend refers to spend within the home country of operations, excluding local spend. International spend refers to spend external to the home country. Our approach is to use local suppliers wherever possible. In 2006/07, our distribution of spend with local suppliers increased to 30 per cent, in part due to an increase in local fabrication activities associated with capital expansion projects.

Management Systems Update

In 2005/06, we completed a project to improve the integration of environmental and social considerations into the sourcing processes via the rollout of our Global Sourcing Guide. The rollout of the Guide has continued in 2006/07.

In 2006/07, we developed our Supplier Relationship Guide. This document provides guidance for our supply managers
around the world on how to effectively engage strategic supplies and align their activities with BHP Billiton’s Corporate Objective, including our Sustainable Development Policy. The Guide has been endorsed and will be rolled out globally in 2007/08.

This year, we also developed our Responsible Sourcing Framework. The Framework defines our Company-wide approach to socially, commercially and ethically responsible sourcing and is aligned to our Company Charter and Sustainable Development Policy. Some aspects of the Framework are:

- A clear leadership commitment
- Definition and support of special interest groups, such as black economic empowerment (BEE); small, medium and micro enterprises (SMME) development; and economic transformation and local participation initiatives
- A stewardship approach involving the supply chain in a shared responsibility for minimising the environmental and human impacts that result from the production, use and disposal of products
- The requirement for a clear code of conduct for all sourcing relationships based on risk exposure and potential impact on the society.

The Framework will be endorsed and implemented in 2008.

Seeking Supplier Views

With some 60 per cent of our workforce being contractors, a key focus of our safety management systems is working closely with those contractors to ensure their safety approach and management systems align with ours. During the year, we conducted additional contractor workshops in Africa, the Americas and Australia to discuss our safety approach and how we can work together to drive improvement. Read more: Contractor Partnering and Engagement.

Regional Supply Initiatives

South Africa

Our Black Economic Empowerment (BEE) Supply Unit in South Africa reports on nearly 900 suppliers. The graph right illustrates the trend in BEE spending in recent years.

Read more about our experience with individual supplier development initiatives in our 2007 case study: Black Economic Supplier Development Programs in South Africa.

Emerging Markets

In 2006/07, our Emerging Markets Team continued to develop their approach to identifying and screening potential emerging market suppliers exhibiting high-capability credentials.

Read more about our approach to HSEC screening of potential suppliers in our 2007 case study: accelerating the culture of HSEC in Chinese supply markets.

Indigenous Supply

In 2006/07, our Iron Ore group in Western Australia implemented an Indigenous Contracting Strategy to increase the number of economic development opportunities available to Indigenous people in the Pilbara region. Read more in our 2007 case study: Indigenous Contracting in the Pilbara – building sustainable indigenous economic development.

We have long-running Indigenous employment and training programs and targets at many of our global operations. Read more about our performance in Indigenous Employment and Training.

Supply and Human Rights

The Company has made a public commitment to the UN Universal Declaration of Human Rights. This commitment is supported by our Company Charter, Guide to Business Conduct and Sustainable Development Policy. We believe we have not violated these rights during the reporting period.
Economic Contributions - 2007 Performance

The economic contribution we make to society is much more than the financial profits we derive. Our contribution includes the value that flows from the broader contributions of our operations, such as payments to our employees and suppliers and disbursements to governments, including taxes and royalties.

The following provides an outline of:

- Our Financial Performance
- The broader economic contributions we make to society through our Economic Value Generated and Distributed.

Our Financial Performance

The data in this section deals with the financial performance of the BHP Billiton Group and covers both operated assets and our share of jointly controlled entities. Details on the financial definitions and additional performance information are available in the Annual Reports. Summary financial information for the Group is presented in the following table.

Summary financial information for the BHP Billiton Group US$ Million (Year ending 30 June 2007)

<table>
<thead>
<tr>
<th></th>
<th>2006/7 (1)</th>
<th>2005/6 (1)</th>
<th>2004/5 (1)</th>
<th>2003/4 (1)</th>
<th>2002/3 (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (2)</td>
<td>47,473</td>
<td>39,099</td>
<td>31,150</td>
<td>24,943</td>
<td>17,506</td>
</tr>
<tr>
<td>Underlying EBIT (3)</td>
<td>20,067</td>
<td>15,277</td>
<td>9,921</td>
<td>5,488</td>
<td>3,481</td>
</tr>
<tr>
<td>Statutory EBIT - Profit from operations (4)</td>
<td>18,401</td>
<td>14,671</td>
<td>9,271</td>
<td>5,020</td>
<td>3,462</td>
</tr>
<tr>
<td>Attributable Profit (Incl Exceptional items)</td>
<td>13,416</td>
<td>10,450</td>
<td>6,396</td>
<td>3,379</td>
<td>1,901</td>
</tr>
<tr>
<td>Attributable Profit (Excl Exceptional items)</td>
<td>13,675</td>
<td>10,154</td>
<td>6,426</td>
<td>3,510</td>
<td>1,920</td>
</tr>
<tr>
<td>Net operating Assets</td>
<td>41,101</td>
<td>35,055</td>
<td>29,986</td>
<td>21,706</td>
<td>20,711</td>
</tr>
<tr>
<td>Income Tax paid</td>
<td>3,682</td>
<td>3,152</td>
<td>1,476</td>
<td>1,337</td>
<td>1,002</td>
</tr>
<tr>
<td>Royalty related taxation paid</td>
<td>554</td>
<td>659</td>
<td>551</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Govt royalties paid or payable</td>
<td>971</td>
<td>776</td>
<td>565</td>
<td>421</td>
<td>352</td>
</tr>
<tr>
<td>Dividends declared in respect of the period</td>
<td>2,702</td>
<td>2,160</td>
<td>1,695</td>
<td>1,617</td>
<td>900</td>
</tr>
<tr>
<td>R&amp;D expenditure</td>
<td>169</td>
<td>76</td>
<td>33</td>
<td>19</td>
<td>40</td>
</tr>
<tr>
<td>Underlying EBITDA to interest cover (times) (2) (3) (5) (6)</td>
<td>54.0</td>
<td>44.3</td>
<td>51.7</td>
<td>21.1</td>
<td>13.3</td>
</tr>
<tr>
<td>Debt to equity or gearing ratio</td>
<td>22.5%</td>
<td>25.2%</td>
<td>32.8%</td>
<td>25.7%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>27,729</td>
<td>21,088</td>
<td>14,059</td>
<td>10,461</td>
<td>8,580</td>
</tr>
</tbody>
</table>

(1) FY2005, FY2006 FY2007 data have been calculated on the basis of IFRS. Prior periods have been calculated on the basis of UKGAAP

(2) Including the Groups share of jointly controlled entities revenue

(3) Underlying EBIT is earnings before net finance costs and taxation, and jointly controlled entities' net finance costs and taxation and any exceptional items.

(4) Statutory EBIT - Profit from operations includes exceptional items

(5) Underlying EBITDA is underlying EBIT before depreciation, impairments, and amortisation of both group companies and jointly controlled entities

(6) For this purpose, net interest excludes capitalised interest, the effect of discounting on provisions and other liabilities, fair value change on hedged loans, net of hedging derivatives and exchange differences arising from net debt.

The graphs below show the Company’s diversification by market (revenue) across geographic regions and a breakdown of earnings by Customer Sector Group.
Economic Value Generated and Distributed

Economic value generated and distributed, as defined in the Global Reporting Initiative (2006 version), provides an economic profile or context of the reporting organisation and a useful picture of direct monetary value added to regional economies.

The measure includes revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and to governments. The breakdown of this amount by category is presented below and shows expenditure by region to help to quantify the regional economic contributions of the Company. Refer table below.
Economic value generated is calculated as economic value generated less economic value distributed.

Revenues include other income amounts. Amounts include revenues and costs attributable to jointly controlled entities and are consistent with the Company’s financial reporting of elements comprising underlying EBITDA. Underlying EBITDA is earnings before net finance costs and taxation, jointly controlled entities' net finance costs and taxation and any exceptional items, and Group and jointly controlled entities' depreciation, impairments and amortisation. The amounts are determined on an accruals basis and extracted from the audited financial statements.

Operating costs relate to expenses recognised in the financial statements. They include expenditure paid to suppliers and contractors for materials and services, and exclude community investment, employee wages and benefits, payments to governments, depreciation, amortisation and impairments.

Interest expense on debt for BHP Billiton controlled entities and jointly controlled entities, determined on an accruals basis.

The Extractive Industries Transparency Initiative (EITI) is gaining momentum as an international initiative bringing together companies, investors, governments, international financial institutions and civil society to improve disclosure and tracking of revenues in developing countries.

We remain supportive of EITI but note that implementation in the countries where we operate has not yet progressed to the point where mining companies can commence participation. We remain committed to constructive engagement with our host governments as they seek to progress implementation.

During the reporting period, we continued to be actively involved in the International Council on Mining and Metal Resource Endowment Initiative (REI). Using the International Council on Metals and Mining document 'Mineral Resource Endowment to Foster Sustainable Development' as a basis, we have also developed a measurement process and toolkit for our operations to measure their socio-economic contributions. After our initial pilot at two South American assets in 2006, the tool was further trialled in 2007 at four operations (Cerro Colorado, Chile; Mozal, Mozambique; and GEMCO and Iron Ore, Australia) and is expected to be implemented across the Company in 2008.
Case Studies

The following case studies are examples of issues, initiatives, projects and programs across the Group that highlight some of the socio-economic opportunities and challenges faced by our operations. Case studies are also on healthy people, safe workplaces, environmental commitment, social responsibility, and our people.

Black Economic Empowerment Supplier Development Programs In South Africa
Since the introduction of our Black Economic Empowerment (BEE) Procurement Policy in 2003, and the establishment of a central BEE Supply Unit, the proportion of the Company’s spend with BEE-compliant suppliers increased from 4 per cent in 2003 to 32.8 per cent in 2006.

Indigenous Contracting In The Pilbara - Building Sustainable Indigenous Economic Development
Our Iron Ore Customer Sector Group in Western Australia has implemented an Indigenous Contracting Strategy to increase the number of economic development opportunities available to Indigenous people in the Pilbara region.

Accelerating The Culture Of HSEC In Chinese Supply Markets
Through the development of our Procurement Hub in Shanghai, China, we aim to ensure responsible procurement practices in emerging markets that reflect our commitment to sustainable development.
Black Economic Empowerment Supplier Development Programs In South Africa

Black Economic Empowerment (BEE) legislation has been introduced in South Africa to address historical inequalities, particularly the exclusion of black people from participating in the country’s economy. We have responded to the legislation with the implementation of our BEE Procurement Policy in 2003 and the establishment of a central BEE Supply Unit.

The proportion of the Company’s spend with BEE-compliant suppliers increased from 4 per cent in 2003 to 32.8 per cent in 2006. The requirements of the BEE legislation saw high-spend suppliers, such as Scharrighusen, fulfill BEE compliance through transformation premised on selling equity to black investors and rolling out management control initiatives. Having few progressive and competent black-owned suppliers on our database called for enterprise development.

The BEE supply strategy, though largely guided by the Company Charter and the principles of sustainable development, also answers to government transformation legislation, thereby creating long-term value through innovative interventions that create jobs and support sustainable development of the South African economy.

The Opportunity

Supplier development workshops conducted at our South African assets during the year highlighted emerging local suppliers who were increasing their participation in the resources industry.

These suppliers are making a significant contribution to local economic development, as reflected by increases in local procurement, sustainable jobs and skills development for local people.

How We Are Doing It

Below are three examples of supplier development initiatives and employee empowerment within our Aluminium, Manganese and Energy Coal Customer Sector Groups. While these examples highlight initiatives by former employees, enterprise development support is also available to other emerging local suppliers.

Aluminium – Bayside

After 17 years working with our Bayside Aluminium operation, Sibusiso and some colleagues discontinued their employment to start up Sizehago, a BEE company supplying spare parts. By 2004, the business had diversified into painting and labour hire services.

Sibusiso said: "BHP Billiton was the resourceful bridge I used to cross from the employee to the employer realm!"

The table below shows how Sizehago has grown over the past three years in terms of number of employees, annual turnover, customer base and scope of services. In the third quarter of FY07, Sizehago will finalise negotiations on a US$270,000 services contract it has been awarded.

Following the departure of two partners, Sibusiso has recruited two reputable engineers to diversify Sizehago’s skills offering to include engineering services.

Manganese – Hotazel

Ishmael Morongwe and John Gaabuse, former employees of Samancor with over 32 years mining experience, own J&J Business Enterprises, which commenced trading in 2004. Their primary offering included the full range of construction and maintenance services for underground and surface mines.
As the table below shows, with Hotazel Manganese Mines as its major client, the business began with 16 employees, and numbers have since grown to 75 currently. Turnover has risen from US$100,000 during the first year of trading to US$400,000 in 2006.

J&J Business Enterprises is looking to further improve its business operations to enhance its chances of securing more business from our Company and others. Ishmael Morongwe said: "The Hotazel business has given us the opportunity to feed 75 families; the only way to sustain this mandate is to grow by enhancing our service offering."

Energy Coal – BECSA

In 1999, Shadrack Shongwe teamed up with two partners to establish Thembelihle Equipment, a manufacturer, remanufacturer and repairer of hydraulic components.

Shadrack, a registered certified engineer, was employed at several of our operations in South Africa, accumulating over 20 years experience in mining and engineering. The partners have considerable collective experience in marketing and selling hydraulic products and services to the mining industry.

Thembelihle Equipment began trading at the end of the 2000 and over the last five years has increased its annual turnover by more than seven times. As shown in the table below, the company’s 2006 turnover was 25 per cent higher than the year before.

The company is now providing 75 full-time positions for South Africans. Shadrack Shongwe said: "To Tembelihle, BHP Billiton is synonymous with the impartation of tangible growth in turnover, employment opportunities and technology traction."

Growth Indicators for BEE Compliant Suppliers

<table>
<thead>
<tr>
<th>Year</th>
<th>Full-time Employees</th>
<th>Annual turnover US$million</th>
<th>Customers</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sizehago</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>4</td>
<td>0.1</td>
<td>National Ports Authority; Minet; St Francis Hospital; Spoornet</td>
<td>Labour; locomotive components; industrial cleaning</td>
</tr>
<tr>
<td>2005</td>
<td>15</td>
<td>0.2</td>
<td>National Ports Authority; Hillside; Bayside</td>
<td>Painting and maintenance; industrial cleaning</td>
</tr>
<tr>
<td>2006</td>
<td>20</td>
<td>0.3</td>
<td>National Ports Authority; Hillside; Bayside</td>
<td>Painting and maintenance; industrial cleaning</td>
</tr>
<tr>
<td>2007 (prjctn)</td>
<td>30</td>
<td>0.4</td>
<td>National Ports Authority; Hillside; Bayside</td>
<td>Painting and maintenance; industrial cleaning, engineering</td>
</tr>
<tr>
<td>J&amp;J Business Enterprises</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>16</td>
<td>0.1</td>
<td>Hotazel Manganese Mines</td>
<td>Underground and surface construction</td>
</tr>
<tr>
<td>2005</td>
<td>50</td>
<td>0.1</td>
<td>Hotazel Manganese Mines</td>
<td>Underground and surface construction</td>
</tr>
<tr>
<td>2006</td>
<td>76</td>
<td>0.4</td>
<td>Hotazel Manganese Mines</td>
<td>Underground and surface construction</td>
</tr>
<tr>
<td>2007 (prjctn)</td>
<td>90</td>
<td>0.4</td>
<td>Hotazel Manganese Mines</td>
<td>Underground and surface construction</td>
</tr>
<tr>
<td>Thembelihle Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>47</td>
<td>5.9</td>
<td>BHP Billiton; Sasol; Anglo Coal</td>
<td>Cylinders; pumps; valves and motors</td>
</tr>
<tr>
<td>2005</td>
<td>60</td>
<td>6.7</td>
<td>BHP Billiton; Sasol; Anglo Coal; Columbus Steel</td>
<td>Cylinders; pumps; valves and motors</td>
</tr>
<tr>
<td>2006</td>
<td>65</td>
<td>8.4</td>
<td>BHP Billiton; Sasol; Anglo Coal; Columbus Steel; BAE Systems</td>
<td>Cylinders; pumps; valves and motors</td>
</tr>
<tr>
<td>2007 (prjctn)</td>
<td>75</td>
<td>10.5</td>
<td>BHP Billiton; Sasol; Anglo Coal; Columbus Steel; BAE Systems; OEMs</td>
<td>Cylinders; pumps; valves and motors</td>
</tr>
</tbody>
</table>

Going Forward

Studies will indicate areas that require improvement for emerging companies to become sustainable within the broader resources industry. We will continue to invest in local enterprise development, in line with our BEE obligations.
Indigenous Contracting In The Pilbara - Building Sustainable Indigenous Economic Development

Our Iron Ore Customer Sector Group in Western Australia has implemented an Indigenous Contracting Strategy to increase the number of economic development opportunities available to Indigenous peoples in the Pilbara region.

The key performance indicator (KPI) for the strategy is entry into nine contracts with Indigenous contracting businesses by 1 July 2007, as part of an annual project spend of AUD$25 million. The key benefits and learnings of the strategy implementation process to date are:

- Every situation is unique, and we need to be flexible and creative in our approach.
- Indigenous businesses tendering for contracts can include Native Title claimants and politically active groups; negotiations are more straightforward when the focus is on business objectives and not clouded by political issues.
- At this early stage of strategy implementation, an establishment cost is necessarily incurred to build the capacity of the contractors so they can become commercially competitive.
- The social benefits of Indigenous businesses being established can be significant and may include increased self-esteem, improved diet and lifestyle and other more tangible outcomes, such as reduced drug and alcohol use, financial independence and increased home ownership.

We have six contracts in place and negotiations in various stages for at least three others. The contractors include Pilbara Logistics (waste management services), Wangka Maya (cultural awareness training), Indigenous Mining Services (Indigenous labour hire services), Meta Maya Building Services (residential property refurbishment), Ngarda Civil & Mining (two contracts for on-site civil services), Oasis Gardening Services (gardening services) and Carey Biyulu (drill pad preparation).

Evidence of the positive outcomes that may be achieved through this strategy can be seen in the comments of Daniel Tucker of Carey Biyulu, who says: "I have been working in the mining industry for over 27 years and operating our business for over 13 years, as well as being involved with other private and public businesses. From my experience, the Indigenous Contracting Guidelines are one of the best mechanisms around, that I am aware of, that aim to develop and deliver Indigenous business outcomes. The process is commercial, the BHP Billiton people are committed, and opportunities are being identified and explored."

Indigenous employment across the Iron Ore business peaked in December 2006 at 8.23 per cent, while Indigenous employment in our Iron Ore contractor companies peaked in October 2006 at 9.59 per cent.

The Challenge

A workforce growth study conducted by the Company in 2006 has indicated a requirement for continued expansion of our total workforce up to 2012, which means the number of Indigenous employees must continue to increase significantly. This provides a significant challenge as there is limited capacity in the Indigenous contracting and labour market.

BHP Billiton Iron Ore is committed to achieving 12 per cent Indigenous employment by 2010. A range of programs has been developed to assist in achieving this target, including education partnerships to support local Indigenous students, support for local Indigenous business partnerships and targeted selection for entry level positions including traineeships and apprenticeships. Contractors and service providers are also required to commit to achieving the 12 per cent goal, and Indigenous contracting guidelines have been developed to further identify and assess business opportunities for Indigenous contracting businesses.
We have encountered some barriers to implementing the Indigenous Contracting Strategy because of structural and cultural issues. This has reduced our ability to source sustainable and flexible contracting opportunities.

How We Are Doing It

The Indigenous Contracting Strategy sits under Iron Ore’s Indigenous investment strategy along with Native Title, Heritage & Culture, Community Relations and Direct Employment.

The project operates through an Indigenous Contracting Steering Committee, which has high-level representation from all facets of the business. Underpinning the strategy is the Indigenous Contracting Preferred Supplier Accreditation Process and Indigenous Contracting Guidelines. These serve to ensure transparency, consistency and continued application of sound commercial practices.

A commercial staff member has been seconded to the Iron Ore Aboriginal Affairs department for a two-year period with the aim of delivering the project start-up KPIs in collaboration with the Indigenous Contracting Steering Committee and the Aboriginal Affairs and Supply departments.

We have developed an online reporting system to allow tracking of progress against each contractor’s contractual commitment of 12 per cent employment by 2010.

The long-term success of the strategy is based on selecting a diverse range of opportunities and aligning strategy objectives with mainstream business objectives, such as contractor optimisation and cost management.

The key is to select opportunities that are within the current capacity of Indigenous contracting businesses and provide significant growth potential over three to five years. This approach allows for and encourages contracting businesses to build capacity at a sustainable rate in a supported environment.

Going Forward

Our progress to date has provided a solid platform and broader experiences to build from. Our key tasks now are to:

- Intensify the education of our workforce so that Indigenous contracting is accepted as an integral part of our business practice.
- Facilitate development of strategic alliances between Indigenous peoples and industry leaders.
- Improve links with government to ensure a cohesive approach and tangible outcomes.
- Measure the social metric outcomes for the Indigenous contracting companies and their employees.
Accelerating The Culture Of HSEC In Chinese Supply Markets

During 2006/2007, Global Supply established a Procurement Hub in Shanghai. This new Hub, led by the Emerging Markets Team, marks the first step in a broader program seeking to increase purchases from emerging markets.

The Emerging Markets Team, introduced in last year’s Sustainability Report as the Supply Optimisation in Emerging Markets (SOiEM) Team, is working to facilitate a growing number of coordinated purchases from suppliers located in emerging markets, with an initial focus on sourcing opportunities in China. The Shanghai Procurement Hub is key to the team’s implementation strategy, which places great emphasis on ensuring that the Company’s procurement practices in China are responsible.

The Hub, though still in its pilot phase, is already helping the Company’s assets to purchase directly from Chinese suppliers. Through the work of the pilot team, the Company is influencing supplier standards in relevant supply markets in China. The team engages only those suppliers that demonstrate that they maintain suitable HSEC standards and supports those suppliers’ further improvement through ongoing audits and management. In this fashion, our purchases in China are aligning mutual economic benefit with the encouragement of suppliers to adopt global best-practice HSEC standards.

The Opportunity

The Emerging Markets function was created to deliver increased access to critical supplies and economical supply-chain solutions in a manner consistent with our Sustainable Development Policy and HSEC Management Standards. From its inception, the team has sought to develop supplier selection and management methods that both align with Company policies and faithfully implement their values throughout the supply process.

How We Are Doing It

The Emerging Markets team has developed a structured supplier selection program, which starts with the review of supply markets and ends with a set of suitable suppliers that assets can consider as candidates in their sourcing activities. The aim of this process is not to fully qualify suppliers for supply contracts, but rather to cost-effectively identify a targeted pool of suppliers worthy of recommendation to our sites and worthy of more comprehensive assessment led by those sites.

The team has also developed practices for ongoing supplier management in China, which prioritise the development of supplier HSEC performance. Where an assessed supplier does not meet the necessary HSEC standards or where the effort required by our Company to assist the supplier to reach acceptable standards is too great, then the supplier is excluded from further consideration.

To date, the supplier selection process has excluded around 50 per cent of the identified suppliers, rewarding those suppliers with the strongest capability. Encouragingly, and almost without exception, the team has been greeted at factory visits by suppliers eager to learn more about our global standards.

In some cases, direct purchases from China are replacing purchases of items made in China but sold through trading companies. By facilitating such direct purchases, the Emerging Markets Team is increasing the responsibility taken by our Company for the practices employed at the point at which the goods we use are made.
Going Forward

The Emerging Markets Team has recently recruited personnel to expand their technical HSEC assessment capability. This will extend the team’s focus on HSEC to a growing number of suppliers offering the growing list of goods being sourced in China.
At BHP Billiton our objective is to be the company of choice – creating sustainable value for our shareholders, employees, contractors, suppliers, customers, business partners and host communities.

We aspire to Zero Harm to people, our host communities and the environment and strive to achieve leading industry practice. Sound principles to govern safety, business conduct, social, environmental and economic activities are integral to the way we do business.

Wherever we operate we will develop, implement and maintain management systems for sustainable development that drive continual improvement and ensure we:

- do not compromise our safety values, and seek ways to promote and improve the health of our workforce and the community;
- identify, assess and manage risks to employees, contractors, the environment and our host communities;
- uphold ethical business practices and meet or, where less stringent than our standards, exceed applicable legal and other requirements;
- understand, promote and uphold fundamental human rights within our sphere of influence, respecting the traditional rights of Indigenous peoples and valuing cultural heritage;
- encourage a diverse workforce and provide a work environment in which everyone is treated fairly, with respect and can realise their full potential;
- set and achieve targets that promote efficient use of resources and include reducing and preventing pollution;
- enhance biodiversity protection by assessing and considering ecological values and land-use aspects in investment, operational and closure activities;
- engage regularly, openly and honestly with people affected by our operations, and take their views and concerns into account in our decision-making;
- develop partnerships that foster the sustainable development of our host communities, enhance economic benefits from our operations and contribute to poverty alleviation;
- work with those involved through the lifecycles of our products and by-products to promote their responsible use and management;
- regularly review our performance and publicly report our progress.

In implementing this Policy, we will engage with and support our employees, contractors, suppliers, customers, business partners and host communities in sharing responsibility for meeting our requirements.

We will be successful when we achieve our targets towards Zero Harm, are valued by our host communities, and provide lasting social, environmental and economic benefits to society.