xstrata
copper

Xstrata Copper Canada

Sustainability Report 2009




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Xstrata Copper at a glance

Xstrata is a global diversified mining group, listed on the London and Swiss stock exchanges, with its headquarters in Zug, Switzerland. Xstrata's businesses maintain a meaningful position in seven major international commodity markets: copper, coking coal, thermal coal, ferrochrome, nickel, vanadium and zinc, with a growing platinum group metals business, additional exposures to gold, cobalt, lead and silver, recycling facilities and a suite of global technology products, many of which are industry leaders. The Group's operations and projects span 19 countries.

Headquartered in Brisbane, Australia, Xstrata Copper is one of the commodity business units within Xstrata plc. Its operations and projects span eight countries: Australia, Argentina, Chile, Peru, Canada, the United States, the Philippines and Papua New Guinea. Its operations are administered by five separate divisions, based close to the mining operations, namely the North Queensland, Minera Alumbrera, North Chile, Southern Peru and Canada divisions. It also has a recycling business (Xstrata Recycling) with plants in the U.S. and offices in Canada and Asia.

Xstrata Copper's world-class portfolio of copper development projects includes Tampakan in the Philippines, Frieda River in Papua New Guinea, Las Bambas and Antapaccay in Peru and El Pachón in Argentina. Xstrata Copper is also developing the Energía Austral hydropower project in southern Chile.

Xstrata Copper is the fourth-largest global copper producer with attributable mined production in 2009 of 907,000 tonnes of copper in cathodes and concentrates. The company is also one of the world's largest producers of smelter and refined copper, including from third-party materials. It employs approximately 19,500 people, including contractors.

About Xstrata Copper Canada

Xstrata Copper Canada is headquartered in Toronto, Ontario, and comprises the Kidd Mine and Kidd Metallurgical sites, the Horne Smelter, the Canadian Copper Refinery (CCR), Xstrata Recycling and closed sites. Close to 3,700 employees and contractors are employed across the operations. We manage activities at each key stage of the sustainable development cycle, including exploration, mining and milling, smelting and refining, and closure and rehabilitation.

Map of Operations

Kidd Mine and Kidd Metallurgical

The Kidd Mine and Kidd Metallurgical operations, located in Timmins, Ontario, are organised into two independent sites located 27 kilometres apart. Kidd Mine is focused on developing and sustaining economic mining plans for the Kidd Creek ore body. The mine has received ISO 14000 certification.

The Kidd Metallurgical site is a mineral processor and metal producer for both company-sourced and purchased feeds. The site consists of a concentrator processing copper-zinc ore, a copper smelter and refinery, an integrated zinc roaster and refining plant, a cadmium plant, an indium plant and two sulphuric acid plants. The copper refinery and zinc casting plants are ISO 9001 certified.

Horne Smelter

Located in Rouyn-Noranda, Québec, this custom copper smelter uses both copper concentrates and precious-metal-bearing recyclable materials as its feedstock to produce a 99.1 percent copper anode. The site also operates a sulphuric acid plant.

Canadian Copper Refinery (CCR)

Located in Montréal-East, Québec, CCR refines anode copper from the Horne, Vale Inco Limited and Altonorte smelters, as well as other unrefined copper and precious metals from Xstrata and third-party sources.

Xstrata Recycling

Xstrata Recycling is one of the world's largest recyclers of metallic copper and electronic scrap. The business contributes to the production of significant quantities of copper, gold, silver, palladium and platinum for Xstrata Copper Canada's smelting and refining facilities. Xstrata Recycling facilities are located in East Providence, Rhode Island; San Jose, California; and Penang, Malaysia. More information is available at www.xstratarecycling.com.

More detailed information on our operations is available in the section entitled Our Operations and Economic Contribution on page 14.

Chief Executive's Report

The global financial crisis presented difficult challenges for the mining sector in 2009. From late 2008 and into 2009, there was a dramatic collapse in demand for commodities, resulting in average copper prices 26 percent lower than the previous year. Xstrata Copper responded rapidly and decisively, with management teams across our businesses implementing cost-reduction programmes, deferring non-critical capital expenditures and curtailing uneconomic production from our custom metallurgical facilities.

These actions positioned us to emerge strongly from the downturn as economic conditions gradually improved and copper prices rebounded in the second half of the year. As a result, Xstrata Copper recovered to achieve a solid set of operational and financial results in 2009 that has provided us with important momentum as we enter 2010.

Nonetheless, global custom smelting conditions remain extremely difficult. The rapid expansion of Chinese smelting capacity means that global capacity now far exceeds the availability of concentrate, driving treatment and refining charges to near all-time lows. Our Canadian metallurgical operations implemented production suspensions and slowdowns in 2009 in response to the lack of concentrates and anodes for processing and the collapse in North American demand for sulphuric acid (a by-product of the smelting process). The outlook remains bleak for this part of the copper industry and in December we announced the difficult decision to permanently cease operations at our loss-making Kidd Metallurgical copper and zinc plants in Timmins, Ontario, effective in June 2010.

This has clearly impacted many people in Timmins and we have been providing as much support as possible through the transition, giving early notice of closure, maintaining direct communications with our people and communities, offering early retirement schemes to eligible people and, where possible, alternative employment opportunities and establishing a job placement centre in conjunction with local government and union representatives.

The resulting rationalisation of our Canadian assets is intended to convert our Canada copper division into a profitable and more sustainable business. We continue to invest in the expansion of the Kidd Mine and in capital programmes at our other metallurgical plants in the country with this objective in mind.

As part of the Xstrata Group, the principles of sustainable development are integrated into our business model and guide our daily decision-making. Ongoing improvements across a range of indicators in 2009 demonstrate that our commitment to sustainable development has not wavered during these difficult times. Xstrata's commitment to sustainable development was recognised in 2009 as the industry leader by the Dow Jones Sustainability Index for the third consecutive year. I am proud to add that over the year Xstrata Copper's operations and projects received 23 regional and local recognitions for safety, environment and social responsibility achievements.

A fundamental component of Xstrata Copper's business model is our commitment to transparent and regular communication on our sustainable development performance. Our quarterly Sustainability Bulletin highlights best-practice case studies, and our divisions and projects publish annual sustainability reports complying with the globally recognised Global Reporting Initiative (GRI) G3 reporting guidelines. The performance scorecard at the front of each report (see page 6) clearly shows progress on meeting sustainable development targets and new goals for the coming year. This report is one of 11 that have been prepared on this basis across Xstrata Copper.

Xstrata Copper also sets more detailed sustainable development targets internally, and we continually assess our performance against these objectives. Our main safety priority is zero harm, and our ultimate goal is that all our people return home safely at the end of every workday.

In 2009, this unremitting focus on improving safety performance resulted in our Total Recordable Injury Frequency Rate (TRIFR) falling for the sixth consecutive year to a record low of 4.7, a 36 percent improvement over the previous year and far exceeding our year-end target of less than 6.6.

We also reduced our Lost-Time Injury Frequency Rate (LTIFR) from 1.1 at the end of 2008 to 1.0 at the end of 2009, an improvement of 9 percent, but just short of our target of less than 0.9. The number of days lost due to lost-time and restricted work injuries also fell significantly to 4,030, down from 5,237 in 2008. This reduced our Disabling Injury Severity Rate (DISR) from 131 in 2008 to 104 in 2009, just missing our year-end target of 103.

We were, however, not able to meet our most important target of being a fatality free mining company in 2009. Tragically, a fatal incident occurred at Energía Austral when an inflatable boat carrying personnel from a contractor company capsized on the Cuervo River in south Chile causing the loss of three workers, Moisés Aros, Mario Méndez and Edgardo Rogel. In response, we reviewed our safety systems in remote sites to ensure that we are doing everything possible to establish and maintain safe work environments.

For 2010, Xstrata Copper has renewed its determination to achieve zero fatalities and set itself the challenge of further improving our TRIFRs by 10 percent to less than 4.2, LTIFRs by at least 20 percent to less than 0.8 and DISRs by over 25 percent to less than 84.

In 2009, Xstrata Copper continued to pursue its strategic objective of achieving recognised leadership in environmental performance within the mining industry. We met our target of receiving no environmental fines, penalties or prosecutions, and our copper smelters continued to improve their environmental performance, with important reductions in overall sulphur dioxide (SO_2) emissions.

We reported one Category 3 (Significant) environmental incident in 2009 against our target of zero. This involved a spillage of concentrate into the harbour at our port facilities in Townsville, Queensland, during loading operations. This was quickly remediated in consultation with the local authorities. Across our businesses we achieved an impressive 52 percent reduction in Category 2 (Minor) incidents.

We recognise the urgent need to address climate change and, as part of Xstrata's overall corporate approach, are actively promoting a response to this challenge within a global, equitable framework that would reduce carbon emissions globally without irreparably damaging the export industry of any one nation. All of our divisions have set targets to reduce greenhouse gas emissions and energy consumption, as well as reduce fresh water use and maximise water-recycling opportunities, and progress is regularly reported to Xstrata Copper's sustainable development Committee and Executive Committee. In addition, we actively engage with governments, the scientific community, industry and other organisations on the development of legislation, new technologies and industry initiatives to tackle this global challenge.

As Xstrata Copper advances towards developing an important portfolio of brownfield and greenfield projects, the preparation of Environmental and Social Impact Assessments (ESIA) was a key focus in 2009. Two major ESIAs were submitted to the authorities, one for the Río Cuervo hydropower project in southern Chile and a second for the Antapaccay copper project in southern Peru.

At Xstrata Copper, open and honest communication with our local stakeholders lies at the heart of our community relations. Management at each division and project is responsible for implementing two-way dialogue processes that are appropriate for each cultural setting and particular set of circumstances. In 2009, we intensified community consultation to ensure that local people's concerns and interests were being addressed in our plans and designs for new mines. Of particular note was the resettlement agreement with the Fuerabamba community that will allow the construction of our Las Bambas copper project in southern Peru's Apurimac region. Also, at our Tampakan project in the Philippines, management successfully conducted extensive community and stakeholder briefings and public meetings as part of preparatory work for the expected submission of its ESIA at the end of 2010.

Transparent engagement is also crucial to the success of our Corporate Social Involvement (CSI) programmes. Only with the participation of local community and government stakeholders can we implement projects that make a real difference to the social and economic development of the areas where we operate. In 2009, Xstrata Copper spent over US$30 million on CSI projects, including the Collahuasi and Antamina joint ventures. These focused on health, education, enterprise development, culture and social development.

As we move into 2010, continued improvement in macroeconomic conditions in Western economies is expected to drive a recovery in copper consumption, providing a more positive environment for our mining businesses. However, the outlook for our custom smelters and refineries remains challenging as the gap between constrained concentrate supply growth and installed smelting capacity continues to widen.

During this year construction on all five of Xstrata Copper's current expansion projects is expected to get under way. One of the challenges will be to ensure that new employees involved in these large-scale projects are quickly inducted to the sustainable development standards that are expected of them. After a comprehensive review, we will also be implementing in the second quarter of this year a new sustainable development Policy and Management Framework that will replace and incorporate our current Safety & Health, Environment and Community policies. Training and revised induction procedures at all of our sites will form a crucial part of the implementation plan.

I do hope that you find this report a valuable source of information not only about Xstrata Copper Canada, but also about the sustainable development principles and objectives that guide all of Xstrata Copper's business activities.

Charlie Sartain
Chief Executive
Xstrata Copper

Chief Operating Officer's Report

In 2009, Xstrata Copper Canada maintained a steadfast commitment to sustainable development in the face of difficult conditions that challenged the viability of the business.

Exceptional safety improvements

In the area of worker protection, we made exceptional improvements across all operations, among both employees and contractors. At the beginning of the year, we set what we believed to be ambitious goals of achieving a 20 percent improvement across all major safety metrics. We ended up far exceeding these targets, reducing the Lost-Time Injury Frequency Rate by 32 percent and the Total Recordable Injury Frequency Rate by approximately 38 percent over 2008 levels. New safety records were set at Kidd Mine, with more than 3.75 million hours (or two years) worked without a single lost-time injury, at the Horne Smelter, where we reached more than 1 million hours without a lost-time injury, and at the Kidd Metallurgical site, where employees worked 800,000 hours without a lost-time injury between January and April 2009.

This exceptional performance is the result of embedding our commitment to zero harm in everything we do. It also reflects the maturing of the Positive Attitude Safety System (PASS), which was introduced a few years ago to increase each person's involvement in recognising and managing workplace risks. In addition, there were numerous site-specific initiatives that contributed to the stellar results. For example, Kidd Mine modified the safety cards used in its Neil George Five-Point Safety System, asking workers to identify and rank hazards associated with their tasks and to identify safety controls. The Horne Smelter increased the use of work permits for maintenance and non-routine activities.

Meeting commitments

On the environmental front, we advanced our multi-year action plans to improve air quality near our operations. At the Kidd Metallurgical site's copper smelter, a new baghouse was commissioned to reduce lead and particulate emissions. At the Horne Smelter, the second of two secondary gas hoods was installed on the anode furnaces as part of a three-year arsenic reduction commitment.

After completing the remediation of the closed Murdochville, Québec, mining and metallurgical facilities in 2009, we officially started the process to hand over the former mine service buildings to the town for use as an industrial park. As per our initial plan, we also completed the voluntary rehabilitation of residential properties in the Sandy Beach area of the port of Gaspé, Québec, where we maintained a concentrate storage/transfer facility for many years.

Partners in the community

Our involvement with our host communities takes many different forms. Working in partnership with various local stakeholders, we provided financial support to projects that make a difference to these communities. We also engaged with community stakeholders who have an interest in our activities, sharing future plans, answering questions and discussing concerns. Meetings were held with First Nations peoples living near exploration projects in Ontario and British Columbia. Open houses were held in Timmins, Ontario, to review our application for an alternate air standard at the Kidd Metallurgical site and a proposed landfill expansion project at Kidd Mine. We value these relationships and want to know our communities' issues and concerns so that we can address them proactively.

Supporting employee development

Human resources activities were focused to a large extent on implementing action plans prompted by the results of our 2008 employee engagement survey. Our employees told us that we needed to get better at performance feedback and making the best use of people's skills. We made it a priority in 2009, creating new performance feedback tools for all salaried and hourly employees that will be implemented in 2010. We also developed competency models that will identify the skills and knowledge required to be successful in each role and assist in employees' career development.

Improvements in sustainable development assurance

We continued to strengthen our sustainable development (SD) management systems at the division and site levels, bringing more structure and consistency through development of SD policies, standards and procedures. This past year, we created a divisional Risk Management Assurance Working Group focused on improving our risk management processes.

External and internal audits are an integral part of Xstrata's approach to SD. In 2009, SD assurance audits were conducted at all major Canadian operations, and the division's average assurance score improved by 24 percent over prior results. These audits revealed strengths as well as opportunities for improvement.

Challenging business decisions

When we look back at the year, the advances in key areas of SD are overshadowed by the difficult decisions that had to be made to ensure the viability of the business.

Our 2009 production volumes at Kidd Mine were negatively impacted by two significant seismic events that resulted in the isolation of part of the mine for several months as a cautionary measure. The metallurgical plants were seriously impacted by a collapse in acid demand, and disruptions in concentrate and anode supply from a major producer. These events resulted in lengthy shutdowns of our Kidd and Horne copper operations.

After conducting a comprehensive review of the metallurgical business, we concluded that some of our operations would continue to struggle because of ongoing low treatment and refining charges associated with increased global competition, higher operating and capital costs and the strength of the Canadian dollar. This review led to the decision at year-end to rationalise and consolidate our Canadian metallurgical operations and permanently close the copper and zinc plants at the Kidd Metallurgical site as of June 1, 2010.

Approximately 670 employees are directly affected by this decision. We are supporting them through the transition, offering an early retirement incentive to eligible employees, helping them find alternative employment where possible and setting up an employment centre. This was a difficult decision and we recognise that the impact is felt by not only our employees, but also contractors, suppliers and the local community in general.

The company will remain a major employer in Timmins. Future efforts and investments will be focused on Kidd Mine and the concentrator. More than $100 million is currently being invested at Kidd Mine to extend the mine workings to a depth of 9,500 feet and the mine life to 2017.

Looking ahead

In 2010, we are targeting further improvements in health, safety and environmental performance, as well as in our employee and community relationships. As a result of the closure announcement of the zinc and copper plants at the Kidd Metallurgical site, we will also be heavily involved in transitioning our workforce, initiating reclamation of the Kidd plants and integrating the remaining Kidd assets with the smelting and refining assets of the Horne Smelter and CCR.

Once the rationalisation is completed, we expect to have a more economically robust, sustainable business focused on higher-margin feedstock. Part of our new business model includes significant growth targets for the Horne Smelter's recycling business over the next three or four years. We will also advance exploration drilling programmes at our projects in British Columbia, Ontario and Québec.

In summary, we expected 2009 to be a challenging year, and it turned out to be just that. Despite the enormous pressures, our employees operated our facilities safely and responsibly, and met commitments to our communities and our customers. We are proud of their performance and contributions and would like to thank them for a job well done.

Claude Ferron
Chief Operating Officer
Xstrata Copper Canada

2009 Scorecard & 2010 Targets

Safety		2009 TARGET	PERFORMANCE	2010 TARGET
Xstrata Copper Canada	Fatalities	0	0	0
	LTIFR	< 1.8	1.5	< 1.2
	TRIFR	< 10.9	8.3	< 6.7
	DISR	< 270	193	< 159
CCR	Fatalities	0	0	0
	LTIFR	< 2.2	3.2	< 1.8
	TRIFR	< 8.7	9.6	< 7.0
	DISR	< 297	333	< 238
Horne Smelter	Fatalities	0	0	0
	LTIFR	< 3.7	0.7	< 1.4
	TRIFR	< 10.1	9.4	< 7.5
	DISR	< 315	191	< 153
Kidd Metallurgical	Fatalities	0	0	0
	LTIFR	< 1.0	2.2	< 0.9
	TRIFR	< 13.6	8.3	< 6.6
	DISR	< 338	245	< 196
Kidd Mine	Fatalities	0	0	0
	LTIFR	< 1.0	0.5	< 1.0
	TRIFR	< 8.0	7.8	< 6.4
	DISR	< 176	78	< 81

Health and Safety	2009 TARGET	PERFORMANCE	2010 TARGET
New occupational illnesses	Zero	Three	Zero
Leadership and competent leaders	Complete safety training programmes for divisional and operational leaders in risk management.	Internal and external resources conducted various formal and informal training events.	No further action on these specific items Other targets available for 2010 on page 19
	Finalise the review and update of training and induction programmes for new and current employees as well as contractors.	Achieved with ongoing improvements to include PASS, Business Principles Training programmes mapped to SD standards	
	Complete hazard and risk management training for all employees.	Achieved with ongoing improvements to include local site processes (e.g., STOP, emergency response)	
	Increase focus on adding more safety adviser resources.	Increased the number of safety advisers.	
Contractors	Complete implementation of contractor management common system at Horne and Kidd Metallurgical.	Partially achieved	Continued implementation efforts
Controlled work environment	Complete PASS rollout.	Achieved with ongoing continuous improvement efforts	No further action
	Critical Incident Prevention: Maintain and update risk registers, action plans and monitoring processes; conduct regular risk-based audits.	Routine and periodic risk reviews at division and site levels	Review and update as appropriate.
	Complete implementation of risk-based health assessment programmes.	Achieved with ongoing continuous improvement efforts	No further action
Equipment	Complete implementation of standards for workplace, tools and equipment associated with high-hazard activities.	Partially achieved	Continued implementation efforts
Health protection & promotion management	Identify applicable legal obligations and legal requirements specific to significant risks.	Achieved	No further action
	Determine and report internal compliance status and establish management action plans. Develop plans to achieve or demonstrate legal compliance.	Compliance status partially achieved	Compliance assurance audit scheduled for 2010

Environment	2009 TARGET	PERFORMANCE	2010 TARGET
Fines and penalties	Zero	Two	Zero
Category 3, 4 or 5 incidents	Zero	Achieved	Zero
Regulatory non-compliance incidents	16	21	9
Sulphur dioxide capture and treatment	Horne Smelter > 95% Kidd Metallurgical > 97%	96.4% 97.7%	> 96% > 97%
Implementation of Xstrata Copper common environmental systems	70% implementation	71%	80% implementation
Air quality	Horne: Design, construct and install second hood on anode furnace.	Achieved	Commission and optimise the new hood. Re-characterisation of arsenic sources.
	Kidd Metallurgical: Commissioning of a new baghouse in early 2009 to reduce lead and total particulate concentration at ground level.	Achieved	No further action
Biodiversity	Complete consultation with key stakeholders in order to finalise site-specific biodiversity plans for the four large operations and the Gaspé mine-smelter closed site located near a provincial reserve/park.	Achieved	Start implementing plans.
Energy intensity (energy/tonne of product, Gj/t) **5% reduction 2007-2012**	Kidd Mine 7.185 Kidd Metallurgical 24.448 Horne Smelter 13.406 CCR 5.65	Kidd Mine 7.300 Kidd Met 28.621 Horne Smelter 13.707 CCR 6.493 Not achieved: Shutdowns resulted in lower metal outputs, negatively affecting intensity values.	Kidd Mine 6.756 Kidd Metallurgical 24.198 Horne Smelter 13.269 CCR 5.596
Carbon intensity (GHG/tonne of product, CO_2/t) **5% reduction 2005-2010**	Kidd Mine 0.455 Kidd Metallurgical 1.833 Horne Smelter 0.488 CCR 0.269	Kidd Mine 0.580 Kidd Met 1.834 Horne Smelter 0.411 CCR 0.233 Not achieved: Shutdowns resulted in lower metal outputs, negatively affecting intensity values.	Kidd Mine 0.45 Kidd Metallurgical 1.815 Horne Smelter 0.424 CCR 0.266
Water intensity (Water consumption/ tonne of product, '000/t) **5% reduction 2007-2010**	Kidd Mine 0.634 Kidd Metallurgical 64.3 Horne Smelter 64.3 CCR 22.82	Kidd Mine 0.665 Kidd Met 80 Horne Smelter 67 CCR 27.372 Not achieved: Shutdowns resulted in lower metal outputs, negatively affecting intensity values.	Kidd Mine 0.627 Kidd Metallurgical 63.0 Horne Smelter 64.0 CCR 22.6
Waste management diversion plans	Kidd Met 60% Kidd Mine 10% Not applicable to Horne Smelter and CCR since they have lower volume of waste and do not have landfill on site.	Achieved Kidd Mine 36%	Kidd Mine: reduce/recycle 10% or 125 tonnes of waste send to mine site landfill.
Closure plans	Rouyn-Noranda: Submit closure plan to government for active and inactive tailings site.	Achieved	Obtain feedback from provincial government and finalise.
	Kidd Metallurgical: Update jarosite pond closure plan.	Partially achieved	Complete in 2010
Closed sites	Continue site closure and soil rehabilitation at Murdochville.	Achieved	No further action
	Obtain approval from the authorities for the Sandy Beach area soil rehabilitation plan (commercial and industrial).	Xstrata adopted a voluntary rehabilitation plan and moved forward with rehabilitation of all soils affected with metals.	Complete soil rehabilitation of all affected properties in the Sandy Beach area, Gaspé.

Social	2009 TARGET	PERFORMANCE	2010 TARGET
Xstrata Copper Canada	Set aside a minimum of 1% of pre-tax profit	Achieved	Set aside a minimum of 1% of pre-tax profit
	Evaluate community perceptions	Not achieved	Conduct second phase of community perception studies. Review and adjust stakeholder engagement plan.

Scope of This Report

This report details the economic, health, safety, environment and social performance of Xstrata Copper Canada from January 1, 2009, to December 31, 2009. This report includes the sustainable development (SD) performance of the Kidd Mine and Kidd Metallurgical sites, the Horne Smelter, the Canadian Copper Refinery (CCR), Xstrata Recycling and closed sites.

As part of Xstrata Copper's commitment to transparency and stakeholder engagement, we publish our reports annually. This is the third report produced by Xstrata Copper Canada.

The Xstrata Copper Canada report is one of 11 sustainability reports published by Xstrata Copper that details the company's 2009 sustainability performance.

An overview of Xstrata Copper's sustainability performance is also provided in the Xstrata Group sustainability report. All these reports are available on the Xstrata sustainability website: www.xstrata.com/sustainability.

A general description of Xstrata Copper's SD policies is provided in this report. The full policies are published on the Xstrata website: www.xstrata.com/corporate/commodities/copper/publications.

As part of the Xstrata Group, Xstrata Copper aligns its policies with Xstrata's SD policy and 17 SD Standards and its operations are annually audited against these standards. Xstrata's SD policy and standards are published on Xstrata's sustainability website: www.xstrata.com/sustainability.

Target audience

This report has been prepared for Xstrata employees, government stakeholders (federal, provincial and municipal), business partners (such as contractors), residents in communities where Xstrata Copper operates or where there used to be an operation (closed sites) and a broad range of environmental and social groups.

Presentation of data

All monetary values are expressed in United States dollars unless otherwise stated. Please note that 2007 values are reported in Canadian dollars. For broad year-over-year analysis purposes, the Canadian dollar ended the year 2007 nearly at par with the American dollar. Few changes were made to the scope, boundary or measurement methods since the last report; they are noted where applicable. There are no restatements of previously published data or reporting on joint ventures or subsidiaries, that could affect the comparability of reporting periods.

Ownership and structure

There were no changes to the size, structure or ownership of operations during the 2009 reporting period.

Xstrata Copper Canada's management structure

Defining report content

Sustainable development topics or issues that are material to Xstrata Copper Canada or have the potential to become material to the long-term success of our business have been prioritised in this report. We have aimed to provide a complete and balanced view of our sustainability performance tailored to the expectations and interest of our stakeholders. In determining which issues or topics are material to Xstrata Copper Canada, we have considered:

- Feedback on our sustainability performance and reporting from key stakeholders;
- Company-specific issues raised either directly or indirectly by external stakeholders, including NGOs, governments, communities and investors;
- Industry challenges raised in industry associations and forums;
- Xstrata plc's Business Principles and Sustainable Development policy and standards;
- Xstrata Copper's sustainable development framework, policies and standards;
- Indicators and topics outlined in the GRI G3 Guidelines, International Council of Mining and Metals' (ICMM) principles, and other best practice guidelines and initiatives; and
- Significant risks recorded in our division risk register – an aggregate of significant risks across our operations plus strategic risks for the division (e.g., offshore sourcing of scrap for recycling).

Quality assurance

Independent auditors Ernst & Young have verified Xstrata's data management and reporting systems and processes as part of its external verification of the Group's 2009 sustainability report. A brief description of the assurance process and the signed assurance statement is provided in the Group's 2009 sustainability report available at www.xstrata.com from April 2010. While the Xstrata Copper Canada sustainability report has not been independently audited, it draws its key sustainability data from the same database as the Group report that is externally assured.

The information presented in this report has been reviewed and validated by all the senior managers of the division.

Contact details for questions/feedback regarding report

Please see the report's back cover for contact information.

A Global Reporting Initiative (GRI) Index, detailing how Xstrata Copper has addressed the G3 Guidelines, can be found at page 38 of this report.

Our Approach to Sustainable Development

Xstrata Copper aims to manage its businesses so as to balance social, environmental and economic considerations. Although the lifespan of our activities is finite, we aim to invest in skills, education, health, social and enterprise development that will lead to economic benefits and sustainable communities that outlive our operations in any particular region.

We strive to preserve the long-term health, function and viability of the natural environments affected by our operations and to maintain safe and healthy workplaces based on mutual respect, fairness and integrity.

Xstrata Copper takes a systematic approach to setting targets, monitoring performance and reporting (both internally and publicly) against our targets in each of the key sustainability areas, as demonstrated in this report. The Xstrata Copper SD Strategy and Management Framework is published in full on Xstrata's website at www.xstrata.com/corporate/commodities/copper/publications.

The Xstrata Copper SD framework interprets and supports the Xstrata Group's SD policy and 17 SD Standards, which were revised in 2008, and is consistent with our Definition of Purpose.

This report is a key element of our strategy as it outlines the main policies, standards, targets, programmes and activities that support our commitment to sustainability.

Xstrata Copper's Definition of Purpose

We will maximise value for shareholders by successfully growing and managing an industry-leading portfolio of copper assets that deliver superior returns.

We will achieve this in a safe, environmentally and socially responsible way, in open partnerships between our people and with communities, governments and other stakeholders.

Our strategic objectives

- Injury-free, safe work environments
- Recognised leadership in environmental performance
- Reputation for social responsibility
- Realisation of the full potential of our people
- Achievement of the full capacity of our physical assets
- Cost competitiveness through the cycles
- Value creation through dynamic growth and continuous improvement

Our values

Our decisions and actions will demonstrate the following values:

- Honesty
- Dependability
- Respect
- Confidence
- Ingenuity
- Courage
- Passion

Risk-based approach to sustainability management

Xstrata Copper Canada takes a risk-based approach to the environmental, community, health and safety and operational management of its activities. This approach helps to identify and manage the impacts on our people, our communities and the environment. We remain committed to continuous and sustainable improvement and the mitigation of these types of impacts.

We use internal resources and external resources to facilitate the identification and analysis of risks. We also utilise external resources to conduct periodic third-party audits of our SD systems and critical controls for significant risks. For audit purposes, we use organisations trained in internationally recognised audit protocols and the Xstrata 17 SD Standards.

In 2009, we aligned the Canadian division's risk management framework and processes with Xstrata Copper's requirements. Our work included developing standardised division and site risk registers, establishing Xstrata Copper Canada risk management standards and risk reporting procedures and conducting monthly risk review meetings.

Key sustainability challenges and opportunities

Xstrata Copper requires all of its sites and operations to identify their principal risks. From internal review and feedback from stakeholders, Xstrata Copper Canada has identified a number of key challenges that may impact on our ability to successfully operate our business now and in the future.

For the Canadian division, the major challenge in 2009 continued to be the fragile economy, at a time when emission-reduction investments were required at the Horne Smelter and the Kidd Metallurgical site. In addition, there was uncertainty as to the greenhouse gas targets to be set by Canada following the Copenhagen environmental summit. These targets should be available in 2010.

Opportunities lie in our commitment to utilising management systems to improve health and safety performance results. This includes using our risk-based approach for enhancing our internal capacity to identify risks, the analysis of root causes and for establishing more stringent targets. A September 2009 consultation with an external consultant and recognised scientists identified opportunities for biodiversity conservation at some of our sites. We plan to implement one opportunity at each site in 2010. More information is available on page 32 of this report.

In 2009, we created an Xstrata Copper Canada SD site on the CCR intranet, which is accessible to all Xstrata Copper Canada employees. The site provides information and links pertaining to sustainable development for the Xstrata Group, Xstrata Copper and Xstrata Copper Canada. The site also holds the division SD document framework and reporting tools for incidents, risks and SD scorecards, as well as performance reports.

Awards for sustainable development

Xstrata Recycling

Xstrata Recycling was one of 25 suppliers to receive Intel Corporation's Preferred Quality Supplier (PQS) award. Xstrata supplies Intel with high-value inventory component scrap processing. The award recognised Xstrata Recycling's commitment to quality, responsiveness to Intel's needs, and its demonstrated support of Intel's environmental, health and safety performance.

Kidd Mine

Kidd Mine was one of five mining companies presented with the Angus D. Campbell Award at the Regional Mine Safety Awards Dinner in Timmins in March 2009. The award is given to the company with the lowest injury frequency, taking into account shifts lost due to injury. Throughout 2008, none of the five competing companies lost any full workshifts due to injuries.

Timmins Chamber of Commerce Nova Environmental Award

The Kidd Metallurgical site won the Timmins Chamber of Commerce Nova Environmental Award in 2009 for demonstrating its commitment to preserving and enhancing the natural environment. Among other things, the award recognised the operation's $30-million investment over the last eight years in environmental improvements such as dust collectors, baghouses, water treatment and sulphur capture and fixation plants.

Canadian Copper Refinery (CCR)

The Pointe-de-l'Île Chamber of Commerce awarded the Méritas Award in the large industry category to CCR for its significant contributions to the community's economic, social and industrial well-being. For example, in January 2009, in anticipation of a week of record cold temperatures, CCR temporarily reduced amperage by 10 percent in response to Hydro-Québec's request to conduct activities with high-energy demands outside of peak hours. In addition, the refinery took into account the needs expressed by key community members by focusing its social initiatives on school dropouts and literacy.

Horne Smelter

The F.J. O'Connell trophies are presented annually by the Québec Mining Association to companies demonstrating the best safety performance in Québec. The Horne Smelter won in the surface operations, transport and metals first transformation category. Award criteria included improvement initiatives and outcomes, and performance relative to the Québec mining industry average.

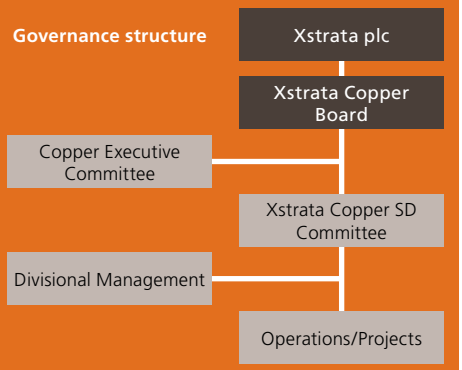
For the third consecutive year, Xstrata plc has remained the mining sector leader in the Dow Jones Sustainability Index (DJSI) in 2009/2010.

Rick Farrell, Certified Kidd Mine Worker Representative; Don Landry, Senior Territory Sales Manager, Mining Safety Appliances (award sponsor); Tom Semadeni, General Manager, Kidd Mine

Michel Goulet, Union Gas (award sponsor); Thompson Hickey, General Manager, Kidd Metallurgical

Victor Gaudreault, President, Orange bleue; Jo-Anne Ouelette, Communication Liaison; Marcel Faucher, General Manager, CCR

A Solid Approach to Governance and Ethics



Xstrata Copper operates within the structure of Xstrata's robust standards of corporate governance as set out in Xstrata's Statement of Business Principles and SD management standards. Further information about Xstrata's governance mechanisms is provided in the corporate governance sections of the Group's Annual Report and Sustainability Report.

This approach is supplemented by Xstrata Copper's own common systems and policies in the areas of health and safety, environment, community, risk management, human resources and sustainable development. Xstrata Copper's common systems ensure that clear and common standards, procedures and performance measures are applied across all sites for key SD areas.

Xstrata Copper's SD performance is monitored and evaluated by Xstrata Copper's SD Committee, which meets monthly. Through the Xstrata Copper Board, the Business Unit's SD performance is regularly reported to the Xstrata Executive Committee.

Since 2008, the Xstrata Copper Canada SD Assurance Steering Team (SDAST) has been responsible for developing, implementing and monitoring SD strategies and management systems across the Canadian division. It is chaired by the Chief Operating Officer and supported by a working group of senior managers responsible for implementation at each site. An SD Assurance Working Group (SDAWG) was also established to facilitate the sharing of SD approaches and best practices among Xstrata Copper Canada operations. The SDAWG is made up of functional specialists and operations representatives.

In 2009, Xstrata Copper Canada created division-level SD standards and procedures based on Xstrata plc's 17 SD Standards and Xstrata Copper SD requirements. These documents were developed in consultation with the division's SDAWG and reviewed and approved by the SDAST, prior to being issued by the Chief Operating Officer.

These documents stipulate SD performance requirements and expectations for Canadian operations and activities. In many cases, the requirements go above and beyond the Xplc 17 SD Standards by providing more specificity. They also provide additional support and tools. Specific accountabilities and responsibilities are incorporated into the division's standards and procedures. Monitoring and review components are designed to ensure that the "Check" aspect of a management system is clearly defined.

Sustainable development assurance

Xstrata Copper undertakes a combination of internal and external SD audit activities to gain assurance that the requirements of Xstrata Group's SD policy and standards are being met. This includes the completion of specified internal and external audits against the requirements of the Xstrata SD policy and SD standards. The process also ensures that SD targets for material issues have been identified, our monitoring systems are robust and our reporting is material, accurate and timely.

In 2009, SD assurance audits were conducted at all major Canadian operations. Scores increased by 10 to 30 precent across the organisation, with the most significant improvements at CCR and the Horne Smelter. A gap analysis of the division's SD framework and documents by a third party identified both strengths and opportunities. Accountability, monitoring and review were identified as exceeding Xstrata plc requirements, and the provision of supporting tools were all identified as strengths. Opportunities for improvement were noted in the areas of strategy and planning (improving alignment with Xstrata Copper SD strategy and objectives), initial assessments related to risk context and recording community engagement activities.

Site	ASSURANCE SCORE	
	2009	2008
Kidd Metallurgical	58%	47%
CCR	70%	54%
Horne Smelter	71%	55%
Kidd Mine	68%	62%

Xstrata Ethics Line

The Xstrata Ethics Line is a confidential facility operated independently by KPMG. The line provides employees and other stakeholders with a means to report any breaches of Xstrata's Business Principles, policies or prevailing legislation. The toll-free phone number for Xstrata Copper Canada is 1-866-311-5773. The Ethics Line can also be accessed online at www.xstrataethics.com.

The Ethics Line is promoted through many different channels, including the Xstrata Business Principles and the Xstrata Copper Fraud Policy, site newsletters, the television communication system, bulletin boards and emails.

Human rights

As part of the Xstrata Group, we endorse the principles set out in the UN Universal Declaration of Human Rights and the International Labour Organisation Conventions. Xstrata is a signatory to the UN Global Compact and has aligned its SD framework with 10 universally accepted principles in the areas of human rights, labour, the environment and anti-corruption.

We are committed to the rights of our employees and contractors to work for equal pay, to associate freely, to a safe and healthy work environment, to non-discrimination and fair treatment and to legal rights.

Xstrata Copper's operations and projects implement community relations strategies that ensure transparent and honest stakeholder engagement, and respect for cultural heritage, traditions and norms. Appropriate community grievance mechanisms are set up to protect these rights.

The Canadian legislative framework ensures that companies protect human rights, including contractors and suppliers working within Xstrata Copper Canada. The Human Resources department is responsible for human rights policies and administers procedures that it has developed to ensure that these rights are maintained within our operations and that human rights issues related to employees are formally addressed. All contractors and suppliers are subject to the same laws and are therefore required to have similar procedures. Close to 1,400 workers were trained on human rights issues in 2009.

Among initiatives, the Horne Smelter provides training on the Québec Charter of Rights and Freedoms to all managers, superintendents and security personnel (employees and contractors). The Canadian division's SD conflict escalation process gives employees many different avenues for reporting human rights issues.

Child and forced labour

Xstrata's Business Principles stipulate that no form of child or forced labour will be tolerated, and all Xstrata operations are audited through the internal audit risk management programme. In line with the Canadian division's policy to hire individuals who are 18 years of age or older, our youngest employee in 2009 was 18 years old.

Corruption

There were no incidents of bribery or corruption registered at Xstrata Copper Canada in 2009.

Xstrata Copper Canada has a corporate governance and internal audit structure designed to minimize the risk of occurrence and to investigate any instances related to unethical business practices. Starting with induction training, all employees and contractors receive a copy of Xstrata's Business Principles.

Xstrata's Business Principles state that we do not offer, solicit or accept any form of inducement or bribe. Xstrata's internal audit function, supported by KPMG, takes into account identified fraud and compliance risks associated with our key business activities, including the ethical performance expectations contained in our Statement of Business Principles.

In addition, Xstrata Copper's Fraud Policy explicitly states that the organisation will not tolerate any incidence of fraud committed by employees or others, either from within or outside the organisation, and will take immediate and serious action against those persons committing a fraud, irrespective of length of service or position. It outlines the channels available to employees or others to safely and confidentially report fraud or other unethical behaviour that is contrary to Xstrata's Business Principles.

Public policy participation & political contributions

In accordance with Xstrata's Business Principles, which prohibits political contributions of any kind, Xstrata Copper Canada did not provide any financial or in-kind contribution to political parties or individuals in 2009.

Xstrata plays an active role in a number of significant international and national industry organisations and multi-stakeholder groups, through membership, funding, provision of expertise and participation in committees and working groups, including membership of the International Council of Mining and Metals (ICMM) and the Extractive Industries Transparency Initiative (EITI).

Xstrata Copper plays a similar role in organisations that are copper-specific and those that are unique to geographical areas where Xstrata Copper is the only Xstrata commodity business in operation. Among Xstrata Copper's global public policy participation commitments are our involvement in the International Copper Association, of which Charlie Sartain, Xstrata Copper's Chief Executive Officer, is chairman, and the Australia-Latin America Business Council (ALABC).

In 2009, a Québec government study group, led by the Economic Development Ministry with representatives from the ministries of Environment and Natural Resources, visited the Horne Smelter and CCR to study the impact of climate change regulations. At the request of the study group, we showed them where we had made investments and our progress to date.

Xstrata Copper Canada also provided input on Québec's mineral strategy, which brings together a number of policies on the development of the North, financial assurance and public consultations. Although we agree with the objectives, we have questions regarding the means for achieving these.

Voluntary initiatives

As a member of the Mining Association of Canada, Xstrata Copper supports the association's Towards Sustainable Mining (TSM) initiative, a stewardship initiative aimed at increasing public trust in the mining industry's ability to manage environmental and social issues important to Canadians. TSM includes clear performance indicators and targets in the areas of tailings management, energy use and greenhouse gas management and external outreach and crisis management. Frameworks have also been developed for biodiversity protection and aboriginal relations.

TSM's development is supported and advised by a community of interest advisory panel, which includes representatives from labour, aboriginal organisations and communities, non-governmental organisations, mining communities and the investment sector.

More information about this initiative and Xstrata Copper Canada's performance is available online at www.mining.ca/www/ Towards_Sustaining_Mining.

Principal memberships in industry and business associations and advocacy organisations

- Mining Association of Canada
- Canadian Institute of Mining and Metallurgy
- British Columbia Mining Association
- Québec Mining Association
- Ontario Mining Association
- Ontario Prospectors Association
- International Council of Mining and Metals
- International Copper Association
- Institute of Scrap Recycling Industries
- International Precious Metal Institute
- Canadian Copper and Brass Development Association
- Copper Development Association
- Conseil pour la réduction des accidents industriels majeurs
- Association québécoise pour l'hygiène, la santé et la sécurité du travail
- Mine Aggregate Safety Health Association
- Mining Diesel Emissions Council
- Mouvement québécois de la qualité
- Association industrielle de l'est de Montréal
- Association québécoise des consommateurs industriels d'électricité
- Chambre de commerce et d'industrie de Rouyn-Noranda
- Chambre de commerce de la Pointe-de-l'Île
- Chambre de commerce de l'industrie de l'Est de l'île de Montréal
- Chambre de commerce du Montréal Métropolitain
- Fédération des Chambres de commerce du Québec
- Thiosalts Consortium
- Timmins Chamber of Commerce
- Conseil du patronat du Québec
- Conseil patronal de l'Environnement du Québec
- Canadian Payroll Association

Our Operations and Economic Contribution

Our products travel the world

The metals produced by Xstrata Copper are shipped mainly throughout North America, followed by Europe and Asia. Copper conducts electricity better than any other metal, except silver. The most common uses of the world's refined copper are electrical wire and cable applications for building and construction, electronics, automotive, industrial machinery and consumer products. Building wire is the largest end-use product, driven by the rapidly increasing number of appliances and electronics found in homes and businesses. The second most common end use is electrical and electronic products, including telecommunications and power cables, transformer windings, semiconductors and motors for heavy appliances. Sales data is provided in the Xstrata plc Annual Report, which is available online at www.xstrata.com/sustainability.

From exploration to closed sites

We manage activities at each key stage of the sustainable development cycle, including exploration, mining and milling, smelting and refining, and closure and rehabilitation.

Exploration plays an essential role in Xstrata Copper Canada's growth strategy and in extending the life of existing operations in Canada. We are actively exploring the Noranda Camp in a joint venture with Alexis Minerals. We are also active in the Kidd Mine camp, both underground and in a focused zone enveloping the most favourable geology surrounding the Kidd Mine. In addition, we are conducting regional exploration near Thunder Bay, Ontario, and in the Quesnel Trough geologic zone in British Columbia and in the Gaspé Peninsula of Québec.

Kidd Mine was already the deepest mine in the world when Xstrata Copper announced an investment of more than $100 million in 2008 to deepen and extend the life of the underground Mine D from 9,100 feet to 9,500 feet, improving the production profile through the addition of 3.4 million tonnes of ore to the mining plan and extending the mine life by one year to 2017.

Smelting and refining facilities at the Kidd Metallurgical site, CCR and the Horne Smelter produce a wide variety of base metals, mainly copper anodes and cathodes and zinc, as well as precious metals. The concentrator at the Kidd Metallurgical site processes a copper-zinc ore. Both Kidd Met and the Horne Smelter operate sulphuric acid plants.

Xstrata Recycling is one of the world's largest recyclers of metallic copper and electronic scrap, including printed circuit boards, integrated circuit and mobile phones. The business contributes to the production of significant quantities of copper, gold, silver, palladium and platinum for Xstrata Copper Canada's smelting and refining facilities and mainly at the Horne Smelter. In 2009, 100,000 tonnes of recyclable materials processed at the Horne Smelter and Xstrata Recycling yielded some 30,000 tonnes of copper and 2 million troy ounces of precious metal.

Closed sites of former copper-related operations are managed across Canada. Operations, maintenance and surveillance are conducted by seven Xstrata employees, supplemented by contractors, to ensure that the 16 sites are maintained in compliance with provincial and federal permits and regulations. Three of the sites operate and maintain water-treatment plants. Rehabilitation of the mine-smelting complex in Murdochville was completed in 2009. Rehabilitation activities are continuing in 2010 in the Sandy Beach area of the town of Gaspé. Conceptual closure plans for closed sites around Rouyn-Noranda were submitted to the authorities for approval.

Economic contribution: it's very much about community

To meet significant community needs, all sites carefully plan donations, sponsorships and community investments. In 2009, these totalled close to C$705,600 across the Canadian division. Adding in-kind contributions, the total amount reached C$1.1 million. Included in this amount is C$316,000 for infrastructure provided for public benefit in Timmins and Rouyn-Noranda.

In 2009, approximately 53 percent of total expenditures went towards the purchase of regional goods and services with the understanding that some goods and services are not available locally. While we do not have an official policy on local procurement, we believe in buying locally to support our communities and minimise environmental impact due to transportation. We give preference to local suppliers, provided they meet the criteria specified for all potential suppliers. We communicate product and service requirements to our suppliers and ensure that any local supplier who qualifies is invited to participate in the tender process. Selection criteria vary, depending on the service or product required, and include quality, service levels, inventory and SD criteria such as safety records, community involvement and business ethics.

The Kidd Mine and Metallurgical sites and the Horne Smelter each employ more than 500 people and are located outside of major Canadian cities. They are important employers in their communities, providing above-average wages and benefits.

Xstrata Copper does not track the indirect economic impact of its presence, which includes the economic benefit of local spending. For example, taxes are used by government to fund social programmes and we support community businesses by purchasing local goods and services.

Highlights of a challenging year

In January, the Horne Smelter was forced to reduce its workforce and capital expenditures following the closure of a custom milling circuit and a reduction in the volume of recycled feed. In total, 100 positions were eliminated, including employees and contractors.

Both of our copper smelters were impacted by a significant drop in sulphuric acid sales. Sulphuric acid is a necessary by-product of smelting concentrate and is sold to customers worldwide. It has a wide variety of uses in the chemical industry, such as in fertilizer production. In response, the Horne Smelter's annual maintenance shutdown was extended from two weeks to one month. While the shutdown did not require us to eliminate permanent positions, it resulted in the need for fewer contractors. We also curtailed production during statutory holidays.

Similarly, the Kidd Metallurgical site shut down the copper smelter in the spring, for a period of eight weeks. During this time, the concentrator and zinc operations continued to operate as usual. The 175 employees were required to take their 2009 vacations in accordance with the collective agreement and were offered opportunities to replace contractors working in other plants at the site.

A subsequent shortage of third-party copper concentrate, caused by reduced shipments from some of the Kidd Metallurgical site's regular suppliers and the Vale Inco strike in Sudbury, forced another temporary shutdown of the Kidd copper operations for a further two months in the fall.

Finally, seismic events at Kidd Mine in January and June resulted in rock movements causing minor injuries, property damage and the temporary closure of parts of the mine.

	KIDD MINE AND METALLURGICAL	HORNE SMELTER	CANADIAN COPPER REFINERY (CCR)	XSTRATA RECYCLING	TOTAL
PRODUCTION					
Mined ore (million tonnes)	2.3				2.3
Copper in concentrate (t)*	45,000				45,000
Copper anodes (t)	75,000	164,000			239,000
Copper cathodes (t)	54,000		278,000		332,000
Zinc in concentrate (t)	108,100				108,100
Refined zinc (t)	110,200				110,200
Nickel concentrate (t)	15,000				15,000
Indium (t)	11,5				11,5
Liquid sulphur dioxide (t)	17,600				17,600
Sulphuric acid (t)	371,000	594,000			965,000
Gold (oz)			874,000		874,000
Silver (million oz)			2.5		2.5
Platinum-paladium (oz)			107,000		107,000
Rhodium (oz)			2,100		2,100
Selenium (t)			251		251
Tellurium (t)			24		24
Recycling plants (t) **				11,100	11,100
DIRECT ECONOMIC CONTRIBUTION (EXCLUDING CLOSED SITES)					
Cost of all goods, material and services purchased from suppliers	$319	$123	$24	$3.6	$469.6
Purchase of regional goods and services ($ million)	$173	$57	$17	$2.9	$249.9
% spent on regional goods and services	54%	46%	70%	80%	53%
Cost of utilities (power, water, rail, etc. - $ million)	$45.3	$25	$16	$0.6	$86.9
Wages & benefits ($ million)	$126	$65	$42	$5	$238
Local taxes ($ million)	$7.4	$2.2	$1.2	$0.6	$11.4
Community donations & sponsorships (C$ thousand)***	$546.6	$342	$242	$1.4	$1,132
Infrastructure provided for public benefit (C$ thousand) ****	$191	$125	$0	$0	$316
OTHER KEY FACTS AND CONTRIBUTION (EXCLUDING CLOSED SITES)					
Employees (including contractors)	2,271	760	547	41	3,619
Training ($ million)	$3.9	$1.9	$1.2	$0.02	$7
Capital investments ($ million)	$69.3	$20	$4.6	$1	$92.9

* Includes 1,000 tonnes from Xstrata Nickel Montcalm Mine.
** New: Reporting of recycling material processed by Noranda Recycling.
*** New: Includes in-kind contributions.
**** Included in total contributions

The Workplace and Our People

As outlined in Xstrata Copper's Safety and Health Policy, we strive to create and sustain injury-free, safe work environments for everybody in our workplace. Zero harm is our goal. To achieve this, we make management accountable for safety performance, and we train our employees to improve their safety knowledge and skills and make them aware that they have a responsibility to themselves, their families and their friends to work and behave safely.

Health and safety

We ensure that every task undertaken in our workplace has a safe system of work identified and that our people have tools and equipment fit for the purpose and well maintained to complete tasks safely and productively. Furthermore, our regular health-screening programmes monitor employees' health, well-being and fitness for work.

Xstrata Copper uses a risk-management system to identify, assess and eliminate or control risks. When an unsafe condition is identified or when an incident, such as a High Potential Risk Incident (HPRI) occurs, it is investigated immediately and action is taken to control the risks involved. Periodic audits are conducted across our operations and activities to ensure that systems, standards and compliance are adequate. Our safety performance, initiatives and issues are regularly communicated to all employees.

2009 safety performance

Xstrata Copper Canada made exceptional improvements in safety performance across all operations in 2009.

We achieved our targets of zero fatalities and zero critical incidents. Total recordable injuries declined from 104 in 2008 to 61 in 2009, resulting in a 38 percent improvement in our Total Recordable Injury Frequency Rate (TRIFR). Lost-time injuries (LTI) decreased by 35 percent, from 17 in 2008 to 11 in 2009, leading to a 32 percent improvement in the Lost-Time Injury Frequency Rate (LTIFR).

Total days lost to disabling injuries were reduced from 2,552 in 2008 to 1,437 in 2009, resulting in a 41 percent improvement in the Disabling Injury Severity Rate (DISR). There were no lost-time injuries at our closed sites.

Xstrata Copper Canada was prosecuted and fined $26,000 in 2009 by the Ontario Ministry of Labour for a safety incident that occurred in 2008. Actions were identified and implemented to solve some issues with the Kidd Metallurgical site's confined-space programme.

Site	SAFETY ACCOMPLISHMENTS
Kidd Mine	3.75 million hours with no LTI Improved TRIFR by 15% over last 12 months
Kidd Metallurgical	Improved TRIFR by 51% over the last 12 months
Horne Smelter	1.2 million hours with no LTI – 85% improvement over last 12 months Improved TRIFR by 31% over the last 12 months
CCR/Recycling	Improved TRIFR by 39% over the last 12 months
Rhode Island Recycling Operations	131 months with only 1 LTI
Gaspé project (closed site)	Zero LTIs over the life of the project

Three-year performance

Over the three-year period from 2007 to 2009, Xstrata Copper Canada averaged approximately 7.3 million exposure hours while bettering its results for total recordable injuries, lost-time injuries and disabling injury days lost. These improvements resulted in reductions in the TRIFR and LTIFR of 57 percent and 56 percent respectively while driving down the DISR by 63 percent.

Key areas of focus that have helped us create a safer and healthier work environment are standardised incident reporting, incident causal analysis and corrective action identification, improved disability case management at the site level and ongoing efforts in risk analysis. At the same time, we see further opportunities for improvement in causal analysis, control effectiveness monitoring, disabling injury severity reductions, health assessment programme participation and exposure monitoring strategies.

These tools were used at Kidd Mine following uncontrolled ground movements in January and June. These resulted in rock movements, causing minor injuries (one medical treatment injury, several first-aid injuries), property damage and the temporary closure of parts of the mine. As part of the detailed root cause analysis, external consultants were engaged to help us better understand the phenomenon of rock bursts, the adequacy and effectiveness of current controls and methods to prevent future incidents. Additional control actions and monitoring are being implemented.

Two years of zero lost-time injuries at Kidd Mine

In November 2009, Kidd Mine employees and contractors achieved a significant milestone on the journey to zero harm by working two years, and more than 3.8 million man-hours, without a lost-time injury. Kidd Mine also achieved a 59 percent reduction in TRIFR during the same two-year period. These accomplishments are the result of a high level of employee engagement and high performance expectations.

In 2009, Kidd Mine introduced a number of initiatives to improve risk management, including self-assessment tools. Used in the field, these tools provide a means for workers to assess hazards and implement controls to manage risk as well as recognise changing conditions. When a change is identified, the worker must stop, assess the risk and apply the appropriate controls.

Complementing these efforts, changes were made to increase the effectiveness of the Positive Attitude Safety System (PASS). An Operating Safety Team was established to determine and implement key site safety improvement initiatives, safety pauses were introduced to review key messages with all workers, and processes were developed to improve transparency and accountability for safety results and activities.

High expectations, engagement, leadership, accountability and involvement are key elements that are promoted and continue to contribute to Kidd Mine employees' and contractors' ability to work safely and go home with zero harm.

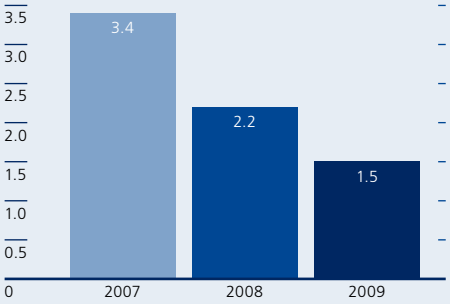
Horne Smelter health and safety week shared with the community

Nearly 600 people visited the Horne Smelter during its 2009 health and safety week, themed "I'm a responsible employee". During the week, employees and contractors were invited to visit information booths to learn about electrical risks, personal protective equipment, health and hygiene, workplace innovations and more. Community leaders were also invited to attend, as were students from a local primary school, who were given safety tips by Horne employees. All attendees received smoke detectors as gifts for participating.

All sites have emergency plans that are shared with the community.

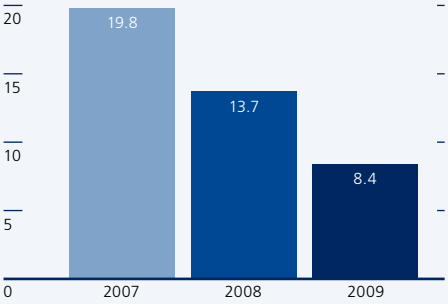
Lost-Time Injury Frequency Rate (LTIFR)

Measure of the number of lost-time injuries (occupational injuries and diseases that result in days away from work on any rostered shift subsequent to the day on which the injury occurred, including fatalities) per one million hours.



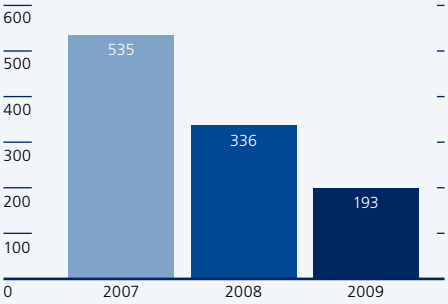
Total Recordable Injury Frequency Rate (TRIFR)

Measure of the number of lost-time injuries (including fatalities), restricted work injuries and medical treatment injuries per one million hours worked.

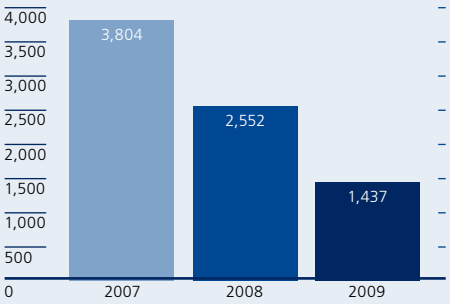


Disabling Injury Severity Rate (DISR)

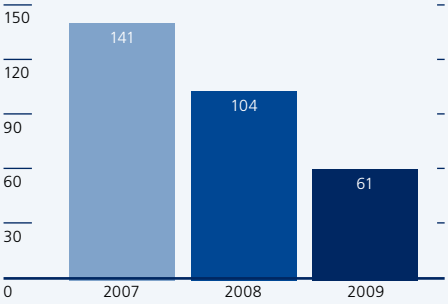
Measure of the number of days lost due to disabling injuries per one million hours worked. The DISR has replaced the Disabling Injury Frequency Rate (DIFR) used in the 2007 Sustainability Report, as mandated by the Xstrata Copper SD Committee.



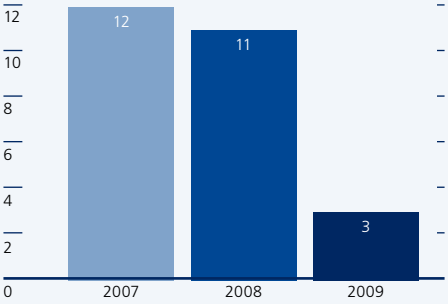
Disabling injury days



Total recordable injuries



New occupational illnesses



There were three new cases of occupational illnesses reported in 2009, resulting in an Occupational Illness Frequency Rate (OIFR) of 0.4. This compares to 1.4 and 11 reported cases in 2008. OIFR is a measure of the number of confirmed occupational illnesses per one million hours worked.

Occupational health

The key occupational health challenges facing our operations are exposure to hazardous substances, long-term employment in physical roles that could contribute to degenerative musculoskeletal conditions, and working in dusty, hot and noisy environments. Each site is required to develop annual health and safety plans, including various health monitoring programmes for arsenic, lead, asbestos, beryllium, silica, heat stress and hearing, as well as ergonomic programmes. Threshold limits for metals or dust are determined either by law or by Xstrata guidelines. Monitoring includes air quality testing during production and employee medical examinations and clinical tests (e.g., blood and urine analysis).

At Kidd Mine, where blasting releases silica into the air, employees are given training and personal protective equipment, and a health monitoring programme is in place.

The Horne Smelter, in co-operation with the Union, reinstated a beryllium monitoring programme in 2009. The first extensive beryllium monitoring programme was offered to employees at the beginning of 2000. Information was provided to all employees who may have been exposed in the past in order to explain the objectives of this prevention programme. More than 110 were tested. The test helps to identify people whose immune system has become sensitised to beryllium by triggering a form of allergic response following past exposure. All results were negative. We will continue with information sessions and testing in 2010 with all other smelter employees.

Site	MUSCULOSKELETAL INJURY	DERMA CONDITION	NOISE-INDUCED HEARING LOSS
Kidd Metallurgical	Carpal tunnel – 1	Dermatitis – 1	
Kidd Mine			1

Copper sheets sometimes detached from the blank prematurely and fell to the machine floor.

CASE STUDY

Reducing high-risk injuries by half

At CCR, a three-year quality improvement project has reduced the probability of high-risk injuries by 50 percent. The project was focused on lowering the frequency with which copper sheets would fall on the stripping machine floor.

At the stripping machines, copper cathodes are flexed, hammered and wedge-stripped to remove the copper from the stainless steel blank. The copper sheets normally stay bound together and, once removed from the blank, they are automatically stacked and bundled for shipping. However, copper sheets sometimes detach from the blank prematurely and fall to the machine floor. Retrieval of these sheets is a labour-intensive procedure that traditionally resulted in approximately four hours of downtime each month and posed a safety risk to operators.

Upon analysis, it was determined that the problem was initiated at the washing stage, prior to the cathodes being loaded onto the stripping machine carousel. Furthermore, the team discovered that two detection switches were worn out because of heavy vibrations at their location. Corrective actions included establishing the optimal parameters for reducing wash flow rates so as not to loosen the copper strips while maintaining washing effectiveness. More than 500 cathode samples were analysed to ensure that there was no statistically significant increase in the sulphur content of the cathodes at the reduced wash flow rates.

As a result of this work, the number of self-stripping cathode incidents has been reduced by 50 percent, which, in turn, has meant a significantly safer workplace for machine operators.

2010 health and safety priorities

Priorities	ACTIONS
Health leadership	Division ■ Complete development of self-assessment tool. ■ Finalise fit-for-work guidelines. ■ Finalise medical examination and clinical testing protocols. ■ Finalise exposure action levels for material occupational health hazards. ■ Incorporate compliance assurance audits into 2011 annual audit plan. Sites ■ Complete annual self-assessment to divisional SD requirements. ■ Incorporate management actions to address gaps into annual business plans. ■ Establish internal audit plans and incorporate into annual business plans.
Controlled work environment	Incorporate management actions into annual site business plans to address gaps identified in 2009 risk control audits.
Safety leadership	Division ■ Finalise guidelines for catastrophic hazard management and high hazard activity control. ■ Finalise high hazard activity control protocols. ■ Finalise high hazard activity control protocol self-assessment tool. Sites ■ Complete self-assessment to division high hazard activity control protocols. ■ Incorporate management actions to address gaps into annual site business plans. ■ Establish catastrophic hazard management plans. ■ Establish high hazard activity control plans.

Xstrata Copper Canada aims to attract and retain the best people at every level of our organisation and provide them with the resources they need to succeed. We offer employees training and education in the workplace and through external organisations.

Employees

The majority of our employees are full-time, permanent employees. Preference is given to local residents when skill sets and abilities are equal, in line with our engagement with communities.

Approximately 78 percent of employees are from local communities, although percentages vary by location. For a variety of reasons, some 200 employees ceased being employed by the division in 2009. Thirty six new positions were created.

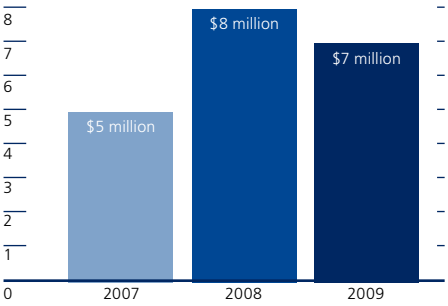
Training and education

In 2009, we spent approximately $7 million on training, or $2,570 per permanent employee. Overall, Xstrata Copper sites dedicated up to 2 percent of work time to training, representing some 40 hours per employee. We provide a variety of programmes related to health and safety, leadership training, professional training, trades, operations and apprenticeships to enable current employees and external applicants to develop trade qualifications. All supervisors and superintendents participate in the Xstrata Copper leadership development programme, which is delivered by internally trained facilitators and fundamental to the implementation of our unique culture.

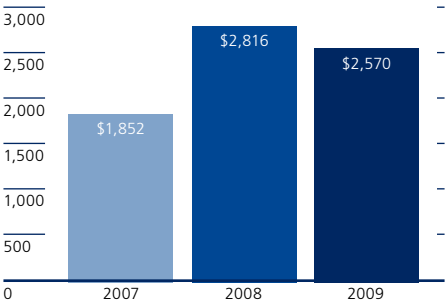
All staff employees participate in performance reviews at least once a year, in order to align business and individual objectives and identify areas for individual improvement, development and support. We have a straightforward system for ensuring that our many high-performing employees are rewarded at levels superior to others in our market.

The Horne Smelter received a $45,000 training grant from the Québec Labour Ministry (Emploi Québec).

Total investment in training



Investment in training per permanent employee



Recruitment and retention

Our employee retention rate was approximately 93 percent. Specialised employee recruitment, development and retention remained a priority to ensure that we have the skilled people we need. Initiatives included apprenticeships across the division, targeted recruiting for certain positions and continued communication through regular meetings and television screens in many locations. In recognition of the importance of encouraging students to enter – and remain in – mining-related university courses, we offered co-op and summer work placements, as well as scholarships.

Non-discrimination policy

As outlined in Xstrata's Business Principles, we value the contribution made by employees, and our policies and practices respect their personal dignity and rights. We do not tolerate any form of workplace discrimination, harassment or physical assault.

No cases of discrimination were registered in 2009.

Diversity and equal opportunity

In line with Xstrata's policies, Xstrata Copper Canada seeks to employ a diverse workforce to benefit from a varied range of skills, backgrounds and perspectives. We employ people based on the skills and experience required for each particular position, without discrimination by gender, race, age, sexual orientation, religion, nationality or any other factor.

Although men have typically accounted for the majority of the workforce in the mining industry, the presence of women is on the rise. Representing 4 percent of the group of employees aged 50 or over at Xstrata Copper Canada in 2009, women account for 15 percent of the workforce aged 30 or less.

Labour relations

Within Xstrata Copper there are examples of various workplace relations models, including individual agreements and collective bargaining agreements, reflecting the circumstances of a given site and Xstrata Copper's devolved management structure. All employees are free to join a union of their choice. Labour relations are a fundamental responsibility of operational management, and we seek to have a direct relationship between our employees and line management founded on quality leadership, effective communication, mutual respect and trust.

Fifty percent of Xstrata Copper Canada employees are represented by a collective workplace agreement. All employees are covered by formal joint management-worker health and safety committees. We consult with employees in advance of any significant operational change. Minimum notice periods vary across our operations and are generally specified in collective agreements or by law.

Health and safety topics covered in formal agreements with trade unions address health and safety committees, personal protective equipment, audits, complaints mechanisms, accident investigations, refusal to proceed with work considered unsafe, as well as training and education.

The collective agreement with employees at the Horne Smelter was renewed in March 2009.

Compensation

The majority of our employees are full-time, permanent employees who enjoy a comprehensive benefits package including health, medical, dental, and disability insurance as well as retirement benefits. Benefits for our contract employees with less than six months of service include basic life insurance coverage only. Contract employees with more than six months of service receive basic life insurance, basic accidental death and dismemberment insurance, 50 percent medical coverage and 90 percent dental coverage.

Entry-level wages are more than double the minimum wage, although the minimum wage may differ from site to site because it is set by provincial governments and collective agreements are negotiated locally.

Workforce by role type
(not including contractors)

ROLE TYPE	NUMBER
Executive and senior managers	25
Managers	98
Operational, production and maintenance	1,909
Supervisors, administration and technical	726

Sustainable Communities

Xstrata Copper is committed to contributing to the social, economic and institutional development of the communities where we operate to improve the quality of life for all. We believe that contributing to the development of sustainable communities and engaging with our stakeholders in two-way, open dialogue, regardless of our location, enhance our corporate reputation and are crucial to maintaining our social licence to operate.

In line with Xstrata Copper's Community Policy, our community relations practices are characterised by open and honest engagement with our stakeholders through effective, transparent consultation and communication. We consult and communicate with stakeholders regularly in culturally appropriate and respectful ways, using materials that are easily understood, and provide feedback on issues raised in a similar way. We record, monitor and address community complaints. We establish fair and equitable processes for engagement with indigenous and local communities, including, where relevant, free prior informed consent.

Xstrata Copper's Corporate Social Involvement (CSI) programmes are developed in line with Xstrata's SD policy and standards and form an important part of our work with local communities. Through these programmes we develop community partnerships in the areas of art and culture, education, enterprise development, environment, social and community development and health. These community partnerships contribute to the development of sustainable communities and emphasise local capacity building. Xstrata Copper also supports local businesses and employs local people wherever we operate, in order to strengthen local and regional economies.

Engaging in a meaningful conversation with our communities

Xstrata Copper seeks to maintain broad-based, ongoing community support for its activities throughout each operation's life cycle. We interact regularly with all levels of government and the media. At the division level, environmental, economic development and health authorities are our main external stakeholders. At the site level, stakeholders include municipal authorities; provincial and federal elected representatives; local environmental, economic development and health authorities; educational institutions; and environmental groups. We consult with communities as early as possible and establish formal mechanisms for ongoing consultation and complaint resolution.

Our 2009 results reflect our commitment more than ever. We conducted a total of 61 stakeholder meetings across the division, compared to 23 in 2008, including formal community advisory mechanisms and one-off meetings to address specific issues.

At the Horne Smelter, a citizens committee meets four times per year to discuss site operations and address community questions or concerns. The committee also publishes a quarterly community newsletter, which is designed and printed by Horne employees. For each Horne project, there is a process for identifying and mitigating community risks. In 2009, managers and superintendents participated in two training sessions on roles and responsibilities vis-à-vis the community. They are evaluated on their community involvement and encouraged to bring any concerns forward to the site leadership team. Community members were invited last year to participate in the Horne Smelter's health and safety week events.

At CCR, a citizens committee, established in 1992, meets four times per year. The site's monthly newsletter is shared with the Association industrielle de l'est de Montréal and to citizens-committee members. It will be more accessible once published on CCR's website in 2010. CCR also sits on CLIC, a local committee comprising industrial companies, municipalities, non-governmental organisations and citizens of the area that meets to discuss environmental issues. Three times a year, CCR participates in a focus group with the local Table de concertation de l'industrie métallurgique and publishes its SD performance in the local newspaper every quarter.

Open houses were held in Timmins to review our application for an alternate air standard at the Kidd Metallurgical site and a proposed landfill expansion project at Kidd Mine. However, the planned citizens committee did not meet in 2009 due to a lack of resources.

In Murdochville, the Citizen's Committee on Environment visited the industrial site and received a last update on the mine-smelter site rehabilitation. The committee was formed when the site was in operation and held its last meeting in November 2009 after 20 years of existence.

Exploration and communities

Our Exploration team engages in communication and consultation with local communities throughout all stages of exploration and development. Meetings and forums are held to inform local stakeholders and the public of our intentions and activities in areas selected for exploration. Our Exploration team understands that it is typically Xstrata's first contact with local communities and stakeholders. At an early stage, it must develop a relationship that enables stakeholder concerns to be addressed and built into proposed exploration programmes.

In addition to communication, Xstrata Copper's exploration group strives to engage local First Nations contractors when exploration activities are conducted on First Nations traditional lands. For example, line-cutting work for our Prince George Porphyry Copper project was contracted to Chunzooth Forest Products from the Lheidli T'enneh First Nation in Prince George and Tootikoh Contracting from Nak'azdli First Nation near Fort St. James.

Recycling day at the Horne Smelter

The Exploration group initiated a youth mentoring programme designed to introduce young people from local First Nations communities to opportunities in the mining and exploration sectors by employing them for summer exploration programmes. The youth are inserted directly into our exploration teams, living in the same accommodations as our staff at each site. Two mentored youths from the Fort St. James area worked on our projects in the Prince George/Fort St. James area and were seconded to work with other teams on programmes in Thunder Bay, Ontario, and the Gaspé Peninsula in Québec.

First Nations consultation

In 2009, the Kidd Mine and Metallurgical sites presented their biodiversity and landfill expansion plans to nearby First Nations communities. They also delivered workshops on First Nations awareness and consultation.

The Horne Smelter participated in information sessions with representatives of First Nations communities in order to encourage employment. The sessions were organised by a regional mining organisation.

No other Xstrata Copper operations are located near First Nations communities, and there were no complaints relating to the violation of indigenous rights.

Overall, key issues and concerns - such as the environment or community issues - raised by stakeholders in various consultation forums are addressed, where possible, by way of support through donations and sponsorships or time donated by employees as well as action plans in operations. (For more details, see "Supporting community initiatives" on this page or the section entitled "Environment" on page 26.)

Supporting community initiatives

We have two major programmes to support community initiatives: the Community Partnership Programme and the Community Service Fund. Under the Community Partnership Programme, we fund initiatives that fulfil community needs. These needs are assessed through formal and informal consultations with community leaders as well as a quantitative perception study conducted every two years. Our first perception study was conducted in 2008 at CCR, the Horne Smelter and the Kidd sites. Because our Community Partnership Programme was only introduced in late 2007, we will wait for the results of our second study in 2010 before making any programme changes.

The Community Service Fund is a volunteer grant programme that recognises the efforts of employees who contribute their time to local community clubs and non-profit organisations. Employees are invited to apply for a grant of up to C$1,000 for the organisation with which they volunteer at least 40 hours of their own time during the year. In 2009, this programme provided C$13,000 to various community organisations located near our operations.

Challenging economic conditions in 2009 and a lack of financial resources made it difficult to allocate the targeted 1 percent of pre-tax profit to community financial support, but we did maintain our commitments to several multi-year programmes. Moreover, adding in-kind contributions, we achieved our objective and intend to include these non-monetary contributions in future reporting, recognising the efforts of our employees in supporting Xstrata Copper Canada's community efforts.

Investment by category (C$)

Category	CASH/SPONSORSHIP	IN-KIND CONTRIBUTIONS	TOTAL
Social/community development	$273,600	$121,500	$395,100
Education	$45,000	$270,000	$315,000
Enterprise/job creation	$53,000	$10,700	$63,700
Culture/art	$147,800	$3,700	$151,500
Health	$163,400	$22,600	$186,000
Environment	$22,800	$6,000	$28,800
Total	$705,600	$434,500	$1,140,100

Major contributions (over C$10,000)

KIDD MINE AND KIDD METALLURGICAL: TOTAL DONATIONS OF C$546,600	
Timmins & District Hospital Foundation	$89,300 (third instalment of a three-year commitment)
Kamiskotia Snow Resort	$40,000 (second instalment of a two-year commitment)
Northern College Foundation	$50,000 (third instalment of a three-year commitment)
Science Timmins	$16,500
Porcupine United Way	$30,000 (matched employee contributions for a total of $60,000)
College Boreal	$70,000
Bannerman Park Rejuvenation	$25,000
Navy League Sea Cadets	$25,000
Anson General Hospital	$20,000
HORNE SMELTER: TOTAL DONATIONS OF C$342,000	
Les Intrépides	$50,000 (second instalment of a two-year commitment to create 16 housing units for disabled people)
L'Agora des arts	$50,000 (second instalment of a three-year commitment)
Le Petit Théâtre du Vieux Noranda	$25,000 (second instalment of a two-year commitment)
Festival du cinéma international en Abitibi-Témiscamingue	$10,000
Festival pyromusical Osisko en lumière	$10,000
Fondation hospitalière Rouyn-Noranda	$10,000
CCR: TOTAL DONATIONS OF C$241,800	
Commission scolaire de la Pointe-de-l'Île	$105,000 $ (second instalment of a three-year commitment)
Un Mondalire literacy organisation	$17,800 $ (second instalment of a three-year commitment)
Jeunes en mouvement	$10,000 (third instalment of a three-year commitment)

Listening to our communities

Xstrata Copper Canada operations have formal mechanisms to handle community grievances.

At the Horne Smelter, residents are invited to call the site and their complaints are automatically recorded. Follow-up is managed through a detailed complaint process, with every complaint addressed and resolutions varying depending on the nature of the issue.

Complaints to CCR are also handled by phone calls to the site. Following a thorough complaints procedure, a site representative is responsible for returning phone calls and gathering relevant operating data corresponding to the time of the alleged incident. If the complaint concerns damage to property, an inspection occurs and the matter is then dealt with accordingly.

At Kidd Mine, stakeholders (employees, contractors and community members) can record their comments on a dedicated line managed by the communications and community relations representative, who then follows up as required.

Most community complaints are related to atmospheric emissions, such as fumes and dust. Our total number of complaints/events remained stable at 43 for 2009, compared to 42 in 2008.

Highlights of complaints

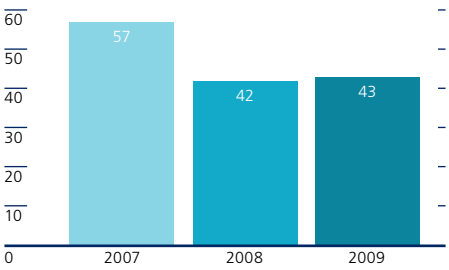
The majority of complaints were registered at the Horne Smelter, which is located in close proximity to neighbouring houses. Horne Smelter personnel have put tremendous effort into reducing site emissions, especially fugitive emissions that occur during the smelting process.

In 2009, dust released from a plant stack settled on some cars near the site. The Horne Smelter paid for the cars to be cleaned and painted, depending on the extent of the damage.

2009 complaints/events by category

General complaints about odour/fumes	21
General complaints about dust	4
Fallout damage claims	5
General complaints about noise	2
Traffic amenities	2
Other	9
Total	43

Number of complaints/events



Responding to a community call at CCR

During a period of extreme cold in January 2009, Hydro-Québec issued a request asking residential and industrial customers to voluntarily reduce their energy consumption during peak hours as a means of averting potential power outages. For its part, CCR altered its electrolyte purification schedule to run during off-peak hours and temporarily lowered the electrolysis amperage by approximately 10 percent. These actions, together with those of the surrounding community, were successful in helping Hydro-Québec avoid power interruptions despite record-high electricity demand. CCR received a letter of thanks as well as a $10,000 credit on its next electricity bill for its contribution.

CASE STUDY

Recycling Day

The Horne Smelter has a high profile in the Rouyn-Noranda community. For the third consecutive year, it invited local residents to bring their old electronic and electric devices to the site for recycling on a specially designated Recycling Day. This annual event helps educate the community and plant employees on the Horne Smelter's metal recycling activities and environmental progress. Guests are given a guided tour of the facilities and receive a gift in exchange for the materials they bring for recycling.

Thanks to the efforts of 29 employee volunteers and their families, more than 350 people participated in the 2009 event and approximately 25 tonnes of electronic/electric equipment were collected. Attendance was bolstered through a large-scale promotional campaign, which included flyers, and newspaper and radio advertisements.

Site initatives

Taking corrective action at Xstrata Recycling

At the East Providence, Rhode Island, recycling facility, a cartridge filter dust collector was installed in 2008 at the same time that a new small sample process was commercialised. These filters ruptured twice during the year, emitting dust and foil from the plant's exhaust stack and prompting complaints from industrial neighbours. After testing various options for addressing the issue, a cyclone was attached to the dust collector as a means of removing large particles from the exhaust air and reducing the burden on the filters. Since installation of the cyclone in early 2009, there have been no filter failures and no community complaints.

Promoting tourism at the Horne Smelter

Tourism has long contributed to the economic vitality of the Abitibi-Témiscamingue region of Québec, where the Horne Smelter is located. However, for the past two years, the number of visitors had dropped compared to the rest of the province. To help revive local tourism, the Horne Smelter partnered with the Local Development Centre (CLD) to offer plant tours during the 2009 summer season and participate in a promotional campaign. The tours turned out to be a popular draw, attracting visitors from across the province as well as the local community. They were also well received by employees, who were proud to showcase their workplace. As a result of these efforts, the number of visitors touring the plant rose to more than 1,200 in 2009.

2010 priorities	ACTIONS
Baseline needs analysis	Identify with community stakeholders the needs of the community. Adjust Community Partnership Programmes.
Gauge community perceptions.	Conduct second phase of community perception studies. Review and adjust stakeholder engagement plan.

Konanee salmon in the Trepanier Creek, downstream from the effluent of the Brenda Mines closed site

Environment

In accordance with Xstrata Copper's strategic objectives, we strive for industry leadership in environmental performance. The environmental management systems are in place at all operations, and each is aligned with Xstrata's Business Principles and SD Standards. We routinely assess our performance against these systems and standards.

Our operations and projects are required to meet and, where practicable, exceed relevant laws, regulations and standards. Our operations are required to set targets to reduce carbon and energy intensity, fresh water use and sulphur dioxide (SO_2) emissions that go beyond the requirements of local regulations.

We manage biodiversity-related risks and seek to avoid, minimise or mitigate any negative effects on biodiversity caused by our operations.

Xstrata Copper Canada is committed to its recycling business in North America, which extends the life cycle of metals and disposes of electronic scrap, an increasing source of environmental concern and landfill waste.

When environmental incidents do occur, we determine the cause and take the necessary steps to prevent recurrence. Xstrata Copper Canada also plans, operates and closes operations in a way that is consistent with our commitment to sustainable development.

Environmental protection expenditures and investments

In 2008 and 2009, a large part of our budget went to the closure of the Murdochville site in the Gaspé Peninsula of Québec (in total, the project will have cost C$140 million) and to site initiatives to reduce emissions, including the new baghouse at the Kidd Metallurgical's copper smelter and the second of two secondary gas hoods at the Horne Smelter.

2009 environmental performance

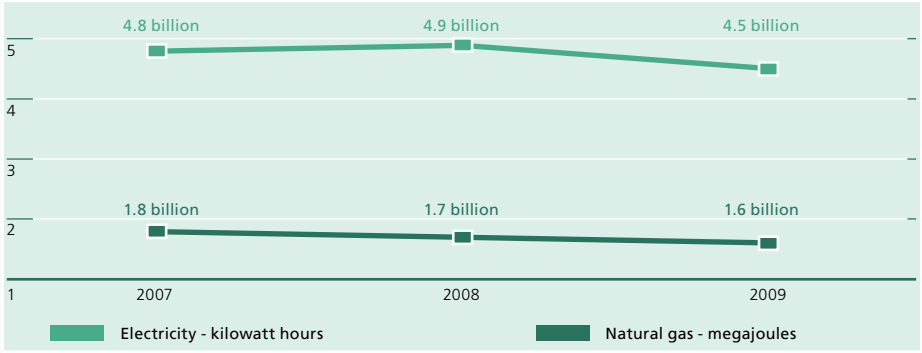
In 2009, we advanced our multi-year action plans to improve air quality near our operations. At the Kidd Metallurgical site's copper smelter, a new baghouse was commissioned to reduce lead and particulate emissions. At the Horne Smelter, the second of two secondary gas hoods was installed on the anode furnaces as part of a three-year arsenic emission reduction commitment. The installation of the first hood, coupled with other initiatives, resulted in a 33 percent reduction from 2008 in the concentration of arsenic in ambient air in the Notre-Dame neighbourhood adjacent to the operation.

After completing the remediation of the closed Murdochville mining and metallurgical facilities in 2008, we officially started the process of handing over the former mine service buildings to the town for use as an industrial park. The only activity to be continued in 2010 is the bio-treatment of soil affected by hydrocarbons. As per our initial plan, we also completed the voluntary rehabilitation of residential properties in the Sandy Beach area of the port of Gaspé where we maintained a concentrate storage/transfer facility for many years.

Even though we implemented many initiatives to reduce energy and carbon intensity, targets per tonne of product were not met as a result of lower production volumes, driven by the economic downturn and seismic events at the mine. Despite the fact that water is abundant in Canada, we set water intensity targets for 2009. They were not met for the same reasons as the energy and carbon targets.

NUMBER OF NON-COMPLIANCE INCIDENTS	2007	2008	2009
CCR Refinery	2	0	3
Horne Smelter	1	8	10
Kidd Metallurgical	20	9	6
Kidd Mine	1	5	0
Xstrata Recycling (2 sites)	1	0	0
Closed sites (16 sites)	1	1	2
Total	26	23	21

ENERGY USE BY SOURCE



EMISSIONS (CO_2-EQUIVALENT TONNES)

AIR EMISSIONS	2007	2008	2009
CO (carbon monoxide) ('000 kilograms)	509	539	260
Hydrofluorocarbons (HFCs) (kilograms)	81*	340*	376
Sulphur dioxide (SO_2) ('000 (tonnes)	23	25	21
Total particulates ('000 tonnes)	1	1	1
SO_x – Oxides of sulphur ('000 tonnes)	23	25.5	20.8
NO_x – Oxides of nitrogen (tonnes)	525	489	969**

* Restatements
** Stack measurements operation in 2009 vs. conversion factor or estimation in previous years

Xstrata Copper Canada set a division-wide GHGs and energy intensity reduction targets of 5 percent over five years (from 2005 to 2010).

There is no carbon trading market in Canada and, therefore, no costs associated with the purchase of emissions certificates.

Our two smelters are among the best in class for base metal smelters in Canada regarding sulphur fixation.


Site before rehabilitation

In 2009 Xstrata Copper Canada completed the rehabilitation of the former mining-smelting site in Murdochville, Québec.

Overall, we improved our performance on non-compliance incidents in 2009. The Kidd Metallurgical site had six non-compliance incidents in 2009, down from nine in 2008 and 20 in 2007. The 2009 incidents related to sulphur dioxide exceedances for short periods of time during the start-ups of the acid plants, until the catalyst attained normal operating temperatures. It is somewhat like starting a car on a cold winter day: Emissions from the tail pipe are higher until the car warms up. An Ambient Air Telemetry protocol is in place to prevent exceedances. This has led to continuous improvement over the years in the number and total duration of events.

Environmental incidents

The number of incidents recorded at the Horne Smelter rose because of failed *Daphnia magna* (a micro-crustacean) effluent toxicity tests. All results with trout passed the toxicity tests. The issue with *Daphnia magna* was resolved at the Kidd Metallurgical site in 2008, and, although the causes are different at each site, employees shared their findings to support the Horne Smelter's efforts.

Xstrata Recycling/Horne Smelter received an $88 fine relating to the improper submission of documents for a cross-border material movement by one of our shippers.

Recycling's San Jose, California, facility paid a $45,000 fine in 2009 following delays the previous year in providing financial assurance for closure costs to the California Department of Toxic Substances and Control (DTSC). California regulations require that San Jose provides assurance in the event the facility closes and cleanup is required. The format for providing this assurance changed, which resulted in a period during which Xstrata Recycling wasn't technically able to demonstrate coverage.

In 2009, all closed sites operated in compliance with their operating permits except for two non-compliances in the Brenda Mines final effluent. The exceedances, slightly above the standard for iron, were caused by the re-suspension of a light sludge containing iron. There were routine regulatory inspections and no infractions or citations at any of the closed sites. Again this year, all tailings and water impoundment facilities were inspected by third-party experts and no major findings were made.

Climate change: GHG emissions and energy usage

Xstrata Copper is committed to managing energy use and the emission of associated greenhouse gases (GHG). We recognise that the future impacts of climate change, including increased regulation, higher energy costs and physical impacts, present a risk to our operations. Further information about Xstrata's approach to climate change can be found in the Group's sustainability reports and on its sustainability website: www.xstrata.com/sustainability.

A task force representing the Québec ministries of Environment, Natural Resources and Industry and Commerce visited our Québec operations as part of a tour of large greenhouse gas emitters including petroleum, pulp and paper and cement production facilities. The task force is planning to draft new GHG objectives and was interested in learning about our projects and processes. The task force was pleasantly surprised by the pipeline of projects aiming at reducing energy and GHG emissions and, more generally, by the integration of energy and GHG targets in the operation performance dashboard.

Our operations are major users of electricity and hydrocarbon fuels. Energy use and the resulting GHG emissions are therefore important business issues from an environmental perspective, in addition to operating costs.

Xstrata Copper Canada tracks direct and indirect GHG emissions resulting from the purchase of energy. In Québec, most electricity is water-generated and in abundant supply, which helps minimise direct and indirect emissions. However, in Ontario, a large portion of electricity is supplied by fossil-fuel-powered plants. In 2009, there was a reduction in direct and indirect GHG emissions because of the extended production shutdowns. In this context, 2009 performance is not representative of typical annual emissions. However, the improvement projects under way at the Horne Smelter, CCR and the Kidd Metallurgical sites to reduce natural gas consumption and GHG emissions, for example, contributed to a significant decrease in direct emissions.

There are currently no mandatory GHG reduction targets in Canada, and the targets proposed by the federal government at the beginning of 2010 have yet to be approved by the Cabinet.

Site after rehabilitation

Reducing energy usage and GHG emissions

Kidd Mine

Among the challenges of operating Kidd Mine, the deepest base-metal mine in the world, are the high energy requirements. The mine monitors its energy use and continually strives for improvement, achieving a 4 percent reduction in energy consumption in 2009, compared to 2008. During the year, the team addressed the issue of auxiliary vent fans, aiming to improve their life cycle and reduce energy costs. They took advantage of programming capabilities to remotely control the fans operating on 25 levels within the mine. The programme consisted of turning on and off up to four fans per level for at least 4.5 hours per day without compromising air quality for workers.

Kidd Metallurgical

At the Kidd Metallurgical site, voluntary actions were taken to reduce GHG emissions, such as the survey and repair of makeup heaters in the zinc operation, maximising boiler steam generation and better limestone control in the copper smelter. These activities resulted in a 1.6 percent decrease in energy consumption, or a 2 percent reduction in GHG emissions compared to 2008. The site also continued the practice of switching some plating time at the zinc cell house from peak to low-usage time, generating a $170,000 rebate from Ontario Hydro in 2009 and helping reduce electricity generation at Ontario's coal-fired plants.

Horne Smelter

A key objective at the Horne Smelter has been to reduce costs, without compromising on health and safety or environmental protection. Over a two-year period, the Horne Smelter implemented different improvement projects at the converters and anode furnaces. The projects involved covering the converters' mouth during standby time, adding extra insulation at the furnaces, replacing natural gas and combustion air flow meters to optimise the air/gas ratios of vessels' burners, reducing air infiltration at furnaces' hoods and optimising the end of charge at the converters so that less oxygen is added to copper prior to refining into the anode furnaces. These projects reduced the Horne Smelter's energy consumption by 4 percent compared to 2008. The Horne Smelter also initiated a pilot project to test the use of electricity instead of natural gas to thaw frozen concentrate and recycling material in rail gondolas.

CCR

CCR has a goal of reducing energy and GHG intensity by 1 percent per year. To help reach this goal, a team of employees set out to lower natural gas consumption at the submerged combustion plant.

Nickel sulphate production involves evaporating water from decopperised electrolyte and then filtering the resulting nickel sulphate crystals. Traditionally, the evaporators at the plant have been operated at a high firing rate to maximise solution throughput. However, this process creates high variability in the nickel level in the electrolyte. Upon analysis, the team found that by maintaining a higher target level of nickel in the electrolyte, less water needed to be evaporated to produce nickel sulphate, thereby reducing the amount of natural gas consumed. At current operating rates, this project alone will save 17,000 gigajoules of energy and reduce greenhouse gases by more than 830 CO_2-equivalent tonnes per year.-

Overall, CCR achieved a 2.4 percent reduction in energy use through various initiatives, including the project at the submerged combustion plant focused on lowering natural gas consumption. In addition, an energy committee was established at the site and plant-wide energy and lighting analyses were completed.

Horne Smelter

Kidd Metallurgical

CCR

Since the design of the 2004 and 2007 Environmental Effects Monitoring programmes under the Federal Metal Mining Effluent and Ontario government regulations, the Kidd Metallurgical site determined the extent and magnitude of effects on benthic invertebrate communities downstream from the site. The results will be submitted to the government in 2010.

Reducing air emissions

Horne Smelter

The Horne Smelter continued the implementation of a comprehensive programme aimed at reducing sulphur dioxide fugitive emissions, which has been under way for five years. Fugitive emissions are air emissions that escape the normal gas capture and treatment systems of the acid plant and other stacks.

Because of their multiple sources and the complexity of the Horne Smelter's operations, fugitive emissions are difficult to control. However, Horne employees recognised that a large percentage of emissions could be reduced by improving operator understanding of the impact of their work and the addition of appropriate control equipment. Over the five-year period, Horne metallurgists and technicians worked closely with smelter operators, monitoring each step of the work to identify and modify activities contributing to fugitive emissions. They also introduced measuring and control devices. To date, this sustained attention has resulted in an 81 percent reduction in fugitive emissions.

Kidd Metallurgical

At the Kidd Metallurgical site, economic and technical evaluations were undertaken to assess options to further reduce modelled and measured ground-level concentrations in anticipation of phased in changes to Ontario Reg. 419 – Local Air Quality Regulation and Limits. Best practices for controlling fugitive dust sources around the site and the installation of the baghouse contributed to compliance in surrounding areas in 2009. Readings at the air monitoring stations (AMS's) downwind of the plant in the rural community of Hoyle indicate that the average over the year is well below 2009 Ontario limits or guidelines.

ANNUAL AVERAGE AMBIENT AIR CONCENTRATIONS NEAR KIDD METALLURGICAL	HOYLE ROAD - AMS#1 (1.6 KM EAST OF PLANT)			2009 ONTARIO LIMIT OR GUIDELINES
	2007	2008	2009	
Sulphur dioxide	4	3	3	20 ppb
Lead	0.13	0.12	0.08	0.4 mg/m³
Cadmium	0.008	0.006	0.007	0.05 mg/m³
Arsenic	0.013	0.013	0.009	0.060 mg/m³
Total suspended particulate matter	39	28	21	120 mg/m³
Particulate matter (PM10)	21	14	11	50 mg/m³

Canada enjoys an abundant water supply and is not faced with many of the sensitive issues confronting our global counterparts, such as the withdrawal of groundwater for operational purposes.

Water management

Most of the water used by our operations is raw surface water, and less than 2 percent comes from potable water sources. It is to be noted that close to 85 percent of the water used at the Kidd Mine is either recycled or reused. There are no bodies of water and related habitats significantly affected by discharges of water and runoff from our operations.

Despite our abundant water resources, Xstrata Copper Canada set water usage reduction/recycling targets, and sites have started to include water management in operations in 2009. Each site has a water target to achieve a division-wide 5 percent water intensity reduction per tonne of metal from 2007 to 2010.

TOTAL WATER WITHDRAWAL BY SOURCE (MEGALITRES)	2007	2008	2009
Raw groundwater consumed	0	0	0
Raw surface water consumed	41,600	34,000	32, 900
Potable water consumed	877	736	670
Total water used	42,400	34,800	33,570
Total water recycled or reused	12,700	13,300	14,000

Main dam at Brenda Mines closed site

Step change in water consumption

In 2008, an investigation into the septic system servicing Kidd Mine's warehouse shop complex indicated that it was no longer operating properly and that excessive water was being consumed. In order to prevent odours and the freezing of lines during the winter, water was left running in the urinals.

The system was also being overloaded by groundwater infiltration through manholes from decommissioned buildings on the site. To address the issue, distribution pipes leading to the urinals were shut and improvements were made to allow for structured flushing. In addition, manholes leading to the septic system were cemented shut. These actions alone resulted in a reduction, by more than 80 percent, of fresh water consumption at the warehouse shop complex.

Closure plans

All Xstrata Copper Canada sites have closure plans that are regularly reviewed and updated. The forecasted costs of rehabilitation and restoration after mining activities are reflected in the division's financial registers throughout the life of operations.

All of the division's closure plans are reviewed and approved by an internal stage gate steering committee. The Kidd Mine closure plan was revised in 2009 and will be submitted to the Ontario government in 2010. Conceptual site closure plans for CCR and the Horne Smelter will be reviewed by the internal steering committee in 2010.

Managing closed sites responsibly

Canada has a long and rich mining history, and many mining sites are now closed or in the process of being closed. Xstrata Copper manages 16 sites across the country. Each site has been closed and subsequently managed in compliance with regulations and best practices put forward by the Mining Association of Canada.

In addition to Xstrata Copper guidelines, sites are subject to regular monitoring and inspection to ensure proper water management and dam stability, among other things. Dedicated site personnel are responsible for these activities, which also include community relations.

In 2009, conceptual closure plans pertaining to four inactive tailings sites around Rouyn-Noranda were submitted to the authority for approval, and we are awaiting feedback. Repairs were made to a small bridge leading to the Waite Amulet water treatment plant. This bridge is used for bringing lime to the treatment plant, and load restrictions were applied until completion of the repairs.

At the Boss Mountain site in British Columbia, we installed a new channel to bring in the settling pond water collected from an underground mine opening. The work was approved by the B.C. provincial authority. Warning signs were installed at the Tasu property, which is located in a remote area of B.C. The provincial authorities have launched a review exercise of closed sites in B.C. We are actively participating by providing information and conducting environmental effects monitoring studies.

At Murdochville, the decommissioning of the former mine and smelter complex is now completed. Work in 2009 included the construction of a 1.6 kilometre-long clean water diversion channel bringing water from Needle Creek into the open pit and then into the Copper Brook, the completion of the raw-water dam dismantling and the reprofiling of the site. The only activity to be continued in 2010 is the bio-treatment of soil affected by hydrocarbons. At Sandy Beach, rehabilitation work on residential properties has been completed as per the initial plan. The completion of soil rehabilitation in Sandy Beach is planned for 2010.

Third-party dam safety inspections were conducted at closed sites, and sustainable development initiatives were introduced into the site management processes. In addition, risk and change management procedures, risk assessments and biodiversity plans were developed.

An internal audit conducted at Gaspé in 2009 resulted in no significant or reportable findings.

SITE NAME	LOCATION	OPERATED	SITES LOCATED IN THE ROUYN-NORANDA REGION, QUÉ.	OPERATED
Bell	Granisle, B.C.	1970 – 1992	Beaudry	1974 – 1987
Brenda Mines	Peachland, B.C.	1970 – 1990	Don Rouyn	1959 – 1999
Boss Mountain	Hendrix Lake, B.C.	1965 – 1983	Noranda 1	1927 – 1971
Camchib	Timmins, Ont.	1964 – 1965	Noranda 2	1927 – 1971
Gaspé	Murdochville, Qué.	1956 – 2002	Noranda 3	1927 – 1971
Granisle Mine	Granisle, B.C.	1965 – 1982	Old Waite	1928 – 1961
Tasu	Queen Charlotte Islands, B.C.	1967 – 1983	Quemont 1	1949 – 1971
Wire Rope	Pointe-Claire, Qué.	1975 – 2000	Waite Amulet	1928 – 1961

Blue Heron at the Granisle Mine closed site

The United Nations declared 2010 to be the International Year of Biodiversity.

Biodiversity

We firmly believe that looking at all operations' activities through a biodiversity lens provides "win-win" opportunities that will achieve local, regional and national conservation goals while meeting community needs in a cost-effective manner.

Xstrata Copper's Canadian operations and closed sites have made advances in biodiversity conservation over the years. Sites conducted biodiversity and land use research in 2008. Sites then completed biodiversity management plans in 2009 and have engaged, or are soon to be, in consultations with interested parties in the community regarding their plans. These plans identify strategies and actions to monitor key biological indicators. In the longer term, we aim to avoid, minimise or mitigate the significant impacts or risks on biodiversity. We may conduct further research and rehabilitation, as needed.

Xstrata Copper Canada sites are not located within, or adjacent to, protected areas or areas of high biodiversity value, except for the Gaspé closed site, which is adjacent to a reserve and provincial park.

Operations adjacent to biodiversity-rich habitats

Biodiversity-rich habitats are national protected areas as defined by the International Union for Conservation of Nature (IUCN) protected areas management, categories I to IV, and/or globally identified sites of significant international or global value that are recognised by the UNESCO World Heritage Convention, the Ramsar Convention on Wetlands' List of Wetlands of International Importance and the UNESCO Man and the Biosphere Programme.

IUCN has defined a series of six protected area management categories, based on primary management objective.

CATEGORIES	
Ia	Strict Nature Reserve: protected area managed mainly for science
Ib	Wilderness Area: protected area managed mainly for wilderness protection
II	National Park: protected area managed mainly for ecosystem protection and recreation
III	Natural Monument: protected area managed mainly for conservation of specific natural features
IV	Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
V	Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
VI	Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

OPERATION	LOCATION	PROTECTED AREA	AREA (HA)	IUCN CATEGORY	ECOLOGICAL SENSITIVITY
CCR	Montréal, Qué.	îles de Boucherville National Park	1,000	II	National park on island in the St. Lawrence River, 3 km from site High bird concentration and muskrat habitat
		Bois-d'Anjou Nature Park	50	III	Park in urban setting, 5 km from site
		Bois-de-la-Reparation, Pointe-aux-Prairies Nature Park	80	III	Park in urban setting, 5 km from site
Gaspé (closed site)	Murdochville, Qué.	Réserve faunique des Chic-Chocs	113,400	VI	Park located less than 1 km from closed mine site
		York River	140	VI	Salmon river located 1 km downstream from closed mine site effluent
		Madeleine River	100	VI	Salmon river located in different drainage basin 10 km from closed site
		Parc de la Gaspésie	80,200	II	Closed site 10 km from provincial park

Coyote at Brenda Mines closed site

Site initiatives

Kidd Metallurgical

Kidd Metallurgical's plan was developed with input from key government external stakeholders, the Mattagami Region Conservation Authority and the Timmins Naturalists. Although the site is not located near IUCN-protected areas, biodiversity studies were conducted in 2009 to further evaluate the impact of our operations, such as snow surveys to characterise air deposition and an environmental effects monitoring study on the Porcupine River.

Kidd Mine

The Kidd Mine Biodiversity Conservation Plan was completed in 2009 and consisted of the verification of basic biodiversity indicators and species. In 2010, Kidd Mine will communicate the findings of its biodiversity studies, proceed with a noise assessment, the Environmental Effects Monitoring programme Cycle III study under the Federal Metal Mining Effluent and Ontario government regulations and the Olive-Sided Flycatcher recommendations.

Horne Smelter

The Smelter is adjacent to eight fauna habitat areas (bird colonies), all classified as IUCN category VI. Local and regional biodiversity experts were consulted to identify biodiversity conservation opportunities. Two aquatic studies were carried out in 2009 to determine the fish and fish habitat conditions in lakes downstream from one of the Horne Smelter's final effluent discharges. The potential impact of the current effluent discharges will be assessed over the next two years. An environmental effects monitoring study started in 2009 and will continue through 2010. None of the IUCN Red List species identified around the site are considered to be impacted by the operations.

CCR

CCR is located close to the Parc national des Îles de Boucherville National Park (IUCN category II), with nearby walking and biking trails and interpretation panels. A significant part of the park is covered with marsh. Other nearby municipal nature parks include the Bois-d'Anjou Nature Park (IUCN category III) and the Pointe-aux-Prairies Nature Park (IUCN category III). The confirmed IUCN species in the highly industrialised and urbanised area around the site are all classified as minor preoccupations.

Initiatives are under way to lessen the impact on local biodiversity, such as a project to reduce selenium in effluents. Biodiversity considerations are now integrated into the engineering manual, and project planning and conservation efforts have been discussed with the local citizens committee.

Closed sites

Although most of the closure rehabilitation activities have been implemented and completed, site-specific biodiversity conservation opportunities were identified in biodiversity conservation plans. For example, nest boxes were installed to increase nesting opportunities for local wildlife in the ecosystems adjacent to the mine sites, and dead pine trees, salvage piles or other snags were placed in clusters in disturbed areas to create nesting/perching structures, wildlife habitats and shade for other plant species below.

LAND USE	HECTARES
Land owned	5,400
Land leased, not owned	377,000
Land disturbed during reporting period	0.7
Total land disturbed to date	12,900
Land rehabilitated during reporting period	7
Total land rehabilitated to date	1,700
Total undisturbed land	356,000

The Olive-Sided Flycatcher is listed as threatened under a Federal regulation and of concern under an Ontario regulation. As a result, the Kidd Mine site will be investigating methods for protecting and/or mitigating impacts on the bird's surroundings.

The Red-necked Grebe is a rare bird found in Québec's Abitibi-Témiscamingue region. Nesting couples are found especially around lakes in the Rouyn-Noranda area. Although the species is not vulnerable, motorised leisure activities on these lakes could contribute to its scarcity. In collaboration with local stakeholders, the Horne Smelter wishes to explore the implementation of activities promoting awareness of the bird's presence.

235 tonnes of wood (mainly wood pallets) was diverted from disposal in Kidd Metallurgical's onsite landfill. Chipped by a local contractor, the wood will be reused as ground cover or for moisture control of by-products before shipment to customers for further metal recycling and refinement.

Waste and tailings management

Recycling waste

Xstrata Copper manages waste in compliance with regulations and aims to recycle all materials to the extent possible. In 2009, close to 39,000 tonnes of materials were recycled.

As a leading recycler of electronic scrap and other secondary materials, we accepted and recycled approximately 100,000 tonnes of material in 2009.

Disposing of waste

All sites have waste management plans in place. No waste materials are exported.

Tailings are disposed of in secure sites regulated by government standards. Sludges and residues are stored in secure sites. Waste-containing metals are returned to smelters in order to extract the metals. Used lubricants and oils are collected and recycled. Overburden and acid rock are kept on site in a specific area. Drainage water is collected and treated as needed. Scrap metals, tires and construction materials are sent to recycling whenever possible.

The Horne Smelter disposal and risk assessment of tailings impoundment areas are managed according to an operating manual. Annual inspections of impoundments and dams are conducted by an independent firm. All tailings dams are built according to Mining Association of Canada (MAC) standards and inspected regularly.

CCR is now able to recycle some materials, such as water treatment sludge, at the Horne Smelter.

Materials consumption

Other than concentrate, the primary materials used in Xstrata Copper operations are oxygen, silica, lime and cement. Oxygen is used by smelters as a catalyst to activate the oxidation of sulphur and iron contained in the concentrate. The resulting metallurgical gases are treated in acid plants. Silica is also used in the smelting process to create a matrix for retaining impurities floating above the copper sulphide layer in the bath of molten metal. Lime is primarily used for treating effluent before it is discharged in the environment.

As of 2010, Xstrata Copper Canada will report on metals constituents of waste rock and tailings as part of the new federal national pollution release inventory requirements.

MATERIALS RECYCLED (TONNES UNLESS OTHERWISE NOTED)	2007	2008	2009
Copper slag recycled	34,800	22,700	18,200
Pallets recycled	2,700	1,700	5,100
Scrap metal recycled	2,000	28,100	6,700
Tailings recycled	1,500	1,600	1,300
Slimes recycled	460	0	0
Waste oil recycled (kilolitres)	340	290	260
Domestic waste recycled	150	70	115
Batteries recycled	20	15	7

WASTE TYPE AND DISPOSAL (TONNES UNLESS OTHERWISE NOTED)	2007	2008	2009
Hazardous, off-site disposal	4,900	6,000	1,300
Hazardous, on-site disposal	0	0	0
Hazardous, recycled/reused	6,600	7,450	5,500
Non-hazardous, off-site disposal	2,900	5,300	2,500
Non-hazardous, on-site disposal	3,700	2,310	2,400
Non-hazardous, recycled/reused	8,220	530	99

MATERIALS (OVER 5,000 TONNES, '000S TONNES)	2007	2008	2009
Oxygen	370	340	320
Silica	170	190	170
Lime	50	40	45
Cement	14	30	33
Limestone	13	11	8
Grinding media	5	5	5

Practical solution to an age-old issue

The Kidd Metallurgical site's central maintenance shop has traditionally bought and used large volumes of acetone as a solvent for repairing, manufacturing and maintaining fibreglass components. The used acetone was a hazardous waste product that was stored in large drums and then shipped for disposal by an external vendor. In 2009, on the recommendation of an employee, a solvent recycler unit was installed, leading to significant cost savings and environmental improvements. Not only is 95 percent of the acetone now reused but the small amount of non-hazardous resin residue remaining after recycling can be bagged and disposed of with regular landfill waste.

Environmental improvements at San Jose

At the Xstrata Recycling facility in San Jose, a new cool roof system has helped reduce zinc discharge in storm water, which had been attributed to corrosion on the building's metal roof. The new system includes a primer and an acrylic coating sprayed on bare metal surfaces and a membrane applied to portions of the roof not amenable to the spray system. The new system not only lowers zinc discharge but also reduces heat absorption into the building by reflecting the sun's rays. This in turn translates into energy savings in air-conditioned areas and a more comfortable workplace in other parts.

Transporting products, goods & materials

Various initiatives have been undertaken to reduce transportation impact, including the following:

- Recognising that rail uses less fuel per tonne kilometre than trucks, we strive to transport goods by rail when acceptable to our customers/suppliers and when economically feasible.
- At the Horne Smelter, the main road used by heavy trucks and equipment and for deliveries was paved to reduce dust from transportation activities and avoid potential accidents or damages to vehicles.
- The Horne Smelter also offered training on handling and transporting hazardous materials to 62 employees.

Product stewardship

Xstrata's SD Standards provide guidelines to ensure that the impacts and risks associated with our products and services are identified, analysed, evaluated and dealt with. Material safety data sheets are completed for products and intermediaries, including product physical and chemical composition, risks to human health, handling, transport, storage and exposure control.

All programmes and initiatives implemented to reduce Xstrata Copper Canada's environmental impact contribute to the sustainability of our products at every stage of their life cycle.

Official programmes, such as stage gate reviews and the waste management programme, ensure that products are managed throughout their life cycle. CCR has Buy Green procurement guidelines. All products shipped to Kidd Mine are evaluated for eco-efficiency and sustainability attributes through a review and approval process. This includes the evaluation of recyclability, material used, energy consumption and toxicity of the product. All products are approved by the Health, Safety and Environment department.

Product stewardship will also benefit from eco-efficiency and sustainability attributes that are currently under development by the International Copper Association (ICA).

The Xstrata Commercial and Sales Groups for copper and zinc conduct customer surveys and provide feedback to Kidd Metallurgical personnel for action under the ISO 9001 quality management system. In addition, site energy and steam plant audits were completed by Union Gas, our natural gas supplier, under its industrial energy efficiency programme, and improvement projects were identified.

All sulphuric acid produced in Xstrata Copper plants is marketed and transported by NorFalco. NorFalco adheres to the codes of practice of the chemical industry's Responsible Care® programme and the Responsible Distribution Process℠. This commitment ensures responsible management of chemicals by minimising risk to employees, customers, the public and the environment. Responsible practices are in evidence throughout every phase of NorFalco's distribution system, where strict safeguards and established practices are in place. Compliance with Responsible Care® and the Responsible Distribution Process℠ is re-verified every three years by advocates and chemical-industry experts.

We had no incidents of non-compliance with laws and regulations concerning the provision and use of our products in 2009.

Copper has a beneficial impact on the environment and is an essential element for maintaining human life. It also improves electrical efficiency and is used in a wide range of common electrical products, such as refrigerators, computers, air conditioning and electric motors. It also enhances the efficiency of renewable energy sources, including geothermal, wind and solar. In 2008, the U.S. Environmental Protection Agency granted registration of copper and copper alloys as antimicrobial agents, paving the way for the metal to be used in a wide variety of health-care facilities.

Members of the Thiosalts Consortium listen as Metallurgist Andréa Lagacé explains how the newly commissioned hydrogen peroxide-thiosalt treatment plant operates.

CASE STUDY

Sharing innovative solutions in water treatment with the industry

At the Kidd Metallurgical site, we developed and implemented an innovative process to destroy thiosalts, which was recognised as a best practice in water treatment by the Thiosalts Consortium, a government, industry and academic consortium led by CANMET Mining and Mineral Sciences Laboratories of Natural Resources Canada.

Thiosalts are sulphur compounds formed during the milling process. They can oxidise in tailings ponds and receiving waters in the presence of bacteria, producing sulphuric acid with the potential to reduce pH. When it was recognised in 2002 that traditional thiosalts management processes were delivering inconsistent results, the Kidd Metallurgical team initiated a comprehensive thiosalts study. The goal was to consistently produce a quality final effluent with no indirect toxicity from thiosalts while reducing operating challenges in the water treatment system.

The study involved reviews of existing water quality data and toxicity monitoring programmes at Kidd; research into thiosalts formation and characteristics; establishing procedures for rapid analysis of thiosalts; evaluating potential treatment options through laboratory tests and modelling studies and conducting cost-benefit analyses and pilot tests.

As a result, improvements were made to the tailings management area, including dredging two treatment ponds for added retention time. We also constructed a unique water treatment plant, commissioned in May 2009, which uses hydrogen peroxide to oxidise thiosalts. To date, the results have been highly positive and we are openly sharing this innovative solution to an industry-wide issue with our peers.

In 2010, we are targeting further improvements in health, safety and environmental performance, as well as in our employee and community relationships.

2010 PRIORITIES	TARGETS	ACTIONS
Fines and penalties	0	
Category 3, 4 or 5 incidents	0	
Regulatory non-compliance incidents	9 (43% less than 2009 plan)	Key focus on pH adjustments and toxicity events for *Daphnia magna* at the Horne Smelter
Implementation of Xstrata Copper common environmental systems	80%	Local activities to further implement environmental management systems
Sulphur dioxide capture and treatment	Horne Smelter > 96% Kidd Metallurgical > 97%	Maintain best practices in sulphur capture.
Energy intensity (energy/tonne of product, Gj/t)	Kidd Mine 6.756 Kidd Metallurgical 24.198 Horne Smelter 13.269 CCR 5.596	Site initiatives to reduce energy usage
Carbon intensity (GHG/tonne of product, CO_2/t)	Kidd Mine 0.45 Kidd Metallurgical 1.815 Horne Smelter 0.424 CCR 0.266	Site initiatives to reduce GHG emissions
Water intensity (Water consumption/tonne of product, '000/t)	Kidd Mine 0.627 Kidd Metallurgical 63.0 Horne Smelter 64.0 CCR 22.6	Site initiatives to reduce/ recycle water
Biodiversity	Start monitoring biodiversity.	Monitoring of indicators
Waste management diversion plans	Kidd Mine: Reduce/recycle 10% or 125 tonnes of waste sent to mine site landfill.	Site initiatives to reduce waste
Soil rehabilitation of affected properties in the Sandy Beach area, Gaspé	Complete rehabilitation.	Remove and dispose of affected soils and replace.

GRI Index

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EN13	Habitats protected or restored	33
EN14	Strategies, current actions and future plans for managing impacts on biodiversity	32-33
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	32
EN16	Total direct and indirect greenhouse gas emissions by weight	27, 40
EN17	Other relevant indirect greenhouse gas emissions by weight	Not reported

INDICATOR	DESCRIPTION	PAGE(S)
Environmental Indicators (continued)		
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	29
EN19	Emissions of ozone-depleting substances by weight	27
EN20	NO_x, SO_x and other significant air emissions by type and weight	27
EN21	Total water discharge by quality and destination	Not reported
EN22	Total weight of waste by type and disposal method	34
EN23	Total number and volume of significant spills	34
EN24	Weight of transported, imported, exported or treated hazardous waste (partially reported)	34, 35
EN25	Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by discharges of water and runoff	30, 32
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	35
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Not applicable
EN28	Value and number of significant fines and non-monetary sanctions for non-compliance with environmental laws and regulations	28
EN29	Significant environmental impacts of transporting products and other goods and materials	35
EN30	Total environmental protection expenditures and investments by type	26
MM3	The number/percentage of sites identified as requiring biodiversity management plans, and with plans in place	32
MM4	Percentage of product(s) derived from secondary materials	14
MM5	Policies for assessing the eco-efficiency and sustainability attributes of products	35
MM6	Approach to management of overburden, rock, tailings and sludges/residues	34
Labour Practices and Decent Work		
LA1	Total workforce by employment type, employment contract and region (partially reported)	21
LA2	Total number and rate of employee turnover by age group, gender and region (partially reported)	20
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees	21
LA4	Percentage of employees covered by collective bargaining agreements	21
LA5	Minimum notice period(s) regarding significant operational changes	21
LA6	Percentage of total workforce represented by joint management-worker health and safety committees	21
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region	16-18
LA8	Education, training, counseling, prevention and risk-control programmes in place regarding serious diseases	20
LA9	Health and safety topics covered in formal agreements with trade union	21
LA10	Average hours of training per year per employee by employee category (partially reported)	20
LA11	Programmes for skills management and lifelong learning	20
LA12	Percentage of employees receiving regular performance and career development reviews	20
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity (partially reported)	21
LA14	Ratio of basic salary of men to women by employee category	Not reported
MM12	Approach to identifying, preparing for and responding to emergency situations (partially reported)	17
MM13	Number of new cases of occupational disease by type. Programmes to prevent occupational disease	18

INDICATOR	DESCRIPTION	PAGE(S)
Human Rights		
HR1	Percentage and total number of significant investment agreements that include human rights clauses or human rights screening	Refer to Xplc 2008 Sustain. Report
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	13
HR3	Employee training on policies and procedures concerning aspects of human rights	13
HR4	Total number of incidents of discrimination and actions taken	13
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk	21
HR6	Operations identified as having significant risk for incidents of child labour	13
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour	13
HR8	Percentage of security personnel trained in policies or procedures concerning human rights	13
HR9	Total number of incidents of violations involving rights of indigenous peoples and actions taken	23
Society		
SO1	Nature, scope and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting	22-25
SO2	Percentage and total number of business units analysed for risks related to corruption	13
SO3	Percentage of employees trained in organisation anti-corruption policies and procedures	13
SO4	Actions taken in response to incidents of corruption	13
SO5	Public policy positions and participation in public policy development and lobbying	13
SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions by country	13
SO7	Total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes	Refer to Xplc 2008 Sustain. Report
SO8	Monetary value of and total number of fines or non-monetary sanctions for non-compliance with laws/ regulations	16, 28
MM7	Description of significant incidents affecting communities during the reporting period, and grievance mechanisms used	24
MM8	Description of programmes in which the reporting organisation has been involved that addressed artisanal and small-scale mining (ASM)	Not applicable
MM9	Description of resettlement policies and activities	Not applicable
MM10	Number or percentage of operations with closure plans, company policy, stakeholder engagement processes, frequency of plan review and amount and type of financial provisions for closure	31
MM11	Process for identifying local communities' land and customary rights, including those of indigenous peoples, and grievance mechanisms used to resolve any disputes	23-24
Product Responsibility		
PR1	Life cycle stage in which health and safety impacts of products are assessed for improvement	35
PR2	Total number of incidents of non-compliance with regulations and voluntary codes conferencing product health and safety impacts	35
PR3	Type or produce and service information required by procedures	35
PR4	Total number of incidents of non-compliance with regulations and voluntary codes re labelling and information	35
PR5	Practices related to customer satisfaction	35
PR6	Programmes of adherence to laws, etc., re marketing and advertising	35
PR7	Total number of incidents of non-compliance with regulations and voluntary codes re marketing and advertising	35
PR8	Total number of substantiated complaints regarding breaches of customer privacy	Not applicable
PR9	Monetary value of significant fines for non-compliance with laws	35

Summary of Key Sustainability Data

	2007	2008	2009
Economic Contribution			
Employee salaries and benefits	$240.2 million	$272.8 million	$238 million
Corporate Social Involvement (C$)	$877,000	$1.1 million	$1.1 million
Infrastructure provided for public benefit (C$)	$241,600	$210,000	$316,000
Local taxes	$9 million	$10.5 million	$11.4 million
Percentage of goods purchased locally	40%	42%	53%
Total value of financial and in-kind contributions to political parties	0	0	0
Our People			
Total workforce	3,600	3,800	3,700
Permanent employees	2,700	2,840	2,723
Full-time contractors	900	960	956
Percentage of employees covered by collective agreements	57%	52%	50%
Percentage of employees hired from local area*	90%	90%	78%
Fatalities	1	0	0
Total Recordable Injury Frequency Rate (TRIFR)	19.8	13.6	8.4
Lost-Time Injury Frequency Rate (LTIFR)	3.2	2.2	1.5
Disabling Injury Severity Rate (DISR)	535	336	193
Health and safety prosecutions	0	0	1
Health and safety fines	0	0	1
Occupational Illnesses (new cases)	11	11	3
Total investment in training	$5 million	$8 million	$7 million
Investment in training per permanent employee	$1,852	$2,816	$2,570
Our Community			
Community complaints/events	57	42	43
Our Environment			
Total energy use (million gigajoules)	12.04	11.4	10.06
Total water use (megalitres)	42,400	34,800	33,570
Total recycling and reuse of water (megalitres)	12,700	13,300	14,000
Direct greenhouse gas emissions (CO_2-equivalent tonnes)	327,200	285,600	265,734
Total greenhouse gas emissions (CO_2-equivalent tonnes)	686,300	611,900	549,248
Total sulphur fixation by smelters			
Horne Smelter	96.2%	96.3%	96.4%
Kidd Metallurgical	97.7%	97.7%	97.7%
Land disturbed (hectares)	0	8,957	0.7
Land rehabilitated (hectares)	17	18	7
Category 3 incidents	0	0	0
Category 4 incidents	0	0	0
Category 5 incidents	0	0	0
Prosecutions	0	2	2
Fines	0	2	2

* Estimates in 2007 and 2008

Graphic design **Tattoo Communication**

Glossary

Anode

A rectangular plate of about 99 percent copper, cast in a shape suitable for refining by the electrolytic process.

Biodiversity

An abbreviation of "biological diversity," which means the variability among living organisms from all sources, including land-based and aquatic ecosystems and the ecosystems of which they are a part.

Cathode

A rectangular plate of high-purity copper produced by electrolytic refining, which is melted by our customers into commercial shapes such as wire rods, billets and ingots.

Carbon intensity

Emissions of CO_2 tonnes per tonne of product.

Closure plan

A formal document detailing a costed conceptual outline of how the operation will be closed, taking into account the options available to meet safety and environmental standards. For property having ceased operation in the past, the closure plan focuses primarily on rehabilitation and, where needed, surveillance, monitoring and maintenance.

CO_2-equivalent

Carbon dioxide equivalent is a standard metric by which greenhouse gases other than carbon dioxide are converted to CO_2 equivalence to facilitate comparisons and quantification.

Copper concentrate

A fine, powdery product of the milling process containing 25 to 40 percent copper, sometimes with traces of precious metal. Concentrates are treated by smelters.

Disabling Injury Severity Rate (DIFR)

A measure of the number of days lost due to disabling injuries per one million hours worked.

Energy intensity

Energy consumption per tonne of product.

Environmental incident

An environmental incident is classified on a scale from 1 to 5 representing the extent of environmental impact.

- Category 1, Negligible: An incident that has caused negligible, reversible environmental impact and requires very minor or no remediation.
- Category 2, Minor: An incident that has caused minor, reversible environmental impact and requires minor remediation.
- Category 3, Significant: An incident that has caused moderate, reversible environmental impact, with short-term effect, and requires moderate remediation.
- Category 4, Serious: An incident that has caused serious environmental impact, with medium-term effect, and requires significant remediation.
- Category 5, Disastrous: An incident that has caused disastrous environmental impact, with long-term effect, and requires major remediation.

Global Reporting Initiative (GRI)

Globally applicable sustainability reporting guidelines to assist corporations in reporting on the economic, environmental and social performance of their operations.

HSEC

Health, safety, environment and community.

International Union for the Conservation of Nature (IUCN)

Based in Gland (Switzerland), IUCN is the world's largest and most important conservation network. Its mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and ensure that any use of natural resources is equitable and ecologically sustainable.

ISO 14001

The International Organisation for Standardisation's standard for environmental management systems.

Jarosite

Iron sulphate (classified as a hazardous waste).

Land rehabilitated

Land disturbed by operational activities and then reshaped and revegetated.

Lost-Time Injury Frequency Rate (LTIFR)

A measure of the number of lost-time injuries (occupational injuries and diseases that result in days away from work on any rostered shift subsequent to that on which the injury occurred, including fatalities) per one million hours worked.

Occupational illness

Any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to factors associated with employment.

Particulate emissions

Controlled discharges from stacks containing microscopic solids in the form of dust.

Restricted work injury

An occupational injury or illness that results in a person being physically or mentally unable to perform all or any part of his/her normal assignment during any rostered shift.

Statement of Business Principles

Xstrata's Statement of Business Principles sets out the ethical framework for the way we work globally.

Sulphur dioxide

A gas generated during the smelting of most sulphide ores; either converted into commercial sulphuric acid or released into the atmosphere in the form of a gas.

Sustainable development

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs," as defined by the UN World Commission on Environment and Development 1987. The ultimate goal is to attain balance among social equity, environmental protection and economic prosperity throughout all business activities.

Tailings

The fine fraction of waste rock remaining after the mining and on-site processing of mineral resources. This consists of finely ground particles and traces of process reagents and chemical residues. Tailings are piped into engineered impoundments known as tailings dams.

Total Recordable Injury Frequency Rate (TRIFR)

A measure of the number of lost-time injuries (including fatalities), restricted work injuries and medical treatment injuries per one million hours worked.

Water intensity

Water consumption per tonne of product.

We value your comments and feedback. To tell us what you think about Xstrata Copper Canada's Sustainability Report, or for more information about our company, please contact:

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