At Cameco our sustainable development report plays an important role in helping us communicate with our key stakeholders, monitor and measure our performance, and ensure accountability.

Why sustainable development?
We are confident in the business case for sustainable development. As we see it, sustainable development is a management philosophy and process that helps us:

- build trust, credibility and corporate reputation;
- gain and protect our licence to operate and grow;
- attract and retain employees;
- manage risk; and
- direct innovation and drive continual improvement to build competitive advantage.

Our ability to move forward on these objectives determines our ultimate success as a company.

Why commit?
Sustainable development simply makes good business sense. We have begun to better understand our impact on the world, to think differently, to behave differently, and to come up with innovative courses of action.

So have our competitors and many other companies. In fact, we are all learning from each other and pushing each other to improve.

This critical mass of companies committed to sustainable development could make a world of difference. The more companies engaged in sustainable development, the more likely we are to offer greater opportunities to future generations.

What is the impact on business strategy and goals?
Companies are under scrutiny for the way in which they conduct business. We have seen a significant increase in our stakeholder expectations of environmentally and socially responsible business practices.

Rather than viewing sustainable development as an "add-on" to traditional business activity, we see it as an integral component to the way we do business. Our aim is to fully integrate sustainable development principles and practices at each level of our operations.

For each of our strategies, we set and evaluate the business goals, plans, tactics, and performance measures to stimulate the change we need to see. These performance measures are included in our sustainable development scorecard.

Does this mean we're sustainable?
We see our sustainable development programs and reporting as a work in progress. We don't believe that it will ever be possible for us to say, "That's it, we are sustainable now."

The needs of our stakeholders will continue to evolve as will our own awareness of them and of the possible strategies for action. Our commitment is to continue to engage and work with our stakeholders to ensure we
stay abreast of evolving sustainable development issues, innovations, concerns, and challenges.
At Cameco, sustainable development is both a philosophy and a process that guides how we work every day as we pursue our global business strategy.

Our commitment to sustainable development is a commitment to our stakeholders. It provides the framework for our priorities, the impetus to foster innovation and the tools that will help us hold ourselves accountable for the effects of our operations. Sustainable development is an investment in the future of our company and our industry.

As we look ahead to our goal of doubling production by 2018, we will continue to demonstrate our commitment to sustainable development in every segment of our business.

Our board believes in the value and importance of sustainable development and the key role it will play in advancing Cameco’s vision to be a dominant nuclear energy company producing uranium fuel and generating clean electricity.

VICTOR ZALESCHUK, CHAIR
RESPONSIBILITY

Stakeholders

At Cameco, we endeavor to actively engage with our five key stakeholder groups:

- Employees
- Governments & Regulators
- Corporate Owners
- Customers
- Communities

We want to understand your concerns as they relate to Cameco’s operations. Your participation has informed our decision-making processes, policies and practices, helping us to improve our social, environmental and economic performance.

Sometimes accomplishing our goals is more difficult than anticipated and there are some areas that require further improvement. We value your feedback and will continue working with you to address our sustainable development progress.

Employees

At the end of 2009, Cameco had over 3000 employees around the world. Considering the diversity of our workforce, it is a challenge to effectively communicate with everyone about their specific concerns and needs.

We prefer face-to-face communication such as employee meetings. However, Cameco also provides a number of other options to keep employees informed, deal with emerging issues and collect vital feedback:

- company intranet, the Cameco Insider
- newsletters
- CEO updates
- employee surveys
- employee focus groups

In these ways we strive to be accountable and open with employees about our social and environmental objectives, results and plans for the future.

Governments & Regulators

Our relationships with regulatory agencies and government officials are critical to our business, impacting the company at all stages of project development, from exploration to decommissioning. We engage elected officials at all levels to ensure that we understand local issues and requirements, and to explain our business operations. This shared understanding and open dialogue allows us to maintain public support for our operations.

Strong relationships with our regulators at the local, national and international level are equally important as they make decisions that directly affect our business. We make a concerted effort to understand and meet or better the expectations of our regulators.

Cameco representatives are continuously engaged with regulators as part of ongoing operations and new projects. We report regularly on operational activities and the results from our environmental monitoring and...
safety programs. We also participate in public licensing and environmental assessment processes.

We seek to earn the trust and confidence of our regulators while pursuing our shared goal of sustaining safe, clean and healthy operations.

**Corporate Owners**

Cameco communicates regularly with investors and financial analysts through

- one-on-one meetings with senior management
- telephone inquiries
- emails
- regularly scheduled conference calls
- quarterly and annual reports
- annual information form (AIF)
- news releases
- shareholder events
- management proxy circulars
- annual general meetings
- surveys
- site visits

Every 12 to 18 months we conduct an investor perception study to determine investment community sentiment toward Cameco, to get insights into preferred investor relations practices and to determine where the investment community stands in the area of corporate governance and corporate sustainable development, including corporate social responsibility.

In addition to our financial success, investors are increasingly interested in how we deal with our business risks and the systems and procedures we have in place to assess and address these risks.

**Customers**

Cameco has a diversified portfolio of customers that we aim to keep fully satisfied through our specialized and personal customer service. Because we are an integrated fuel producer, we can offer one-stop shopping by packaging uranium conversion services and, for Candu reactors, fuel manufacturing.

We work with our customers to help them plan for future requirements and closely monitor the needs of all nuclear utilities in our markets. Marketing representatives communicate with customers regularly through face-to-face meetings, telephone calls, emails, surveys and seminars. We also offer site visits and are open to sharing company information with customers for their own sustainable development reporting needs.

**Communities**

It is through our relationships with local communities that we build and maintain public support for our operations. We strive to provide significant employment and economic benefits that come from our activities for communities near our operating sites.

Each year Cameco supports hundreds of community events and organizations, including capital projects that have a lasting impact on the health and quality of life of local people. We also encourage and support our employees to become involved by donating their time and money to local organizations. Our relationship with our communities varies by region.

To keep Saskatchewan communities informed about our operations and development plans, we:

- have established public information programs at many of our sites
- conduct an [annual tour](http://www.cameco.com/responsibility/stakeholders/) of communities in the northern administration district (NAD)
- maintain northern affairs offices located in La Ronge, Patuanak, Black Lake, Wollaston Lake and Fond du Lac
• maintain close relationships with the Athabasca Working Group, Community Vitality Monitoring Partnership Process and members of the northern Saskatchewan Environmental Quality Committee.

In Port Hope we interact with the local community at the town fair, regular community forums and through ongoing dialogues with municipal leadership. The Community Liaison Forums were created to foster a stronger relationship with the people of Northumberland County and provide a venue for information sharing and open dialogue about Cameco's operations.

In the village of Taikonur, near the Inkai operation in Kazakhstan, community meetings and public hearings are conducted to discuss plans for construction, environmental monitoring and operation activities. Residents of the community can also request additional information about operations from the office in Almaty.

Cameco undertakes annual surveys of public opinion in a number of jurisdictions where we operate. This exercise helps us understand local opinions about the industry as well as our own reputation and performance.
The 23 key performance indicators we have chosen are appropriate for the company at this stage in our sustainable development program. We have used programs such as the Global Reporting Initiative (GRI) as a basis for developing guidelines more specific to our industry, activities and impact communities.

Below is the complete scorecard, designed to apply to our core business and have lasting relevance for our growth as a company.

**Scorecard**

**Air Emissions**

![Graph showing Air Emissions from 2005 to 2009](image)

**Definition**

Emissions to air of constituents of potential concern (COPCs), resulting from a facility's processes, excluding fugitive dust.

COPCs are identified as those emissions that are of concern to regulatory or community stakeholders and may include: uranium and other metals, radionuclides (excluding radon), volatile organic compounds (VOCs), ozone depleting substances, oxides of nitrogen, sulphur oxides, hydrogen fluoride, ammonia, and particulate matter.

**What does this mean?**

There has been an overall downward trend in air emissions over the past four years primarily due to improvements in acid plant operation at Rabbit Lake and operational improvements made within the Fuel Services Division.

**Where are we going?**

The installations of a new acid plant at Key Lake, and a new converter on the acid plant at Rabbit Lake, are expected to significantly reduce emissions of sulphur dioxide.

**More Information**

- The title Air Emissions changed from Mass Loading of Point Source Emissions.
- The definition was also refined, to ensure that emissions from HVAC systems, underground ventilation and open tanks and reservoirs are included in the total.
- Historic data has been updated to reflect the changes.
**Average Radiation Dose to Workers**

![Graph showing average radiation dose from 2005 to 2009](image)

**Definition**
Average annual radiation dose to workers in jobs with potential radiation exposure. Measured in milliSieverts (mSv).

The regulatory limit is 50 mSv per year, and no more than 100 mSv over a five-year period.

**What does this mean?**
On average, doses at Cameco operations are significantly below regulatory limits and remain generally stable.

**Where are we going?**
The corporate objective is to maintain a long-term downward trend for doses.

---

**Corporate Donations & Sponsorships**

![Graph showing corporate donations from 2005 to 2009](image)

**Definition**
Total amount spent on corporate donations and sponsorships.

**What does this mean?**
Donations and sponsorships have remained fairly consistent, reflecting corporate financial results over the three year period.

Our corporate investment budget has made it possible to make major contributions in education and literacy, health and wellness, youth and community development.

**Where are we going?**
Each year Cameco targets one percent of forecasted after tax net earnings to go toward community investment initiatives projects.

We will further develop the corporate community investment program, with a more proactive approach to partnerships and initiatives in regions where our business is expanding.
Employee Absenteeism

**Definition**
Total percentage of regular working hours where employees are counted as absent from the workplace. This includes employees on a sick leave, short and long-term disability, worker's compensation, at medical appointments or away without leave.

**What does this mean?**
A slight downward trend in absenteeism.

**Where are we going?**
We have continued our focus on wellness and disability management programs and enhanced our efforts toward attendance management.

**More Information**
All of Canada operations included.

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Employee Engagement

<table>
<thead>
<tr>
<th>Year</th>
<th>Score</th>
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<tbody>
<tr>
<td>2005</td>
<td>53%</td>
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<tr>
<td>2006</td>
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<tr>
<td>2007</td>
<td>57%</td>
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<td>2008</td>
<td>59%</td>
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<tr>
<td>2009</td>
<td>60%</td>
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**Definition**
Engaged employees, as measured through the Hewitt Associates Employee Opinion Survey.

Generally an engaged employee consistently speaks positively about the organization, has a desire to stay with the organization and exerts time and effort to contribute to the organization's success.

**What does this mean?**
Employee engagement scores again showed a modest improvement but the overall score is below our desired level.

**Where are we going?**
Cameco has set a goal of pushing our engagement score to the Hewitt survey’s "best employer zone". We will do this by focusing on specific and relevant engagement drivers by work location and corporately. These include leadership development and accountability.

**More Information**
All of Canada, USA, and Australia operations included.
**Employee Turnover**

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<thead>
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<tr>
<td>8</td>
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</table>

**Definition**

On a rolling 12-month average, the total percentage of regular employees voluntarily leaving the organization.

**What does this mean?**

The decrease in part reflects the downturn in external economic environment and the slightly less competitive labour market. It also reflects Cameco’s focus on activities that strengthen our ability to retain and attract workers.

**Where are we going?**

We continue to focus on strategies for our critical workforce segments. Our efforts toward operational excellence and accountability align employers more closely with the goals of the company.

**More Information**

All Canada, USA, and Australia operations included

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**Energy Intensity**

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<tbody>
<tr>
<td>120</td>
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<td>300</td>
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</table>

**Definition**

The amount of energy (all forms) consumed per unit of production normalized against baseline. This applies only to operations in commercial production.

**What does this mean?**

With the exception of 2008, energy intensity has been slowly increasing since 2005. Expansion of mining operations has caused increases in fuel consumption, as expected.

In 2008, reduced production caused the energy intensity to increase substantially.

**Where are we going?**

The trend in energy intensity is expected to improve, as all sites have now returned to historic production levels, and energy efficiency projects are being implemented at various locations.

**More Information**

The wording of the definition has changed for clarity, but not for intent. Minor corrections were made to the energy data in historic years.
Governance Analytics CGQ (Corporate Governance Quotient)

Definition
- Rating against other companies in the S&P/TSX Composite Index
- Rating against other companies in the Materials Group
- Current data for rating against other companies in the S&P/TSX Composite Index and rank against other companies in the Materials Group respectively

The CGQ rating is based on RiskMetrics Group's proprietary formula developed to rate the practices of publicly-traded companies in the following areas: board issues, charter and bylaws, executive and director compensation, progressive practices, ownership, director education and audit.

What does this mean?
The high ratings we received in both our index and industry accurately reflect our commitment to a high standard of corporate governance.

Where are we going?
In March 2010 RiskMetrics Group began to use a new rating methodology, Governance Risk Indicators (GRId), to determine issuers' performance in four distinct areas: audit, board, compensation and shareholder rights. This rating system is very different from their previous system, so our future ratings will not be comparable to past ratings. In this new measure of governance, our goal will be to have a low level of concern in each area.

Greenhouse Gas Emissions

Definition
Direct and indirect emissions of greenhouse gases (GHGs), including carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydro fluorocarbons (HFCs), and per fluorocarbons (PFCs) expressed as a carbon equivalent (CO2e).

What does this mean?
The greenhouse gas emissions have been slowly increasing since 2005. Expansion of mining operations has caused increases in fuel consumption, and therefore emissions, as expected.

Where are we going?
GHG emissions are expected to stabilize or decrease as energy efficiency and renewable energy projects are implemented.

More Information
Minor corrections have been made to historic energy data; slight increases each year compared to previously reported data were the result - trending was not altered.
The wording of the definition has changed for clarity, not for intent.
## Lost Time Injuries

**Definition**
Number of lost time injury (LTI) incidents per 200,000 hours worked for Cameco employees and contractors.

**What does this mean?**
There has been a steady improvement in the LTI frequency over the last three years.

**Where are we going?**
Cameco's objective is to strive for zero workplace injuries and maintain a downward trend in the frequency of injuries.

**More Information**
Data has been updated as the status of some events has changed over time.

### Net Employment Creation

**Definition**
Total number of Cameco employees.

**What does this mean?**
Increased employment continues to be the result of our growth plans to double production in support of our goal to be a dominant nuclear energy company.

**Where are we going?**
We can anticipate a further increase in our workforce as we develop new projects and bring them into production.

**More Information**
All Canada, USA, and Australia regular and temporary employees included
Polling (public support) in Port Hope

**Definition**
Based on affirmative answers to the poll question:
Are you supportive of the continuation of Cameco's operations in Port Hope?

**What does this mean?**
Cameco's operations in Port Hope continue to enjoy a very high level of support among the general public within the community.

**Where are we going?**
Cameco aims to maintain the very highest levels of public support for our industry and our company, particularly in the communities and regions where we operate.

---

Polling (public support) in Saskatchewan

**Definition**
Based on affirmative answers to the poll question:
Are you supportive of the continuation of uranium mining in Saskatchewan?

**What does this mean?**
The uranium mining industry in Saskatchewan continues to enjoy a very high level of support among the general public within the province.

**Where are we going?**
Cameco aims to maintain the very highest levels of public support for our industry and our company throughout Saskatchewan, particularly in the communities and regions where we operate.
Radioactive Waste

Definition
The net change in the mass of radiologically contaminated material, as defined by local jurisdiction. The mass includes materials generated or produced as a by-product that have not been reused, recycled, or processed for reduction and/or mineral recovery.

The definition has primarily changed to account for, and 'give credit' for, all of the diversion strategies being implemented at each of the operations. In other words, rather than track all radioactive wastes being generated, Cameco felt it more important to track only the residual materials that are either being stored and/or that could be managed in a more sustainable fashion in the future. All diverted materials are being managed in appropriate sustainable ways - through reuse, recycle and recovery tactics.

The definition was also clarified to exclude a particular liquid waste stream disposed at the Key Lake site within its historic tailings management facility. Accounting for an annual average of 5.4M kg's previously tracked under this KPI, this fluid is collected and treated through the mill water treatment facility (a form of processing for elimination of waste), and is otherwise accounted for under the treated water KPIs.

What does this mean?
With one exception in 2008, the mass of radioactive waste has been declining since 2006.

The substantial peak in 2008 was a result of two major projects:

- Removal of an ore pad liner at Key Lake (7.8M kg's); and,
- Remediation at Port Hope, where excavated contaminated concrete and soil required disposal (4.4M kg's)

Where are we going?
Waste reduction / diversion strategies are being investigated to divert wastes from the approved license storage facilities, such as processing of metal wastes; improved management of packaging; various decontamination techniques for recycling; and incineration or gasification units combined with air pollution controls and energy recovery systems.

Until such technologies can be implemented, it is anticipated that the annual mass of radioactive waste will be somewhat dynamic due to various site cleanup activities, and demolition of aging mill infrastructure.

More Information
The KPI does not include tailings, waste rock, mineral product, or materials containing sufficient uranium such as to be considered a valuable commodity on the international market.
Reportable Incidents

**Definition**
A reportable incident is any discharge of a pollutant to the environment, other than a discharge explicitly authorized by the appropriate regulatory authority. Each jurisdiction defines what constitutes a reportable incident.

**What does this mean?**
Although the total number of reportable incident incurred in 2009 is slightly above our long term average of 22, it is within the long term statistical range for normal operations.

**Where are we going?**
Operations continue to implement measure to reduce incident frequency. However, since Cameco is planning on increasing production at existing facilities and bringing new facilities on line, we expect the total number of reportable incidents to stay within the historical range going forward.

**More Information**
Data has been updated as the status of some events has changed over time.

Return on Average Capital (ROAC)

**Definition**
ROAC is a financial measure to evaluate the returns that a company realizes from the capital employed. It is calculated by dividing pre-tax operating profit, by average capital.

**What does this mean?**
ROAC has been affected by significant unusual items in the past two years. In 2008, ROAC decreased as a result of mark-to-market losses on financial instruments combined with higher average capital due to debenture conversions into common shares and borrowings to finance acquisitions. In 2009, ROAC increased as a result of higher earnings, mainly due to mark-to-market gains on financial instruments.

**Where are we going?**
Cameco plans to focus on increasing uranium production, exercising prudent financial management to ensure the company continues to grow and generate positive returns.
**RSN Employment**

Definition
Total percent of regular and temporary employees at our northern Saskatchewan operations classified as "Residents of Saskatchewan's North" ("RSN"). An RSN is defined as a person who has resided in Saskatchewan's North for a period of 10 years or one half of his or her age, whichever is lesser.

What does this mean?
Although there has been a decrease in the percentage of RSN employees at our Saskatchewan Operations, the absolute number of RSN's has continued to increase.

Where are we going?
As part of various surface lease agreements, Cameco has committed to achieve 67% of RSN employment at our sites, including both Cameco employees and contract labour. We will continue to provide training and opportunities for RSN workers.

More Information
Northern sites, La Ronge regular and temporary Cameco employees included.

**Shareholder Return**

Definition
Annual shareholder return based on TSX market close on last trading day of each calendar year.

Where are we going?
Cameco plans to focus on increasing uranium production, exercising prudent financial management to ensure the company continues to grow and generate positive returns.

Definition
The ROB annually rates the boards of companies in the S&P/TSX index. The marking system includes criteria designed to go beyond mandatory regulatory requirements; particularly looking at board composition, shareholding and compensation, shareholder rights and disclosure.

What does this mean?
There are changes to the marking system each year so scores are not precisely comparable with the scores of prior years. Every year companies increase the quality of their own governance practices which influences the comparable ranking.

Where are we going?
Our goal is to continue to obtain top quartile ranking in this measure of governance.

Treated Water Discharged

Definition
The volume of water that has been, or has potentially been, contaminated by our business operations, treated, and discharged to surface water bodies.

What does this mean?
The volume of treated water discharged continues to rise, due primarily to increased throughput of Key Lake’s reverse osmosis plant and expansion in mining.

Where are we going?
It is anticipated that the volume of treated water discharged to surface water bodies will continue to increase as Cigar Lake commences underground development and McArthur River and Eagle Point expand underground operations.

More Information
ISR operations do not currently discharge any treated waters to surface water bodies.
The title Effluent Volume was changed to Treated Water Discharged.
The wording of the definition has been changed for clarity, but not for intent.
**Treated Water Quality**

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<th>Index</th>
<th>2005</th>
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<th>2008</th>
<th>2009</th>
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<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
</tr>
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</table>

**Definition**
The quality of the treated water discharged to surface water bodies, based on water quality guidelines for the protection of aquatic life set forth by the Canadian Council of Ministers of the Environment (CCME).

The higher the index value, the better the treated water quality, measured by a score out of 100.

**What does this mean?**
Treated water quality has improved by 4% from 2008 to 2009, and has shown continual improvement over the last 5 years as a result of water treatment process improvements.

**Where are we going?**
Water quality is expected to continue to improve as new technologies are researched and implemented at our operations.

Water assessments are being performed at various operations to identify other potential areas of improvement.

**More Information**
A number of parameters monitored in Cameco’s treated water discharges are compared against the CCME guidelines and formulated into a water quality index (WQI).
The title Water Quality Index was changed to Treated Water Quality.
The wording of the definition has changed for clarity, but not for intent.
Quality checks on the historic data revealed some errors in data entry for a couple of sites; the data has since been updated.
**Un-reclaimed Waste Rock**

**Definition**
Un-reclaimed, stockpiled rock and overburden (sand, soil and vegetation) that has been extracted and relocated through mining activities.

An un-reclaimed stockpile is one that does not satisfy one or more of the following criteria:

- designed to eliminate potential long-term environmental liability;
- re-graded to acceptable slopes to maintain long-term stability; or
- established self-sustaining vegetation.

**What does this mean?**
The tonnage of un-reclaimed waste rock has remained relatively stable over the past number of years.

**Where are we going?**
Modest reductions will be realized with continued improvements in management of waste rock from McArthur River and Eagle Point. Otherwise, further significant reductions will take several years to materialize, as established vegetation is a required component of a reclaimed surface.

**More Information**
The title was modified from Total un-reclaimed waste rock to Un-reclaimed waste rock. The definition has been changed from previous year.

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**Waste to Landfill**

**Definition**
Domestic, commercial and industrial wastes disposed in Cameco-operated or external landfills.

**What does this mean?**
There has been a downward trend on waste to landfill since 2007.

**Where are we going?**
Waste reduction / diversion strategies are being investigated to divert wastes from the landfill, such as industrial scale composting, increased recycling, and incineration or gasification technologies.

Until such technologies can be implemented, the trend is expected to continue to fluctuate, as several operations progress with large-scale projects such as mill upgrades, construction and decommissioning of facilities.

**More Information**
The wording of the definition has changed for clarity, but not for intent. Minor corrections were made to historic data.
This report has been influenced by feedback provided by our stakeholder groups, combined with our own needs to track and report our activities. Some indicators have been more clearly defined, particularly regarding environmental performance and information on Cameco's sustainable development initiatives and performance in Saskatchewan, Ontario, the United States and Kazakhstan.

This report focuses solely on performance of Cameco's global uranium mining and milling operations and its refining, conversion and fuel manufacturing operations. It excludes performance related to Cameco's ownership in nuclear electricity generation. The report does not include any assessment of the performance of associated companies or non-operated joint ventures.

The data, information and conclusions contained in this report have been approved internally. Representatives from all levels of the company were involved in its preparation, from technical specialists to senior executives. The report has been reviewed by the safety, health and environment committee of the board of directors. The report has not been independently assured.

Unless otherwise indicated this report has been prepared as of October 1, 2010 and should not be considered current as of any subsequent date.
Cautionary Statement About Forward-Looking Information

This sustainable development report contains statements considered to be forward-looking information or forward-looking statements under Canadian and U.S. securities laws. They represent our current views, and can change significantly. These statements are based upon a number of material assumptions, which may prove to be incorrect. Actual results and events may be significantly different from what we currently expect, because of the risks associated with our business. We recommend that you review our current annual, first and second quarter management's discussion and analysis for more information about these assumptions and risks. You should also review our current annual information form, which includes a discussion of other material risks that could cause actual results to differ significantly from our current expectations. Forward-looking information is designed to help you understand management's current views of our near and longer-term prospects, and it may not be appropriate for other purposes. We will not necessarily update this information unless we are required to by securities laws.

Examples of forward-looking information in this sustainable development report include: our target of doubling our annual uranium production by 2018; our expectations for Cigar Lake's contributions to our growth; our expectations for Inkai's contributions to our growth; our statement that a significant portion of our future production is expected to result from our global exploration activities; our expectation that we will invest significantly in expanding production at our existing mines and advancing projects as we pursue our growth strategy; and our expectations regarding future worldwide uranium supply and demand.

The material risks that could cause actual results to vary include: production costs are higher than planned, or necessary supplies are not available, or not available on commercially reasonable terms; we are unable to enforce our legal rights, or are subject to litigation or arbitration that has an adverse outcome; there are defects in title to our properties; our reserve and resource estimates are inaccurate, or we face unexpected or challenging geological, hydrological or mining conditions; we are affected by environmental, safety and regulatory risks, including increased regulatory burdens; we cannot obtain or maintain necessary permits or approvals from government authorities; we are affected by political risks in a developing country where we operate (like Kazakhstan); we are affected by terrorism, sabotage, accident or a deterioration in political support for, or demand for, nuclear energy; there are changes to government regulations or policies, including tax and trade laws and policies; our uranium and conversion suppliers fail to fulfill delivery commitments; we are affected by natural phenomena including inclement weather, fire, flood, underground floods, earthquakes, pitwall failure and cave-ins; our operations are disrupted because of problems with our own or our customers' facilities, the unavailability of reagents, equipment, operating parts and supplies critical to production, labour relations issues, strikes or
lockouts and other development and operating risks.

We have made material assumptions regarding: sales and purchase volumes and prices for uranium; expected production costs; reserve and resource estimates; the geological, hydrological and other conditions at our mines, including the accuracy of our expectations about the condition of underground workings; our ability to continue to supply our products and services in the expected quantities and at the expected times; our ability to comply with current and future environmental, safety and other regulatory requirements, and to obtain and maintain required regulatory approvals; our operations not being significantly disrupted because of political instability, nationalization, terrorism, sabotage, natural disasters, governmental or political actions, litigation or arbitration proceedings, labour relations issues and other development or operating risks.
RESPONSIBILITY

Workplace

Cameco strives to provide a safe, healthy and rewarding workplace at all of our facilities. Our policies and initiatives reflect the value we place on the safety of people and the contribution of every employee.

As part of our sustainable development reporting, we measure key workplace indicators such as employee sentiment toward the company, conventional and radiation safety statistics and employment creation.
**WORKPLACE**

**Scorecard**

**Employee Absenteeism**

[Bar chart showing absenteeism percentages from 2005 to 2009]

**Definition**
Total percentage of regular working hours where employees are counted as absent from the workplace. This includes employees on a sick leave, short and long-term disability, worker's compensation, at medical appointments or away without leave.

**What does this mean?**
A slight downward trend in absenteeism.

**Where are we going?**
We have continued our focus on wellness and disability management programs and enhanced our efforts toward attendance management.

**More Information**
All of Canada operations included.
**Employee Engagement**

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<td>2006*</td>
<td></td>
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<tr>
<td>2007</td>
<td>57%</td>
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<tr>
<td>2008</td>
<td>59%</td>
</tr>
<tr>
<td>2009</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Definition**
Engaged employees, as measured through the Hewitt Associates Employee Opinion Survey.

Generally an engaged employee consistently speaks positively about the organization, has a desire to stay with the organization and exerts time and effort to contribute to the organization's success.

**What does this mean?**
Employee engagement scores again showed a modest improvement but the overall score is below our desired level.

**Where are we going?**
Cameco has set a goal of pushing our engagement score to the Hewitt survey's "best employer zone". We will do this by focusing on specific and relevant engagement drivers by work location and corporately. These include leadership development and accountability.

**More Information**
All of Canada, USA, and Australia operations included

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**Employee Turnover**

<table>
<thead>
<tr>
<th>Year</th>
<th>(%)</th>
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<tbody>
<tr>
<td>2005</td>
<td>8</td>
</tr>
<tr>
<td>2006</td>
<td>7</td>
</tr>
<tr>
<td>2007</td>
<td>6</td>
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<tr>
<td>2008</td>
<td>5</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
</tr>
</tbody>
</table>

**Definition**
On a rolling 12-month average, the total percentage of regular employees voluntarily leaving the organization.

**What does this mean?**
The decrease in part reflects the downturn in external economic environment and the slightly less competitive labour market. It also reflects Cameco's focus on activities that strengthen our ability to retain and attract workers.

**Where are we going?**
We continue to focus on strategies for our critical workforce segments. Our efforts toward operational excellence and accountability align employers more closely with the goals of the company.

**More Information**
All Canada, USA, and Australia operations included
**Average Radiation Dose to Workers**

**Definition**
Average annual radiation dose to workers in jobs with potential radiation exposure. Measured in milliSieverts (mSv).

The regulatory limit is 50 mSv per year, and no more than 100 mSv over a five-year period.

**What does this mean?**
On average, doses at Cameco operations are significantly below regulatory limits and remain generally stable.

**Where are we going?**
The corporate objective is to maintain a long-term downward trend for doses.

**Lost Time Injuries**

**Definition**
Number of lost time injury (LTI) incidents per 200,000 hours worked for Cameco employees and contractors.

**What does this mean?**
There has been a steady improvement in the LTI frequency over the last three years.

**Where are we going?**
Cameco’s objective is to strive for zero workplace injuries and maintain a downward trend in the frequency of injuries.

**More Information**
Data has been updated as the status of some events has changed over time.
**Net Employment Creation**

![Bar chart showing employment growth from 2005 to 2009](http://www.cameco.com/responsibility/workplace/scorecard/)

**Definition**
Total number of Cameco employees.

**What does this mean?**
Increased employment continues to be the result of our growth plans to double production in support of our goal to be a dominant nuclear energy company.

**Where are we going?**
We can anticipate a further increase in our workforce as we develop new projects and bring them into production.

**More Information**
All Canada, USA, and Australia regular and temporary employees included
As the area's largest employer and a significant part of the community, Cameco's refinery in Blind River has enjoyed a positive local reputation. In October 2009, that reputation was confirmed regionally as the operation was named one of the five best places to work in northern Ontario.

Employee participation in community events, such as the annual Community Appreciation Day, helped Cameco's Blind River refinery earn recognition as one of the five best places to work in northern Ontario.

The list – published each fall by the Northern Ontario Business weekly newspaper – is based on the recommendations of economic development officers and takes into account:

- community involvement
- pay periods
- flexibility available to employees

"This is really important for us because it is a chance for our employees to be recognized," said Chris Astles, general manager at the Blind River refinery. "They are the ones coming forward with the ideas, and they are the ones that make our programs work – it's their support that makes us successful."

Employees are an important part of the operation's connection to the community as well.

The Blind River refinery's community investment program helps a variety of groups and initiatives through:

- Employee giving program
- Cameco STARS Program
- Newspapers in Education
- Summer programs for kids
Community bulletin boards

The operation also encourages and supports employee volunteerism and community participation such as:

- playground equipment projects at local elementary schools
- annual dragon boat races
- annual Community Appreciation Day

 Cameco’s Blind River operation is the world’s largest uranium refinery, receiving uranium ore concentrates from mines around the world, including those in Canada, Australia and the United States. The operation provides employment for about 160 people.
Safety is one of Cameco’s guiding values and measures of success, and in 2010 two of its Saskatchewan operations received acclaim for their achievements.

McArthur River and Cigar Lake operations were recognized for outstanding safety performance by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) at an awards ceremony on May 10.

McArthur River received the prestigious John T. Ryan national safety trophy for the best safety performance – the lowest accident frequency in the country during the previous year – in the metal mine category.

“It’s important to recognize how tough it is to have...one of the safest mines in Canada," said Dave Bronkhorst, vice-president, Saskatchewan mining south. "Especially when there are several mines in the country that have such great safety results.”

Last year, McArthur River recorded only one reportable injury for 756,990 working hours, in spite of the challenge of increased employee numbers and moving into production areas that have an inherently higher risk.

Cigar Lake, though not yet in production, was awarded a special certificate in recognition of its outstanding safety record in 2009. Last year, the operation recorded just one reportable injury for 717,932 working hours.

Grant Goddard vice-president, Saskatchewan mining north is pleased with the recognition.

“When I came to Cigar Lake in 2007, I was immediately impressed with the strong safety culture but also the desire to continually improve," said Goddard. "The assurance of success model further catalyzed the performance, but ultimately the success is because of the personal commitment to safety by the members of the Cigar Lake team.”
This commitment to safety at all Cameco projects has received previous recognition from CIM. Rabbit Lake and McArthur River/Key Lake operations received the John T. Ryan national trophy in 2001 and 2000, respectively. Rabbit Lake also received a regional John T. Ryan award in 2003.
As one of the world's largest uranium companies, Cameco has long been recognized as an industry leader. Now the company is recognized as a leader in human resources as well.

In October 2009, Cameco was named to three prestigious lists as one of the best employers in Canada.

Cameco provides a variety of learning and volunteer opportunities for employees, such as the Earth Day community clean-up and lunch n' learn in Saskatoon. (Left to right: Stephanie Oleniuk, Jaime Moore, Teresa Kinal, Tracy Ridgewell, Deanna Girod, Julie Douthwright, April Basko)

As one of Maclean's/Globe and Mail's Top 100 employers, Cameco was rated on:

- workplace
- atmosphere
- financial benefits and compensation
- health/family-friendly benefits
- vacation/personal time off
- employee engagement
- training and skills development
- community involvement

Cameco was noted for several specific initiatives including:

- offering employees a wide range of career development options
- helping employees prepare for retirement
- providing maternity leave top-up benefits and other flexible work options
- creating ownership through the company's employee share ownership program

Cameco was also counted as one of Financial Post's Top 10 Best Companies to Work For, recognizing fast-growing companies in Canada that offer career advancement opportunities and leading-edge employee perks and benefits, and as one of Saskatchewan's Top 20 Employers.

In May 2010, another award from the same family was added – Canada's Best Diversity Employers. The award examines a range of initiatives covering five major employee groups: women; members of visible minorities; persons with disabilities; aboriginal peoples; and lesbian, gay, bisexual and transgendered/transsexual peoples.

This recognition is particularly significant given Cameco's goal to reach 67% northern (or RSN) employment at its northern Saskatchewan operations. Some of the initiatives that were mentioned by the award committee include:

- creating a northern workforce strategy committee
- developing a three-year employment equity plan in 2008, and establishing a diversity committee to review/amend the plan every six months
- including an Aboriginal awareness component in the leadership development training program
- establishing relationships to help recruiters reach visible minority/disabled job candidates
- providing annual diversity training to hiring managers
- incorporating a diversity component into succession planning
For the second time in three years, JV Inkai – Cameco’s joint venture operation in Kazakhstan – received the chairman's award for outstanding safety performance.

The award is named in honour of Mary-Jean Mitchell Green, who joined the board of Cameco in 1988 before losing her battle with breast cancer two years later. During her time with the board, she was committed to advancing the health and safety of employees.

Inkai has in place a number of innovative safety controls and monitoring systems, including escorting of hazardous reagents transports.

Inkai exemplified the spirit of the award in 2009, working over 1.8 million hours with a combined lost time accident and medical aid frequency of just 0.2. Their construction crews also achieved over three million hours LTI-free last year.

"I am really impressed each time I go to the Inkai site," said Bob Steane, senior vice-president and chief operating officer, who accepted the award on behalf of the joint venture. "They are not taking risks and to achieve what they have speaks very highly of the dedication we see at that site."

This internal recognition was not the only repeat safety award Inkai received in 2010.

At a gathering of industry and government personnel in the city of Shymkent, the Chief Labour Protection Inspector of the South Kazakhstan Oblast presented Inkai with an award for their high performance in improving safety and health, and compliance with labour law requirements among the enterprises of the atomic industry.

For Glen Hein, Inkai's director of safety, health, environment and quality, winning this award for the second time in two years is a reflection of the operation's ongoing efforts.

"[This] shows to us that our high standards for safety, health and radiation management are being recognized by regulatory authorities in Kazakhstan," said Hein. "JV Inkai consistently has a low number of work place
injuries with innovative safety controls and monitoring, including escorting of hazardous reagents transports and uranium bioassay program."

Inkai is a significant uranium deposit located in south central Kazakhstan. Cameco owns 60% of the project and expects it to become a major contributor to production growth in the coming decade.
For Cameco, doubling production by 2018 is an ambitious goal that will require drawing from our existing world-class body of assets. It will require the financial strength, expertise and discipline to grow.

What Double U will not require is the doubling of personnel.

Identifying and planning for critical positions – such as those responsible for radiation safety – is an important part of strategic workforce planning.

"Double U may require new competencies, skills and some additional positions," said Sean Junor, manager of workforce planning.

With this in mind, the workforce planning group in human resources has undertaken a more thorough strategic process with business units and operations to analyze and forecast the talent Cameco will need to achieve its objectives. This process includes inquiries focusing on:

- annual department priorities
- skill and technology change
- operations and capital impacts
- employee development
- critical positions
- workforce review
- contractors and consultants

Identifying the human resource impacts of Double U is just one way that better data collection will allow the workforce planning team to provide managers with company-wide indicators of potential employment growth ahead of the annual budgeting process, helping everyone plan their staffing before numbers are finalized. In addition, the workforce planning team is strongly encouraging all managers and supervisors to follow the
business case for new personnel when planning for new staff.

Employee development is also an important part of the planning process, providing guidance on:

- succession planning
- critical positions
- career development
- job progressions

"Ensuring that employees are engaged, challenged and rewarded is a company-wide priority," Junor said. "We look to managers to identify their high-potential people so we can help them determine what development and supports these people require to see a clear progression with Cameco."

Another vital step in the process is identifying critical positions – those necessary for Cameco to continue operations. The human resources council provides managers and superintendents with labour market analytics and assessments to determine if there are any potential supply and demand gaps that will affect these positions. Managers can then identify if any action is required.

Through this critical planning activity, the human resources department is helping identify, develop, attract and sustain the workforce skills necessary to execute Cameco’s business strategy while satisfying the career and lifestyle goals of employees.
Safety is one of Cameco’s highest priorities. This commitment at all of our operations has been recognized by a number of organizations, including the Nebraska Safety Council in the United States.

In April 2010, Cameco Resources’ Crow Butte operation received the council’s Peak Performance award – one of four categories given out to members at their annual conference and exposition – for excellence in workplace health and safety.

Award applicants are judged by a committee of business people from the local community on:

- statistical data (hours worked, recordable injuries and illnesses, and incident rate)
- training activities for the year
- safety and health program
- community safety activities

The Crow Butte operation has worked five years without a lost time or medical aid incident.

The Nebraska Safety Council provides education and resources for safety, health and environmental issues on roads, at home and in the workplace. Crow Butte has received previous awards from the council, including:

- Governor’s Award (community safety and health outreach) - 2001
- Peak Performance Award - 2005, 2008, 2009
- Star Award (workplace safety) - 2004, 2006, 2007
- Safety Excellence Award - 2000
At Cameco, protection of the environment is one of the foundations of our work. All of us share in the responsibility of continually improving the quality of our environment. We are committed to integrating environmental leadership into everything that we do.

To determine our progress, as part of our sustainable development reporting, we measure our impact on air, water and land near our operations as well as generation of waste and emissions.
ENVIRONMENT

Scorecard

Air Emissions

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (000 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>200</td>
</tr>
<tr>
<td>2006</td>
<td>450</td>
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<tr>
<td>2007</td>
<td>300</td>
</tr>
<tr>
<td>2008</td>
<td>250</td>
</tr>
<tr>
<td>2009</td>
<td>150</td>
</tr>
</tbody>
</table>

**Definition**
Emissions to air of constituents of potential concern (COPCs), resulting from a facility's processes, excluding fugitive dust.

COPCs are identified as those emissions that are of concern to regulatory or community stakeholders and may include: uranium and other metals, radionuclides (excluding radon), volatile organic compounds (VOCs), ozone depleting substances, oxides of nitrogen, sulphur oxides, hydrogen fluoride, ammonia, and particulate matter.

**What does this mean?**
There has been an overall downward trend in air emissions over the past four years primarily due to improvements in acid plant operation at Rabbit Lake and operational improvements made within the Fuel Services Division.

**Where are we going?**
The installations of a new acid plant at Key Lake, and a new converter on the acid plant at Rabbit Lake, are expected to significantly reduce emissions of sulphur dioxide.

**More Information**
The title Air Emissions changed from Mass Loading of Point Source Emissions.
The definition was also refined, to ensure that emissions from HVAC systems, underground ventilation and open tanks and reservoirs are included in the total.
Historic data has been updated to reflect the changes.
**Treated Water Quality**

*Definition*

The quality of the treated water discharged to surface water bodies, based on water quality guidelines for the protection of aquatic life set forth by the Canadian Council of Ministers of the Environment (CCME).

The higher the index value, the better the treated water quality, measured by a score out of 100.

*What does this mean?*

Treated water quality has improved by 4% from 2008 to 2009, and has shown continual improvement over the last 5 years as a result of water treatment process improvements.

*Where are we going?*

Water quality is expected to continue to improve as new technologies are researched and implemented at our operations.

Water assessments are being performed at various operations to identify other potential areas of improvement.

*More Information*

A number of parameters monitored in Cameco’s treated water discharges are compared against the CCME guidelines and formulated into a water quality index (WQI).

The title Water Quality Index was changed to Treated Water Quality.

The wording of the definition has changed for clarity, but not for intent.

Quality checks on the historic data revealed some errors in data entry for a couple of sites; the data has since been updated.
Treated Water Discharged

Definition
The volume of water that has been, or has potentially been, contaminated by our business operations, treated, and discharged to surface water bodies.

What does this mean?
The volume of treated water discharged continues to rise, due primarily to increased throughput of Key Lake’s reverse osmosis plant and expansion in mining.

Where are we going?
It is anticipated that the volume of treated water discharged to surface water bodies will continue to increase as Cigar Lake commences underground development and McArthur River and Eagle Point expand underground operations.

More Information
ISR operations do not currently discharge any treated waters to surface water bodies.

The title Effluent Volume was changed to Treated Water Discharged.

The wording of the definition has been changed for clarity, but not for intent.
**Waste to Landfill**

**Definition**
Domestic, commercial and industrial wastes disposed in Cameco-operated or external landfills.

**What does this mean?**
There has been a downward trend on waste to landfill since 2007.

**Where are we going?**
Waste reduction / diversion strategies are being investigated to divert wastes from the landfill, such as industrial scale composting, increased recycling, and incineration or gasification technologies.

Until such technologies can be implemented, the trend is expected to continue to fluctuate, as several operations progress with large-scale projects such as mill upgrades, construction and decommissioning of facilities.

**More Information**
The wording of the definition has changed for clarity, but not for intent. Minor corrections were made to historic data.
**Energy Intensity**

**Definition**
The amount of energy (all forms) consumed per unit of production normalized against baseline. This applies only to operations in commercial production.

**What does this mean?**
With the exception of 2008, energy intensity has been slowly increasing since 2005. Expansion of mining operations has caused increases in fuel consumption, as expected.

In 2008, reduced production caused the energy intensity to increase substantially.

**Where are we going?**
The trend in energy intensity is expected to improve, as all sites have now returned to historic production levels, and energy efficiency projects are being implemented at various locations.

**More Information**
The wording of the definition has changed for clarity, but not for intent.

Minor corrections were made to the energy data in historic years.
**Greenhouse Gas Emissions**

Direct and indirect emissions of greenhouse gases (GHGs), including carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydro fluorocarbons (HFCs), and per fluorocarbons (PFCs) expressed as a carbon equivalent (CO₂e).

**What does this mean?**
The greenhouse gas emissions have been slowly increasing since 2005. Expansion of mining operations has caused increases in fuel consumption, and therefore emissions, as expected.

**Where are we going?**
GHG emissions are expected to stabilize or decrease as energy efficiency and renewable energy projects are implemented.

**More Information**
Minor corrections have been made to historic energy data; slight increases each year compared to previously reported data were the result - trending was not altered.

The wording of the definition has changed for clarity, not for intent.
Radioactive Waste

Definition
The net change in the mass of radiologically contaminated material, as defined by local jurisdiction. The mass includes materials generated or produced as a by-product that have not been reused, recycled, or processed for reduction and/or mineral recovery.

The definition has primarily changed to account for, and 'give credit' for, all of the diversion strategies being implemented at each of the operations. In other words, rather than track all radioactive wastes being generated, Cameco felt it more important to track only the residual materials that are either being stored and/or that could be managed in a more sustainable fashion in the future. All diverted materials are being managed in appropriate sustainable ways - through reuse, recycle and recovery tactics.

The definition was also clarified to exclude a particular liquid waste stream disposed at the Key Lake site within its historic tailings management facility. Accounting for an annual average of 5.4M kg's previously tracked under this KPI, this fluid is collected and treated through the mill water treatment facility (a form of processing for elimination of waste), and is otherwise accounted for under the treated water KPIs.

What does this mean?
With one exception in 2008, the mass of radioactive waste has been declining since 2006.

The substantial peak in 2008 was a result of two major projects:

- Removal of an ore pad liner at Key Lake (7.8M kg's); and,
- Remediation at Port Hope, where excavated contaminated concrete and soil required disposal (4.4M kg's)

Where are we going?
Waste reduction / diversion strategies are being investigated to divert wastes from the approved license storage facilities, such as processing of metal wastes; improved management of packaging; various decontamination techniques for recycling; and incineration or gasification units combined with air pollution controls and energy recovery systems.

Until such technologies can be implemented, it is anticipated that the annual mass of radioactive waste will be somewhat dynamic due to various site cleanup activities, and demolition of aging mill infrastructure.

More Information
The KPI does not include tailings, waste rock, mineral product, or materials containing sufficient uranium such as to be considered a valuable commodity on the international market.
**Reportable Incidents**

**Definition**
A reportable incident is any discharge of a pollutant to the environment, other than a discharge explicitly authorized by the appropriate regulatory authority. Each jurisdiction defines what constitutes a reportable incident.

**What does this mean?**
Although the total number of reportable incident incurred in 2009 is slightly above our long term average of 22, it is within the long term statistical range for normal operations.

**Where are we going?**
Operations continue to implement measure to reduce incident frequency. However, since Cameco is planning on increasing production at existing facilities and bringing new facilities on line, we expect the total number of reportable incidents to stay within the historical range going forward.

**More Information**
Data has been updated as the status of some events has changed over time.
**Un-reclaimed Waste Rock**

<table>
<thead>
<tr>
<th>(million tonnes)</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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**Definition**

Un-reclaimed, stockpiled rock and overburden (sand, soil and vegetation) that has been extracted and relocated through mining activities.

An un-reclaimed stockpile is one that does not satisfy one or more of the following criteria:

- designed to eliminate potential long-term environmental liability;
- re-graded to acceptable slopes to maintain long-term stability; or
- established self-sustaining vegetation.

**What does this mean?**

The tonnage of un-reclaimed waste rock has remained relatively stable over the past number of years.

**Where are we going?**

Modest reductions will be realized with continued improvements in management of waste rock from McArthur River and Eagle Point. Otherwise, further significant reductions will take several years to materialize, as established vegetation is a required component of a reclaimed surface.

**More Information**

- The title was modified from Total un-reclaimed waste rock to Un-reclaimed waste rock.
- The definition has been changed from previous year.
A change in the way water flowing into McArthur River mine is treated and collected demonstrates creative thinking in developing effective treatment.

Water that flows through the developed areas of the world's largest, high grade uranium mine picks up metal contaminants, but not all the water that flows into the mine gets contaminated.

Reducing the volumes flowing through the water treatment plant has improved its efficiency, reducing loadings to the environment of certain metals.

McArthur River staff demonstrated that water flowing down a collection system within Shaft 3 (used for mine ventilation) is already clean enough to meet Saskatchewan surface water quality objectives, and even clean enough to meet drinking water guidelines.

If that water could be collected at the bottom of the shaft and isolated, permission could be received to discharge this clean water from Shaft 3 directly to the environment.

In 2008, system improvements for collecting this water were completed. This system at the bottom of shaft 3 now collects about 50 to 70 cubic meters of water an hour. The Shaft 3 water is pumped to surface at an existing discharge point designed to stop erosion. The water then flows through a muskeg that acts as a natural filter before ultimately reaching the Read Creek some 600 metres away.

As expected, immediate environmental improvements came from diverting this volume of clean water. By reducing the volumes flowing through the water treatment plant, its efficiency has improved, thus reducing loadings to the environment of certain metals such as molybdenum.

The quantity of chemical reagents barium chloride, ferric sulphate and lime used in the water treatment process has been reduced by half for an annual estimated savings of $172,000.

"This change to the mine's water collection system was not overly complicated to achieve," says Todd
Swenson, McArthur River's environment coordinator. "But it resulted in improved environmental performance for McArthur River with the bonus of reducing the costs of treating this water."
Modern Acid Plants to Reduce Cameco SO₂ Emissions

Compared to other Canadian industrial emitting sources of sulphur dioxide (SO₂) in air, Cameco’s two uranium mills in northern Saskatchewan represent a relatively small percentage of total emissions.

Environment Canada’s National Pollutant Release Index tracked more than 1.5 million tonnes of SO₂ emitted from all industrial facilities in the country in 2008. The SO₂ emitted by Cameco’s two operations (about 279 tonnes between the Key and Rabbit Lake mills combined) amounted to less than 0.02% of the Canadian total.¹

The new acid plant at the Key Lake mill should reduce SO₂ emissions to as low as 12 parts per million (ppm).

Nevertheless, two projects now underway at Cameco’s Key Lake and Rabbit Lake mills should lower that percentage dramatically.

The main source of Cameco’s SO₂ emissions is from acid plants at each mill site, used in the production of uranium. These produce sulphuric acid from dry sulphur trucked to the sites. Two large capital projects at both mills will replace or improve these acid plants.

“The age and design of these facilities is such that some of the sulphur dioxide being produced as an interim step in the process ends up going up the stack,” says Scott Grant, manager of the Key Lake revitalization project. “Today’s acid plant designs substantially reduce those emissions.”

By design, the new acid plant at Key Lake is expected to provide a 96% reduction in SO₂ emissions compared to the existing plant.

The project to replace the acid plant at Rabbit Lake is somewhat more complicated – the plant is being refurbished within an existing building and must be refurbished in stages over several planned summer shutdowns.

“Staged replacement means Rabbit Lake can still make its own acid rather than trucking in sulphuric acid,” says Rabbit Lake project superintendent Keith Perry.
Despite being refurbished rather than completely new, project managers on the Rabbit Lake site are also aiming for a dramatic reduction in SO$_2$ emissions once the acid plant has been refurbished with new technology.

1 Government of Canada: NPRI pollution reporting
STORIES

Cameco Competition Shines Light on Environmental Leadership

Environmental leadership is not a top down process at Cameco. This was evident in the enthusiasm of employees participating in the second Cameco Environmental Leadership Awards (CELA) in June of 2010.

At the CELA showcase, Chris Astles, general manager of the Blind River refinery, explains the award-winning ammonia removal project.

In submitting their work for peer judging, many of the teams were able to demonstrate their project contributed to each of Cameco's four measures of success:

- a safe, healthy and rewarding workplace
- a clean environment
- supportive communities, and
- outstanding financial performance

New at the CELA showcase in 2010 was an Ideas category where people were encouraged to make the business and environmental case for blue sky thinking.

Cameco's director of environmental leadership Brent Berg says the 16 entries in each category show people within the company are embracing environmental leadership as an ongoing commitment.

"There are a lot of environmental initiatives going on right now at our various operations," Berg explained. "But people are also looking ahead to see what else we might accomplish."

Top prize in the projects category was awarded to a team at Cameco's Blind River operation who substituted steam for ammonia in the process of refining yellowcake into uranium trioxide (UO3). This removed a source of nitrogen oxide from the mill's air emissions and resulted in electricity and chemical savings of about $1 million annually.
"The biggest environmental impact coming out of this innovation is that we have completely eliminated our number one risk to the environment and the public – the use of ammonia," said Chris Astles, general manager of the Blind River refinery.

The Ideas category winner was a project submitted by the Key Lake geo-environmental team, who have spent the past three years demonstrating that reclaiming waste rock piles is best accomplished by creating microclimates on the slopes. This process can help establish a pioneer plant species and ultimately an eco-system with proper soil conditions and nutrients to allow trees such as jack pine to become re-established.

"We realized that once the communities of plants that make up a forest floor are in place, the pine trees can start to grow," says team leader Pat Landine, the chief geo-environmental engineer for Cameco’s major projects group.
STORIES

Cleaning Metals Reduces Waste within Fuel Services

Changes to industrial cleaning techniques at Cameco's fuel services operations in the past year have begun to put a dent in the volume of the division's metal waste.

At the Blind River refinery, a cleaning system has allowed the refinery to recycle the metal drums used to ship uranium oxide (yellowcake) to the refinery from uranium mines around the world.

The new drum cleaning system at Blind River that allows for recycling of the metal drums used to ship uranium oxide (yellowcake) to the refinery has also created four new jobs.

Regulations allow for recycle of drums shipped from Cameco mines on a very limited basis. This has created an historic inventory on the Blind River site.

In the past year, the refinery has set up a new procedure to clean the drums to ensure removal of any residual radiation. After drum bottoms are removed, drums are blasted inside and out using a metal abrasive and crushed by a hydraulic compactor.

"[This] is making the refinery operation more sustainable by removing empty drums at the same rate at which they are generated, and by slowly eliminating the historical inventory," explains Doug Horne, superintendent of refinery operations at Blind River.

The drum cleaning circuit has also created four new jobs within the Blind River operation.

And at the Cameco Fuel Manufacturing (CFM) in Port Hope, the waste treatment department has adapted a different cleaning method to recycle high-value zirconium tubes from fuel assemblies rejected during the quality control process.

While the uranium dioxide fuel pellets are easily used again, the zirconium tubes which house the pellets in the bundle assemblies had previously been stored as low-level radioactive waste, producing nearly 15 drums of rejected zirconium tubes each year.
Recently, CFM staff successfully demonstrated that an ultrasonic wash tank can clear residual radiation from the tubes, allowing them to be sold to an accredited recycler at a price of nearly $10 a kilogram.

"Ultimately, we are eliminating a potential environmental liability at site and avoiding any off-site disposal fees for the waste," said Mike Longinov, manager of environment and occupational health and safety at CFM.
An energy dilemma has led to a number of ongoing initiatives and studies within Cameco aimed at:

- reducing energy consumption at sites
- examining clean ways of generating electricity for production

Recovering heat from the exhaust mine air at Cigar Lake is one of the ongoing initiatives and studies within Cameco aimed at reducing energy consumption at sites.

Cameco’s operations in northern Saskatchewan produce uranium to fuel clean nuclear power production all over the world. Ironically, this uranium is produced in a remote area where energy supplies are quite limited and becoming ever more expensive.

The electrical grid – partly fed by coal-fired generating stations located a thousand kilometres to the south – is nearing capacity in the Athabasca basin. Diesel fuel for machinery and propane for heating have to be trucked in hundreds of kilometres over gravel roads.

Projects or studies that could help to alleviate this strain also have the potential to reduce greenhouse gas emissions.

**Rabbit Lake** - An air leak detection program within the compressed air system at the Rabbit Lake mill and nearby Eagle Point mine could reduce electrical consumption by 2%. In addition, environment staff have conducted an early stage study to determine if commercial scale wind turbines could provide up to 13% of total site electricity and give a reasonable payback.

**Cigar Lake** - An investigation is underway to recover heat from the exhaust mine air while incorporating more advanced propane burners to cut down on the amount of propane used to heat mine ventilation air.

**McArthur River** - Advanced design studies are looking at recovering heat from the mining operation to preheat the mine ventilation air in winter. A recovery unit at the freeze plant would capture the heat brought to the surface from the brine circulated in the underground freeze pipes some 600 metres below surface.
(frozen ground provides the mine with an effective barrier against water inflow). This could result in potential annual savings of about two million litres of propane – about 15% of the mine’s total annual consumption.
Reducing waste rock is an important issue for any mining company to address. This is especially true at uranium mines. Waste rock contains only a tiny percentage of uranium compared to the rich mineral-bearing ore it surrounds it. Nevertheless, it is best to avoid adding to surface accumulations of mineralized waste rock because it contains other metals which can leach out when exposed to rain and snow.

The use of mineralized waste rock as a component in the concrete mix for backfilling development areas underground at McArthur River could save the transport of 1.6 million tones of waste rock to the Key Lake mill.

Right now at McArthur River, waste rock is brought to the surface and stored on lined pads. It is then hauled to Key Lake where it also held on storage pads before being used to blend down the ore going through the mill’s leaching circuits.

However, McArthur River produces more mineralized waste rock each year than the operations at Key Lake can process and processing this uneconomic waste rock also adds extra volumes of material to Key Lake’s tailings facility.

One solution being pursued is to reduce the amount of mineralized waste rock that is sent to the surface in the first place by adding it as a component in the concrete mix for backfilling.

A mine such as McArthur River has to backfill development areas such as raise bore chambers where mining is finished. This year a project is going ahead to put in place the necessary infrastructure to support an underground batch plant that would use some of the mineralized waste rock in the concrete mix. This could mean a potential 65% reduction in the volume of transported waste shipped to Key Lake by truck.

An internal estimate indicates that this could mean:

- 1.6 million fewer tonnes of waste rock trucked to Key Lake over the life of the mine as well as six million
litres of diesel not consumed

- 17,000 fewer tonnes of greenhouse gas (GHG) emissions, and
- $6.8 million in cost savings from reduced water treatment, tailings disposal and waste processing over the life of mine
Three Cameco operations have instituted new processes to reduce the volume of metal contaminants such as selenium and molybdenum in treated water. This success helps Cameco:

- meet new regulatory requirements
- lay the foundation for expanded production, and
- protect aquatic populations, especially in Saskatchewan’s north where fish consumption remains part of the traditional diet of many residents

Selenium can take an organic form, making it difficult to remove from process water. High accumulations in streams and lake beds have been proven to damage aquatic life. In Saskatchewan, changing regulatory requirements meant that mill circuits had to be adapted both to capture selenium (Se) and to remove molybdenum (Mo).

Reducing the volume of metal contaminants such as selenium and molybdenum in treated water helps Cameco meet regulatory requirements, lay the foundation for expanded production and protect aquatic populations.

Cameco’s experience in reducing the levels of these contaminants has demonstrated that treatment solutions must be custom made to suit each mill’s operation and ore type. With support from Cameco's Innovation and Technology Development research centre in Port Hope, teams at Key Lake and Rabbit Lake in Saskatchewan and Smith Ranch Highland in Wyoming each tested various bench scale circuits before deciding on a course of action.

A number of process challenges at Key Lake – such as scaling within feed pipes – had to be overcome to get the process working at optimal levels within the bulk neutralization circuit. The Key Lake team examined a number of different chemical reagents and settled on a ferric sulphate-gypsum reagent at the low-pH stage to get Se ions to precipitate with the reagent.

At the same time, research showed Mo in the mill effluent could be reacted with ferric iron at a pH level of 3.5
to form an iron-molybdate precipitate. The final neutralization process ended up encapsulating the molybdenum-iron precipitate in gypsum, meeting another challenge by making it stable in the tailings.

"Geochemical aging studies completed at Key Lake show that Mo precipitated from this reaction is thermodynamically stable in the mill tailings," said Key Lake senior metallurgist Arthur Lieu. "This will result in better overall environmental performance at the tailings management facility."

Another direct positive outcome for Cameco and its Double U strategy is that Key Lake was granted regulatory approval for flex production in 2009: the mill can produce above the current licensed limit of 18.7 million pounds to make up for any production shortfalls in recent years.

At Rabbit Lake, a similar treatment process was implemented. As there wasn't room within the existing mill, new treatment circuits, a new solution recovery thickener and a low pH clarifier were built in separate buildings outside the mill. The new process successfully reduced Mo and Se levels and resulted in a further reduction in uranium concentrations in treated water discharged to the nearby Collins Creek watershed which flows into Collins Bay, part of the third largest freshwater lake in Saskatchewan.

At Smith Ranch Highland in Wyoming, staff and researchers in Port Hope came up with a new closed loop that is removing both uranium and selenium in the purge water from this ISR operation. The treated water is now suitable for irrigation.
RESPONSIBILITY

Communities

Cameco works to build and sustain the trust of local communities by acting as a good corporate citizen. Generating energy goes beyond uranium fuel and clean electricity. It's about doing our part:

- to support the volunteers and organizations that energize strong communities
- to hear and respond to the questions and comments of residents, and
- to work with local communities through employment and economic opportunities, community development and environmental leadership.

As part of our sustainable development reporting, we measure our success by the amount invested in communities through sponsorships and donations, community support through annual polling and regional employment figures.
COMMUNITIES

Scorecard

Corporate Donations & Sponsorships

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<th>Donations/Sponsorships ($ mil)</th>
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**Definition**

Total amount spent on corporate donations and sponsorships.

**What does this mean?**

Donations and sponsorships have remained fairly consistent, reflecting corporate financial results over the three year period.

Our corporate investment budget has made it possible to make major contributions in education and literacy, health and wellness, youth and community development.

**Where are we going?**

Each year Cameco targets one percent of forecasted after tax net earnings to go toward community investment initiatives projects.

We will further develop the corporate community investment program, with a more proactive approach to partnerships and initiatives in regions where our business is expanding.
Polling (public support) in Saskatchewan

Definition
Based on affirmative answers to the poll question:
Are you supportive of the continuation of uranium mining in Saskatchewan?

What does this mean?
The uranium mining industry in Saskatchewan continues to enjoy a very high level of support among the general public within the province.

Where are we going?
Cameco aims to maintain the very highest levels of public support for our industry and our company throughout Saskatchewan, particularly in the communities and regions where we operate.

Polling (public support) in Port Hope

Definition
Based on affirmative answers to the poll question:
Are you supportive of the continuation of Cameco's operations in Port Hope?

What does this mean?
Cameco's operations in Port Hope continue to enjoy a very high level of support among the general public within the community.

Where are we going?
Cameco aims to maintain the very highest levels of public support for our industry and our company, particularly in the communities and regions where we operate.
**RSN Employment**

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**Definition**
Total percent of regular and temporary employees at our northern Saskatchewan operations classified as "Residents of Saskatchewan's North" ("RSN"). An RSN is defined as a person who has resided in Saskatchewan's North for a period of 10 years or one half of his or her age, whichever is lesser.

**What does this mean?**
Although there has been a decrease in the percentage of RSN employees at our Saskatchewan Operations, the absolute number of RSN's has continued to increase.

**Where are we going?**
As part of various surface lease agreements, Cameco has committed to achieve 67% of RSN employment at our sites, including both Cameco employees and contract labour. We will continue to provide training and opportunities for RSN workers.

**More Information**
Northern sites, La Ronge regular and temporary Cameco employees included.
Cameco's Dream & Believe hockey camp will make eight stops across central and northern Saskatchewan this season. The following dates are confirmed:

- Jan 11 - Stony Rapids
- Jan 12 - Black Lake
- Jan 17 - Wollaston Lake

Camps in other communities are in the process of being confirmed.

The camps provide youth with on-ice instruction, while reinforcing the importance of striving/believing in one's individual goals and dreams. Besides being the on-ice instructor, former NHLer Rich Pilon delivers a motivational message of overcoming adversity off the ice.

This is the first time inner-city students in Saskatoon's Kinsmen Hockey League have participated and video camera went along for the day. Watch Video.
With help from Cameco and the Missinipi Broadcasting Corporation, northern Saskatchewan residents set a new fundraising record for the Children’s Hospital Foundation of Saskatchewan. A seven-hour radio-a-thon on November 25, 2011, hosted by the MBC Radio Network, raised $625,856 for the upcoming Children's Hospital in Saskatoon – almost doubling the previous record.

Volunteers were kept busy at the phones as they set a new record over the 7 hour radio-a-thon on November 25, 2011.

Donations from Saskatchewan northerners came in all sizes, including a touching moment when a bag of rolled-up pennies from a local elementary school arrived at the radio-a-thon headquarters at the La Ronge Hotel and Suites. In total, residents raised $312,928 – with Cameco matching the donation to bring the overall total to $625,856.

More details on this success story are available from the Saskatoon Star Phoenix – Northerners raise $625K for children’s hospital
A partnership has been born between Cameco and the Canadian Diabetes Association that will allow people in northern Saskatchewan access to the support they need for managing life with diabetes.

"In light of the diabetes health challenge facing northerners, we see our support for the Travelling Diabetes Resource Program as an opportunity for Cameco to make a difference," said Brian Main, Cameco’s manager of community investment.

A new vehicle will help bring support for managing life with diabetes to northern Saskatchewan residents in their home communities.

Cameco’s $50,000 donation is being used toward purchasing a vehicle for the Travelling Diabetes Resource Program (TDRP), which is dedicated to the northern part of the province.

Diabetes is a serious health concern in northern Saskatchewan. Aboriginal Canadians, who make up a large portion of our northern Saskatchewan workforce, are three to five times more likely to develop diabetes than non-aboriginal Canadians.

Moreover, northern communities are often isolated and residents have difficulty accessing information and care regarding diabetes programs.

This partnership will bring the programs to the people in their home communities. The TDRP will:

- attend and participate in community events such as fairs, pow-wows and trade shows
- offer diabetes presentations to service clubs, seniors groups, schools, employee groups, caregivers, and other community associations
- set up educational displays and literature in high-traffic public venues, and
- work closely with community health agencies
"We are hopeful this new partnership with the Canadian Diabetes Association can be the start of a turnaround story in combating diabetes in the north," said Main.
Cameco is helping northern and First Nations students reach their full potential through its support of Credenda Virtual High School.

Credenda is a non-profit institution established in 2005 by the Prince Albert Grand Council to strengthen the delivery of math and science high school courses to remote Saskatchewan First Nations and community schools. It has quickly emerged as a leading Saskatchewan distance education organization.

Former Cameco CEO Jerry Grandey gets a guided tour of the virtual classroom with Credenda's director, Vince Hill, and two of the school's students.

Credenda offers:

- scheduled, real time interaction with instructors
- unlimited access to course content
- recorded lessons for review
- learning at school, at home or wherever students choose to go online

Cameco has donated $2 million to Credenda to help support its program in northern Saskatchewan.

This investment reflects Cameco's belief that this institution has the potential to be a game changer for young people throughout northern Saskatchewan. The ultimate return on investment will come through the success of these motivated students located at the other end of the broadband highway in the schools of Saskatchewan's north.

Better educated people will strengthen northern communities, and industry will have a deeper pool of qualified young people to sustain their operations. It will also help build communities by giving their youth both confidence and a solid educational foundation from which to build success.
Through Credenda, Cameco is giving more northerners and First Nations people the opportunity to succeed.
In 2008, Cameco partnered with the Saskatchewan Institute of Applied Science and Technology (SIAST) to build new student family housing at its Woodland campus in Prince Albert.

"People from communities in northern Saskatchewan play an important role in our success as a company," said Gary Merasty, Cameco's vice-president, corporate social responsibility. "This investment is one of the ways Cameco can support students from northern Saskatchewan as they pursue their studies away from home at SIAST."

On-campus student family housing significantly addresses transportation needs and improves access to campus daycare, which helps alleviate some of the concerns faced by students with dependents.

Cameco pledged $200,000 for SIAST's first student housing project, which provides accommodation for 36 students in two-bedroom, townhouse-style units. The ten buildings also include two wheelchair accessible suites.

The project is expected to draw a significant number of families from northern Saskatchewan, where a high proportion of the population is aboriginal. It will allow for an increase in the participation of aboriginal students in post-secondary education. Currently at SIAST Woodland Campus, 47% of students are of aboriginal descent.

Construction on the project was on time and under budget. Two students and their families were able to move in before the official opening in October 2009.

By enhancing access to affordable housing to enable students to bring their families to SIAST-Woodland, Cameco continues to support academic success.
Last year, Cameco employees showed their support for their communities in a big way. The sixth annual employee giving campaign raised a record total of $854,653 for Canadian charities – an increase of $126,000 or 17% over 2008.

The 2009 Saskatchewan campaign set a new record, raising $745,661. Cameco Corporation matched every employee's donation dollar-for dollar. The total represents a $177,000 or 29% increase over the company's all-time record of $577,971 set in 2008.

"Back in October, I challenged every employee to do even better than last year, particularly at a time when charities in every community are struggling," said former Cameco CEO Jerry Grandey. "Clearly, they took that message to heart. The results of their generosity are both inspiring and remarkable."

The groups that benefited from this generosity include the Saskatchewan and Port Hope United Way campaigns and the Blind River public library.

Cameco employees, together with long-term contractors, directed donations to over 100 charities funded by the United Way, including:

- Kids First North in La Ronge
- local food banks and church organizations
- the Canadian Cancer Society
- the Multiple Sclerosis (MS) Society

The sixth annual Saskatchewan campaign was held from October 19 to November 16, 2009, and was co-sponsored by USWA Local 8914. It also represented a significant milestone, reaching over the $2 million mark in cumulative contributions.
"As CEO, I could not be more proud – proud of the rapid growth of this campaign and gratified that is has done so much to foster a positive workplace culture," said Jerry. "I would like to sincerely thank all the employees and contractors who participated in the 2009-2010 campaign and who have contributed in the six years since we began."

Some 2009 campaign highlights:

- 769 employees in total contributed
- the average donation was $488 per person, up from $388 in 2008
- overall participation rates were very strong at 40%
- 77 donations were over $1,000, up from 71 in 2008
The St. Mary Wellness and Education Centre in Saskatoon will bring together acute medical services, preventative care, nutrition education and mental health and addictions services all under one roof.

In December 2009, Cameco was pleased to present the students and staff with a symbolic cheque for $500,000, representing the company’s total commitment to the project. The funding will be delivered in two equal instalments in 2010 and 2011 as the new school construction proceeds.

St. Mary’s school students Jonathan Tait (left) and Cody Bear helped unwrap a cheque from Cameco earmarked for the school's planned pediatric wellness centre as Greater Saskatoon Catholic Schools board chair Diane Boyko and Cameco president and former CEO Jerry Grandey look on.

The rebuilding of St. Mary’s is part of a larger neighbourhood renewal project. The commitment reflects Cameco’s interest in investing in the vitality of the communities in which it operates.

“This wonderful project is located in the same neighbourhood as our corporate office,” said former Cameco CEO Jerry Grandey. “More importantly, it is going to help countless youth get the health, fitness and educational benefits they need to succeed and excel.”

By providing these essential services, the Centre is directly responding to the needs of the community. The innovative project will address the root causes that impede learning for inner city youth, and will serve children attending St. Mary's and nine other schools in Saskatoon's Catholic and public systems.

Cameco’s sponsorship provides a physical space for a variety of shared services that complement the paediatrics clinic, where community based research will flourish and community partnerships will be forged.

As part of its community investment program, Cameco supports organizations and initiatives that focus on youth, education and literacy, health and wellness, and community development.
Cameco Employees Keep Christmas Tradition

Cameco Resources employees have kept alive a beloved Christmas tradition for underprivileged families in Nebraska.

Years ago, a retired local man named Virgil Couch began gathering used toys in his hometown of Crawford, Nebraska, which is located near Cameco Resources' Crow Butte mine. Virgil would lovingly repair the toys and make them like new before donating them to local children who might otherwise not get anything for Christmas.

Mr. Couch eventually became too frail to continue his work and later passed away. The community was in danger of losing a valuable and beloved holiday tradition.

That's when Cameco Resources employees stepped in. They created the "Virgil Couch Toy Program," which is similar to the Toys for Tots program developed by the US Marine Corps Reserves. Every year, employees and other community residents give their time and energy to raise donations of toys and cash toward this wonderful effort.

To this day, these volunteers ensure that no child in the Crawford area goes without a present at Christmas, and that the name of one kind and thoughtful gentleman will live on in the work that he loved.
Cameco came out in full force to the Northumberland United Way’s Challenge the Dragon event on June 10, 2010 in Cobourg, Ontario.

Over 40 Cameco employees and family members participated in the dragon boat race. In addition to helping out an excellent cause, participants got to have fun, fresh air and plenty of exercise during the day.

Teams from the Port Hope conversion facility and from Cameco Fuel Manufacturing competed in the Northumberland United Way annual dragon boat race in June 2010.

The event featured 39 teams in total – each team consists of 20 paddlers, a drummer at the bow and a steer person at the stern. Races were divided into two divisions: club crews (who have more than ten team members who are regular paddlers) and recreational crews. Many of the participants were trying dragon boating for the first time.

Cameco was well represented, fielding teams from the Port Hope Conversion Facility and from Cameco Fuel Manufacturing.

This year, the Cameco teams raised close to $40,000 toward the Northumberland United Way – almost half of the total United Way contribution of $90,000 in 2009.

Cameco is proud to have been a title sponsor of the dragon boat challenge since 2005, and looks forward to continue leading in this terrific community-building event in the years to come.
To fulfill our vision and achieve our Double U strategy, Cameco must remain competitive and retain the support of all stakeholders. We are steadfastly focused on the long-term, spending prudently today for greater benefit tomorrow. We seek to leverage our strengths through joint ventures and strategic alliances to build relationships with industry leaders and gain access to promising projects and technology.

As part of our sustainable development reporting, we measure our financial performance by our return on average capital and shareholder return.
**FINANCE**

**Scorecard**

**Return on Average Capital (ROAC)**

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2005 2006 2007 2008 2009

**Definition**
ROAC is a financial measure to evaluate the returns that a company realizes from the capital employed. It is calculated by dividing pre-tax operating profit, by average capital.

**What does this mean?**
ROAC has been affected by significant unusual items in the past two years. In 2008, ROAC decreased as a result of mark-to-market losses on financial instruments combined with higher average capital due to debenture conversions into common shares and borrowings to finance acquisitions. In 2009, ROAC increased as a result of higher earnings, mainly due to mark-to-market gains on financial instruments.

**Where are we going?**
Cameco plans to focus on increasing uranium production, exercising prudent financial management to ensure the company continues to grow and generate positive returns.

**Shareholder Return**

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2005 2006 2007 2008 2009

**Definition**
Annual shareholder return based on TSX market close on last trading day of each calendar year.

**Where are we going?**
Cameco plans to focus on increasing uranium production, exercising prudent financial management to ensure the company continues to grow and generate positive returns.
While the financial downturn that started in 2008 continues to impact companies around the globe, Cameco has withstood the quake and its resulting tremors remarkably well.

Due to its strong revenue and cash flow, Cameco has continued to move forward with its growth plans.

Double U focuses on expanding production at existing mines, bringing development properties into production, and advancing other projects already in Cameco’s portfolio.

We have a strategy and process in place to double our annual uranium production from 20 million pounds U₃O₈ to 40 million by 2018.

The plan to Double U focuses on:

- expanding production at existing mines
- bringing development properties into production, and
- advancing other projects already in Cameco’s portfolio

In short, the company is opting to grow by investing in itself. The strategy makes sense – Cameco already owns, or has a controlling interest in, valuable assets around the globe. We will consider other uranium production opportunities as they arise.

Cameco’s commitment to organic growth is evidenced by its steadily increasing investments in its existing assets. Over the next several years, we expect to make significant investments to expand production at existing mines and to advance projects as we pursue our growth strategy.

While our focus may be internal, the future is always a priority for the company. This is why Cameco continues
to explore around the world for the next generation of uranium deposits.

The company has already spent considerable sums on exploration – $53 million and $49 million respectively in 2008 and 2009 – and plans to continue seeking out quality uranium assets.

The Double U plan strategically aligns operations with long-term market fundamentals.

Over the next 10 years, demand for uranium is expected to outstrip supply by about 136 million pounds. Existing primary and secondary supply are forecast to fill 95% of this global appetite. New sources of primary production will be necessary to address the supply shortage and meet growing energy needs.

Today, there are 438 reactors operating in 31 countries. Economic powerhouses in the developing world – such as China and India – are racing to expand their nuclear energy capabilities creating an even greater appetite for uranium.

With significant investments today, Cameco will be well-positioned to take advantage of tomorrow's rise in demand.
To remain an industry leader, Cameco's growth curve must continue to trend upwards.

With assets totalling almost 480 million pounds of proven and probable uranium reserves, the company is well-positioned for growth. Moving this diverse and valuable inventory of assets down the production pipeline is key to the successful execution of the company's growth strategy.

In February 2010, Cameco executives took an underground tour of Cigar Lake for the first time since dewatering was completed and crews safely re-entered the 480 level. (Left to right: Tim Gitzel, president and chief executive officer; Robert Steane, senior vice-president and chief operating officer; Jerry Grandey, former chief executive officer; Grant Isaac, senior vice-president, corporate services)

One of these key assets is Cigar Lake.

With an average ore grade of 17%, Cigar Lake is expected to add an additional nine million pounds of uranium production for Cameco, once remediation and construction efforts are complete.

Advancing this valuable asset has not been without challenges. The ore at Cigar Lake is situated at the base of the Athabasca sandstone common to northern Saskatchewan. This sandstone is saturated with water and composed of weak rock formations.

However, through more than two decades of mining at other projects in the Athabasca basin, Cameco has developed a wealth of technical expertise and harvested millions of pounds of uranium.

Today, the company continues to make technological breakthroughs.

In 2009 at McArthur River, Cameco achieved a mining first, successfully excavating in the Athabasca sandstone using an innovative freezewall technique. The resulting new mining area is expected to produce additional uranium over the next decade.
Development at Cigar Lake has also been successful in recent months:

- the property has been dewatered
- safe access to the underground has been established, and
- remediation is proceeding as planned

Cameco's operational excellence has also included a clear commitment to safety. In 2010, two of the company's Saskatchewan operations were recognized by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) for outstanding safety performance:

- McArthur River received the prestigious John T. Ryan National Safety Trophy for best safety performance, metal mines
- Cigar Lake received a Special Award Certificate for safety excellence

In the future, efforts will continue to focus on moving Cigar Lake, and other promising properties, safely and surely down the production pipeline.

*Information of a scientific and technical nature concerning Cigar Lake was prepared under the supervision of Grant Goddard, P. Eng., Cameco's Vice-President, Saskatchewan Mining North, who is a qualified person for the purpose of NI 43-101.*
A significant part of Cameco's future production is expected to result from our global exploration activities. We have maintained an active exploration program even when uranium prices were low, reflecting our long-term commitment to the industry.

In 2009, Cameco invested about $54 million in direct uranium exploration. We plan to invest approximately $90 million to $95 million on uranium exploration in 2010 as part of our long-term strategy to maintain our leadership position. This includes approximately $40 million for exploration at Kintyre and Inkai block 3 in Kazakhstan.

The environmental assessment and feasibility study for the Millennium project are now under way.

We have skilled and experienced exploration staff, with more than 100 professionals searching for the next generation of economic deposits. Our landholdings are substantial, with approximately 4.2 million hectares (10.4 million acres) of Cameco and partner-operated land, primarily in Canada, Australia, the US, Mongolia and Africa.

The majority of Cameco's exploration projects are early to middle stage, meaning that economic grades or quantities of uranium have not yet been identified. However, successful exploration programs over the past few years have led to the discovery in Saskatchewan of the Millennium deposit, for which the environmental assessment and feasibility study are now under way. It has also led to the discovery of the Tamarack deposit and the Centennial deposit, advanced projects that are now, or will soon be, evaluated for their economic viability.

In 2008, Cameco also added two advanced projects to our portfolio in Australia – the Angela Project and the Kintyre Project. Both of these projects will be aggressively evaluated in the next few years and have the possibility of adding to Cameco's long-term production profile.

Cameco continues to evaluate uranium prospects in several regions globally, and we intend to add to our land position as new prospects are confirmed.
Cameco also invests in strategic partnerships with junior exploration companies to complement our own exploration program. Our objective is to position the company for future participation in areas with promising results and leverage Cameco's recognized position in the development of uranium resources worldwide. We will continue to use Cameco's industry leadership position and specifically our recognized exploration expertise to leverage investments as the partner of choice in the junior sector and with larger players.

Our strategic alliances with junior exploration companies typically involve investments in publicly listed or private companies and, Cameco typically obtains the right to own a majority in, and develop a successful discovery resulting from, exploration on the junior companies' lands.
Over 15,000 nuclear warheads have been recycled to fuel electricity generation under the "megatons to megawatts" agreement.

In 1993, the US and Russia entered into a 20-year agreement to recycle a significant portion of Russian nuclear material. The weapons-grade uranium is diverted from military stockpiles to peaceful purposes under the program. The initiative is funded entirely through the sale of the downblended uranium to utilities and operates at no cost to governments.

Under the "megatons to megawatts" program, weapons-grade uranium is diverted from military stockpiles to peaceful purposes.

Through a multi-step process, highly enriched uranium (HEU) from dismantled weapons is converted and then diluted into low enriched uranium (LEU) to be fabricated into commercial nuclear power reactor fuel.

This fuel generates roughly half of the nuclear power in the United States – approximately 10% of its total electricity. Though usage depends on region, on average one in 10 American homes, businesses, schools and hospitals receive electricity generated by fuel from the "megatons to megawatts" program.\(^1\)

So far the program has recycled almost 400 metric tons of HEU into more than 11,000 metric tons of LEU for nuclear fuel.

By the time the program is complete, it is expected that 500 metric tons of Russian and more than 100 metric tons of American nuclear warhead material will have been downblended. This is equivalent to more than 20,000 warheads and represents enough fuel to power the United States for about two years.\(^2\)

As one of the world’s largest uranium producers and a significant conversion supplier, Cameco played a major role in negotiation of the agreement. Cameco, AREVA and Nukem purchase the uranium and conversion components of the fuel; USEC Inc. purchases the enrichment component of the fuel under a separate contract.

\(^1\) USEC Inc.
2 Nuclear Energy Institute, "Megatons to Megawatts Dismantles More Than 15,000 Warheads"
One of Cameco's measures of success is outstanding financial performance, and a significant part of that performance is communicating clearly with investors. Cameco seeks to do this through a variety of means, including an award-winning investor relations (IR) website.

In 2010, for the third year running, Cameco's IR website was ranked among the top five in North America by the Investor Relations Global Rankings (IRGR).

Jennifer Skinner, manager, communications projects, (fourth from left) accepts Cameco's award at the IR Global Rankings April 6 in New York.

The IRGR is a comprehensive ranking system for investor relations websites, online annual reports, corporate governance practices and financial disclosure procedures. More than 100 items are evaluated by a team of investor relations specialists to come up with the rankings for each category.

Over 500 companies from 30 different countries registered for the awards, which are supported by key global institutions such as KPMG; The Bank of New York Mellon; Bloomberg; and Corporate Asia Network.

At the 2008 IRGR awards, Cameco's online annual report was named the best in North America. Cameco was also awarded the best IR website by technical criteria in North America and the best IR website by technical criteria in Canada.

Cameco's IR and web development teams – based at the company's head office in Saskatoon – work closely with zu.com, a leading web communications company, also based in Saskatoon.
RESPONSIBILITY

Governance

Cameco's board of directors is committed to good corporate governance, recognizing that it is important for strong corporate performance. The board is responsible for supervising the management of the business and affairs of the corporation. The board seeks to sustain a successful business, optimizing long-term financial returns and increasing the corporation's value.

Cameco measures its sustainable development performance through our governance and management practices and our four key measures of success. For governance, we gauge our progress based on RiskMetrics Group's Governance Analytics CGQ (Corporate Governance Quotient) and the Globe & Mail's annual Report on Business (ROB) board evaluation.
GOVERNANCE

Scorecard

Governance Analytics CGQ (Corporate Governance Quotient)

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**Definition**
- Rating against other companies in the S&P/TSX Composite Index
- Rating against other companies in the Materials Group
- Current data for rating against other companies in the S&P/TSX Composite Index and rank against other companies in the Materials Group respectively

The CGQ rating is based on RiskMetrics Group's proprietary formula developed to rate the practices of publicly-traded companies in the following areas: board issues, charter and bylaws, executive and director compensation, progressive practices, ownership, director education and audit.

**What does this mean?**
The high ratings we received in both our index and industry accurately reflect our commitment to a high standard of corporate governance.

**Where are we going?**
In March 2010 RiskMetrics Group began to use a new rating methodology, Governance Risk Indicators (GRId), to determine issuers' performance in four distinct areas: audit, board, compensation and shareholder rights. This rating system is very different from their previous system, so our future ratings will not be comparable to past ratings. In this new measure of governance, our goal will be to have a low level of concern in each area.
**Definition**
The ROB annually rates the boards of companies in the S&P/TSX index. The marking system includes criteria designed to go beyond mandatory regulatory requirements; particularly looking at board composition, shareholding and compensation, shareholder rights and disclosure.

**What does this mean?**
There are changes to the marking system each year so scores are not precisely comparable with the scores of prior years. Every year companies increase the quality of their own governance practices which influences the comparable ranking.

**Where are we going?**
Our goal is to continue to obtain top quartile ranking in this measure of governance.
The key to good communication is not only what you say, but *how* you say it.

Cameco took this truism to heart in producing its 2009 management proxy circular.

In the investment world, the proxy circular is often regarded primarily as a compliance document. Accordingly, Cameco has focused on ensuring that the document is always fully compliant with all the rules and regulations, even going above and beyond by providing additional information for shareholders. However, due to its nature as a compliance document, the circular was still written in highly technical and legal language.

Cameco's 2009 plain language management proxy circular (centre) earned a Governance Gavel Award for excellent compensation disclosure.

In 2008, Gary Chad, Cameco's senior vice-president, governance, law and corporate secretary, and Elizabeth Williamson, senior legal advisor in governance, decided to try something different.

The Canadian Securities Administrators had instituted new rules and regulations on director and compensation disclosure in the proxy circular, with the intent of providing better disclosure to shareholders. These new rules did not present a major challenge – Cameco was already voluntarily providing much of the required information.

However, Chad and Williamson believed that Cameco's high standards of corporate governance were not being adequately recognized or communicated.

"We decided to take a plain language approach," said Williamson. "It allowed us to communicate our governance practices, which were already very good, but may have been masked by how we communicated in the past."

With the help of an external company, the language in the proxy circular was written in 'plain English'.

The circular was fully compliant and the page count remained largely unchanged. However, the document...
provided more information in an easier to read format with less text, more tables and more white space.

The company’s board of directors were impressed with the new approach, as was the Canadian Coalition for Good Governance, a group composed of 41 institutional investors who cumulatively manage over $1.4 trillion.

In 2009, the coalition – committed to improving governance among issuers in which their members invest – presented Cameco with a Golden Gavel Award for providing excellent compensation disclosure in its management proxy circular.

"Other companies and our peers now point to our document as a good example to follow," said Williamson.
Cameco's corporate governance ranks high, compared to other Canadian-based companies.

Since 2007, Cameco has scored in the top quartile in the Globe & Mail's annual Report on Business scores for corporate governance. The scores offer a realistic snapshot of a corporation's governance practices – both mandatory and voluntary – evaluating performance in:

- board composition
- shareholding and compensation
- shareholder rights and disclosure

Cameco has consistently scored 85% or more in the Globe & Mail's annual Report on Business scores for corporate governance in the last three years.

A detailed methodology, based on 13 different indicators, is used to rank almost 200 companies each year.

Cameco has consistently scored 85% or more in the last three years.

Cameco's board also received special mention in 2009 for disclosing the continuing education and development that directors participated in throughout the year.

They may earn even higher marks next year: in 2009, the board reviewed and updated its skills matrix and conducted a diversity survey.

The skills matrix is designed to ensure that the board is composed of people with the requisite skills to govern Cameco, and that these skills themselves are still relevant in today's rapidly changing business climate. The matrix is used when recruiting new board members.

Through a self-assessment, the board members identified their skills and experience. In all, 14 categories of
skills and attributes were evaluated, including 11 categories of skills and experience essential to the board to effectively oversee and act as a strategic resource for the company.

Through the diversity survey, the board affirmed its commitment to diversity. It allowed board members and senior management to identify the desired level of representation according to ethnicity, residency, gender, political affiliation and age.
When you're running a company at the forefront of a worldwide rebirth of nuclear energy, it's comforting and advantageous to have the board's collective experience and wisdom at your side.

Our directors are a great resource because they understand the complexities and demands associated with running a company and making strategic business investments. Detached from day-to-day operations, they bring a seasoned perspective that helps us stay ahead of the curve when it comes to aligning key decisions, corporate values, and stakeholder interests.

Our directors challenge us, ask the tough questions, and put us through a vetting process that proves our operating strategies are sound.

Many of our directors are also pretty savvy when it comes to mining and energy. They have seen strategies that have worked and ideas that haven't. They challenge us, ask the tough questions, and put us through a vetting process that proves our operating strategies are sound.

But, that's not all. Some directors have significant expertise in the disciplines of mining, law and accounting. Some directors have their 'ear to the ground' on energy policy, nuclear acceptance, and community engagement. Given the stakes in today's highly competitive world, our directors provide a real advantage in seizing opportunities and avoiding threats.

The intellectual muscle that we have in our board, not only strengthens our management capacity, it helps create shareholder value and gives us a competitive edge in the marketplace.
Believe it or not, doing the ‘right thing’ not only helps us sleep at night, it preserves our excellent international reputation for openness and ethical conduct and contributes directly to our bottom-line.

As good as our programs were - a long history of codes of ethics, respectful workplace and competition policies and the like - we've gone even further in ensuring that we do the 'right thing'.

Ethical decision-making builds Cameco’s credibility and preserves the company’s excellent international reputation.

Firstly, we've enhanced our code of conduct and ethics. The revised code is written so that everyone can easily understand it and apply it to everyday situations.

Secondly, we've provided a formal means to discourage lapses - known as our 'ethics hotline'. The hotline is operated by a third-party and is confidential and anonymous. We encourage and expect employees to call the hotline if they see any activity they feel is unethical or inappropriate.

Thirdly, we've integrated ethical responsibilities into our leadership programs and management systems. Through these programs and systems, each and every one of us is held accountable for exemplifying the decisions, behaviours and actions that are consistent with our corporate value of acting with personal and professional integrity.

We know that our reputation is reflected in the thousands of decisions that we make every day. Woven together, ethical decision-making builds our credibility and protects our social licence to operate and grow.