

Mining Voice

Volume 2 | November 2012

Deloitte Canada's mining newsletter

In this issue

[Sustainability and climate change](#)

[Fuel up with innovation](#)

[A change in the Québec tax regime?](#)



Deloitte.

In this issue



Mining Voice

In a rapidly changing global economy, the energy and resources industry faces unprecedented challenges. Our Canadian mining companies are not immune to these challenges, including, the run-up in base metal prices, environmental concerns, industry consolidation and managing the impact of global exchange rates.

With the increasingly complex environment facing the mining industry, Deloitte has responded by issuing this quarterly mining newsletter, **Deloitte's Mining Voice**, to share valuable insights on the topics relevant to mining companies, which we hope you will enjoy.

- 1 Introduction
- 3 Sustainability and climate change
- 6 Fuel up with innovation
- 9 A change in the Québec tax regime?

Introduction

Welcome to the second quarterly issue of **Deloitte's Mining Voice**.

Here we present relevant topics focusing on various issues that we trust are of interest to decision-making professionals in the mining industry.

This edition features insights on the various sustainability issues regularly faced by mining companies as it relates to the Québec government's development of Northern Québec. We also offer our perspective on innovation in the mining industry with a specific focus on Canada's Scientific Research & Exploration Development (SR&ED) tax program. Finally, we discuss the impact of the recent Québec election as it pertains to the Québec mining duties regime.

We hope that you will enjoy this quarterly newsletter and continue to find the content applicable to your work in the industry. We look forward to discussing with you various insights into the mining industry and welcome any questions, comments or suggestions on future topics of interest. Please feel free to contact any member of the team to share your thoughts and ideas.



Sustainability and climate change

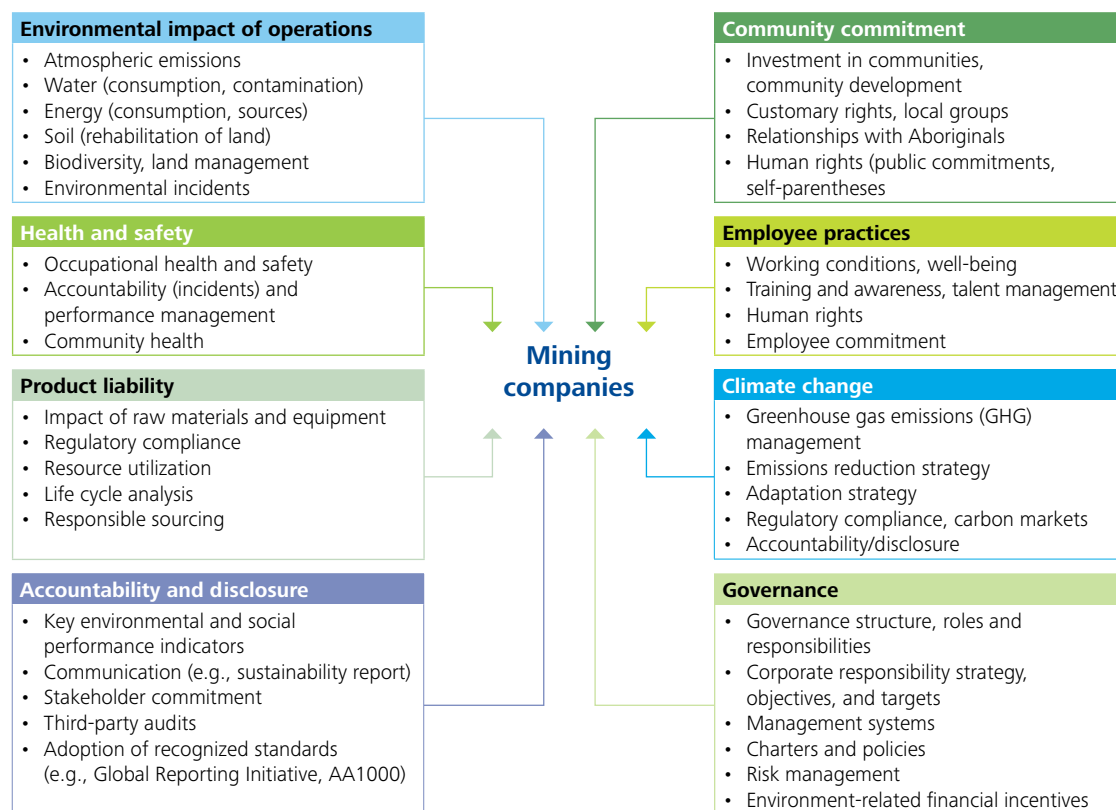
The issue of sustainable development is of ever increasing importance in the global economy and in fact one that is of critical importance to the mining industry. Sustainable development is central to the vision of the Québec government's development of Northern Québec. The environmental protection and socio-economic development objectives of the government for Northern Québec will require all players to reflect intently on matters of sustainable development when designing and carrying out Québec based projects. It's a reality that affects the mining industry in particular.

A company's sense of responsibility regarding sustainability can be seen in how it manages its business. It involves creating value for shareholders and stakeholders, while also having a positive societal impact by minimizing negative environmental consequences and not compromising the needs of future generations.

For example, when you consider the typical life cycle of a mining project, one quickly realizes that every project stage has a significant impact – be it environmental, social or economic – and presents both risks and opportunities for mining companies.

These risks and opportunities exist from the very outset of a new project. Whether it's the involvement of local communities at the exploration stage, worker health and safety, technological and environmental innovation, or restoration of sites after closure, sustainability issues are abundant. Today's companies must now address and manage these issues strategically.

Below is a non-exhaustive list of the sustainability issues that mining companies face:



The expectations of mining industry stakeholders are growing and their standards and principles in relation to the social acceptability of future mining projects will become key in whether these projects go ahead. Stakeholders who have an influence on the mining industry include, among others, Aboriginal communities, governments (of all levels including municipalities, ministerial representatives, etc.), environmental and social groups, and other organizations impacted by the mining industry or that have influence over it.

Given the high number of sustainability reports published voluntarily in Canada by mining companies, it appears that the mining industry understands the importance of gaining social acceptance as part of the development of projects.¹ For businesses operating in Northern Québec, and particularly for mining companies, assessing the risks and opportunities related to sustainable development has become essential if they are to publicly show how projects will contribute to the government's sustainability goals.²

Guidelines on corporate and organizational social responsibility are increasingly prevalent in the current business environment. Although the Québec Sustainable Development Strategy does not currently apply to businesses, the government hopes that 20% of Québec companies will have implemented a sustainability program by the end of 2013.³

To help Québec companies incorporate sustainability into their management practices, the Bureau de normalisation du Québec published standard BNQ 21000 and an application guidance, which provides management tools for creating a strategic approach to responsible and sustainable development based on the 16 principles of Québec's *Sustainable Development Act*. This guide, developed for Québec companies and organizations, helps them begin the strategic decision-making process by proposing a methodology for identifying issues and providing certain operational aspects to be incorporated into their management and culture of change.

Additionally, the International Organization for Standardization (ISO) implemented ISO 26000:2010, which is designed to provide broad guidance to businesses and organizations on how to operate in a socially responsible manner. It is important to note that applying ISO 26000:2010 does not lead to certification since it provides guidelines rather than requirements.⁴

In the current environment, when businesses evaluate their performance, they must take into account not only their financial performance but their environmental and social performance as well.

At Deloitte, we help private and public organizations strategically integrate matters of sustainability into their projects and operations and seize the related opportunities. Our solutions include:

- Sustainability diagnostics, strategies and action plans
- Stakeholder engagement (e.g., preparation for public hearings, consultations, communication)
- Management of risks related to sustainability and climate change (financial, regulatory, physical, etc.)
- Management of energy and GHG⁵ emissions (energy strategy, scenarios for complying with the Cap and Trade System for GHG Emissions Allowances)
- Evaluations of the financial return on sustainability investments
- Audits of financial and non-financial information related to environmental and social matters (e.g., audits of sustainability reports, reviews of internal controls for measuring performance)
- Communication strategies for sustainability (e.g., GRI integrated sustainability reporting)



Fuel up with innovation

The mining industry must be continually competitive in order to attract investors and retain employees as demand for skilled labour steadily increases. Each mineral deposit is unique and every mine has its own technological challenges. In fact, mining operations all face different challenges: deep deposits, mines in urban or northern settings, high-volume/low-grade production, presence of complex minerals.

When mining companies feel that their knowledge base is insufficient, they usually perform scientific research and experimental development (“SR&ED”) in collaboration with universities/CEGEPs, research consortiums, technology transfer organizations (Corem, Consorem, Soredem, URSTM, etc.) or by contracting out consulting services. We have noted that in general the mining industry would tend to underestimate onsite SR&ED, for reasons more circumstantial than rational. Because the projects are unique, technologists and engineers operate in a changing and ever-evolving context. Part of their job is to react to changing constraints as they arise. Where it is a question of identifying which SR&ED projects qualify for tax credits or other kinds of government assistance, the commercial aspect and a “Problem-Solving” model often influence the conclusions. We have seen many tasks that should have qualified under the current SR&ED regime however have been inadvertently put aside. Detailed interviews regularly reveal that some findings go beyond current best practices and engineering standards. The kind of knowledge gained from experimental work and the way it is obtained often constitute experimental development, or even applied science, under the definitions of the *Income Tax Act*. In our experience, the value of SR&ED concealed in day-to-day operations can be considerable, considering the size and economic scope of the projects. If qualifying payroll expenses alone were taken into account, the eligible SR&ED benefits are often surprising.

Canada’s SR&ED program is arguably considered among the best in the world and its mandate and the general understanding of the program may be reasonably understood by or known to businesses. It is important to note however that the detailed intricacies of the specific rules of the program as well as the required scientific understanding necessary to identify qualifying activities can be very complex, and oft times discourages many taxpayers. Some of the changes announced in the 2012 Federal Budget were meant to address this aspect.⁶ But other aspects relative to innovation financing in general were addressed as well. The government announced its plan to redirect a portion of the assistance offered under

the SR&ED program to more direct support, chiefly through targeted grant programs such as the Industrial Research Assistance Program (“IRAP”). More specifically, money for direct financing would come from cuts to SR&ED incentives. Many in the industry are of the general view that these cuts will have an overall adverse impact and that it is time for businesses to consider ways of reducing and/or neutralizing this impact.

Some opportunities to consider in this new context:



Maintain and enhance the eligibility of SR&ED projects for current programs and measures

The Canada Revenue Agency (“CRA”) is increasingly tightening its interpretation of the required criteria for the scientific methods used and, by implication, the associated documentation requirements. Claimants must ensure that their experimental method or systematic/organized approach at least complies with the program criteria and best practices. Scientific methods advance along with science itself, depending on the technological field. A business must keep up with recent developments, new approaches and available tools. The development of digital predictive tools or simulations and design of experiments (“DOE”) are good examples.

Preparing quality documentation highlighting the quantitative and qualitative aspects of the claim is the surest way to maximize the eligibility of project submissions. We have noted that, in the mining industry, interim analyses and reports are often postponed or skipped due to shortages of labour or time and the magnitude of the task. Failing to crystallize the scientific reasoning or assumptions as the project advances not only frequently results in declassification (because by definition, science has to be transmissible) but also makes it difficult to secure a low-cost claim. Furthermore, with a mobile workforce, it is imperative to keep the company’s memory intact. Tools such as Innovation Strategy™, Experimental Planning™, Timetracker and others can be useful in this sense.



Make SR&ED an integral part of your processes

Make SR&ED an integral part of your processes. Appointing an innovation manager and documenting processes in a Company quality manual, whether certified or not, are initial however important steps in a formal intention to complete future projects in a spirit of discovery. The projects will also be more visible and readily identifiable and fewer opportunities will be missed.



Stimulate minds through challenges

Building a true corporate culture of innovation fosters greater innovation and increases experimental development work. Whether through structuring approaches like LEAN, SIX Sigma, Kaizen, etc. or simply through a pilot project targeting a trigger (such as changing the drilling/dynamiting procedure, onsite control tests, waste reuse/reduction, recurring problems, decreased water consumption, eliminating/reducing chemical use, etc.), reflection on the subject is sure to help identify potential projects. For instance, redefining an ideal in-plant process flow sheet is a powerful catalyst for SR&ED projects because the engineer must identify a workable comfort zone within predefined constraints and set new operating limits, generating investigative work that will define new process equilibrium. Every department – engineering, maintenance, IT services, geology, environment, etc should be revisited to identify potential SR&ED projects. Sometimes strengthening certain aspects of a project is all it takes to realize that it will be eligible in future. You might discover that many activities are designed to address a common uncertainty and could be made into an SR&ED project.





Look at the entire portfolio of tax and non-tax incentives for businesses

It is important to be informed and take advantage of federal, provincial and other government non-SR&ED funding and incentives that can contribute towards research or innovation program costs or free up available corporate funds for additional research and innovation. For instance, there are incentives related to the environment, green solutions and alternative energies, others for industrial sectors (exploration credit, processing credit) or administrative regions (resource region credit, etc.), or human capital such as manpower training (student internship, apprentice training). Other incentives cover the use of domestic resources, including inter-company partnerships (precompetitive research partnership) or academic organizations (research contracts, industrial chairs). Knowing which programs are available can spur a company to review its strategic innovation plans and check that its scientific and financial goals are aligned.



As of 2014, capital expenditures will no longer be qualifying expenditures for purposes of deductions related to SR&ED and related investment tax credits (“ITC”s)

With this in mind, it would be wise to plan for SR&ED capital purchases before the related incentives are reduced or eliminated. You should also determine whether the asset in question is a capital expenditure or current expenditure with respect to SR&ED.

These opportunities are possible precursors to action plans responding to the announced tax changes. Stakeholders should pay particular attention to the federal government’s change of direction – one cannot afford to sit back. Take the opportunity to maximize the value of your tax and innovation strategy. Being an innovation leader means being more productive, secure and responsible and making a significant contribution to the mining industry across Québec and Canada.

“But innovation is about much more than just technological breakthroughs. Increasingly it is about breakthroughs in collaboration – forming linkages among different types of companies, industries, and public institutions to address challenges and opportunities that reach far beyond the scope or capability of any individual organization.”

Ben Verwaayen, Chief Executive Officer of Alcatel-Lucent, foreword to *The Global Innovation Index 2012*.



A change in the Québec tax regime?

When the March 30, 2010 budget was tabled, the Québec government had announced that Québec's mining duties regime would be completely revamped. As part of the reform process, on June 6, 2011, the *Mining Duties Act* was replaced by the *Mining Tax Act*. Among the new measures introduced, the tax rate applicable to an operator's profits went from 12% in 2010 to 16% in 2012, with the regime being based on annual profits using a mine-by-mine approach.

In addition, various exploration, development, processing and depreciation allowances were reduced, and eligible expenses for the credit on duties refundable for losses were limited and no longer applied to expenses financed by flow-through shares issued outside Québec. Other mining industry changes pertaining to income taxes were also expected to be introduced. When the 2012 budget was tabled, the Québec Ministry of Finance announced the introduction of a new investment tax credit for the purchase of capital assets used for mineral processing. Additional information about these reforms can be found in *Recent Changes in the Tax Environment of the Mining Industry*, an article published in the previous issue of *Mining Voice newsletter*.

On September 4, 2012, the Liberal government under Jean Charest was defeated in the Québec provincial election. A new Parti Québécois (“PQ”) government has now been formed with Pauline Marois as premier. However, this new government is a minority government and may have difficulty staying in power or advancing its program.

During the election campaign, the PQ announced its intention to make further major changes to the Québec mining tax regime. More specifically, the PQ’s election platform proposes increasing government mining royalties, raising them from 16% of net mining profits to 5% of the gross value of extracted resources and adding an additional 30% tax on profits that exceed 8% of the return on invested capital.

The question becomes whether the minority PQ government will succeed in implementing such measures, inspired by similar changes introduced recently in Australia. If implemented, these measures would make Québec a jurisdiction with one of the highest tax rates for mining operations, according to a study published recently by SECOR.

Keep in mind that a study conducted by Deloitte and E&B Data, on behalf of the Minalliance Group and made public on September 20, 2012, revealed that the Québec mining industry contributed over \$1.3 billion to the federal and provincial governments in 2010 and that this amount is expected to increase substantially in the coming years. The data that had supported the predicted increase is based on investment decisions and schedules announced publicly at that date and could be affected by any major changes to current tax policies, as investors in an international marketplace must prioritize their investment decisions according to the competitiveness of various potential projects. We invite you to read the news release at <http://www.minalliance.ca/media-room/news-releases>. The study is available at http://www.minalliance.ca/pdfs/deloitte_ebdata_2012.pdf (in French only).



Endnote

1. In Canada, the mining industry is the industry that publishes the most sustainability reports in accordance with the guidelines of the Global Reporting Initiative (Source: Global Reporting Initiative, 2010).
2. Also note that Bill 14 (*"An Act respecting the development of mineral resources in keeping with the principles of sustainable development"*) will very likely strengthen the regulatory requirements on how mining companies manage the environmental and social impacts of their mining projects. Note that as a result of the September 4th provincial election and change of government, this bill has currently been abandoned pending changes and ultimate approval by the newly elected government of the Parti Québécois.
3. Reference: www.bnq21000.qc.ca/projet-bnq-21000/e-projet-bnq-21000/objectifs-strategiques
4. Reference: www.iso.org/iso/fr/home/standards/iso26000.htm
5. Greenhouse gas
6. 2012 Federal Budget: new R&D support measures challenge Canada's global position. Deloitte publication available at Deloitte.com

Contacts

National contact



Jürgen Beier
National Mining Leader
416-874-3146
jbeier@deloitte.ca

Regional contacts



Gregg Orr
BC Mining Leader
604-640-3063
gorr@deloitte.ca



Richard J. Clark
Toronto Mining Leader
416-601-6223
richaclarke@deloitte.ca



Leigh Derksen
Prairies Mining Leader
306-343-4431
lderksen@deloitte.ca



Martin Granger
Québec Mining Leader
514-393-7177
mgranger@deloitte.ca



Paul Stauch
Ontario Mining Leader
613-751-5420
pstauch@deloitte.ca



Brian Groves
Atlantic Mining Leader
709-758-5225
bgroves@deloitte.ca

Special contributors



Lucie Chouinard
Partner
819-797-7420
lchouinard@deloitte.ca



Paul Greeley
Partner
709-758-5092
pgreeley@deloitte.ca



Albert De Luca
Partner
514-393-5322
adeluca@deloitte.ca



Geneviève Provost
Partner
514-393-7806
gprovost@deloitte.ca

www.deloitte.ca

Deloitte, one of Canada's leading professional services firms, provides audit, tax, consulting, and financial advisory services through more than 8,000 people in 56 offices. Deloitte operates in Québec as Samson Bélair/Deloitte & Touche s.e.n.c.r.l. Deloitte & Touche LLP, an Ontario Limited Liability Partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

© Deloitte & Touche LLP and affiliated entities.

Designed and produced by the Deloitte Design Studio, Canada. 12-2934