August 2006

Taxation Issues for the Mining Industry

2006 Update

A Report by the Intergovernmental Working Group on the Mineral Industry

Mines Ministers' Conference 2006

Whitehorse, Yukon

EXECUTIVE SUMMARY

Background

At their 2005 meeting in St. Andrews, provincial and territorial mines ministers mandated the Intergovernmental Working Group on the Mineral Industry (IGWG) Sub-Committee on Taxation to analyze the industry's recommendations for tax measures to stimulate exploration. Accordingly, the sub-committee is reporting on the status of exploration financed by flow-through shares and on industry proposals for tax measures to stimulate exploration. The sub-committee also analyzed an industry proposal to enhance the tax treatment of Qualifying Environmental Trusts.

Status Report on Exploration Financed by Flow-Through Shares

Added to the $1.2 billion and $1.3 billion totals recorded in 2004 and 2005, the $1.4 billion in exploration and deposit appraisal spending expected for 2006 points to the continuation of one of the most intensive periods of activity in Canadian mineral exploration history. This strong level of exploration activity is the combined result of a number of positive factors, including strong prices over a wide range of commodities, mining-friendly capital markets, a steady stream of positive exploration news, and the availability of the Investment Tax Credit for Exploration (ITCE) and related provincial tax incentives.

On an annual basis, total flow-through-share financing grew from $110 million in 2001 to $202 million in 2002, $308 million in 2003, and $436 million in 2004. This positive trend continued in 2005 as over $617 million was raised for mineral exploration through flow-through-share financing. The increasing average size of flow-through-share issues, from $430 000 in 2001 to over $1.2 million in 2005, suggests stronger industry fundamentals and increased investor interest. Larger average issues would also suggest that more advanced exploration work is being pursued by companies financing the exploration with flow-through shares.

After two extensions, the ITCE program was terminated on December 31, 2005. Funds that were raised under flow-through-share agreements signed on or before this date could be spent on exploration until the end of 2006, with the expenses still qualifying for the tax credit. The newly elected government re-introduced the ITCE for 11 months effective May 2, 2006. As a result, flow-through-share funds raised during the first four months of 2006 are not eligible for the ITCE.

Nevertheless, there was outstanding continued interest in mineral exploration flow-through-share funding during this period since approximately $145 million was raised. This amount is significantly above the level of financing obtained during the same period in 2005.

Review of Industry Proposals for Tax Measures to Stimulate Exploration

Working group members recognize that the issue of declining metal reserves is complex. It is widely understood that the problem is not only caused by insufficient exploration spending over the long term, but also by increasing costs of successful discoveries over time. Based on the historical record, it is doubtful that the exploration productivity decline could be redressed by applying only tax incentives for exploration.

While recognizing the limitations of an exploration tax incentive approach, a majority of provinces and territories continue to support industry proposals to further extend the ITCE as one component of a long-term solution to Canada's declining metal reserves. The tax credit contributes positively to the investment climate for mining and has helped fuel the growth in grass-roots exploration activity. However, a majority of working group members are generally of the opinion that the efficacy of the ITCE would be significantly enhanced if this measure was integrated into a more comprehensive strategy that would include tax and non-tax measures and that would be aimed at reducing exploration costs and improving the productivity of each dollar spent on exploration.

To that end, other industry proposals submitted to the attention of the sub-committee merit careful consideration. This is most particularly the case for two proposals to enhance the tax treatment of exploration undertaken in the vicinity of existing mines. Encouraging exploration activities that are not currently stimulated by tax incentives to the same degree as grass-roots exploration, but that offer a greater immediate potential for addition to metal reserves, could help spread the exploration effort to a wider variety of targets and improve the overall productivity of exploration.

In this connection, the working group is of the opinion that the most interesting proposal is one that calls for Canadian Exploration Expenses (CEE) to include qualified expenses related to exploration work that is undertaken at a specified distance from existing mine workings or that is carried out on mines that have ceased production for a specified period of time. More work on this option is required to determine if criteria could be established that would be fair in all technical situations and acceptable to industry and governments. A proposal to provide a tax credit for deep drilling is more forward looking as it is contingent on qualifying expenses first being eligible as CEE.

Other proposals to improve the definition of CEE include modifications to ensure that all exploration-related environmental costs, community consultation costs and feasibility study costs qualify for that deduction. However, the tax status of these costs is a complex matter because expenses, according to their specific purpose, may be eligible as CEE or CDE, or not eligible for either. This issue will require more interdepartmental discussion.

Of critical importance to the current situation of declining metal reserves will be the ability to use a discovery list and discovery trends to forecast the timing of future

additions to the national mineral supply. A look at the efficiency and cost of the exploration effort will also help orient future government policy on encouragement measures, geoscience funding, and other programs.

Tax Treatment of Qualifying Environmental Trusts (QETs)

Questions have been raised by provinces and industry as to whether the current income tax treatment of the QETs creates an impediment to the more widespread use of these trusts. Industry argues that if earnings within the fund were subject to lower taxes, the fund growth could be maximized. British Columbia supports this proposal. However, a reduction of the taxes imposed on QET earnings would create unequal tax treatment among different types of trusts. By foregoing tax revenues, the government would also be providing part of the funding for mine reclamation in conflict with the "polluter pays" principle. Finally, it could be argued that a more widespread use of QETs could be achieved more effectively by other means. The industry proposal would require a change in government policies, which in turn would require thorough analysis by relevant government departments.

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MINERAL EXPLORATION FINANCED BY FLOW-THROUGH SHARES: A STATUS REPORT

Introduction

Building on data presented in previous versions of this report, the following analysis of exploration and deposit appraisal spending and flow-through-share financing provides further indication that federal and provincial incentives have contributed to higher overall expenditure levels, to a revival in junior company and off-mine-site spending, and to increased financing opportunities for project proponents.

Exploration and Deposit Appraisal Spending

Overview

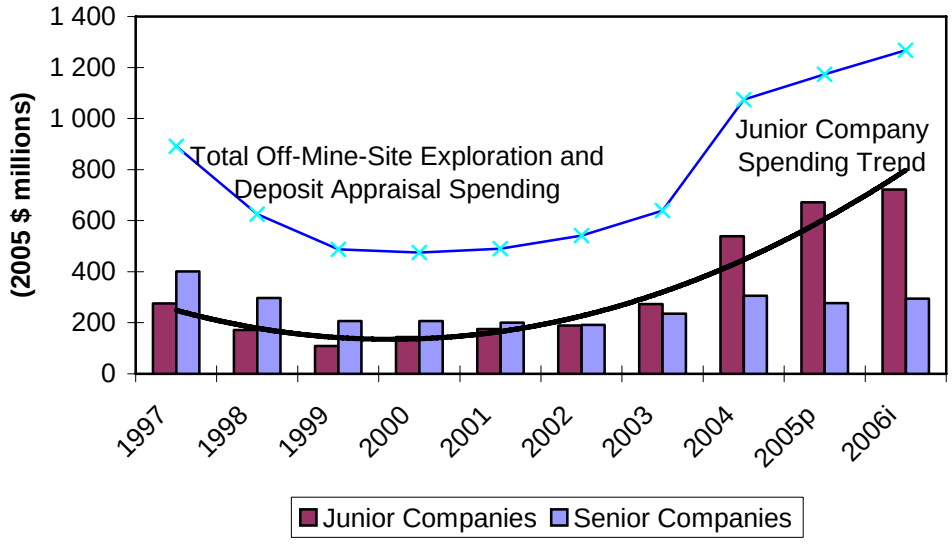
As shown by statistics from the federal-provincial/territorial Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures, exploration and deposit appraisal activity remains very robust. In particular, expenditure levels recorded in the 2004-06 period are in sharp contrast to those recorded in the three years leading to the October 2000 introduction of the Investment Tax Credit for Exploration (ITCE) and in the ensuing three years when the recovery was building momentum.

Added to the $1.3 billion and $1.2 billion totals recorded in 2005 and 2004, the $1.4 billion in exploration and deposit appraisal spending intentions for 2006 indicates the continuation of one of the most intensive periods of activity in Canadian mineral exploration history. This strong level of exploration activity is the combined result of a number of positive factors, including strong prices over a wide range of commodities, mining-friendly capital markets, a steady stream of exploration news, and the availability of the ITCE and related provincial tax incentives. Such an upward trend could be very important to the future of mining in Canada as high-quality discoveries are needed to replace rapidly depleting metal reserves. Chapter 2 of this report contains a short discussion on the need to monitor mineral deposit discoveries in the context of assessing the success of exploration incentives.

Expenditures Targeted by the Tax Credits

Most of the exploration and deposit appraisal spending being incurred in Canada (**Figure 1**) continues to be in relation to activities that take place away from mine sites (off-mine-site). For both 2005 and 2006, this type of spending, which is supported by the ITCE and other tax credits, is expected to represent almost three quarters of total expenditures. While this bodes well for the Canadian grass-roots exploration sector, the relative lack of on-mine-site exploration and deposit appraisal spending remains a concern.

Figure 1
Off-Mine-Site Exploration Work Phase Expenditures, by Type of Company, 1997-2006



Junior Mining Company Spending

Most of this off-mine-site exploration effort is being undertaken by junior mining companies. In fact, junior off-mine-site exploration spending amounted to $672 million in 2005 and is forecast to reach $722 million in 2006. Adding this last total to the $84 million that junior companies intend to spend on deposit appraisal activities clearly shows the growing importance of the junior sector in the Canadian mineral discovery and development process.

As noted in previous editions of this report, incentives such as the ITCE and some provincial measures favour junior mining companies who rely on the issuance of flow-through shares to finance their mineral exploration activities. It was therefore understandable that associations representing this sector of the Canadian mining industry campaigned to obtain the reinstatement of the ITCE, which was announced in the 2006 federal budget (up until March 31, 2007).

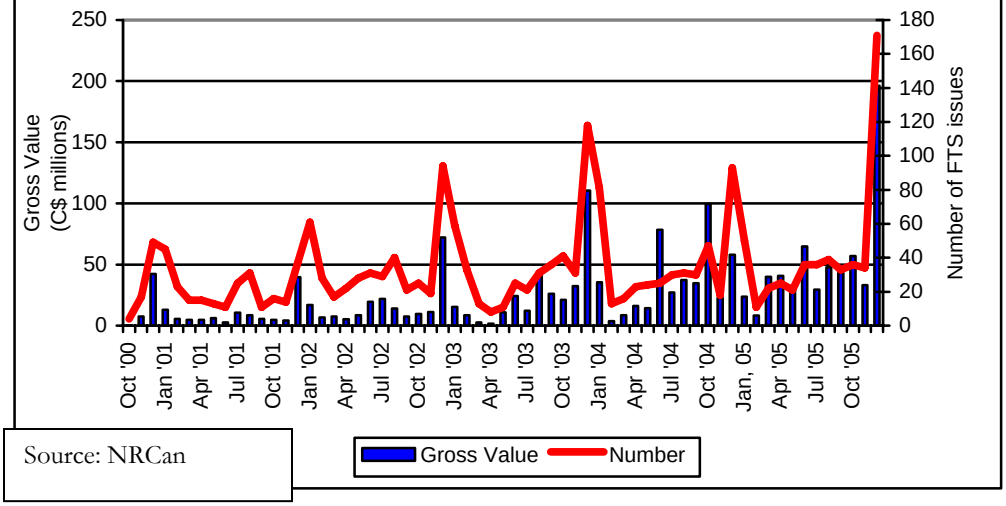
Exploration Financed by Flow-Through Shares

NRCan maintains a database of mining flow-through-share financings to track the success of the ITCE program from its original inception in October 2000 to the end of December 2005. This database consists of selected data on completed flow-through-share financings taken from information circulars that issuing mining companies release to their investors, to securities regulators, and to stock exchanges. These news releases are posted on the SEDAR web site.

An analysis of the compiled data, from the inception of the ITCE to December 2005, reveals that over $1673 million has been raised from 2113 separate flow-through-share issues (**Figure 2**). On an annual basis, total flow-through-share financing grew from $110 million in 2001 to $202 million in 2002, $308 million in 2003, and $436 million in 2004. This positive trend continued in 2005 as over $617 million was raised for mineral exploration through flow-through-share financing. The corresponding number of separate flow-through-share issues has not increased as dramatically as the amount of financing raised (**Figure 3**). The increasing average size of flow-through share issues, from $430 000 in 2001 to over $1.2 million in 2005, further suggests stronger industry fundamentals and increased investor interest. Larger average issues would also suggest that more advanced exploration work is being pursued by companies financing the exploration with flow-through shares.

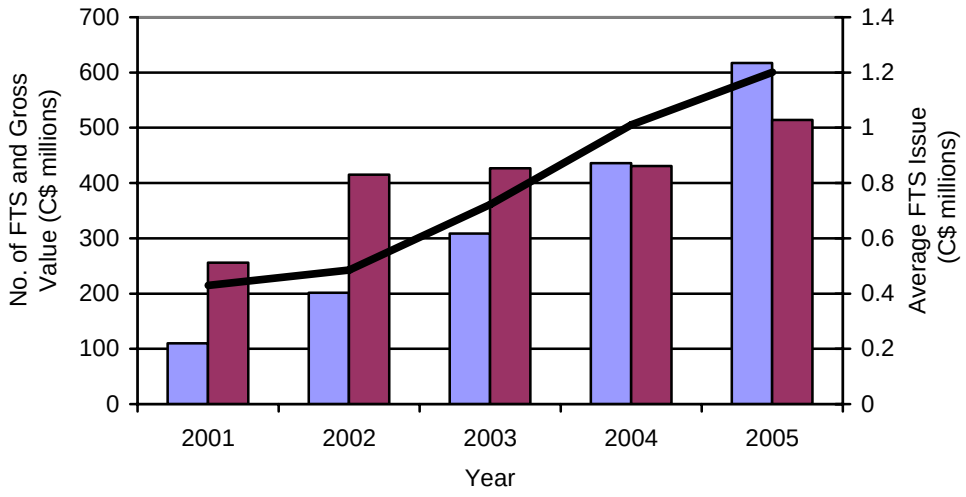
After two extensions, the ITCE program was terminated on December 31, 2005. Funds that were raised under flow-through-share agreements signed on or before this date could be spent on exploration until the end of 2006 with the expenses still qualifying for the tax credit. The newly elected government re-introduced the ITCE for 11 months, effective May 2, 2006, until March 31, 2007. As a result, flow-through-share funds raised from January 1, 2006, to May 1, 2006, are not eligible for the ITCE. Nevertheless, there was outstanding continued interest in mineral exploration flow-through shares during this period since approximately $145 million was raised (based on data provided by GAMAH International Limited, **Figure 4**). This amount is significantly above the level of financing obtained during the same period in 2005.

Figure 2
Canadian Mining Flow-Through Shares, New Issues
(October 2000 to December 2005)



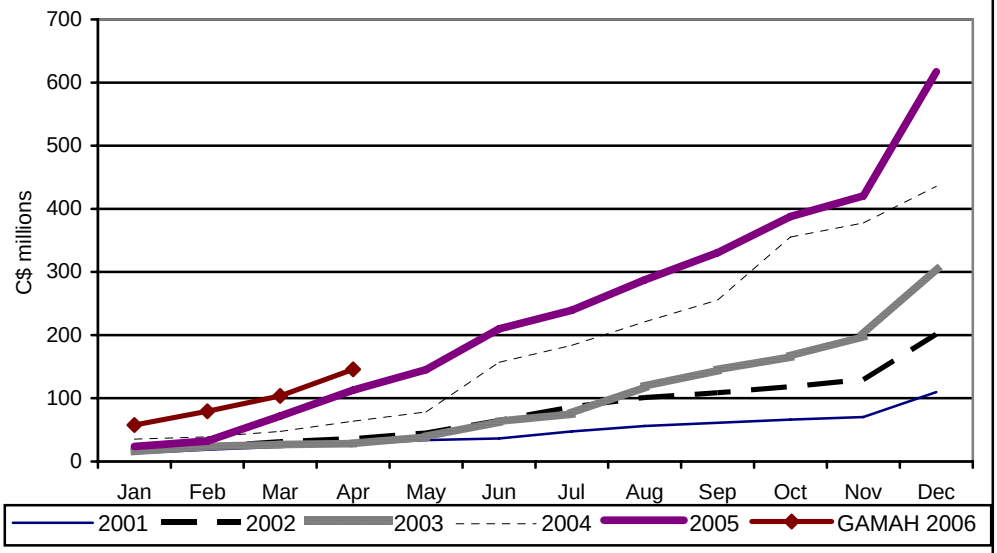
Source: NRCan

Figure 3
Average Size of Flow-Through-Share New Issues



Source: NRCan

Figure 4
Rise in Flow-Through-Share Financings, 2001-2006 (up to April 2006)



Sources: NRCan & GAMAH International Ltd.

Provincial Reports

British Columbia

B.C. has two tax incentive programs to support grass-roots mineral exploration:

- The B.C. Mining Exploration Tax Credit (BC METC) program, and
- The B.C. Mining Flow-Through Share Tax Credit (BC MFTS) program.

The BC METC provides a 20% refundable tax credit for non-flow-through funded grass-roots exploration by individuals and companies. Eligible exploration can include coal, certain industrial minerals and underground work. The 2005 B.C. budget extended the program from July 31, 2006, to December 31, 2016.

The BC MFTS provides a non-refundable 20% tax credit that is fully harmonized with the federal flow-through-share tax credit program. B.C. has consistently supported the various federal flow-through-share tax credit program extensions. The 2006 B.C. budget extended the BC MFTS to December 31, 2008.

B.C.'s tax incentive programs are complementary and, combined with strong mineral prices and various fiscal and policy initiatives to improve the provincial investment climate, have produced a strong increase in B.C. exploration expenditures:

Year	METC	Tax Credits x 5	Mineral Exploration Expenditures, Total	% of Expenditures Linked to Tax Credits
1998	$1.3	$6.5	$54.5	11.9%
1999	$3.1	$15.5	$41.3	37.5%
2000	$2.9	$14.5	$35.9	40.4%
2001	$4.0	$20.0	$29.1	68.7%
2002	$4.7	$23.5	$39.2	59.9%
2003	$6.9	$34.5	$62.5	55.2%
2004	$9.6	$48.0	$130.6 (p)	36.8%
2005	N/A	Not Calc.	$220.3 (e)	Not Calc.

The Northeast zone discovery, Mount Polley mine restart, and subsequent resource discoveries are clear examples of the benefits of the mineral exploration tax incentive programs. Low metal prices caused the Mount Polley mine to suspend operations in September 2001. Imperial Metals was able to use flow-through-share funding in mid-2003, when metal prices and capital markets were just beginning their tentative recovery, for a modest exploration program at Mount Polley. The successful discovery and development of the highly profitable Northeast zone (estimated net present value of $100 million, payable metal values approximately double those of the original mine development, and 1500 metres from the mill) facilitated the mine restart in early 2005. The new geological understandings resulting from that discovery have led to a major increase in exploration and the discovery of other new zones that could support mine operations for many years.

Mount Polley Mine

Year (Dec. 31)	Proven and Probable Reserves (million t)	Measured and Indicated Reserves (million t)	Ore Milled During Year (million t)
2002	31.9	Not Reported	0
2003	30.2	Not Reported	0
2004	44.2	68.5	0
2005	41.0	79.2	4.8

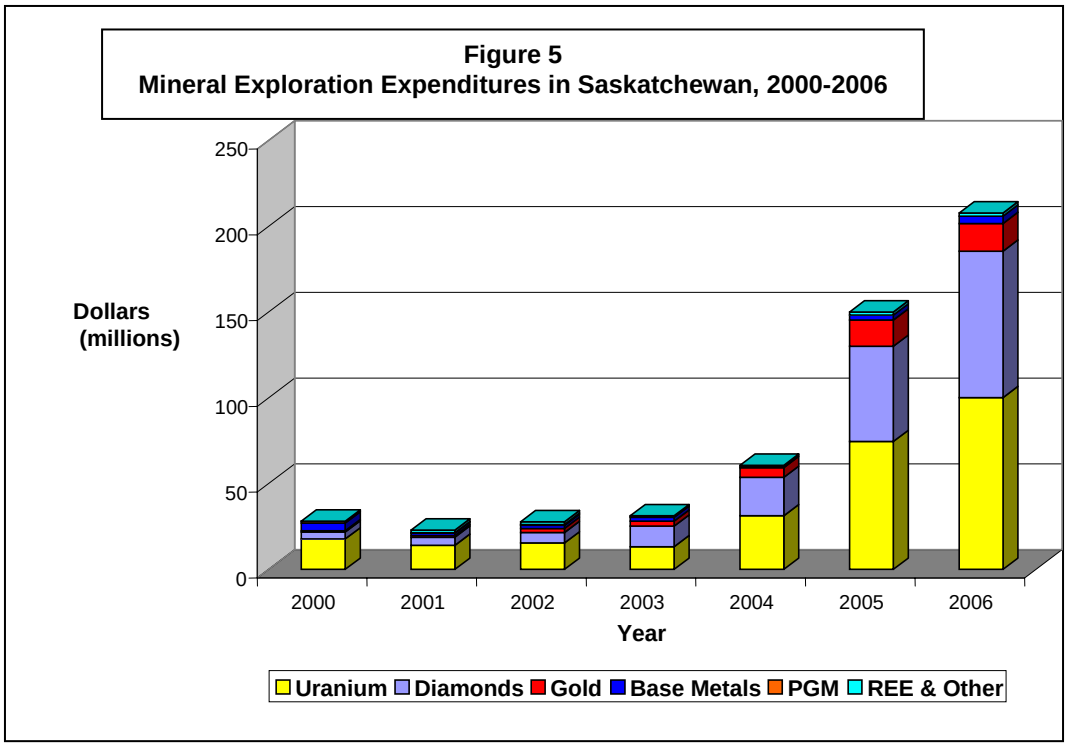
Similarly, several other B.C. properties are advancing towards production decisions as a result of exploration that either might not have been possible without those programs or that would have been delayed by one or more years. Successful development of any of those properties could produce a significant increase in estimated B.C. base-metal reserves.

Saskatchewan

Saskatchewan Mineral Exploration Tax Credit (SMETC)

The Saskatchewan Mineral Exploration Tax Credit (SMETC) was a temporary tax credit measure introduced by the Government of Saskatchewan in 2001 to promote investment in Saskatchewan mineral exploration during a prolonged period of declining mineral exploration expenditures in the province. The SMETC offered a non-refundable 10% tax credit to Saskatchewan taxpayers who invested in flow-through shares of mineral exploration companies conducting eligible programs in Saskatchewan. The SMETC program complemented the federal ITCE.

The mineral exploration landscape has undergone an extraordinary change since the introduction of the tax credits. When the SMETC was introduced in 2001, exploration expenditures in Saskatchewan were at an unsustainably low level of $22.9 million. Conversely, in 2006, Saskatchewan exploration expenditures are forecast to be a record $208 million (see **Figure 5**). Of this amount, approximately 65% ($135 million) was raised by junior companies that raise financing by issuing flow-through shares. Department data also indicate that in the last three years, junior mining companies have raised over $700 million in equity financing for Saskatchewan projects.



The significant increase in the level of mineral exploration expenditures from 2001 to 2006 is largely a reflection of increased commodity prices and strong investor confidence. The rapid economic growth in Asia, and the related consumption of metals, is the driving factor behind the increased commodity prices. This growth is expected to be sustained for a number of years, contradictory to the traditional "boom and bust" mineral investment cycle.

Saskatchewan's favourable geology, including hosting the world's highest-grade uranium deposits and world-class potash and diamond-hosting kimberlite deposits, is the main attraction for mineral exploration investment in Saskatchewan. For example, as the world's leading primary producer of uranium, Saskatchewan mineral exploration has particularly benefited from the increase in uranium prices from US$7.10/lb U_3O_8 in November 2000 to US$45.50/lb U_3O_8 in July 2006. While the SMETC tax credit may have attracted increased investor interest in junior companies active in Saskatchewan, it is likely the investment would have been made primarily on the basis of the positive geological potential of the company's property portfolio.

Analysis of the SMETC

The following discussion is prefaced by the fact that the data collection is not yet complete. As such, all numbers are considered preliminary at this time.

Since the inception of the program in 2000, there has been increasingly greater utilization of the SMETC by both companies and investors. Data gathered by the department and illustrated in Table 1 indicate that, on an annual basis, the number of placements and investors, and the amount of provincial tax credits claimed, has increased from 2000 to 2005. As the department database for 2005 is not yet

complete, the projected amount of tax credits claimed in 2005 is forecast to be approximately $1 million. Given the robust activity of uranium exploration by junior companies, it is anticipated that most of these credits will be related to uranium exploration.

Table 1: Saskatchewan Mineral Exploration Tax Credit Data By Year

Year	No. of Placements	No. of SK Investors	SK Expenditures Renounced, $	Total SMETC Claimed, $
2000	2	9	1 050 250	83 525
2001	4	84	1 739 638	72 081
2002	5	197	4 256 990	92 636
2003	7	453	10 636 179	140 302
2004	10	1955	29 276 590	419 332
2005*	26	5292	55 870 404	751 794
Total	54	7990	102 830 050	1 559 670

*2005 data still being processed – incomplete to date

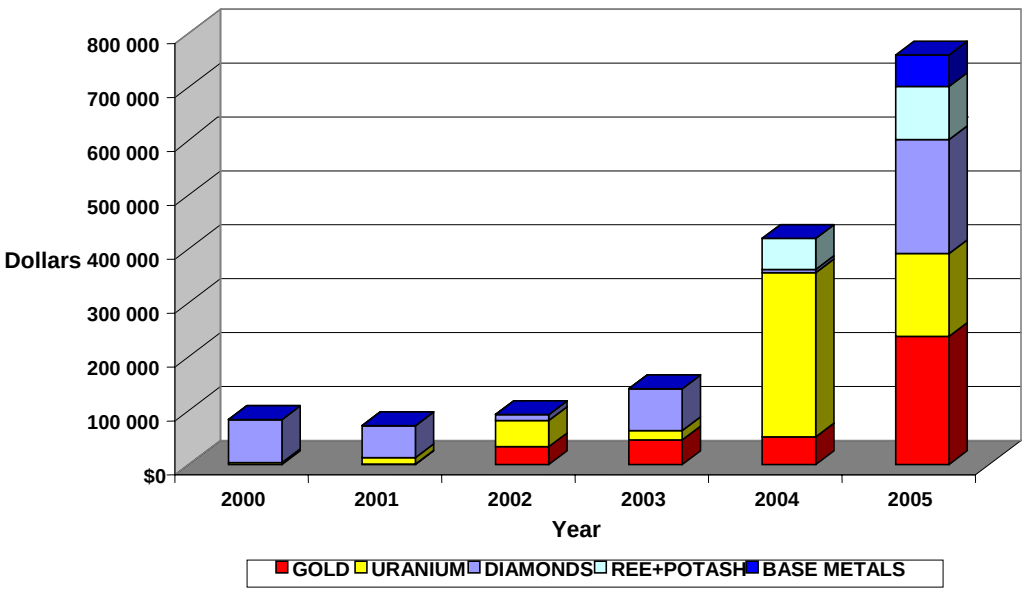
As shown in **Table 2** and **Figure 6**, most of the placements, most of the Saskatchewan investors, and the associated SMETC claimed are related to uranium exploration. The total preliminary amount of SMETC claimed from 2000 through 2005 is $1.6 million.

Table 2: Saskatchewan Mineral Exploration Tax Credit Data By Commodity

Commodity	No. of Placements	No. of SK Investors	SK Expenditures Renounced	Total SMETC Claimed
Gold	15	1990	$19 733 233	$ 368 654
Uranium	21	4168	$64 069 227	$ 531 074
Diamonds	11	1370	$ 7 460 592	$ 445 840
REE/Potash	3	198	$ 3 243 407	$ 156 181
Base Metals	3	335	$ 8 323 591	$ 57 921
Total	53	8061	$102 830 050	$1 559 670

The breakdown of SMETC claimed by commodity over the six-year life of the program is illustrated in **Figure 6**.

Figure 6
Annual Saskatchewan Mineral Exploration Tax Credit Claimed By Commodity



The Saskatchewan Mineral Exploration Tax Credit Program expired on December 31, 2005. The government has reviewed its mineral exploration incentive programs, including the SMETC, and has determined that, given the current vibrant exploration climate in Saskatchewan, the SMETC is no longer required. As such, the Saskatchewan Mineral Exploration Tax Credit will not be re-introduced beyond December 31, 2005.

Manitoba

Report on the METC

The Manitoba Mineral Exploration Tax Credit (METC) was announced in the provincial 2002 budget. The METC is a 10% non-refundable personal income tax credit that is earned on eligible flow-through-share investments. While eligibility for the tax credit is harmonized with the federal ITCE, the incurred mineral exploration must be for a mineral resource located in Manitoba and the tax credit only applies against Manitoba income tax otherwise payable. Credits earned in a given year but unclaimed (due to an insufficient level of tax payable in that year) can be carried back 3 years and carried forward 10 years.

Canada Revenue Agency reports show that in 2002 almost $60 000 was claimed under the METC and approximately $350 000 was claimed in 2003. Manitoba does not have final claimed amounts for 2004 and 2005; however, based on current status reports provided by the Canada Revenue Agency, $135 000 has been claimed for the 2004 taxation year and approximately $480 000 has been claimed for 2005.

Translating these figures into estimates of investment by Manitobans in mineral exploration in an individual year is problematic due to the carry-back and carry-forward provisions of the credit.

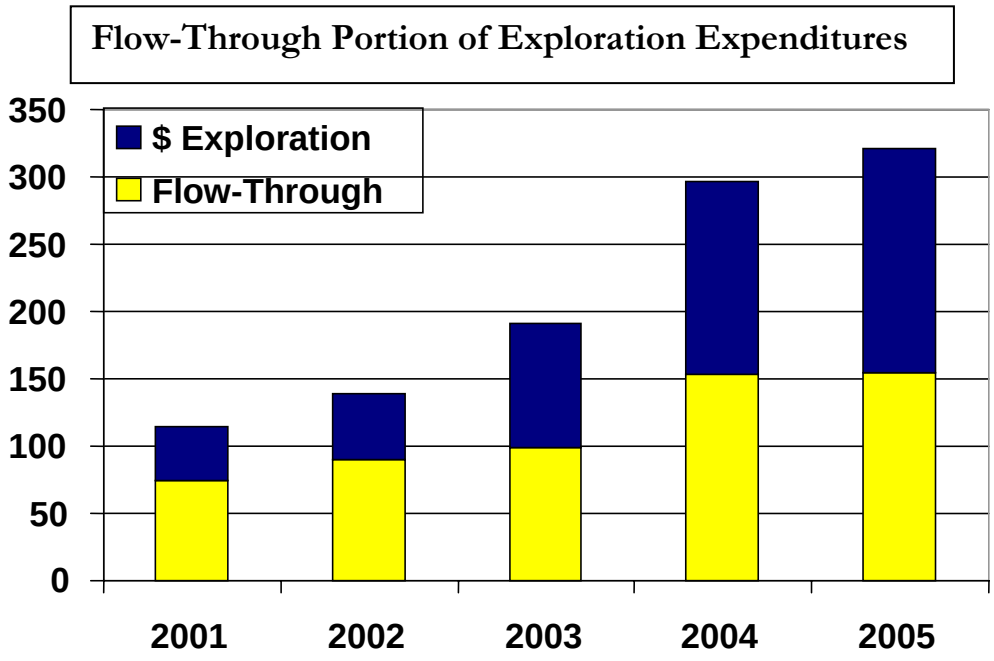
Since the introduction of the METC, Manitoba has seen a dramatic increase in off-site mineral exploration financed by flow-through shares, although not all shares qualify for the federal and Manitoba tax credits. In order to determine the impact of the METC, Manitoba has endeavoured to document flow-through-share financings and expenditures in the province principally via the review of company press releases and through dialogue with Manitoba explorers. In 2002, the year the credit was introduced, Manitoba estimates that just over $4 million, or 15%, of the $27 million spent on off-site mineral exploration was raised via flow-through-share financing for mineral exploration in the province. In 2003, approximately $9 million, or one third of the $27 million spent on off-site mineral exploration, was raised via flow-through-share financings. Natural Resources Canada indicates that $36 million was spent on exploration in Manitoba in 2004. Manitoba is aware of $19 million, or approximately 50% of total exploration expenditure estimates for 2004, that was raised via flow-through-share financing for mineral exploration activity in the province. In 2005, at least 55% of exploration expenditure estimates of $43 million will have been raised via flow-through-share financing for off-site mineral exploration activity in the province.

Although it is difficult to segregate the impact of the METC as a factor in increased grass-roots exploration levels in the province, Manitoba believes that, along with strengthening commodity prices and increased investor interest in the junior sector, the METC has been a contributing factor. In addition, from discussions with Manitoba explorers, it appears that one effect of the METC has been to increase the ability of Manitoba-based junior exploration companies, or those companies with strong ties to Manitoba in terms of an investor base, to raise exploration funds locally.

Since the METC is harmonized with the federal ITCE, the METC will be available for flow-through-share agreements entered into on or after May 2, 2006, and on or before March 31, 2007. Under the "look-back" rule, funds raised with the benefit of the credit in 2007 can be spent on eligible exploration up to the end of 2008.

Ontario

Ontario exploration expenditures have climbed dramatically from $114 million in 2001 to more than $340 million in 2006. The amount of financing raised with flow-through shares for exploration has also risen from $19 million in 2000 to more than $150 million in 2005. In concert with other factors, such as metal price increases and improved geological data, the flow-through-share program is playing a critical role in the dramatic increase in exploration expenditures. Its significance is also reflected in the increasingly important contribution of junior companies conducting exploration in Ontario. The percentage of total exploration expenditures by junior companies in Ontario has risen from 23% in 2000 to 34% in 2005. Another important trend is the increase in off-mine-site activity, which rose from $85 million in 2000 to $247 million in 2005. These trends reflect the increasing number of juniors issuing flow-through shares for grass-roots exploration.



Sources: Natural Resources Canada/Ontario Ministry of Northern Development and Mines.

The Ontario Ministry of Finance is reporting that about $3 million was claimed under the Ontario Focused Flow-Through Share tax credit program in 2003. However, the amount raised by exploration companies could not be confirmed from the taxation data. The $3 million is a rough estimate because the carry-back and carry-forward parts of the credit mean that the credit does not have to be claimed during the same year in which the shares were issued.

EXAMINING TAX PROPOSALS MADE BY INDUSTRY TO STIMULATE EXPLORATION

Introduction

In their briefs to the Mines Ministers' Conference 2005, the Prospectors and Developers Association of Canada (PDAC) and the Canadian Mining Industry Federation (CMIF) recommended that mines ministers work together to adopt an effective strategy that will enable this country and its rural, northern and Aboriginal communities to derive the fullest economic benefits possible from its mineral endowment. Among the issues industry associations identified as requiring immediate public policy attention are the fact that new ore deposits are increasingly costly to explore for, discover and develop. As a result, despite opportunities afforded by the increased demand for metals and higher commodity prices, Canada now faces a shortage of ore reserves that prevents increases in mine production and deprives metal-processing facilities of relatively cheaper domestic sources of supply.

According to industry, this situation would require concerted industry-government commitments to ensure that industry's productivity in exploration is improved, a more inviting investment environment is created, and the capital investment required to develop, renew and expand Canada's depleting mineral resource base is attracted. Industry believes that an effective strategy will need to stimulate both "greenfields" (away from existing mines) exploration to find new reserves and "brownfields" (near existing mines) exploration to extend known deposits or find new ones in the vicinity of existing mines and communities. To that end, the industry argues that this strategy should include two fundamental components: exploration incentives, geological mapping and geoscience initiatives for the near term, and deep drilling initiatives for the longer term.

This section first provides additional evidence of the current shortage of ore reserves. It then reviews specific tax proposals that industry put forward to address the issue of depleting ore reserves. These proposals are:

- Further extending the Investment Tax Credit for Exploration beyond March 2007;
- Modifying CEE tax treatment to include the costs of community consultation, baseline environmental studies, and feasibility studies;
- Modifying CEE tax treatment to include the costs of exploring for metals in the vicinity of former producing or operating mines; and
- Introducing a 20% federal corporate tax credit for deep drilling.

Each proposal is presented with industry propositions supporting it, followed by general considerations by the working group. Individual provincial and territorial views and comments are provided in a following subsection.

Some Additional Evidence of Current Shortage of Ore Reserves

In a section entitled "Stimulating Exploration for Base Metals," the IGWG Report on Taxation Issues of 2005 made specific reference to the fact that Canada's reserves of base metals have been declining for more than 20 years. The report stated that "unless this trend is stopped or reversed, base-metal production and related employment will continue to decline." However, based on comments and representations made by industry and provinces since then, it appears that the levels of precious-metal reserves are also a matter of policy concern and that measures to help address the problem of base-metal reserves should also be extended to precious metals.

An argument has been made that the rate of decline of the reserves may be overstated. According to that view, new stock exchange reporting requirements may have resulted in official reserves being stated more conservatively than in the past. However this is a minor consideration that does not change the observation that this problem is of a structural nature (that is, independent from price fluctuations) and has not yet responded to increased exploration levels.

To put the shortage of metal production in perspective, the production figures of the last 18 years can be examined. Table 1 presents average tonnages of shipment for selected metals in different periods. It shows that output of Canadian metal mines has declined significantly in the last five years (relative to an 18-year average) for all metals except nickel. Production figures for 2005 are also provided to show that the decline in shipments occurred even in a year of high metal prices.

	Table 1 Total Metal Shipments, All Forms, Tonnes (unless otherwise indicated)				
	Copper	**Zinc**	**Lead**	**Nickel**	**Gold (kg)**
Last 18-year average	657 048	1 016 296	185 973	189 039	153 377
Last 5-year average	570 936	810 084	98 036	184 408	140 161
2005	570 619	623 101	72 752	189 039	119 689
Last 5 years, as % of last 18 years	87%	80%	53%	98%	91%
Last year, as % of last 18 years	87%	61%	39%	100%	78%

Natural Resources Canada, Mineral and Mining Statistics Division.

Review of Industry Proposals

Further Extending the Investment Tax Credit for Exploration Beyond March 2007

Propositions Made by Industry Associations

Industry associations are recommending the extension of the Investment Tax Credit for Exploration as a means to maintain strong levels of exploration investment in Canada and to replenish reserves. The PDAC is asking that the ITCE be extended in a series of rolling three-year phases, supplemented with annual reviews of the program's benefits.

Industry associations believe that the ITCE was highly successful in its objectives, serving as a temporary measure that enabled Canadian exploration companies to raise money to finance their exploration activities during a very severe stock market downturn.

Industry associations also believe that Canada now faces a different set of conditions and challenges that necessitates the continuation of the ITCE program by the federal government. These conditions and challenges include: Canada's serious decline in reserves, particularly base metals; an almost unprecedented global demand by emerging markets for this country's mineral commodities over the next two to three decades; and the lack of discoveries and reserves that resulted from the severe downturn in exploration investment in Canada from 1997 to 2002.

Industry associations argue that the ITCE program is ideally suited to address these challenges for the following reasons:

- The program keeps exploration investment in Canada, thereby increasing the possibility of new discoveries of mineral deposits.
- It has a positive impact, particularly in northern and rural regions of the country. This northern economic activity is especially important for Aboriginal peoples who are participating more and more in the mining industry in terms of employment, holding interests in successful projects, and supplying goods and services.
- The program focuses particularly on the junior exploration sector. This is an important consideration because major companies are tending to explore outside Canada in their search for large ore deposits.
- The program covers the full range of commodities. Canada stands to benefit from any discovery, but will derive particular advantages from the discovery of base metals, which would provide feed for smelters, refineries and metal fabrication industries.
- Given that the reserves of a range of commodities need to be replenished, the ITCE program is ideally suited for the task.
- The effectiveness of the program is already known and has been demonstrated. It is also an efficient program that offers considerable advantages at a relatively low cost.

Considerations

The ITCE program was introduced in late 2000 as a temporary measure to help junior mining companies obtain financing for exploration during difficult market conditions. Budgets 2003 and 2004 provided two one-year extensions. Budget 2006 has re-introduced the ITCE up to the end of March 2007 to solidify recent exploration gains and to help establish a strong base from which to move forward.

Since 2001, the much higher levels of off-site exploration spending, junior mining company spending and flow-through-share funding suggest that the ITCE, related provincial tax credits and Quebec super deductions have helped revitalize the Canadian mineral exploration industry. Industry and provincial-territorial governments are celebrating this success and are endeavouring to ensure that it continues for years to come. The extension of the ITCE is perceived by many as a cornerstone policy measure to ensure that it does.

From a public policy perspective, an important question is whether achieving the highest possible level of preliminary or "grass-roots" exploration spending is the ultimate goal to be pursued either by governments or industry. What is critical to the competitiveness of the Canadian mining industry and its contribution to Canada's economic wealth and growth is a significant increase in mineable ore reserves, which would lead to extensions of existing mines and the opening of new mines. Thus, two more important questions are: Can (or should) the ITCE be considered a critical component of a strategy aimed at increasing national mineable reserves of minerals? What should be the other key elements of this strategy?

A comprehensive answer to these questions is beyond the purview of the mandate of this committee. However, it is hoped that the following considerations would be helpful in guiding policy makers towards the best decisions concerning the selection of the most effective policy approach.

- **Is the ITCE the only way to ensure that exploration money raised in Canada is spent in Canada?** It is argued that the tax credit program should be maintained because it keeps exploration investment in Canada. It should be noted, however, that the ordinary flow-through-share program, which transfers valuable tax deductions to investors, achieves the same result with or without the tax credit.

- **Under current circumstances, is the ITCE expected to be a key determinant in stimulating companies to explore for minerals?** The likelihood of discovering minerals, the net present value of which must exceed the discovery cost, is the ultimate driver of a decision to invest in exploration. Thus, the critical variables to focus on to make a decision to spend on exploration are metal prices (current and anticipated) and exploration costs. In a mature mining country like Canada, exploration costs tend to be higher, and the exploration cycle longer, than in countries that do not have a long mining history. Accordingly, decisions to invest in exploration in Canada tend to be particularly sensitive to price fluctuations. All other things being equal (which is

not necessarily the case), the ITCE may have served, when first introduced, to mitigate Canada's cost disadvantage relative to other mining countries. However, in cyclical markets such as metals, price fluctuations are often an order of magnitude higher than the cost reductions that can be afforded by tax assistance programs such as the ITCE. It follows that the impact of such programs may be limited, with maximum efficiency reached in cases of small price drops over a short period of time. Under current market circumstances, it can be argued that the availability of a 15% tax credit, although welcomed, is not critical to companies' decisions to explore. It should also be noted that, as long as the ITCE remains in place, its positive impact on cost can be accounted for only once, and this effect has already taken place. As a result, the extension of the tax credit at this time will do nothing to prevent a decline in the levels of exploration in the case of subsequent drops in prices, nor can it offset the effects of a further decrease in exploration productivity.

- **How much credit should be given to the ITCE for the recent increases in exploration spending?** Since the introduction of the tax credit and its successive extensions, market conditions have improved considerably and, as a result, exploration levels have gradually increased to reach a near all-time high in 2005. The coincidence of these two positive factors raises the question as to how much influence the availability of the tax credit, as opposed to commodity price increases, has had on investors' decisions to invest in mineral exploration. While it is clear that the program fostered the increased use of flow-through shares, it is more difficult to establish that the program resulted in levels of exploration that are significantly above levels that would have been reached without it. The fact that the ITCE was only available through flow-through-share financing could have encouraged exploration companies that were already committed to an exploration program to issue flow-through shares instead of using other available sources of financing.

  Initially, in 2001, metal prices were still very low, but started to show signs of improving. The introduction of the ITCE and related provincial tax credits may have driven the cost of certain "grass-roots" exploration down by 15% to 25% depending on the jurisdiction in which the exploration was carried out. At that time, such a significant level of cost reduction may have provided a significant impetus for higher exploration spending, given that investors were also getting more bullish about future metal prices. However, as anticipated metal price increases started to materialize (metal price increases have in fact exceeded the levels of cost reduction by a wide margin, especially since 2003), it is likely that the price factor has far outweighed the ITCE factor in investors' decisions to invest. The behaviour of investors in the flow-through-share financing market from January 2006 to April 2006 appears to support this view. As noted in the preceding section, despite the lapse of the ITCE during this period, more flow-through-share funds were raised than during the corresponding period in 2005.

- **What has been the effect of government financial assistance for exploration on the levels of ore reserves in the last 25 years?** There is a presumption that increasing government financial assistance for exploration per se will necessarily result in increased mineral reserves by the simple fact that it fosters more exploration. If this was absolutely true, jurisdictions with the highest levels of government financial support for exploration would tend to have the best records of mineral discoveries and the highest levels of reserves. In fact, the validity of this presumption could be verified empirically in the Canadian situation, given the wide variety in the levels of government financial support afforded to exploration over time among Canadian jurisdictions. The conclusions of such a study would be most helpful to evaluate the case for government financial support. To that end, an important missing link remains the establishment of a credible list of mineral discoveries over time based on objective criteria agreed upon by all stakeholders and the governments.

  On economic grounds, there are many factors that theoretically limit the effectiveness of increasing government financial assistance for exploration. Only successful exploration results in increased reserves. To be successful, exploration companies must spend effectively. If metal prices and location constraints are such that eventual discoveries will likely turn out to be non-economic, increasing exploration beyond levels established by market forces becomes a questionable proposition.

  All other things being equal (in the absence of productivity-improving technological changes or provision of additional geoscientific data), if exploration companies are induced to spend more, the economic law of diminishing returns says that the extra dollars will be spent less and less effectively. This is because operators will first pick up the most promising exploration targets. As their exploration budgets increase, they will have to move gradually to targets with lower payoff or a lower potential for discovery. Beyond a certain point, exploration funding may start chasing exploration projects, instead of the other way around. There may also be another negative effect if exploration spending increases too much: that is, increasing investment levels in one specific sector may apply undue pressure on the costs of supply and services to this sector. Ultimately, there is a level of exploration beyond which additional efforts will be fruitless.

  Nevertheless, an implicit argument still prevails that Canada's ore reserves could be replenished if only "enough" exploration spending was engaged, even though the productivity of the additional exploration activity keeps declining. However, this argument begs the question as to why the prevailing market conditions are not sufficiently attractive to foster "enough" exploration in the country. After all, recent price increases are the direct result of, and the ultimate remedy to, the supply shortfalls that Canadian governments are trying to "correct." Even more importantly, the argument fails to recognize that Canada's exploration levels have been among the highest in the world for the most part of the last 25 years, partly due to the generous tax incentives. Why, then, have mineral reserves declined so

dramatically? Why, despite such a formidable effort, has Canada not fared any better than competing countries?

- **ITCE focus on grass-roots exploration by juniors may be too narrow**. The ITCE program focuses narrowly on grass-roots exploration conducted from the surface and is meant to assist principally the junior exploration sector (because the program is delivered through the flow-through-share-financing mechanism, which is used principally by junior companies). The fact that the ITCE focuses particularly on the junior exploration sector may not necessarily be advantageous under current business conditions if the main objective is to increase mineral reserves, particularly of base metals. Historically, junior mining companies have been particularly attracted to exploration for precious metals and diamonds because these commodities are the focus of interest of shareholders. Senior companies are interested in base-metal discoveries and have practical expertise in finding and developing base-metal deposits. However, because they are reluctant to finance exploration by issuing flow-through shares, they cannot benefit from the ITCE and their after-tax cost of exploration is often higher than for flow-through-share investors, even though they have had access to a phased-in corporate mineral exploration tax credit since 2003. Senior companies may do more grass-roots exploration if their after-tax exploration costs were at levels more comparable to those provided to flow-through shareholders that benefit from the ITCE.

- **The provision of financial support for exploration through the tax system could be more effective if it was preceded (or at least accompanied by) the introduction of other measures aimed at improving exploration efficiency.** As seen above, increasing the level of exploration without accompanying measures to provide for productivity increases (by way of exploration performance enhancement and cost savings) tends to have a negative impact on exploration success rates, thereby making the goal of substantially increasing mineral reserves more elusive. The likelihood of this goal being achieved would increase if public policies were designed to encourage not only increased exploration spending, but also more efficient spending. Strategies that would decrease the cost of discovery per exploration dollar spent would make eminent sense, particularly in areas of high discovery costs such as Canada. Canada's exploration costs are relatively high because the most accessible targets have already been investigated. Additional ore reserves are most likely to be found in increasingly remote areas, under thicker overburden, at greater depth, and in more complex mineralogical or geological environments. All of these factors point to increased discovery costs. To overcome Canada's increasing discovery cost disadvantage, a package of measures that increases the availability of new geoscientific data and fosters improvement of exploration technology, data interpretation, or deep mining productivity should be considered in lieu of, or at least in conjunction with, a direct tax incentive for exploration. If successful, such measures would result in durable improvements to the fundamental economic conditions of the exploration industry.

Modifying CEE Tax Treatment for the Costs of Community Consultation, Baseline Environmental Studies, and Feasibility Studies

Propositions Made by Industry Associations

Most junior exploration companies, having no production revenue, fund their exploration activities by issuing flow-through shares. The costs of feasibility studies are not currently considered CEE. Also, the cost of baseline environmental studies, other exploration-related environmental work and community consultations may not be deductible as CEE under certain circumstances. Junior exploration companies must cover costs that do not qualify as CEE with funds that are more difficult to raise than flow-through shares. Industry argues that community consultations and environmental baseline studies are realities of today's exploration business and that the CEE should be modernized to reflect these realities. Industry is also of the opinion that feasibility studies are an integral part of assessing the quality of a mineral deposit and the costs of these studies should also qualify for CEE.

Considerations

- The tax status of these costs is a complex issue where expenses, according to their purpose, may be eligible as CEE or CDE, or other capital costs or operating costs.

- The tax authorities have agreed that feasibility studies, and the costs associated with them, are not specific to exploration. Under the *Income Tax Act* (ITA), all feasibility study costs incurred in all types of activity are treated the same way. According a special status to exploration-related feasibility studies would create a precedent that may threaten the integrity of the tax system.

- There are technical and administrative difficulties involved in considering feasibility study costs as CEE. Industry argues that feasibility studies meet the purpose test used to determine the eligibility of certain costs as CEE because they involve expenditures incurred "… to determine the quality of a mineral resource" or "to bring a mine into production." A difficulty is that feasibility studies encompass a large variety of tasks, some of which give rise to costs that may not meet the purpose test. Another difficulty is the fact that feasibility study costs may be incurred more **to determine whether or not** a mine can be brought into production, rather than being a cost incurred **for the purpose of** bringing a mine into production.

- Environmental baseline studies are considered to be incurred more for the purpose of providing a scientific reference point that protects the interests of the exploration company than for the purpose of determining the existence of a mineral resource. As a result, these costs usually do not qualify as CEE. It could be argued, however, that environmental baseline studies are in accordance with industry best practices and are an essential component of any exploration program. So far, from the limited information at hand, such costs do not appear to represent a significant cost element of exploration programs. Nevertheless,

the inclusion of these costs as CEE would likely require a clear policy statement and changes to the wording of the Act, which in turn would require a demonstration of hardship from the status quo.

- If the current wording and administration of the relevant tax provisions are causing any hardship, it would be useful to have documented evidence from industry.

Modifying CEE Tax Treatment for the Costs of Exploring for Metals in the Vicinity of Former Producing or Operating Mines

Propositions Made by Industry Associations

Canada's need to replenish its metal reserves requires special measures. Treating exploration for metals in the vicinity of former producing or operating mines as CEE, rather than the less favourable current tax treatment, would encourage junior companies, financed through flow-through shares, to explore in areas of high prospectivity. Metal discoveries close to existing mines provide new feed for local smelters and refineries, and jobs for local residents.

In June 2006 in Québec City, the Quebec Mining Association made a presentation to the National Mining Conference of the Canada Revenue Agency. The presentation included a proposal "to encourage diamond drilling and access development to extend mine life." The proposal included, among other components:

  - To amend the CEE and CDE definitions to allow, as CEE, exploration and development expenses related to targets located 400 m laterally or 150 m below the last defined production area (past and present); and
  - To amend the CEE and CDE definitions to allow, as CEE, expenses related to work executed on mine sites that have been closed for over 24 months to discover or develop new ore zones. This provision would not be applicable when closures are associated with labour disputes.

Considerations

- By establishing objective criteria in terms of the 400-m and 150-m limits, this proposal would provide a precise limit between exploration expenses and other expenses related to an existing mine. Currently, any expense incurred in carrying out an exploration or development activity that is related to an existing mine, or any actual or potential extension thereof, is deductible as CDE or as an operating expense. The tax treatment of these two categories of expenses is preferential but significantly less generous than that provided for CEE.

- It has also suggested a fixed time after which a "closed" mine could undertake expenses that would have the benefit of CEE treatment. Under current tax rules, to be eligible as CEE, exploration expenses related to a closed mine require the determination that the "closed" mine has been "abandoned" and lost all the characteristics of a mine. Applicable rules are restrictive and their administration,

which involves a review of several technical parameters that are case-specific, is a time-consuming process.

- It could be argued that certain exploration work undertaken in the vicinity of existing mines shares many of the risk characteristics of "grass-roots" exploration, which is treated more favourably as CEE. Common characteristics include: the level of risk arising from a low probability of successful discovery and the large minimum exploration investment required, the amount of geo-scientific information, and the scale of capital investment that would be required to bring the newly discovered reserves into production. Provision of more attractive financial incentives and financing arrangements for grass-roots exploration, coupled with less administrative encumbrance (including the risk of tax reassessment), may have detracted the focus of interest of explorationists away from areas in the vicinity of existing mines where a definite potential for extending ore reserves is known to exist. Encouraging exploration activities that are not currently stimulated by tax incentives to the same degree as grass-roots exploration, but offer perhaps a better potential for discovery, may be viewed as a measure that could help improve the overall productivity of exploration, at least in the short to medium term.

- Both suggested limits provide administrative guidelines that would avoid many of the administrative problems related to the income tax rules and jurisprudence relating to exploration in the vicinity of existing mines.

- An issue is whether the suggested distance limits would be applicable in all circumstances without unduly penalizing certain related activities that could be claimed to be worthy of a similar tax treatment. This aspect would require careful analysis and discussion with various industry groups.

- In addition, the 24-month closure period appears too short since mines may be put on care and maintenance when demand and prices are low. Other industry proposals include a 60-month closure period provision before CEE can be incurred.

Introducing a 20% Federal Corporate Income Tax Credit for Deep Drilling

Propositions Made by Industry Associations

Most of the mines in Canada were found by the discovery of mineralization at surface, or close to surface, which was then followed down to depths sometimes exceeding 1000 metres or so. It is widely acknowledged that substantial potential for new metal discoveries exists (particularly in the vicinity of existing mines), but are buried at depths greater than usually probed by traditional exploration techniques.

New geophysical techniques are now able to yield information about the rock properties below 300 metres, and diamond drilling can produce cored samples of the rocks down to depths well beyond 2000 metres. However, these techniques are

expensive. Diamond drilling to depths of less than 300 metres may cost as little as $75 per metre, whereas diamond drilling to a depth of 1500 or 2000 metres could be in the order of $250 or more per metre. Few companies can afford to drill many holes to these great depths, and those that can are discouraged by the high risk of failure because of the lack of knowledge about the geological conditions at these depths.

In recognition of the need for new avenues to stimulate metal exploration, the Canadian Mining Industry Federation and the Prospectors and Developers Association of Canada, in their briefs to the Mines Ministers' Conference 2005, recommended the introduction of a non-refundable 20% deep drilling investment tax credit applicable against corporate income taxes payable by the taxpayer. This new tax credit could apply to exploratory drilling carried out below 300 metres with the objective of discovering deep ore deposits or extending the reserve life of existing mines at depth. For this particular category of expenses, it is understood that this new credit would replace the existing 10% federal corporate income tax credit that has been available (at increasing phase-in rates) to mine operators since 2003 for metal and diamond exploration and pre-production mine development expenses incurred in Canada.

Considerations

- This proposal is really forward looking and cannot be implemented without deep drilling expenses being first eligible as CEE. Currently, to the extent that deep drilling expenses are related to an existing mine, or a potential or actual extension thereof, such expenses may be treated as CDE (when related to certain types of underground exploration work) or as operating expenses (when related to work undertaken from the surface, or from underground work of types that do not qualify as CDE). As such, these expenses do not qualify for a 100% tax deduction that can be carried forward indefinitely, nor are they eligible for the 10% corporate income tax credit for exploration that was introduced as a result of the 2003 reform of resource provisions of the ITA. Recognizing these expenses as CEE would be a first major policy step and would constitute a significant enhancement of their tax treatment.

- This proposal would require a change to long-standing tax policies and would also cause significant administrative challenges (notably, the definition of fair and verifiable criteria for inclusion in a new category of expenses). It could be discussed, if necessary, if and when a case for inclusion of deep drilling expenses as CEE is firmly established.

Provincial/Territorial Views and Comments

Northwest Territories

ITCE Extension

The Northwest Territories is encouraged by the reintroduction of the Investment Tax Credit for Exploration (ITCE) program in the May 2006 federal budget and strongly supports the further extension of the ITCE.

Currently, the Northwest Territories does not have any tax incentive program for exploration or a package to harmonize with the federal government's ITCE due to its limited financial resources. The current program assisting/encouraging mineral exploration in the Northwest Territories is the Prospectors Grubstake Program. The Grubstake Program is a grant rather than a tax incentive. It is designed to assist individual prospectors living in the Northwest Territories to conduct grass-roots mineral exploration activities. Eligible applicants may apply for up to $8 000 per annum. From 2000 to 2006, prospectors applied for about $917 000 and some $613 500 has been granted.

Review of the CEE Definition

The Northwest Territories supports the expansion of the Canadian Exploration Expenses (CEE) definition as discussed in the subsection entitled "Reviewing the Definition of Canadian Exploration Expenses," *Taxation Issues for the Mining Industry, A Report by the Intergovernmental Working Group on the Mineral Industry, 2005 Update*. In particular, the Northwest Territories is mostly interested in adding Aboriginal and community consultation costs, environmental baseline studies costs, and environmental impacts assessment costs into the CEE category, followed by the costs of exploration on existing mine properties and capital assets used in exploration.

British Columbia

ITCE Extension

Based on developments noted in B.C. comments under the preceding section, it remains the general position of the Ministry of Energy, Mines and Petroleum Resources that mineral exploration tax incentive programs will be necessary until there is a major Canadian discovery (e.g., Eskay Creek, Lac de Gras, Voisey's Bay) to reignite the investor interest that is necessary for a sustainable mining industry. The mining companies' low current and forward price earnings ratios suggest that current exploration would be much lower if it were not for those incentives. Without government support, it is unlikely that investors would want to invest in risky exploration when some operators trade at less than 10 times their earnings with strong cash flows and healthy dividends.

B.C. has extended its flow-through-share tax credit program until the end of 2008 and its mining exploration tax credit program until the end of 2016. The Ministry of

Energy, Mines and Petroleum Resources currently supports extension of the federal flow-through-share tax credit program until the end of 2008.

Review of CEE

As in 2003, 2004 and 2005, EMPR continues to support the further review and analysis of the implications of policies that:

- Classify expenditures for consultations and environmental studies undertaken until the completion of pre-production development as CEE;
- Allow for the renunciation of those expenditures under FTS agreements;
- Allow for those consultation and environmental expenditures that are FTS financed to also be eligible for the federal ITCE; and, as an alternative,
- The amendment of an existing tax category, or the creation of a new tax category, to provide appropriate tax recognition for environmental baseline studies and community and First Nation consultations.

Court decisions, government policies, industry practices and community expectations are evolving to make community consultation and environmental baseline studies integral to the successful discovery and development of a mine in Canada. Reasonable community consultation and environmental baseline studies are now consistent with the objectives of the other expenditures that are eligible as a Canadian Exploration Expense. Tax measures that provide appropriate recognition for those expenditures will demonstrate Canadian leadership in the development of consistent policies for a sustainable mining industry and should be developed.

Saskatchewan

ITCE Extension

Saskatchewan supported the extension of the ITCE. However, given the recovery of commodity prices and mineral exploration expenditures that now place Canada as the world leader in mineral exploration, it would appear the ITCE is no longer required as a lifeline for the junior sector.

Review of the CEE Definition

The Department of Industry and Resources supports the modernization of the definition of CEE, recognizing that costs such as environmental baseline studies and community and Aboriginal consultations are occurring prior to development and have become a significant obligation to the industry. The Department is reviewing the proposed changes to a modernized definition and will continue to consult with industry and the Department of Finance to determine areas of preference.

Focused Exploration for Base and Precious Metals

Saskatchewan recognizes the concern of Canada's declining base-metal reserves and is interested in increasing exploration in the province's undeveloped, high-mineral-potential areas. The province is revising its mineral exploration strategy to encourage a more diversified mineral exploration and production sector, specifically for base metals and gold. This will include focusing geoscience funding on areas of

base-metal potential, and refocusing the Corporation Exploration Incentive Program to support programs in geological terrains with high base-metal and gold potential.

Manitoba

ITCE Extension

Manitoba introduced an exploration tax credit (METC) harmonized with the ITCE in 2002. Since that time, Manitoba has witnessed a greater than 50% increase in exploration expenditures. With $1 billion in annual metal production, primarily from two vertically integrated base-metal facilities, Manitoba believes that exploration levels need to be maintained in an effort to identify additional mineral resources to replace those being exhausted and, in turn, to sustain local communities that are dependent on mining.

The ITCE expired at the end of 2005 and was reintroduced in Federal Budget 2006. Under the current legislative regime, extension of the federal ITCE automatically results in the extension of the Manitoba METC.

Ontario

ITCE Extension and the Focused Flow-Through Tax Credit

The Ontario Focused Flow-Through Tax Credit is a permanent incentive program that provides a 5% tax credit for eligible exploration in the province. Ontario's Minister of Northern Development and Mines was the lead proponent of a letter sent to federal ministers of Finance and Natural Resources on behalf of all provincial and territorial ministers responsible for mining requesting that the federal government extend the tax credit. The extension of the federal program until March 2007 is good news for Ontario and the exploration sector as it will help maintain the attractiveness of investing in mineral exploration in Ontario. Ontario supports the continuation of the federal flow-through tax credit because:

- The program has been very successful in Ontario and helped exploration spending exceed $300 million for the third consecutive year.
- The reintroduction of the program should avert an anticipated loss of investment that would have accompanied the end of the program.
- The program has acted as a catalyst for exploration in unexplored areas of the province (grass-roots exploration), such as the Far North where the program is offsetting the higher costs of conducting exploration in these regions.
- The new exploration data being produced can act as a catalyst to additional and more extensive exploration in the future.
- The cost of administering the program is minimal.

In 2002, a worldwide trend emerged of junior companies playing a much more prominent role in exploration spending. As home to most of the exploration companies in the world and with a tax incentive program in place, Canada and Ontario were able to take advantage of this trend. The success of the program is

acknowledged in PricewaterhouseCoopers' annual update of global trends in the mining industry, which states "Canada's example shows that specific and targeted tax incentives can have a positive impact on exploration in the mining industry. In order to reap the full benefits, these exploration programs must be converted into new mine developments."

Ontario believes the next step is to take advantage of the momentum that has been built to retain the levels of exploration achieved. Efforts should also be made to ensure that orebodies identified in the exploration can be developed and lead to an increase in reserves. The lag between discovery and development can be up to 10 years, so it can be a slow translation from discoveries to reserves.

Over the last 10 years, Canada's share of world nickel reserves declined from 13% to 7%. Nickel was viewed as a key element of the crisis in base-metal reserves in Canada. In 1994, Ontario accounted for 68% of Canada's nickel reserves, declining to 47% by 2004. Most of the decline in Canada's nickel reserves took place in Ontario due to its role as the leading producer of nickel in Canada. However, the improved outlook for the price of nickel is increasing reserves as companies continue to work on new and undeveloped projects. Additionally, improved market conditions have led to a favourable trend of new nickel mine openings in the Timmins and Sudbury areas by a more diverse group of companies.

The decline in gold reserves in Ontario has moderated recently as gold prices began to rise. However, with the price of gold recently reaching a 25-year high, more mine openings or increasing reserves are expected and should help offset two recent mine closures and depleting reserves.

Zinc reserves in Ontario have declined by over 80% since 1980. However, higher zinc prices and development work at the Kidd Creek mine, Ontario's only operating zinc mine, is curbing the decline.

The ITCE is viewed as a long-term solution to declining reserves since the translation of the work into reserves is delayed by the time lag required to develop an orebody.

Review of the CEE Definition

Ontario continues to support the inclusion of community consultation, environmental baseline studies and feasibility studies under Canadian Exploration Expenses as these expenses are significant stages in exploration and development and reflect the way exploration is now being conducted in Ontario. Travel for community consultation to the more remote regions of the province is particularly expensive.

Ontario would support the development of a proposal that would redefine the CEE to include exploration work closer to the mine-site area to enhance the current program. This enhancement would also address some of the goals of the proposed deep drilling program.

Summary

Ontario recognizes the importance of the ITCE program to the minerals industry and that the program has achieved the intended goal of revitalizing exploration throughout Canada. The increase in spending on exploration to $1.5 billion makes Canada an international leader and the program has justifiably attracted attention from the international mining community. It is a program that allowed Canada to take advantage of the trend toward more exploration being conducted by the junior sector without excessive costs or a distortion of the market. However, these programs have to evolve and take advantage of recent trends occurring in the industry. The program could evolve by recognizing other expenses in the CEE tax treatment and looking at any adjustments that would have to take place if metal prices were to decline. Ontario would support a review of current and future trends in the mining and exploration industries and the development of a strategy that would include increasing exploration with the ultimate goal of increasing reserves.

Quebec

ITCE Extension

The investment tax credit is meeting the industry's needs given that The Mining Association of Canada and the PDAC asked for a three-year extension to the program during the last Mines Ministers' Conferences. If the program were not beneficial, the industry would be calling for a new program or for major changes to the current program.

In addition, despite having a difficult budgetary context, Quebec has maintained and improved a number of incentives with a view to supporting its provincial mineral exploration industry. To that end, it has announced that it will permanently maintain: the flow-through shares regime, additional deductions for investors (currently 150%), an additional deduction of 25% on costs incurred in Quebec's Near or Far North, the deduction related to certain issuance expenditures, and the additional capital gains exemption. It also increased by 5% the refundable portion of the tax credit for resources for companies not mining a mineral resource.

The measures appear to be effective as Quebec ranks 11th for its tax system and 4th for its mining policy (out of 64 jurisdictions), according to the Fraser Institute's latest report on the mining industry.

However, it must be taken into account that, in Quebec, the mining camps are older and all the easy-to-find geographic targets have been found. Junior companies must therefore explore regions further north where costs are higher, which is more demanding on the companies. Geological evidence must be found and this information is not as readily available in data collected by the Department. Significant investment in a geoscience knowledge base must accompany tax incentives to attract investments such as the Cooperative Geological Mapping Strategies.

Review of the CEE Definition

Quebec is open to the mining industry's requests, especially with regard to modernizing the definition of "Canadian Exploration Expenditures." The government will evaluate the proposals of all mining-related associations in that regard in consultation with industry.

New Brunswick

ITCE Extension

Most national governments compete to attract exploration companies to their jurisdiction by offering financial assistance programs such as tax incentives and exploration grants. Encouraging junior mining companies to work in New Brunswick has become a high priority for the provincial government in recent years since these smaller companies have taken over much of the exploration work previously carried out by the majors. Metal prices are currently high and the juniors are actively looking for new mineral discoveries on a global scale. New Brunswick therefore strongly supports the continuation of the federal exploration tax credit program to ensure that investment in the minerals and metals sector of New Brunswick keeps pace with or exceeds that in the rest of the world.

Review of CEE and Deep Drilling Tax Incentives

New Brunswick also supports tax incentives for deep drilling in extensively explored areas such as the Bathurst Mining Camp. Most base-metal deposits in the Bathurst Camp were discovered in the near-surface in the 1950s using the relatively low-powered geophysical equipment available at the time. With today's technology, geophysical anomalies can be detected at depths up to a kilometre below the surface. A tax incentive on deep drilling would encourage companies to invest in exploration for deeply buried orebodies in areas of high mineral potential such as the Bathurst Mining Camp.

At the provincial level, competitive taxes are a key component of New Brunswick's Prosperity Plan building block to create a competitive fiscal and business environment and are a key commitment in the current government's platform. In December 2006, the New Brunswick government announced the elimination of the capital tax by the end of 2008. The capital tax will be gradually reduced from 0.3% to 0.25% in 2006, 0.20% in 2007, 0.10% in 2008, and 0.0% in 2009. In addition, the New Brunswick 2006-2007 Budget announced that the general corporate income tax rate will be reduced from 13% to 12% effective January 1, 2007. The New Brunswick government is committed to lowering the tax burden on New Brunswick businesses in order to stimulate investment and innovation, create jobs, and build economic wealth and prosperity.

Nova Scotia

ITCE Extension

Nova Scotia was moderately encouraged by the one-year extension to the ITCE but was disappointed that the program was not extended to a longer term. The Nova

Scotia exploration sector has benefited significantly from the ITCE with significant new investment mainly in the gold sector, but also in exploration for other commodities. The success of the program in stimulating exploration across Canada is evident and Nova Scotia accepts that while the needs for this sort of tax incentive may be different now than when the program was initiated, there is still a very good argument to be made for its continuation to contribute to new mineral discoveries and to maintain Canada's competitiveness for mineral exploration investment globally. Nova Scotia sees a significant benefit to the local industry from a continuation of the program.

Nova Scotia does not have a harmonized tax credit program, although planning for such a program was well advanced when the federal government decided to cancel the ITCE in 2005. Because the current program extension is only for one year, it is unlikely that Nova Scotia will be able to implement a harmonized credit within the life of the extension. However, in the event that the ITCE is given a longer life, this would be back on the table in Nova Scotia.

Review of the CEE Definition

Nova Scotia supports changes to the CEE as requested by the industry. In particular, the costs of consultation and environmental baseline studies are a part of doing business in exploration today. Junior companies are required to carry out these activities as part of their exploration, and this should be recognized in the treatment of these expenditures for tax purposes.

QUALIFYING ENVIRONMENTAL TRUSTS

Introduction and Background

In the Action Plan resulting from the 2005 Mines Ministers' Conference, mines ministers expressed their concern about the need to ensure adequate financial security for reclamation work. They also recommended that existing reclamation security practices be reviewed. While this issue was not identified as being specifically tax-related, some provincial members of the IGWG tax sub-committee raised the issue that the current federal income tax treatment of Qualifying Environmental Trusts (QETs) may be an impediment to a more widespread use of this competent financial security mechanism. This section of the Report intends to investigate this proposition.

Provincial Jurisdiction of Reclamation Requirements

Under the Canadian Constitution, the regulation of mining activities on publicly owned mineral leases falls under provincial/territorial government jurisdiction. Thus, there is separate mining rights legislation for each of the provinces and the Yukon, while the Northwest Territories and Nunavut are regulated by the *Canada Mining Act*.

Since the establishment of a mining operation usually results in a disturbance of the natural environment where the mine is located, governments require that companies include assurances that actions will be undertaken to repair any resulting environmental damage after the mine operations cease. Therefore, as part of their mineral rights legislation, provincial and territorial governments establish criteria for companies to operate mines within their jurisdictions, including setting the requirements for the reclamation of the mine after the closure of its operations. In these situations, governments could require companies to establish and provide regular contributions to independently administered QETs to ensure that adequate amounts are available to conduct restoration activities at the end of operations.

However, provincial-territorial mining rights acts leave it open as to how financial assurance will be provided and do not currently include any formal requirements for a mine operator to contribute to a QET. For example, the Ontario government requirements concerning reclamation plans are outlined under Part VII of its *Mining Act*:

- Proponents of all advanced exploration projects and new mines are required to file a certified Closure Plan that includes financial assurance to indicate the method, schedule and cost of all rehabilitation to be conducted on the site once closure commences. All Closure Plans will be posted on the Ministry of Environment's Environmental Registry as required under the Environmental Bill of Rights.
- The Closure Plan is audited to ensure all regulatory requirements have been met.

– If all the requirements are met, the Director of Mine Rehabilitation acknowledges receipt of the Closure Plan within 45 days.[1]

In the case of British Columbia, the Ministry of Energy, Mines and Petroleum Resources sets out a security policy for new mines under which they must provide "reasonable assurance" that public funds will not be used for mine reclamation. The policy requires that the reclamation security is set annually at a level that reflects current decommissioning and closure obligations. A detailed projection of reclamation costs is required for applying for a permit under the *Mines Act*. Under this act, the chief inspector is empowered to specify the amount, form and conditions for reclamation when issuing a mine permit. The Ministry seeks security and permit conditions to provide *reasonable assurance* that the required reclamation work will be done at a no cost to the provincial treasury. It risk manages the mine reclamation programs by evaluating the financial capacity of the mine owner to do the future reclamation.[2]

Issue

While provincial and territorial governments require new and current mine operations to have reclamation plans, very few mine operations actually use QETs for providing the financial surety for these future reclamation costs. Companies find it more convenient to use alternative means of providing financial surety for their future reclamation expenses, such as Irrevocable Commercial Letters of Credit[3] or other means of self-insurance. Setting up a separate fund to finance future reclamation work may represent a burden in extra administration and a diversion of financial resources from the core business of the firm.

Concerns have been expressed that the companies rely too much on commercial letters of credit or "self-insurance" for providing financial surety for future reclamation expenses.

It has been suggested that a major factor explaining the lack of industry interest in QET financial arrangements is the fact that the federal income tax treatment of QETs is both unfavourable and unfair. Firstly, industry claims that the tax advantage provided by allowing a tax deduction for contribution to a QET is negated by a requirement that annual fund earnings be subject to taxation as they accrue.

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[1] Ontario Ministry of Northern Development and Mines web site - *Legislation - Part VII Mining Act*, (www.mndm.gov.on.ca/mndm/mines/mg/leg/default e.asp).

[2] *Qualified Environmental Trusts (QETs) for a Sustainable Canadian Mining Industry*, Discussion Paper prepared by British Columbia for the Tax Subgroup Meeting, Intergovernmental Working Group on the Mineral Industry, March 8, 2006, pages 1 and 2.

[3] These letters of credit take the form of an **Irrevocable Commercial Letter of Credit**. These financial instruments are generally used in the financing of export trade transactions. Under an irrevocable letter of credit, a company (the applicant) that is required to pay for goods applies to an issuing bank for a letter of credit. This letter of credit includes a guarantee by the issuing bank that if all of the terms and conditions set forth in the letter are satisfied by the applicant, the letter of credit will be honoured. The letter of credit is **irrevocable** in that it cannot be cancelled or changed without the consent of all parties. For undertaking this risk, the issuing bank charges a fee as a percentage of the face value of the letter of credit (References - Export Development Canada, TD Financial, ExpertLaw.com).

Secondly, it is argued that single-mine firms facing perpetual environmental mitigation annuity payments and having to contribute to QETs are treated less favourably taxwise than multi-mine companies facing the same obligation but not required to contribute to QETs. To investigate these claims, it is necessary to first examine the tax treatment of QETs.

1994 Federal Budget Provision

The federal government introduced a provision for the deductibility of contributions to mine reclamation and environmental trusts as part of the February 22, 1994, Budget. The objectives of this tax measure were to recognize the effect of the contribution on the company's cash flow and the potential inability to use deductions if only available when reclamation work occurs. Prior to this tax change, some companies, such as single-mine companies, may have been unable to fully utilize the deduction of actual reclamation expenses since the majority of these expenses would occur at the end of the mine life when the mine no longer produced income. The 1994 budget provision allowed for the deduction of contributions to mine reclamation trusts to be made in the year in which they are made rather than when the mine reclamation costs are actually incurred.

Income that is earned in these trusts is subject to tax each year under special Part XII.4 rules of the federal *Income Tax Act*. The income taxed in the trust is also considered part of the company's taxable income, but the company receives a refundable tax credit to cover its share of the tax paid by the trust. When actual reclamation costs are incurred, any withdrawal of funds from the trust will be included in the company's income subject to tax and the actual reclamation costs incurred will be deductible from this income.[4]

Time Period	**Financial Transaction**	**Tax Treatment**
Mine Operation and Production	Contribution to Environmental Trust	Deductible in the year of contribution
	Income earned by Trust	Taxable as earned income at the Trust and company levels
	Tax paid by company on income earned by Trust	Company receives refundable tax credit
Mine Closure	Withdrawal from Trust	Included in income subject to tax
	Reclamation costs incurred	Deductible from income

[4] Department of Finance Canada, *Tax Expenditures: Notes to the Estimates/Projections,* Public Works and Government Services Canada, Ottawa, Ontario (2000), page 84.

Analysis

The rationale of federal tax treatment of QET is to assist companies subject to environmental regulations to meet their obligations under the relevant federal or provincial statutes without distorting governments' policy choices to ensure that adequate funds are available to conduct restoration activities at the end of operations.[5]

The overall effect is to allow an immediate deduction for costs that will be incurred only in the future, reducing current tax and providing cash-flow assistance to companies as they set funds aside. Government income foregone may be recovered when the actual reclamation work is done if the corporation is in a taxable position.

In such circumstances, therefore, the nominal value of the tax expenditure over the life of the project is nil, although in real terms there is a tax expenditure equal to the time value of the money put into the trust.

Without the provision of tax incentives, it can be expected that companies may not choose to meet financial assurance requirements by contributing to a discretionary QET scheme. However, QET tax provisions were set out not to provide an incentive for the use of QETs, but to provide a fair tax treatment in cases where provincial-territorial authorities choose to make contributions to QETs mandatory.

The proposition that QET rules may introduce a bias against single-mine companies in certain situations was investigated and discussed using modelling work provided by British Columbia. There was no conclusive evidence that this was the case.

Considerations

- Industry argues that a more favourable tax treatment of QETs would mitigate some negative aspects of the scheme and would make it more acceptable to industry. In particular, it would allow the retention of a larger proportion of fund earnings, thereby enabling a higher growth rate for the mine reclamation funds. Industry feels that maximizing fund growth should be a priority, given that expenses related to mine reclamation and acid effluent discharge containment tend to be difficult to estimate precisely and to increase over time.

- Alternatively, it can be argued that companies could be mandated to contribute to QETs if and when governments decide that this is the safest way for industry to meet its financial obligations. However, this may mean an additional financial burden on industry at a time when it may wish to make important investments in new productive capacity.

- From the point of view of governments, an important policy issue is whether to continue abiding by the "polluter pays" principle, or to accept sharing the cost of environmental remedy measures with industry. This issue is for policy decision-makers to decide.

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[5] Ibid. page 84.

Provincial/Territorial Views and Comments

British Columbia

The Ministry of Energy, Mines and Petroleum Resources (EMPR) has a long and successful history in mine reclamation and reclamation security. Starting in the early 1970s, B.C. was among the first jurisdictions in the world to recognize the importance of mine reclamation and the role of reclamation security.

Provincial legislation (the *Mines Act,* the *Health, Safety and Reclamation Code for Mines in British Columbia* and the *Waste Management Act*), other legislation and policies have combined to ensure that required reclamation has been done at minimal cost to the provincial treasury. This has been accomplished despite an extended industry decline that saw several major mining company bankruptcies/financial reorganizations (Princeton Mining Corporation [Cassiar asbestos mine], Westar Resources [Balmer and Greenhills coal mines] and Royal Oak Mines [Kemess South Mine], and the emergence of acid rock drainage [ARD] as a major environmental issue with associated security requirements [Equity Silver mine - $45.8 million, Sullivan mine - $13 million, and Samotosum - $7.8 million, among others]).

EMPR security policies reflect the results of several formal and informal government-industry-NGO working groups that analyzed various reclamation security issues to determine which of the many possible forms of security could be acceptable and under what conditions. Possible security arrangements that were considered include: irrevocable letters of credit, surety bonds, charges on physical or financial assets, parent company guarantees, trust funds, qualified environmental trusts, captive insurance vehicles, and pooled security for related mines. Irrevocable, unconditional letters of credit are most of the $213 million in reclamation security that EMPR currently holds; however, the Ministry also holds, or has accepted, surety bonds, charges on physical assets, QETs, and corporate undertakings.

EMPR has developed considerable expertise in the climatic, biological, chemical, engineering and economic issues associated with ARD. EMPR was an early proponent of mine-specific reclamation funds to provide the required security and has worked on most of the related issues: liability valuations, investment policies, trusteeship, taxation, ownership interests, indemnification, etc. EMPR is also familiar with many of the studies and reviews of mine reclamation security that have been done.

EMPR worked with federal and B.C. Finance officials when the QET legislation was developed and B.C. was probably the first province to accept a QET for reclamation security. EMPR has since refined its requirements and accepted QETs for other mines' security requirements. However, industry interest has, so far, been limited to short-term arrangements and special situations.

Finally, EMPR has participated in conferences, prepared various reports, and made numerous presentations regarding mine reclamation security issues in general and the special requirements of mines that require long-term post-closure reclamation.

Based on EMPR's experience and expertise, and the analysis in the various papers and presentations, it is EMPR's position that:

- Current tax legislation makes it very difficult to develop robust security arrangements for mines that are owned by single-mine companies and require long-term post-closure reclamation. Those mines entail significant financial and environmental risks for the provinces, financial burdens for the companies, and social licence/sustainability issues for the industry.
- Current QET legislation can be used for a small sub-set of reclamation security issues. QETs do not provide provinces with robust reclamation security for ARD mines owned by single-mine companies.
- Since the long-term reclamation issue emerged in the late 1980s, no alternatives have been developed that address the reclamation security needs of EMPR and the B.C. mining industry for mines owned by single-mine companies that could require long-term post-closure reclamation as well as the RRSP model does.
- Secularly strong metal markets could support the development of several large B.C. metal mines with potential long-term reclamation requirements. Any tax revenue reductions that result from addressing the identified tax-related inequity/inefficiency will be more than mitigated by the social benefits resulting from a more dynamic and sustainable mining industry.
- EMPR would rather work on the various issues related to the RRSP model (contributions and disbursements, investment policies, ownership interests, indemnification, etc.) than study the need for the RRSP model.

In summary, EMPR recommends that we use this unique period of prosperity and opportunity to invest in the policies that will support a sustainable Canadian mining industry. Successful development of RRSP-type reclamation security will reduce provincial risks, lower industry costs, and demonstrate Canadian leadership on this difficult issue.

Ontario

The main objective for funding mine reclamations in Canada is for mining companies to be funding reclamation activities with current cash-flow revenues on a mine-by-mine basis. Since no province or territory in Canada is close to meeting that objective, it is safe to say that the existing qualifying environmental trust (QET) does not work as an incentive scheme and another approach must now be explored. Ontario supports any initiative that would increase the use of QETs by mining companies to meet their financial assurance obligations. Ontario is prepared to discuss any initiatives that can be undertaken by the provincial and/or federal government to improve the QET tax treatment.

CONCLUSIONS

The persistence of a longstanding decline in metal reserves in Canada, with its concomitant effects on the competitiveness of the Canadian mineral industry, is a source of serious concern that must be addressed. Substantive exploration efforts in the last 25 years and the recent rise in exploration spending have not, by January 1, 2005, translated into a reduction in the rate of decline of Canada's key metal reserves, with the exception of nickel. It is widely understood that this problem is complex and is caused not only by insufficient exploration spending over the long term, but also by increasing costs of successful discoveries over time. Accordingly, it cannot be solved by any single policy measure. The sub-committee has reviewed a spectrum of industry proposals that, together or sequentially, might be able to have more impact than any of them individually. They include measures to stimulate metal exploration, particularly in the vicinity of existing mines, and to foster increased exploration success.

The different opinions relative to the "success" of the Investment Tax Credit for Exploration program and the pertinence of its further extension point to the need for additional analysis aimed at evaluating the discovery record. Of critical importance to the current situation of declining metal reserves will be the ability to use a discovery list and discovery trends to forecast the timing of future additions to the national mineral supply. A closer look at the efficiency and cost of the exploration effort would also help orient future government policy with regard to encouragement measures, geoscience funding and other programs.

Before a tax incentive such as the deep-drilling tax credit suggested by industry can be considered for implementation, it would be necessary to first perform a more detailed review of a related industry proposal for changing the Canadian Exploration Expense (CEE) rules so that drilling in the vicinity of existing mines would be eligible, under certain circumstances and conditions, for this more favourable tax deduction. More work on this option is required, particularly to determine if criteria could be established that would be fair in all technical situations and acceptable to industry and governments.

In addition, the increased focus on community consultation and environmental protection has resulted in the proposal to treat the costs for these activities, when directly related to exploration, as CEE. This issue is complex and requires more interdepartmental consultations since these types of costs can be subject to different tax treatments depending on their specific purposes. If the current wording of the tax provisions is causing hardship, it would be useful to have documented evidence from industry.

Finally, modifying the tax treatment of QETs as suggested by industry would require a change in government policies, which would require thorough analysis by relevant government departments.