

# National Diamond Strategy: An Industry Response





Brief submitted to: Provincial and Territorial Governments

Submitted by:

NWT and Nunavut Chamber of Mines The Mining Association of Canada The Prospectors and Developers Association of Canada

# Contents

Introduction	1
Diamond Exploration and Mining Position	
Economic Contribution of Diamond	
Exploration and Mining in the NWT	3
The Challenges	5
Recommendations	11
Rough Diamond Sorting,	
Valuation and Marketing	13
Position	12

Valuation and Marketing	13
Position	13
Background	13
Recommendations	16

The Cutting and Polishing Industry	17
Position	17
Background	18
A Path Forward	20
A Need to Avoid Short-term Thinking	20
Recommendations	22

Diamond Jewellery, Retail Sales and Tourism Jewellery Retail Sales Diamond-related Tourism Recommendations	23 23 24
Conclusion	25
Summary of Recommendations	27
Diamond Exploration and Mining Rough Diamond Sorting,	27
Valuation and Marketing	28
The Cutting and Polishing Industry	28
Diamond Jewellery, Retail Sales and Tourism	
Appendix Facts Supporting the Positions Outlined	29
in This Paper	29
Economic Contribution of the	
Diamond Mining Industry Facts	29
Diamond Cutting and Polishing Facts	30



Since the announcement, in late 1991, that diamonds had been discovered at Point Lake in the Northwest Territories (NWT), the industry has developed quickly, and today two world-class diamond mines (EKATI and Diavik) are operating in the territory. The economic success at Lac de Gras, together with advances in scientific understanding, has led to further success in diamond exploration throughout Canada.

The initial discovery led to wide-scale exploration throughout the country and significant new diamond discoveries have been made, not only in the NWT but also in Nunavut, Alberta, Saskatchewan, Ontario, and Quebec. Aside from the NWT (Snap Lake), advanced stage diamond projects now exist in Nunavut (Jericho) and Ontario (Victor), and bulk sampling is taking place in the NWT, Nunavut, Saskatchewan, and Quebec. As of 2003, Canada is now the premier diamond exploration country in the world and, because of the two operating mines, the third largest producer of rough diamonds by value.

While Canada is currently producing approximately 15% of the world's supply of rough diamonds by value, some analysts suggest that the country could be producing a much larger proportion of the world's rough diamonds in the next 10 to 15 years.

Canada is now the premier diamond exploration country and the third largest diamond producer by value in the world. As the sole producing jurisdiction, the economy of the NWT has benefited in many ways from this industry. As the potential for the industry to expand into other jurisdictions increases, these provinces and territories have rightly begun to look at the most appropriate ways to ensure that they also benefit if a diamond mine is developed. As such the provinces and territories have supported the Government of the Northwest Territories' (GNWT) call for the development of a National Diamond Strategy, and seven working groups have been established covering what is commonly called the diamond pipeline, namely: mining; sorting, valuation and marketing of rough diamonds; cutting and polishing; manufacture of diamond jewellery; and, retail sales as well as exploration and diamond tourism. The working groups have been charged with examining their assigned diamond industry sector relative to regulation and taxation, labour force, technology, marketing, security, business development, financing, and other pertinent issues, and making policy recommendations for a national diamond strategy.

The Canadian exploration and mining industries, represented by the Prospectors and Developers Association of Canada, the NWT and Nunavut Chamber of Mines, and the Mining Association of Canada, applaud governments across Canada for recognizing the importance of the diamond industry to the Canadian economy, and its future potential as an economic driver.

In advance of more detailed discussions under the National Diamond Strategy, this briefing paper outlines the diamond exploration and mining companies' response to the development of a National Diamond Strategy, and provides additional information for consideration by the working groups, and the provincial and territorial governments leading this initiative. ...some analysts suggest that the country could be producing a much larger proportion of the world's rough diamonds in the next 10 to 15 years.



# Position

Today, primary diamond industries – exploration and mining – are providing sustainable benefits to Canada, in general, and the NWT, in particular. Diamond exploration and mining are currently major contributors to economic development of the NWT, providing significant government royalties (federal) and taxes (federal, territorial and municipal), job creation, new business opportunities, training, and education. With the development of the new mines the potential exists that parts of Nunavut and Northern Ontario will also soon benefit from this industry. In addition, if exploration proves to be successful, these sectors may well be driving the economy in other parts of northern Canada for years to come. Given that Canada's new mines are in remote locations, they are proving that significant Aboriginal benefits, through training, jobs and new business development, are achievable and, in fact, are already taking place.

# Economic Contribution of Diamond Exploration and Mining in the NWT

Canada's major influence on the growth of the diamond industry is its geology – Canada's vast Precambrian Shield is the largest and most prospective terrain for diamonds in the world. As a result, approximately 50% of the US \$250 million spent on international diamond exploration in 2003 was dedicated to the discovery or evaluation of new (excluding mine site exploration) diamond deposits in Canada. This focus is mirrored in actual diamond exploration projects, where, of the approximately 450 diamond exploration projects worldwide in 2003, 50% were in Canada.<sup>1</sup> Over \$620 million was spent on diamond exploration in Canada between 1998 and 2002: a sizeable contribution to the Canadian exploration industry.<sup>2</sup> The exploration success for diamonds across Canada has enabled all junior companies to access equity financing and conduct exploration. The decade of diamond exploration since the first find in 1991 has resulted

in new kimberlite geological provinces as well as other mineral discoveries. The world-class Voisey's Bay nickel deposit is a great example of diamond exploration activities resulting in other significant mineral discoveries.

As already noted, two diamond mines are presently in production in the NWT. Three other projects are expected to start production in the NWT, Nunavut and Ontario, in 2006 and 2007, and exploration successes suggest that the diamond mining industry across Canada has a bright future.

Canada's major influence on the growth of the diamond industry is its geology – Canada's vast Precambrian Shield is the largest and most prospective terrain for diamonds in the world. Because of proactive hire and business practices in the NWT and Nunavut, the two NWT diamond mines are delivering sustainable benefits directly to the people and economy of the NWT and Nunavut, and indirectly across Canada. The mines are building capacity among Aboriginal and non-Aboriginal northerners through education, training, high paying jobs, and business development. Mining jobs are diverse, from technical to administrative, and the mines will leave a legacy of skilled workers with transferable skills and knowledge in northern communities for years to come.

The industry is helping to build northern and Aboriginal business capacity through local purchase of goods and services from existing businesses, and where they don't exist, supporting the creation of new businesses.

Consider the following:

- Significance of Canadian rough diamond production – Canada is the world's third largest producer of rough diamonds by value (behind Botswana and Russia).<sup>3</sup>
- Employment The Diavik and EKATI diamond mines have created approximately 2,200 jobs, including contractors.<sup>4</sup> This does not include the additional benefits from mine construction and businesses supporting the mines. In fact, statistics show that over the past five years alone, new mining jobs in Canada's two diamond mines have offset mining job losses in all of northern Canada over the past 13 years.<sup>5</sup> De Beers Canada (De Beers) estimates that its Snap Lake (NWT) and Victor (Ontario) projects, once in production, will create 1,000 direct jobs and an additional 1,000 indirect jobs.

The Diavik and EKATI diamond mines are supplying approximately 2,200 jobs, including contractors.

With the development of the De Beers Snap Lake project, the three diamond mines that will then be operating in the NWT are expected to produce 124,000<sup>6</sup> to 181,000<sup>7</sup> person years of direct, indirect and induced person years of employment in the Northwest Territories alone.

• Business Opportunities – Contributions to northern and Canadian business is significant. Of the \$1.2 billion in contracts to build the Diavik mine, \$1.1 billion was with Canadian businesses. Of this, \$874 million was with northern companies, of which \$600 million was with northern Aboriginal firms. To date, BHP Billiton Diamonds Inc. (BHP Billiton) has spent over \$1.5 billion on the EKATI mine, with the majority being spent in the north. Significant annual purchasing and contracting by both mines is similarly divided between northern, northern Aboriginal and southern Canadian businesses. De Beers has already awarded contracts worth \$29.2 million for the supply of goods, equipment and services in anticipation of constructing the Snap Lake mine. Of this amount, \$25 million involves northern businesses, of which \$22 million involves companies with Aboriginal involvement. Further, De Beers estimates capital costs of \$825 million for the construction of the Victor mine and \$490 million for the construction of Snap Lake. Again, the bulk of the construction contracts will flow to Aboriginal, northern and Canadian companies.

 Contribution to Government Income and GDP – It is estimated that revenue from federal royalties, federal and territorial corporate income tax, municipal taxes, and employment and other business income taxes for EKATI, Diavik and Snap Lake will be in excess of \$10 billion over the life of the mines.<sup>8</sup> The three mines are also expected to generate \$25.7<sup>9</sup> billion to \$29.7<sup>10</sup> billion in GDP over their lifetimes.<sup>11</sup>

(Additional facts on the economic contribution of the diamond mining sector are included in the Appendix.)

Indeed, diamond mining is by far the highest economic contributor of any of the sectors in the diamond pipeline by most measures, including contribution to GDP, labour income, wage rates, person years of employment, and government revenue (taxes). This will continue for the foreseeable future, given that diamond mining commenced only six years ago and downstream activities have not had much time to develop. More research is needed into the best source of potential benefits for Canada growing out of the diamond exploration and mining industry.

With effective and supportive public policies the direct and indirect benefits associated with diamond mining can continue to grow. After all, diamond mining is just the latest addition to a Canadian mining industry that has developed, over decades, into a world-leading mining supply and services sector.<sup>12</sup> Through diamonds, mining business is expanding in northern Canada, developing new expertise, products and skills.

As with all mineral commodities, the future of diamond exploration and mining investment requires a favourable combination of geological potential, economics and policy climate. All of the benefits flowing to the NWT and Canada from this new diamond industry, described to this point, are the result of exploration and the first section of the diamond pipeline – mining. It is imperative that this end of the pipeline flourish or there will be no possibility that other sections will be able to develop. Despite a number of serious challenges (described in the following section) the fact that the EKATI and Diavik mines have flourished are the direct result of three occurrences – both are world-class deposits, both were brought into production by very large mining companies, and both have come into production in an area which has a fair royalty and taxation regime. Smaller, less valuable deposits or even world-class deposits with overly burdensome royalty and/or taxation regimes may not enter production in the face of these challenges. It is incumbent upon new diamond jurisdictions to ensure that their royalty and taxation policies are not so burdensome as to hinder future development.

# **The Challenges**

As with all mineral commodities, the future of diamond exploration and mining investment requires a favourable combination of geological potential, economics and policy climate.<sup>13</sup>

Contrary to jurisdictions like Alberta, Manitoba and Quebec, a complex, expensive and timeconsuming regulatory environment in northern Canada currently detracts from the region's obvious geological potential as an investment destination.<sup>14</sup> Northern Canada faces many challenges, including:

- an arduous regulatory environment;
- uncertainty as a result of unsettled land claims;
- limited geoscience available;
- a harsh and remote environment with limited *infrastructure*;
- a small, unskilled *labour force with high labour and servicing costs*; and
- high exploration expenses.

Canada's two existing diamond mines are built around world-class ore bodies having significant value per tonne. In addition, as noted above, they were brought into production by two of the world's largest mining companies – BHP Limited (now BHP Billiton) and Rio Tinto plc in conjunction with Aber Diamond Mines Ltd. (Aber). These mines are, therefore, somewhat less sensitive to financial and regulatory burdens, but it can be expected that most Canadian diamond discoveries will not be as robust or brought into production by such large companies.

It is expected that most new entrants to diamond mining, and particularly junior exploration companies, will lack the resources to meet arduous, complex and costly permitting and regulatory requirements that are now being imposed on projects in the NWT and Nunavut. These burdens will discourage the development of new diamond discoveries by any but the largest companies in the most difficult regimes.

Only with fair consideration of the economic and regulatory challenges will hurdles to mineral development be overcome. The same holds for discoveries needed to extend the lives of existing mines.

#### **Regulatory Environment**

#### The Northwest Territories

One thing that all mining companies seek is certainty. In the Northwest Territories, the uncertainty of its regulatory regime has been flagged as an important concern to the mining industry, and one that is in need of considerable improvement. To many, the regulatory environment in the NWT is considered to be among the most rigorous and arduous in the world. The assessment and permitting processes alone consume considerable time and resources, and have become disincentives for both junior exploration companies and mining companies. These difficulties have been accentuated by an evolving regulatory regime lacking the appropriate financial resources to administer the latest legislation. Since 1995, three diamond projects have gone through the environmental assessment (EA) and permitting process in the NWT, and each has been subject to a different EA regime.

In December 1994, BHP's Diamond Project (EKATI) was the first diamond project in Canada and underwent a Panel Review as part of the (former) federal Environmental Assessment and Review Process Guidelines Order (EARPGO) process. This process was completed and the Panel accepted the project in the summer of 1996.

In March 1998, Diavik Diamond Mines Inc. also triggered the federal EA process, with the *Canadian Environmental Assessment Act* (CEAA) having replaced EARPGO in 1995. The Diavik project was subject to a Comprehensive Study under CEAA, a level of EA considered less rigorous than BHP's Panel Review. The Diavik Comprehensive Study Report was approved in November 1999.

In the Northwest Territories, the uncertainty of its regulatory regime has been flagged as an important concern to the mining industry, and one that is in need of considerable improvement. In May 2001, De Beers Canada's Snap Lake Diamond Project was referred to the Mackenzie Valley Environmental Impact Review Board (MVEIRB) under the *Mackenzie Valley Resource Management Act*, which was proclaimed in 1998. The MVEIRB Environmental Assessment Report for the Snap Lake Diamond Project was approved in the fall of 2003.

Mineral resources in the NWT have long been managed and administered by the federal government, in particular Indian and Northern Affairs Canada (INAC). Under the regulatory regimes defined in the NWT, institutions of public government have been established by INAC in the Inuvialuit Settlement Region and the Mackenzie Valley in the form of co-management boards. The introduction of the MVRMA in 1998 established new regulatory requirements and, therefore, the need for new working relationships within the regulatory environment. Although still in a state of evolution, the MVRMA has created uncertainties and challenges for regulators, proponents and the new co-management boards in recent years.

Recognizing the challenges associated with the lack of certainty in the NWT regulatory environment, the federal and territorial governments, the boards of public government, and the proponents are genuinely committed to improving the current situation, most notably in the Mackenzie Valley. While industry compliments these efforts, it feels that continued efforts towards improved coordination among all parties will be required to ensure a consistent, clear and certain regulatory environment.

Additionally, co-ordination is required between federal government departments involved in the regulatory process (e.g. INAC, Environment Canada, Department of Fisheries Oceans, and Natural Resources Canada (NRCan)). Lack of clarity amongst federal departments regarding roles and responsibilities, and inconsistent approaches and opinions among them, have led to additional delays in the regulatory process. Although still in a state of evolution, the MVRMA has created uncertainties and challenges for regulators, proponents and the new co-management boards in recent years.

In the case of the two existing diamond mines, overall environmental management has been augmented by independent environmental monitoring agencies established to help monitor the mines' compliance through the use of Environmental Agreements. Environmental Agreements represent a significant innovation to project regulation in the north and have evolved as a way of providing, in one Agreement, a comprehensive framework of the environmental requirements for project regulation. The 1997 Environmental Agreement with BHP Billiton was largely the result of the company's preference for a more flexible enforcement mechanism which would not encumber its land lease.

Economic development in the NWT is the responsibility of the GNWT. Mining interests conclude socio-economic agreements with the GNWT. These agreements formalize the training, employment and business opportunities the mines will provide to northern and Aboriginal residents and companies, and establish detailed reporting and monitoring mechanisms. In addition to federal environmental permits and territorial socio-economic agreements, mining interests are strongly advised by the federal government to negotiate Impact Benefit Agreements (IBAs) or Participation Agreements (PAs) directly with affected Aboriginal groups. The lack of legislation requiring these instruments causes further uncertainty. These confidential agreements set out provisions to provide benefits that include employment, training, scholarships, economic opportunity, and direct cash payments.<sup>15</sup> The fact that IBAs are neither legislated, nor transparent, could serve as a further disincentive to exploration and mining investments.

At present, the cost of community consultations and the cost of the benefit agreements are not deductible from royalties, nor are they eligible as exploration expenses to keep mineral claims in good standing. A more favourable tax treatment of IBAs and the consultations leading to them could reduce the operating cost burden and equity financing burden new diamond projects are facing.

#### Other Canadian Jurisdictions

Some other jurisdictions in Canada have more flexible regulatory regimes. In northern Quebec, for example, the cost of socio-economic agreements can be deducted from royalty payments to the province.

The lack of certainty surrounding IBAs in jurisdictions other than Nunavut, may also cause a disincentive to both exploration and mining companies. Jurisdictions such as Quebec, Saskatchewan, and Alberta, possessing well-established and experienced regulatory regimes, can be expected to manage the development of diamond resources efficiently. Recent amendments to the *Canadian Environmental Assessment Act* should also improve the timeliness and efficiency of the federal environmental assessment process and enhance federal-provincial co-ordination. Federal and provincial governments still have work to do, however, in harmonizing environmental assessment processes. This lack of consistency among provincial, territorial and federal processes creates added complexity and challenge to mining and exploration companies operating in more than one jurisdiction.

Impact Benefit Agreements have been negotiated in many Canadian jurisdictions, but it is only in Nunavut where they are legislated. Clarity for their content is provided in the Nunavut Land Claim Agreement. Furthermore, it is only in Nunavut, where these IBAs are directly linked to the permitting and licensing process. The lack of certainty surrounding IBAs in jurisdictions other than Nunavut, may also cause a disincentive to both exploration and mining companies.

Some provincial jurisdictions also need to re-evaluate their mineral land tenure and assessment regulations with the goal of accommodating the unique requirements of diamond exploration, such as access to large areas of mineral rights during the early stages of exploration.

# Continuing Land Claims and Self-government Negotiations

### Northwest Territories

In addition to a challenging regulatory environment, developers in the Northwest Territories are faced with uncertainties arising from land claims and selfgovernment negotiations that are as yet unsettled. Community requirements and expectations vary from location to location, from project to project, and even over the course of any single project. Exploration and mining companies find themselves as the "ham in the sandwich" between Aboriginal groups who are trying to settle land claims and are in dispute with the federal government over their Aboriginal and treaty rights. These unresolved issues have created further uncertainty and delays in bringing projects into development.

#### **Geoscience Funding**

Increased investment by governments in geoscientific research will further enable the discovery and development of new diamond mines. The level of geoscientific knowledge varies widely in Canada, and some jurisdictions have comprehensive, up-to-date databases. In late 2002, to address the low levels of geoscientific knowledge in the north, the mining industry, in partnership with NRCan, INAC and the territorial governments, developed Northern Geoscience – Investing in Canada's Future, a short-, medium- and long-term strategy for northern geoscience. While new funding has been made available to support the short- and medium-term goals of the proposed strategy, its long-term goals remain unfunded.

Increased investments in geoscience are required if the full potential of the Canadian diamond industry is to be realized. Increased investments in geoscience are required if the full potential of the Canadian diamond industry is to be realized.

### Infrastructure

In Canada, varying levels of infrastructure to support diamond mining exist. In the active diamond exploration areas of Alberta and Saskatchewan, existing roads provide ready access to project sites. In much of northern Canada (NWT, Nunavut and Ontario), access is only possible for a short period in the winter by producer financed, built and operated winter roads. If for any reason a company cannot move all required goods up the winter road during the short season, it faces the prospect of either flying-in goods or missing a full exploration or production year. Lack of adequate infrastructure adds significantly to the costs of exploration and development in the remote northern parts of the country.

The Precambrain Shield is the most prospective area for new mineral and diamond discoveries in Canada today, but its development is generally hindered by inadequate road, port and air facilities. Indeed, this area suffers from a small population which does not command significant federal infrastructure dollars when given on a per capita basis, thereby limiting northern Canada's ability to develop its resources and support its citizens. A commitment by the federal government, in partnership with provincial and territorial governments, is required to develop and implement a long-term infrastructure investment strategy that is needed for northern Canada.

### Labour Force

Canada's mining industry is confronting a major shortage of skilled labour, which threatens to worsen as the population ages. In high demand areas such as northern Canada, where employment and industrial opportunities have not existed to increase overall skill levels, this shortage is particularly acute. Training and educational support of northern and Aboriginal Canadians for employment in the mining industry is essential to the industry's ability to develop new resources. Federal and territorial governments have partnered with diamond producers in the Northwest Territories to provide some of this training. Similar partnerships are being developed in northern Ontario to provide for the future skilled labour needs of De Beers' Victor project.

The EKATI and Diavik mines have been investing in skills training and literacy for several years, with good results. Through a local mine training organization, the NWT and Nunavut Chamber of Mines has also partnered with other agencies to develop and implement human resource training programs. De Beers has invested \$600,000 in a training centre in northern Ontario and an additional \$500,000 over five years for an apprenticeship training centre in Yellowknife.

As the diamond industry grows in northern Canada, local human resources will be depleted and governments will have to rise to the challenge of developing the work force to further the industry. Ongoing partnership between industry and government as well as continued stable human resource development funding from federal, provincial and territorial governments, will enable producers to develop the labour force necessary in northern Canada to meet the needs of a growing diamond mining industry. As the diamond industry grows in northern Canada, local human resources will be depleted and governments will have to rise to the challenge of developing the work force to further the industry.

#### **Exploration Expenses and Tax Regimes**

The costs associated with exploration in northern Canada are high, given the remote location and the short season. These costs are increasing with new regulatory obligations, such as the requirement for exploration companies to undertake community consultation and environmental assessments for grass roots exploration activities. These additional costs are not accountable as exploration expenses to keep claims in good standing, nor do they gualify as Canadian Exploration Expenses (CEE) under existing tax regulations. The mining industry and communities would both benefit if these obligations were tax deductible, eligible as exploration expenses under mining regulations, and eligible as CEE. Governments should consider this, and other measures, to reduce the high costs associated with northern exploration and encourage exploration activity.

The federal Investment Tax Credit for Exploration in Canada (ITCE) provides a 15% investment tax credit to individual investors who purchase flow through shares, the proceeds of which must be applied to qualifying CEE. Several provinces have introduced harmonization programs that have encouraged direction of these exploration dollars to their provinces. The federal flow through share financings and provincial equivalents have resulted in significant additional exploration activity in Canada and have also contributed to several of the new diamond discoveries. The support of the provinces in continuing this program will assist in the exploration for new diamond deposits in Canada.

# Recommendations

- 1. A National Diamond Strategy supportive of exploration and mining would contribute to the long-term viability of the Canadian industry since:
  - a. a healthy exploration and mining sector holds the largest immediate opportunity for significant economic benefits through taxes, royalties, wealth creation, job creation, and capacity building; and
  - b. exploration is key to assuring a long-term supply of Canadian diamonds, which will underpin the growth of other parts of the diamond pipeline.
- 2. Governments should move to enhance the growth of the diamond mining sector by:
  - a. reducing the uncertainty and complexity associated with the regulatory environment, and harmonizing federal and provincial environmental assessment processes;
  - b. streamlining the currently arduous permitting and licensing requirements for diamond mines in some jurisdictions;
  - c. ensuring that Impact Benefit Agreements (IBAs) are not directly linked to the permitting and licensing of diamond mines in regions like the NWT where there are not clear legislative requirements for IBAs;

- d. allowing the costs of socio-economic and Impact Benefit Agreements with local Aboriginal groups to be deductible from royalties and eligible as exploration expenses to keep mineral claims in good standing;
- e. finding ways to reduce the growing costs of exploration, such as allowing for the deductibility of community consultation expenses or eliminating the requirement for time consuming and expensive environmental assessment for low impact, early stage exploration drilling;
- f. ensuring continuation of the Investment Tax Credit for Exploration in Canada (ITCE) and provincial harmonization equivalents, and making exploration stage consultation expenses qualify as Canadian Exploration Expenses (CEE);
- g. revising mineral tenure acquisition
  methodologies and assessment filing
  regulations to encourage diamond exploration;
- h. investing in northern geoscience;
- i. investing in northern infrastructure; and
- j. continuing to provide stable human resource funding for skills training and literacy in partnership with industry.

A National Diamond Strategy supportive of exploration and mining would contribute to the long-term viability of the Canadian industry.

- <sup>1</sup> Metals Economics Group, 2003
- <sup>2</sup> Statistics Canada, 2004
- <sup>3</sup> Diamonds: Adding Lustre to the Canadian Economy, Bruna Santarossa, Statistics Canada analytical paper, page 6, Catalogue No. 11-621-MIE No. 008, ISSN: 1707-0503, ISBN: 0-662-35779-5
- <sup>4</sup> Ibid
- <sup>5</sup> Natural Resources Canada MAC PPT presentation
- <sup>6</sup> Ibid, page 22
- <sup>7</sup> The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002
- <sup>8</sup> Diamonds: Adding Lustre to the Canadian Economy, Bruna Santarossa, Statistics Canada web site www.statscan.ca/english/research/11-621-MIE/ 11-621-MIE2004008.htm, page 6, accessed January 15, 2004
- <sup>9</sup> Towards a National Diamond Strategy, RWED, September 2003, page 22
- <sup>10</sup> The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002, page 9
- <sup>11</sup> Towards a National Diamond Strategy, RWED, September 2003, page 22
- <sup>12</sup> Canadian Suppliers of Mining Goods and Services: Links between Canadian Mining Companies and Selected Sectors of the Canadian Economy, Natural Resources Canada, September 2000
- <sup>13</sup> Annual Survey of Mining Companies 2003/2004, The Fraser Institute
- <sup>14</sup> Ibid
- <sup>15</sup> Fire in the Ice: Benefits, Protection and Regulation in the Canadian Diamond Industry, Ian Smillie. The Diamonds and Human Security Project, Partnership Africa Canada, International Peace Information Service, and the Network Movement for Justice and Development, page 4

# **Rough Diamond Sorting, Valuation and Marketing**

# Position

The industry believes that the producer must be able to maximize the value of its rough diamonds. Each company should be allowed to market its rough diamonds in the way it chooses, as each will develop a strategy according to its competitive advantage. This will benefit shareholders, employees and broader society through increased royalties and taxation. Compelling the producer to do otherwise will have the potential to negatively impact the overall value of the mining operation, affect the ability of a company to finance a project, and result in a disincentive to exploration and new development activities.

The unfettered ability to market its own rough diamonds is one of the critical foundations upon which a successful diamond business is built.

Canadian diamond sorting and valuation expertise is currently limited but growing. In a competitive employment environment, retention is a major problem due to the comparably lower sustainability of a sorter's and valuator's career versus other more sustainable and higher paying careers.

A diamond sorting operation has been successfully established in Toronto, where the labour market is broad and amenable to specialized recruitment. However, the ability to develop sorting and valuation operations in Yellowknife has been challenging. Federal, provincial and territorial governments should explore opportunities to optimize diamond valuation in more sustainable centres in Canada and assess the training implications for developing Canadian expertise in this field.

#### Background

Rough diamonds come in a variety of shapes, sizes, colours, and qualities. Assuming similar quality, larger diamonds are the most valuable and are produced in smaller quantities. It is estimated that 85% of the value of all diamonds comes from diamonds over two carats, which are only 36% of all mined diamonds.<sup>16</sup>

The diamond size versus quality profile varies from mine to mine. For example, the Argyle mine in Australia has a profile that shows relatively smaller value in larger sized rough. With such a profile, and given normal market forces (e.g. no government intervention with subsidies, etc.) it will likely be impossible for a mine to support local cutting and polishing where wage rates are high.

In a competitive employment environment, retention is a major problem due to the comparably lower sustainability of a sorter's and valuator's career versus other more sustainable and higher paying job careers.

#### Sorting and Valuation

In the NWT, once rough diamonds are mined they must be sorted and valued by a Government Diamond Valuator (GDV) at the mine site, or another location in the territory, to ensure that the federal government knows the value of the rough diamonds before they are sold or exported from the NWT. The two existing diamond mines do this sorting (and in the case of Diavik – splitting) in Yellowknife. It is at the companies sorting facilities that the federal valuation takes place.

For companies like BHP Billiton, Diavik Diamond Mines Inc. (DDMI) and Aber, who sell to the open market, the final sales value determines the final royalty to be paid to the federal government. The GDV valuation price is used by the government as a comparison over time against paid royalties. For royalty calculation purposes, GDV valuations are used only on non-arm's-length transactions, as in the case with De Beers where De Beers sells the diamonds to its marketing subsidiary, the Diamond Trading Company (DTC).

The very process used by the GDV gives rise to a high degree of commercially confidential statistical information concerning the size/frequency distribution of the diamond production at each mine. The government organization responsible for collecting and holding this sensitive information must ensure that it is kept confidential and is only used for royalty purposes.

The very process used by the GDV gives rise to a high degree of commercially confidential statistical information concerning the size/ frequency distribution of the diamond production at each mine. Following the government valuation, rough is resorted and distributed by producers according to their own marketing and distribution strategies. Both DDMI and BHP Billiton send their rough to Antwerp to be sorted for market, since Antwerp hosts offices of many of the world's customers, has depth of skilled resources, and banking, industry and market knowledge. Aber sorts and prepares its diamonds for sale in Toronto before they are sent to customers in Antwerp and elsewhere.

In Canada, all rough diamonds require a Kimberley Process certificate from the federal government prior to export.

It is after sale that the federal government imposes its royalties on diamond mines operating in the NWT (and eventually Nunavut) after the actual sale of the rough diamonds and, as noted earlier, one of the reasons that the two mines have been successful is that the federal and territorial governments have not imposed punitive royalties and other taxes on these operations. This has helped the mines come into production and earn a decent return for the mining companies. All jurisdictions should emulate this approach. Indeed, the success of this federallylegislated mining regime is creating the very benefits that governments seek: significant local training, employment and business opportunities, particularly for Aboriginal residents who have been previously disadvantaged or excluded. The result is a global success story, a model of sustainable development for other jurisdictions.

#### Rough Marketing

BHP Billiton markets rough diamonds from the EKATI Diamond Mine on behalf of the joint venture. Rough from Diavik mine is split by the joint venture partners in Yellowknife and marketed separately by Aber and Rio Tinto Diamonds NV, the sister company and sales agent of DDMI. After this sorting and/or splitting, the Canadian diamond companies market their rough in different ways. While BHP Billiton's rough is currently sold in six different ways: to regular customers, windows customers, NWT customers, participants in downstream ventures, occasional customers, and one-off customers, Aber sells its rough in two ways: by contracted off-take to Tiffany & Co. for manufacturing in their Yellowknife factory and to a broad list of non-permanent customers in Antwerp.

#### Regular Customers or "Sightholders"

The international practice of producers in the rough diamond business is to sell market assortments containing low unit value through high unit value rough. These regular customers typically purchase at least several million dollars worth annually, have financial strength and, hence, are large consumers of rough diamonds. These customers have the capacity, through trading strength and/or cutting and polishing facilities throughout the world, to allocate the rough according to their local operating costs and marketing philosophies. Therefore, these customers assume the risk of finding markets for the lower value rough goods in exchange for the opportunity to access the high unit value rough.

### Local Cutting and Polishing Customers

In order to encourage the start of a local cutting and polishing industry, the GNWT developed a policy whereby, in order to obtain the territorial government's support for a proposed mine, the diamond producers must agree to supply a portion of its production to local factories. These are typically high value rough diamonds and in the case of BHP Billiton, it provides approximately 2% of its rough diamonds by volume which represents approximately 7 to 10% of its diamonds by value. This policy runs counter to the normal international practice explained above. Having to provide a high value assortment locally reduces the overall average quality of the rough from the NWT that remains to be packaged and sold via regular marketing practices, and potentially reduces the price and demand that these assortments can garner on the international rough diamond markets.

While the Canadian diamond mining and exploration industry fully supports the development of sustainable industries, around and as a result of diamond mining, the industry strongly discourages the further adoption and expansion of this policy by other jurisdictions since the policy would negatively impact the competitiveness of the Canadian diamond mining industry, and would be a disincentive to future exploration and diamond mine development in Canada. Furthermore:

- forcing producers to sell directly to local secondary industry has been seen as a producer subsidy; and
- the adoption and enforcement of such a policy by more senior jurisdictions would be contrary to international trade rules as set out by NAFTA and WTO.

Having to provide a high value assortment locally reduces the overall average quality of the rough from the NWT that remains to be packaged and sold via regular marketing practices, and potentially reduces the price and demand that these assortments can garner on the international rough diamond markets.

Adopted in any large degree, such a policy negatively impacts the competitiveness of diamond exploration and mine development in Canada. Any impediment to free market access for smaller diamond producers would undermine a junior company's ability to access equity and debt capital financing and, thus, would be a further disincentive to exploration and development.

The issue is fundamental because the traditional mechanism of selling diamonds in the open diamond market does not supply the same security on investment that underlies a typical commoditybased mining project such as a gold or a copper mine. Thus, a diamond mining company is seriously disadvantaged if a government edict creates a situation whereby the company loses control of its right to market its product, in part or in full, and so impacts its freedom to secure funding guarantees with marketing off-takes.

For instance, if any type of caveat had been put on a percentage of Aber's production it is very unlikely that Aber would have been able to obtain the bank financing necessary to help pay its share of the construction costs of Diavik.17

...a diamond mining company is seriously disadvantaged if a government edict creates a situation whereby the company loses control of its right to market its product...

# Recommendations

- 1. Governments should assess the training needs for sorting and valuation activities in Canada.
- 2. Each producing company should be allowed to market its rough diamonds according to its own strategic business model. To do otherwise will result in a less healthy primary industry and will be a disincentive to exploration and development; both of which will affect the sustainability of all industries downstream in the pipeline.
- 3. The GNWT policy requiring producers to provide select, high quality rough to local cutters and polishers should be seriously reconsidered and should not be adopted in other jurisdictions.<sup>18</sup>
- 4. Ensure that the royalty valuation exercised by each jurisdiction protects the commercial sensitivity of a mine's production statistics.
- 5. Ensure that royalties on diamond production are fair and reasonable.

Towards a National Diamond Strategy, RWED, September 2003, page 25 Marketing of Rough Diamonds, Aber presentation, Natural Resources Canada Round Table, Edmonton, May 20-21, 2003 17

<sup>18</sup> Economic Impact of the Diamond Industry in the NWT, Ellis Consulting

# The Cutting and Polishing Industry

# Position

With the development of diamond mines in Canada, governments have understandably encouraged the simultaneous development of downstream activities. History is full of examples of Canadians as "hewers of wood and drawers of water". The concept of value added has always struck an emotional chord in this country and wherever this can be achieved in a self-sustaining way it should be sought.

As recent experience has demonstrated, the opportunity to develop the cutting and polishing segment of the diamond pipeline is fraught with difficulties. Argyle Diamonds recognized that only their very valuable and globally unique pink diamonds could support in-house cutting and polishing. Rio Tinto and Aber have assessed the risk as unworthy of their investment. The Dogrib Rae Band, after conducting its own due diligence, elected not to seek opportunities in cutting and polishing diamonds.<sup>19</sup>

The manufacturing of polished diamonds is an intensely competitive business. Low labour costs and new technology have enabled countries like India and China to dominate this part of the diamond pipeline, significantly limiting the opportunities for new entrants. Other countries, such as Botswana and South Africa, which have endeavoured to compete in this field, have typically had to provide financial incentives and subsidies to domestic cutting and polishing operations, and few of these operations have been able to demonstrate long-term profitability. Government subsidies have included tax exemptions, royalty exemptions, salary subventions, training grants, and duty-free export processing zone benefits. In South Africa most of the subsidies have been withdrawn for their lack of sustainability.

The nascent manufacturing industry in the NWT is now undergoing similar difficulties.

Certain premises have been put forward to support the development of a Canadian diamond manufacturing industry:

- Some believe that because Canadian diamonds are conflict free they will be highly sought after. This is a dubious argument at best, for the vast majority of world diamonds are, in fact, conflict free. In addition, the Kimberley Process is now assuring consumers that this is so. Canada has no competitive advantage from a conflict free perspective.
- It has been stated that Canadian diamonds will attract a premium margin large enough to pay for the extra operating costs. There probably is a small premium in certain Canadian markets. Whether Canadian diamonds will be able to gain and sustain a significant premium in the world market place is open to debate. This is closely related to the next point concerning branding.

Argyle Diamonds recognized that only their very valuable and globally unique pink diamonds could support in-house cutting and polishing. • It has been said that developing a "Canadian brand" will increase margins. Branding is expensive and complex, and building a successful brand takes considerable time and investment. Pride in a national brand is typically not what motivates a consumer to purchase a diamond: rather they are purchased as symbols of love. It is, therefore, unlikely that any country-oforigin brand will command a high premium internationally or that there will be a high demand for such a brand internationally. Furthermore, the Canadian market for diamonds currently constitutes 2% of the world diamond market. The percentage of Canadians who will pay a premium for a Canadian brand is a fraction of this small percentage. While the diamond mining industry fully supports the development of brands both for diamonds and for diamond jewellery, and indeed many of the producers themselves are exploring opportunities for added value down the pipeline, the development of brands requires significant market research and extensive financing. The assumption that the premium from Canadian brands will support the cutting and polishing industry in the NWT is misleading and far from proven.

...we believe that diamond producers already provide significant returns to government in the form of royalties, taxation, payments to citizens through impact benefit agreements, and the multiple economic direct and indirect benefits of mine development. The economic fundamentals of the Canadian diamond cutting and polishing industry should, therefore, be closely examined to determine under what conditions the sector is sustainable. There is also the question of what will become of the cutting and polishing industry in the NWT after mining has ceased or mines are opened in other parts of the country.

Thorough consideration of these questions will allow government, industry, business, and community groups to make reasoned decisions about how, whether, and at what cost, cutting and polishing can succeed in Canada.

As a starting point, we believe that diamond producers already provide significant returns to government in the form of royalties, taxation, payments to citizens through impact benefit agreements, and the multiple economic direct and indirect benefits of mine development. Any additional economic policies designed to stimulate downstream activity should be supported by general revenue.

# Background

Canadian experience in cutting and polishing is limited. Since the development of the EKATI Diamond Mine, the GNWT has, through financial incentives and business policies, endeavoured to develop a cutting and polishing capacity in the territory. A number of government incentives have been introduced, including grants for training and acquisition of equipment as well as loan guarantees to facilitate the purchase of the raw material.<sup>20</sup> In addition, as noted above, the NWT government also requires NWT producers to provide select rough to local diamond manufacturing factories, counter to the normal international practice of selling market assortments containing low through high unit value rough. Most Yellowknife operations have had to rely on government subsidies and industry support to remain in business.

In the absence of subsidies and other forms of support from government it is questionable if cutting and polishing operations could continue to operate.<sup>21</sup> Subsidized, as they are, they have faced a number of challenges, including:

- an over-reliance on foreign workers;
- high worker turnover;
- low profit margins; and
- uncertain and unstable markets.

Most Yellowknife operations have had to rely on government subsidies and industry support to remain in business. The weakness of the Yellowknife cutting and polishing industry was reinforced by the announcement in mid-March 2004 that the GNWT had agreed to forgive the \$800,000 of interest due on a \$2.6 million loan guarantee to a Yellowknife cutting and polishing operation.

At present, due to the repetitiveness of the job, conditions in which the work is performed, the inability to transport this skill-set to other employment, and the abundance of competing job opportunities, cutting and polishing is not a soughtafter employment option. To date, the economic benefits of the GNWT's efforts to develop cutting and polishing expertise have been limited. Combined, the operations employ fewer than 150 workers in relatively low paying jobs. The positions are not easily filled by residents and instead have been filled by foreign workers on work visas. Retaining foreign workers in Yellowknife, with its long winter climate, has been difficult.

The chart below compares the economic contribution of NWT diamond mining to NWT cutting and polishing, two of the sectors of the diamond industry currently operating in the NWT.

Clearly, any cost/benefit analysis of efforts to enter the cutting and polishing industry in Yellowknife would paint a stark picture.

By contrast, a Vancouver-based cutting and polishing factory, HRA Investments Ltd., appears to be successfully and profitably manufacturing polished diamonds using robotics to offset high labour and business costs. This small operation, without reliance on any form of government or business subsidy, is quickly developing a niche in the international marketplace, recently becoming a preferred customer of Diavik Diamond Mines Inc.

	Diamond Mines (Diavik and EKATI)	Cutting and Polishing Factories (three factories)
Annual GDP (average)	\$1.063 billion <sup>22</sup>	\$14 million <sup>23</sup>
Labour income	\$352 million <sup>24</sup>	\$8 million <sup>25</sup>
Annual person years of employment (direct, indirect and induced)	6,496 <sup>26</sup>	15627
Royalties, business taxes, employee and other business income taxes	\$10.2 billion <sup>28</sup>	Unknown

Another operation in Matane, Quebec, has been in the cutting and polishing business for over two years. The factory has received government sponsored training, federal government funding through Export Development Corporation, and Québec provincial funding through the Groupe Collégial de Matane. Matane buys its rough on the open market, including Antwerp. For smaller operations such as Matane, Canadian rough diamonds are readily available in the Antwerp market.

#### **A Path Forward**

Compared with similar factories in other parts of the world, the cost of establishing and operating diamond cutting and polishing factories in the NWT is very high. One of the highest costs faced by Canadian polishing factories is the cost of labour. In addition to the high cost of labour, the volume of skilled labour required cannot be sourced locally. Moreover, based on the limited Canadian experience to date, the polishing industry has produced only marginal benefits and faces severe economic challenges in a very competitive, international free market.

The success of Vancouver-based HRA Investments Ltd., however, presents a more optimistic picture for this segment of the diamond pipeline. Through investments in advanced technology, and through niche marketing, this company has mitigated the impact of high labour costs. Its location, in a large urban setting with easier access to international markets and a larger labour pool, is doubtless an additional advantage over its Yellowknife counterparts. The use of this high tech equipment also requires well trained workers as well as quick and ready access to technical support should technical maintenance of the equipment be required. ...based on the limited Canadian experience to date, the polishing industry has produced only marginal benefits and faces severe economic challenges in a very competitive, international free market.

This company's success points to public policy options for governments interested in encouraging business development in this area. Economic policies could include:

- fiscal measures supporting small- and medium-sized purchases and upgrading of high tech equipment; and
- support for training in the use of high tech cutting and polishing equipment.

A thorough economic analysis of the diamond cutting and polishing business would help Canadian entrepreneurs to better identify how to succeed in this highly competitive business.

#### A Need to Avoid Short-term Thinking

A successful Canadian cutting and polishing industry will not develop overnight. To date, some governments have adopted or considered a number of public policies that demonstrate short-term thinking and have not been successful. These policies could negatively impact diamond producers. Due to their limited application, diamond producers have grudgingly accepted some of these policies. However, governments must recognize that any policy that reduces mining's return on investment necessarily limits its growth potential. Such policies are akin to "biting the hand that feeds you".

### **Rough Purchases**

As stated earlier in this report, the GNWT requires NWT producers to provide select rough to diamond cutters, counter to the normal international practice of selling market assortments containing low through high unit value rough. This reduces the overall average quality of the rough that remains to be packaged and sold as assortments, and can potentially reduce the price these assortments can garner on the international rough diamond markets. Ironically, the economic difficulties faced by the NWT cutting and polishing operations has limited the quantity of rough purchased from NWT producers, thus alleviating somewhat the impact of this policy on the diamond mines to date.

The diamond mining industry does not support the adoption and expansion of this policy by other jurisdictions.

### Definition of a Canadian Diamond

At present there are differences of opinion about what constitutes a "Canadian" diamond. The Government of the Northwest Territories and some in the polishing industry are advocating a definition that requires a diamond to be mined, cut and polished in Canada to qualify as "Canadian".

Similarly, the industry is very concerned by the actions of the Government of the Northwest Territories which, at the end of 2003, with no diamond industry consultation or forewarning successfully obtained an Official mark for the term 'Canadian diamond'. Were this definition adopted, it would remove any, albeit limited, market advantage currently enjoyed by diamond producers selling rough on the international marketplace. This policy would also result in, at present, approximately 95% of the volume of rough diamonds produced in Canada being unmarketable as Canadian and would result in no affordable "Canadian" diamond jewellery available to the consumer. While it could, in theory, provide a market advantage for Canadian cutters and polishers selling the larger, more expensive diamonds, it has never been demonstrated that this advantage would result in any material benefit to this segment of the industry. The proposed definition is akin to suggesting that Brazilian coffee is not Brazilian if the beans are ground in Canada. It is an approach whose goal is perhaps lofty – to stimulate downstream activity – but it is fundamentally flawed since it relies on detracting from the long-term competitiveness of diamond producers.

Similarly, the industry is very concerned by the actions of the Government of the Northwest Territories which, at the end of 2003, with no diamond industry consultation or forewarning successfully obtained an Official mark for the term "Canadian diamond". It is not obvious how this action will further promote Canadian diamonds as a marketing tool.

# Recommendations

1. A thorough economic analysis of the competitiveness and cost structure of the diamond cutting and polishing industry is needed to properly identify the economic and geographic opportunities for developing this downstream activity in Canada. For example, a look at the value added along the diamond pipeline shows that most of the value added is at either end of the pipeline, i.e. mining and jewellery. In global terms, in 2001, 76.3% of the value added was in jewellery and 13.6% was in mining, whereas cutting and polishing added only 3.6% in value.

The unfettered right to market its own diamonds is one of the critical foundations upon which a successful diamond business is built.

- 2. Economic policies designed to stimulate downstream activity should be supported by general revenue.
- 3. Public policy instruments could include:
  - a. fiscal measures supporting small- and medium-sized purchases and upgrading of high tech equipment; and
  - b. training in the use of high tech cutting and polishing equipment.
- 4. Governments should avoid the use of short-term, unsustainable policies to stimulate the development of cutting and polishing in Canada, particularly when those policies detract from the long-term competitiveness of primary producers.
- 5. Retain the existing definition of a Canadian diamond.

19 The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002

- The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002 20
- A National Diamond Strategy Briefing Note, September 2003, page 3, prepared by the Mining Association of Canada The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002, page 7 21
- 22
- 23 Ibid, page 9
- 24 Ibid, page 7
- 25 Ibid 26 Ihid
- 27 Ibid

Diamonds: Adding Lustre to the Canadian Economy, Bruna Santarossa, Statistics Canada web site www.statscan.ca/english/research/11-621-MIE/ 11-621-MIE2004008.htm, page 6, accessed January 15, 2004

# Diamond Jewellery, Retail Sales and Tourism

# Jewellery

Canada possesses a relatively large diamond jewellery manufacturing industry, which appears to be already benefiting from the discovery of Canadian diamonds. Jewellery manufacturers across Canada make a conscious effort to use "Canadian" diamonds as there is some thought that Canadians and others might pay a small premium for jewellery containing Canadian diamonds. Moreover, Canada has a strong artistic community, accentuated by the unique contributions of Aboriginal art. These factors, and the significant value added contribution of this sector in the diamond pipeline, suggest that Canada has a strong potential to further develop this aspect of the diamond industry.

Diamond exploration and mining companies encourage the evaluation of the business case for this sector of the diamond pipeline and its further development. Governments should examine opportunities for enhanced training and education in jewellery design and manufacturing, and support for apprenticeships in the jewellery trades such as goldsmithing.

#### **Retail Sales**

An infrastructure for diamond retail sales exists across Canada. Retailers have shown an interest in Canadian diamonds, and are marketing and selling them in their stores. In the Northwest Territories, Laurelton/Tiffany is investigating the use of Aboriginal motifs in diamond jewellery and the potential to market these unique Canadian diamond jewellery products throughout their retail chain. Last year, when diamond producers organized a major public event in Ottawa, called Diamond Day on the Hill, to showcase the entire diamond pipeline – retailers were enthusiastic participants. The sector is hampered, however, by an onerous federal excise tax – a 10% levy paid by manufacturers on the sale price of items manufactured in Canada, and by importers on the duty-paid value of imports. International competitors have started to liberalize the jewellery trade, improving the competitiveness of the manufacturers by reducing and/or removing duties and other forms of taxation. This situation accentuates the need for Canadian action; the elimination of the federal excise tax on jewellery would encourage retail sales in Canada of Canadian diamonds to Canadians and foreign tourists.

Governments should examine opportunities for enhanced training and education in jewellery design and manufacturing, and support for apprenticeships in the jewellery trades such as goldsmithing. In partnership with the retail sector, governments could encourage marketing of Canadian diamonds through domestic promotion, trade shows and foreign trade missions.

#### **Diamond-related Tourism**

While diamonds will provide one more reason for tourists to visit Canada, the contribution of diamond-specific tourism to the GDP will be nominal nationally.

For the real, vacationing "tourist", the remote location of these mines, combined with safety and weather concerns, significantly restricts the opportunity for the mines to be associated with any formal tourism activity.

However, the diamond mining industry can have a role to play in diamond tourism. It is a major source of information about diamonds and, in partnership with other organizations, has helped to produce a wide range of materials describing the diamond mining business and the Canadian diamond discovery story. The industry also contributes to local and national displays on an ongoing basis. The mining industry has a role to play in preserving the history of diamond mining and exploration in Canada, and contributing to gathering that history through photographs and other materials to be made available to the public. These kinds of activities help to support Canadian tourism and the industry welcomes opportunities to assist in this manner.

For the real, vacationing "tourist", the remote location of these mines, combined with safety and weather concerns, significantly restricts the opportunity for the mines to be associated with any formal tourism activity. The diamond business can also contribute to the tourism experience in communities near diamond mines and polishing plants by providing opportunities for tourists to purchase polished stones. Local jewellery stores could supply local jewellery.

In addition, local museums and visitors' centres can highlight the local industry and add to the ambience for visitors. Diamonds can add to the total selection of tourism offerings and, for remote communities like Yellowknife, can provide extra incentive to attract tourists to the north. To this end, Diavik has created a Visitor's Centre in its headquarters office in Yellowknife to help visitors understand the work they do, without the difficulties of an actual mine site visit.

# Recommendations

- 1. Governments should examine the opportunities for enhanced training and education in jewellery design and manufacturing, and the support for apprenticeships in the jewellery trades such as goldsmithing.
- 2. The federal 10% excise tax on jewellery should be eliminated.
- In partnership with the retail sector, governments should explore ways to encourage marketing of Canadian diamonds through domestic promotion, trade shows and foreign trade missions.
- 4. The tourism sector, the diamond industry and governments should develop common strategies that ultimately promote the demand for Canadian diamonds internationally.



At the 2003 Western Premiers' Conference and the 2003 Annual Premiers' Conference, all provinces and territories supported the NWT Government's call for the development of a National Diamond Strategy led by the provinces and territories.<sup>29</sup>

The Government of the Northwest Territories, along with the Government of Quebec, is leading the provincial and territorial governments in a pan-Canadian effort to develop a National Diamond Strategy. The Strategy is sought to provide a co-ordinated approach to creating the necessary environment to ensure the diamond industry in Canada maximizes opportunities and benefits for all Canadians.<sup>30</sup>

Diamond exploration and mining companies have an intimate understanding of the industry nationally and internationally, and have much to contribute to the development of an effective National Diamond Strategy. We welcome the opportunity to present our views and recommendations, and urge all governments to give them serious consideration.

While much can and should be done to encourage the development of downstream activities, governments should ensure that policies designed to do so do not detract from the competitiveness and viability of exploration and mining activity. Clearly, the success of all sectors in the diamond pipeline depends, in the first instance, upon a healthy diamond exploration and mining sector. Our recommendations flow from this understanding. Indeed, it is our view that there is much that can be done to improve the overall investment climate for diamond exploration and mining, and encourage its further development and expansion. While much can and should be done to encourage the development of downstream activities, governments should ensure that policies designed to do so do not detract from the competitiveness and viability of exploration and mining activity.

We look forward to ongoing discussions with provincial and territorial governments on these important issues, and would welcome any comments or questions on the contents and recommendations in this paper.

# **Summary of Recommendations**

### **Diamond Exploration and Mining**

- A National Diamond Strategy supportive of exploration and mining would contribute to the long-term viability of the Canadian industry since:
  - a. a healthy exploration and mining sector holds the largest immediate opportunity for significant economic benefits through taxes, royalties, wealth creation, job creation, and capacity building; and
  - b. exploration is key to assuring a long-term supply of Canadian diamonds, which will underpin the growth of other parts of the diamond pipeline.
- 2. Governments should move to enhance the growth of the diamond mining sector by:
  - a. reducing the uncertainty and complexity associated with the regulatory environment, and harmonizing federal and provincial environmental assessment processes;
  - b. streamlining the currently arduous permitting and licensing requirements for diamond mines in some jurisdictions;
  - c. ensuring that Impact Benefit Agreements (IBAs) are not directly linked to the permitting and licensing of diamond mines in regions like the NWT where there are not clear legislative requirements for IBAs;

A National Diamond Strategy supportive of exploration and mining would contribute to the long-term viability of the Canadian industry...

- d. allowing the costs of socio-economic and Impact Benefit Agreements with local Aboriginal groups to be deductible from royalties and eligible as exploration expenses to keep mineral claims in good standing;
- e. finding ways to reduce the growing costs of exploration, such as allowing for the deductibility of community consultation expenses or eliminating the requirement for time consuming and expensive environmental assessment for low impact, early stage exploration drilling;
- f. ensuring continuation of the Investment Tax Credit for Exploration in Canada (ITCE) and provincial harmonization equivalents, and making exploration stage consultation expenses qualify as Canadian Exploration Expenses (CEE);
- g. revising mineral tenure acquisition
  methodologies and assessment filing
  regulations to encourage diamond exploration;
- h. investing in northern geoscience;
- i. investing in northern infrastructure; and
- j. continuing to provide stable human resource funding for skills training and literacy in partnership with industry.

# Rough Diamond Sorting, Valuation and Marketing

- 1. Governments should assess the training needs for sorting and valuation activities in Canada.
- 2. Each producing company should be allowed to market its rough diamonds according to its own strategic business model. To do otherwise will result in a less healthy primary industry and will be a disincentive to exploration and development; both of which will affect the sustainability of all industries downstream in the pipeline.
- 3. The GNWT policy requiring producers to provide select, high quality rough to local cutters and polishers should be seriously reconsidered and should not be adopted in other jurisdictions.<sup>31</sup>
- 4. Ensure that the royalty valuation exercised by each jurisdiction protects the commercial sensitivity of a mine's production statistics.
- 5. Ensure that royalties on diamond production are fair and reasonable.

# The Cutting and Polishing Industry

- A thorough economic analysis of the competitiveness and cost structure of the diamond cutting and polishing industry is needed to properly identify the economic and geographic opportunities for developing this downstream activity in Canada. For example, a look at the value added along the diamond pipeline shows that most of the value added is at either end of the pipeline, i.e. mining and jewellery. In global terms, in 2001, 76.3% of the value added was in jewellery and 13.6% was in mining, whereas cutting and polishing added only 3.6% in value.
- 2. Economic policies designed to stimulate downstream activity should be supported by general revenue.

- 3. Public policy instruments could include:
  - a. fiscal measures supporting small- and mediumsized purchases and upgrading of high tech equipment; and
  - b. training in the use of high tech cutting and polishing equipment.
- 4. Governments should avoid the use of shortterm, unsustainable policies to stimulate the development of cutting and polishing in Canada, particularly when those policies detract from the long-term competitiveness of primary producers.
- 5. Retain the existing definition of a Canadian diamond.

# **Diamond Jewellery, Retail Sales and Tourism**

- 1. Governments should examine the opportunities for enhanced training and education in jewellery design and manufacturing, and the support for apprenticeships in the jewellery trades such as goldsmithing.
- 2. The federal 10% excise tax on jewellery should be eliminated.
- 3. In partnership with the retail sector, governments should explore ways to encourage marketing of Canadian diamonds through domestic promotion, trade shows and foreign trade missions.
- 4. The tourism sector, the diamond industry and governments should develop common strategies that ultimately promote the demand for Canadian diamonds internationally.

...a look at the value added along the diamond pipeline shows that most of the value added is at either end of the pipeline, i.e. mining and jewellery.

<sup>&</sup>lt;sup>31</sup> Economic Impact of the Diamond Industry in the NWT, by Ellis Consulting

# Appendix

# Facts Supporting the Positions Outlined in This Paper

## **Economic Contribution of** the Diamond Mining Industry Facts

- Of approximately \$1.2 billion in construction contracts for Diavik, approximately 74% were with northern and Aboriginal firms. Approximately \$500 million was with Aboriginal joint ventures.<sup>32</sup>
- BHP Billiton Diamonds spent approximately \$1.5 billion through northern and northern Aboriginal businesses from the beginning of construction to July 2003.
- 62% of 2002 expenditures by Diavik were distributed to northern-based businesses or individuals, compared to 46% in 2001.
- BHP Billiton Diamonds spent over \$416 million in 2002 in support of mine operations. Of this, 85.4% was spent in the north, with 34.7% spent with Aboriginal businesses.
- To date, De Beers has awarded \$29.5 million in contracts for the supply of goods, equipment and services toward development of the proposed Snap Lake project.

- Of the amount contracted by De Beers to date, \$25 million involves NWT businesses, of which \$22 million has been awarded to companies with Aboriginal ownership, joint ventures or partnerships.
- Over 70% of Diavik's work force is northern and over 55% of BHP Billiton's workforce is northern.
- Diavik proposed and supports a Diavik Communities Advisory Board, a partnership with Aboriginal communities and government that affirms Diavik's commitment to provide training, employment and business opportunities.
- Diavik has Participation Agreements with each of the five neighbouring Aboriginal groups. These agreements require both parties to work together to address training, employment and business opportunities.

Of the amount contracted by De Beers to date, \$25 million involves NWT businesses, of which \$22 million has been awarded to companies with Aboriginal ownership, joint ventures or partnerships.

- BHP Billiton and Diavik have taken leadership roles in developing capacity in the northern work force. They have:
  - identified opportunities for summer work experience for youth;
  - provided training for northern and northern Aboriginal apprentices;
  - reduced employment barriers by establishing minimum acceptable standards for trainable positions;
  - established a scholarship and stay-in-school programs; and
  - provided on-site learning centres where workers can upgrade math, science and computer skills, and write GED, trade apprenticeship exams, and college and university exams.
- Diavik's community-based construction training courses to the end of 2002 produced 234 graduates and a 77% success rate.
- In 2002, over 1,400 NWT residents (including approximately 700 Aboriginal) worked directly in diamond mine construction and operation. Indirect and induced employment spin-offs more than double these numbers to over 3,000 jobs.<sup>33</sup>
- NWT unemployment rates are down (6.1% in 2003), as are social assistance payments.<sup>34</sup>

Diavik's community-based construction training courses to the end of 2002 produced 234 graduates and a 77% success rate.

# **Diamond Cutting and Polishing Facts**

- There is no publicly available cost/benefit analysis conducted to support the economics of GNWT subsidies to the cutting and polishing industry.<sup>35</sup>
- Currently, the producers are supplying local cutting and polishing facilities with high quality rough, from 0.7 carats up to 5 carats in size.<sup>36</sup>
- For De Beers, diamonds are sold through the DTC, the Diamond Trading Company, to 84 sightholders. These sightholders are chosen for their ability to market diamonds successfully and to drive global demand for diamonds.
- In 2002, the NWT cutting and polishing industry (four factories) consumed a total of less than 20,000 carats of rough diamonds. This represents consumption of significantly less rough than available to NWT factories.
- Cutting and polishing facilities in Yellowknife have an advantage over many of their competitors. Without the mines agreeing to make a limited amount of rough available to NWT manufacturers, they would be required to purchase rough further down the pipeline and incur higher costs due to dealer markups and other marketing costs.<sup>37</sup> By getting rough directly from northern mines, they have an advantage over others who might have to buy from brokers several steps removed from the mines and subsequently higher priced.
- The total number of jobs in cutting and polishing in the NWT is approximately 150.<sup>38</sup> Total population in the entire NWT is approximately 40,000 with full employment.

- Surveys indicate that a very small proportion of any population has the aptitude and capabilities to be trained and be sustainable as long-term, skilled diamond polishers and cutters. Therefore, areas with large populations and an underemployed labour pool are best suited for ensuring an adequate labour force for this industry.
- Polishing and cutting are skilled trades, for which there are few trained northerners. A large proportion of employees currently employed in cutting and polishing in the NWT have come to Yellowknife from other countries and are employed on temporary work visas. For example, of 28 people employed at one local factory, only two are northerners. As such, this industry is not a significant engine of new jobs for northerners. By contrast, the NWT diamond mines have committed to 40% Aboriginal employment, and are building capacity and transferable skills.
- Gem cutters and polishers usually earn between \$18,000 and \$30,000 a year, with specialized diamond cutters earning between \$40,000 and \$80,000.<sup>39</sup>
- At full employment and productivity, it is estimated that the profitability of NWT diamond cutting and polishing industry will be only 4%.<sup>40</sup>
- Attempts by other high cost jurisdictions (such as Australia) to get into the diamond cutting business have failed or struggled.<sup>41</sup>

- NWT and other Canadian cutting and polishing factories must compete with experienced cutting facilities in Asia, India, Israel, and New York.
- Part of the reason that NWT cutting and polishing has low profitability is the high cost of labour compared to other cutting centres such as India and Asia. India's labour costs are only about 5% of those in Canada, while Israel's are about 80% of those in Canada. Labour costs in the NWT are generally higher than those in southern Canada, putting the NWT at a further competitive disadvantage.<sup>42</sup> Therefore, only large, high quality diamonds are economically feasible to cut in the NWT, as labour costs are a smaller proportion of the overall cost of expensive goods.
- Diamond mining companies in the NWT, some with experience in diamond manufacturing, have determined that it is not practical or economically viable for them to cut and polish diamonds. Their approach is to sell the raw product to a variety of customers better positioned economically to cut and polish the wide range of mined diamonds.
- One Aboriginal group, which undertook a comprehensive due diligence study to determine if diamond manufacturing meets its investment needs, found that the risk was too great and opted to invest in a more stable business.<sup>43</sup>

At full employment and productivity, it is estimated that the profitability of NWT diamond cutting and polishing industry will be only 4%.

- <sup>32</sup> Diavik Socio-economic Monitoring Report to December 31, 2002
- <sup>33</sup> Economic Impact of the Diamond Industry in the NWT, presentation by Ellis Consulting Services
- <sup>34</sup> Ibid
- <sup>35</sup> A National Diamond Strategy: Briefing Note, September 2003, page 3, prepared by the Mining Association of Canada
- <sup>36</sup> The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002 page 8
- <sup>37</sup> The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002, page 8
- <sup>38/39</sup> Diamond Facts, Government of the Northwest Territories, as found at http://www.gov.nt.ca/RWED/diamond/gnwtrole.htm, accessed October 9 2003
- <sup>40</sup> Where are the Diamond Cutters?, Calgary Labour Market News, Alberta Human Resources and Employment, Volume 4, Issue 12, April 2003
- <sup>41</sup> The NWT Diamond Industry: Opportunities for Dogrib Participation, April 2002, page10
- <sup>42</sup> Ibid
- <sup>43</sup> Ibid, page 12