



The Mining Association of Canada  
L'Association minière du Canada



# The Contributions of Northern Diamond Development: Implications for Nunavut

Nunavut Mining Symposium

April 13, 2010

# Content

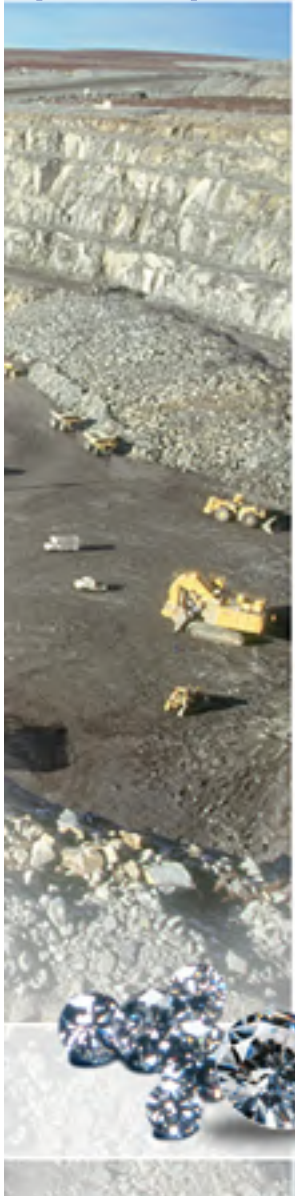


- **About MAC**
  - *“Towards Sustainable Mining”*
- **Northern Diamond Industry**
  - **Economic Contributions to NWT**
  - **Investment, Employment, Business Development**
  - **Socio-economic advancements**
- **Nunavut’s Future Mining Industry**
  - **Implications and “Guestimations” for future development**



# The Mining Association of Canada (MAC)

- National Organization of the Mining Industry in Canada
- Mainly Canada's Senior Mineral Producers
  - Exploration, Mining, Processing
  - Committed to Sustainable Development both Socially and Environmentally
- *Towards Sustainable Mining* – MAC's signature initiative
  - A Condition of Membership
  - Members work towards increasingly higher standards of performance

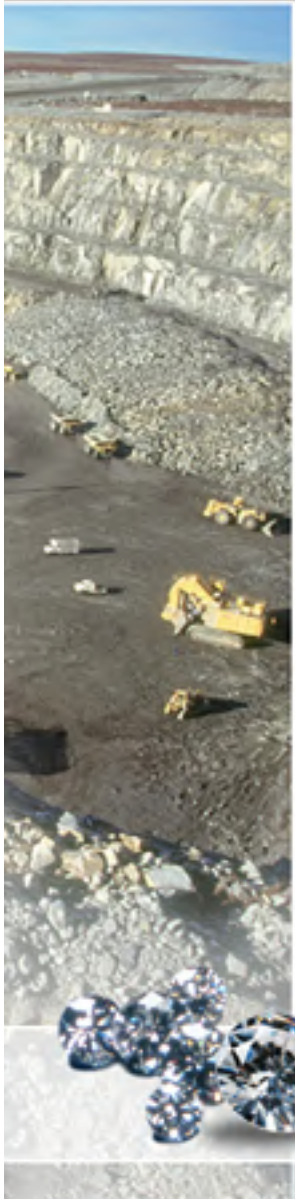


# MAC Members - *Committed to Sustainable Development*

## ***“Towards Sustainable Mining (TSM)”***

### **Fundamental to obtaining our Social Licence**

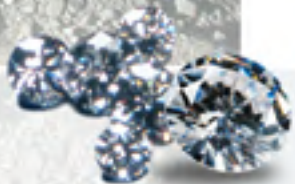
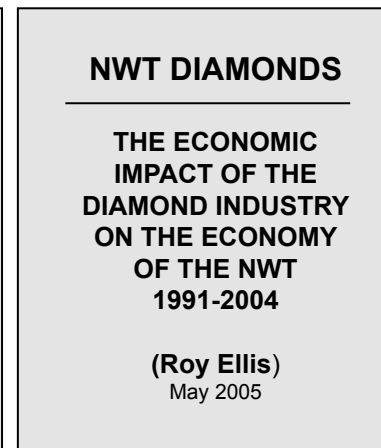
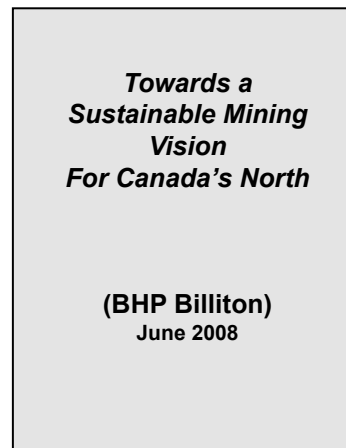
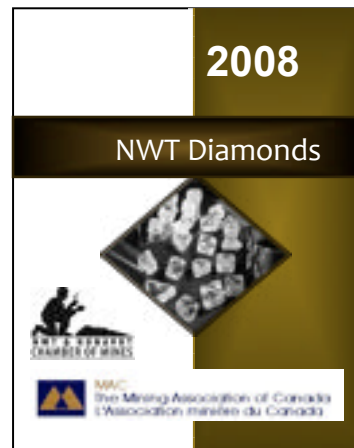
- **A MAC initiative where Member Companies report publicly on their environmental and social performance.**
- **Company Reports are confirmed by external verification audits and guided by a Community of Interest External Advisory Panel**
- **Areas of Member Company Performance include:**
- **Social Responsibility**
  - **Aboriginal Relations**
  - **External Outreach**
  - **Crisis Communications**
- **Environmental Management**
  - **Biodiversity**
  - **Energy Management**
  - **Tailings Management**
  - **Mine Closure**



# Data Sources

## Acknowledgements

- Diamond company SEMA reports
- Ellis 2005 Report; 2007 updates
- Bell 2008 (BHPB)
- Clinton 2008 (MAC, NWT-Nu Chamber)
- Northern mining Company data



# KEY

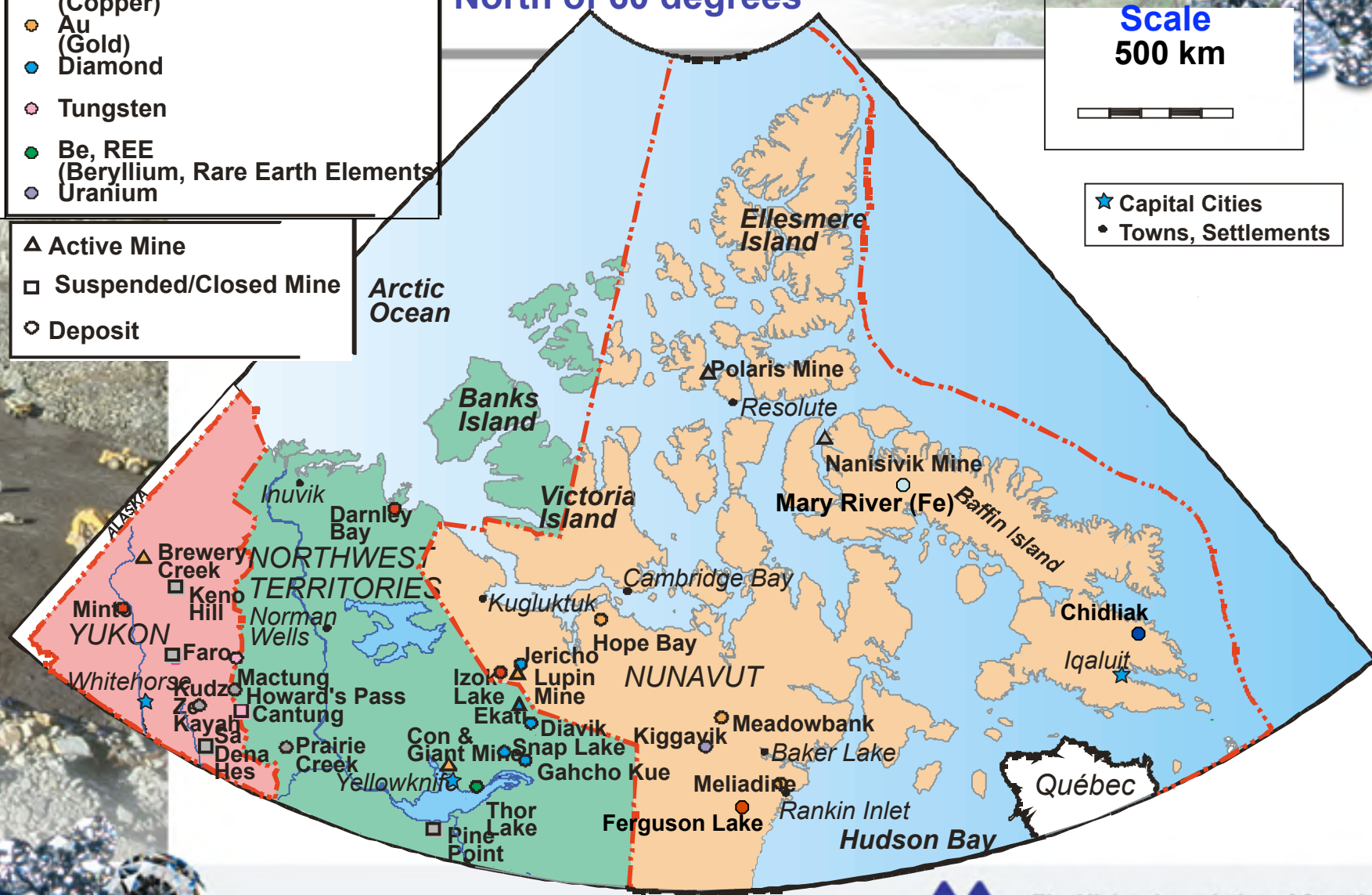
- Pb-Zn-Ag (Lead, Zinc, Silver)
  - Cu (Copper)
  - Au (Gold)
  - Diamond
  - Tungsten
  - Be, REE (Beryllium, Rare Earth Elements)
  - Uranium
- 
- ▲ Active Mine
  - Suspended/Closed Mine
  - Deposit

## Major Mines and Mineral Deposits North of 60 degrees

Scale  
500 km



- ★ Capital Cities
- Towns, Settlements



The Mining Association of Canada  
L'Association minière du Canada

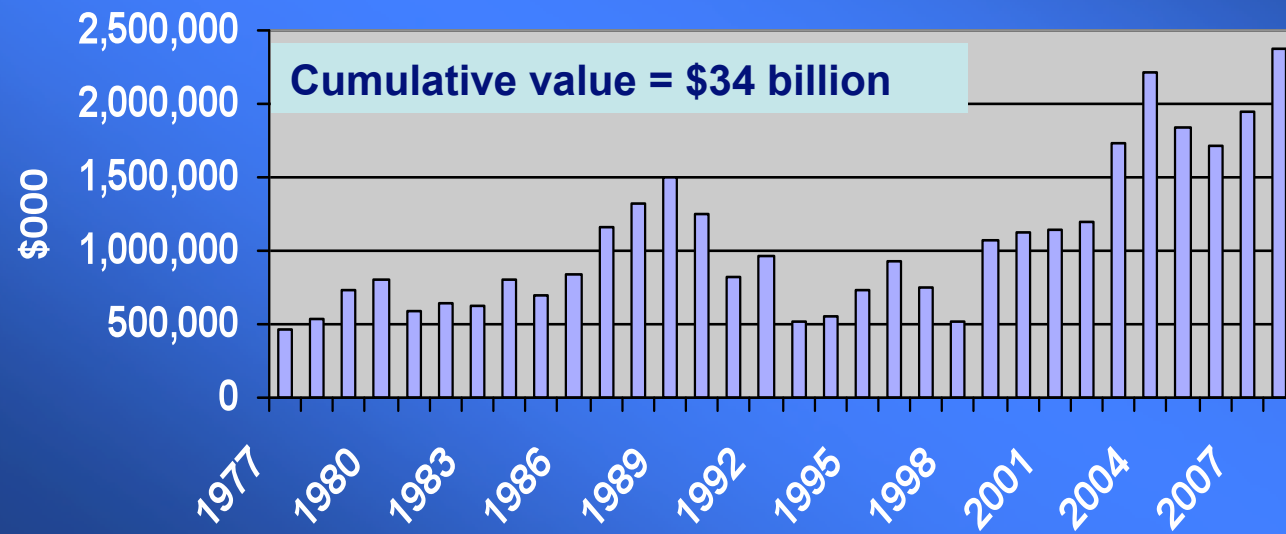
# Northern Mineral Production

1977 - 2008



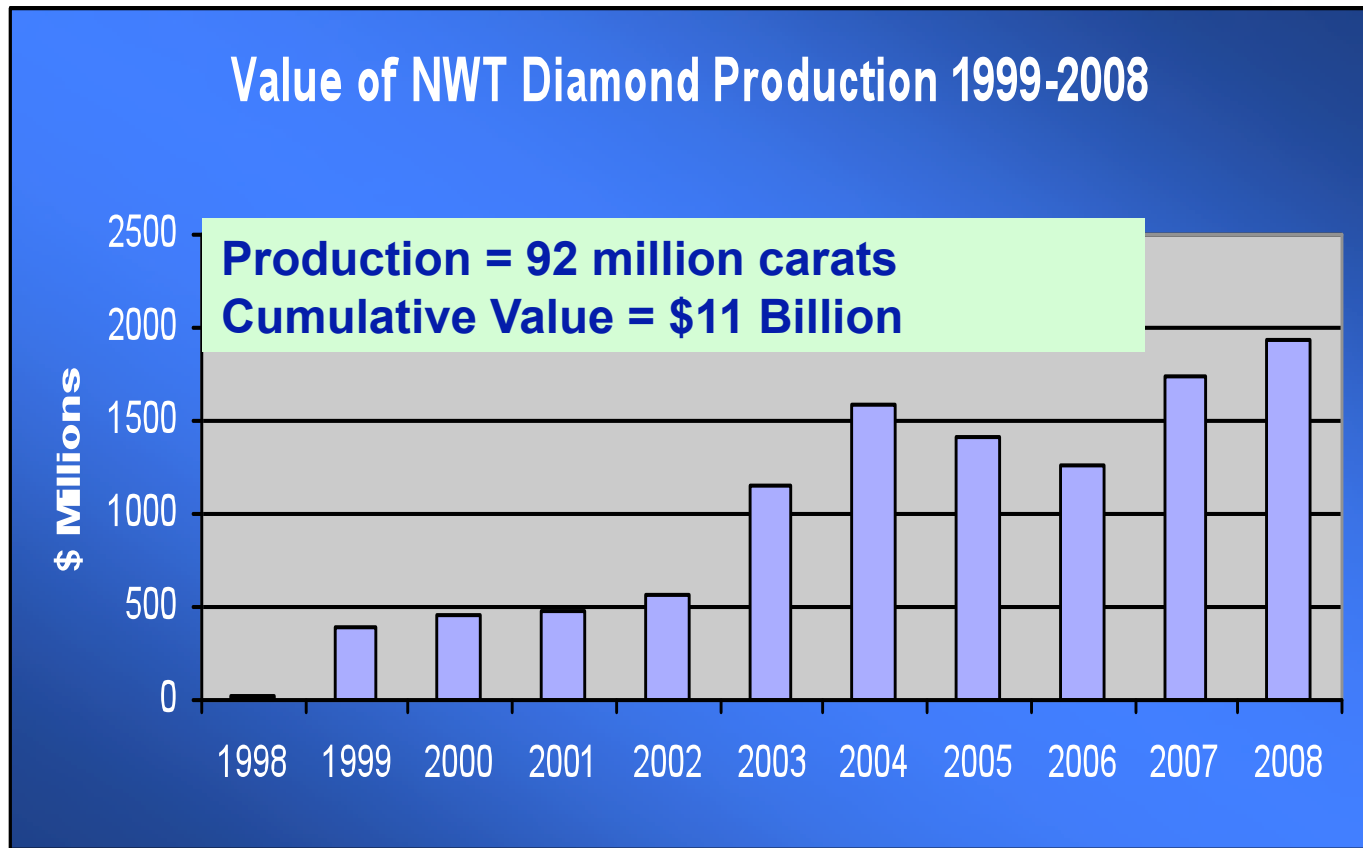
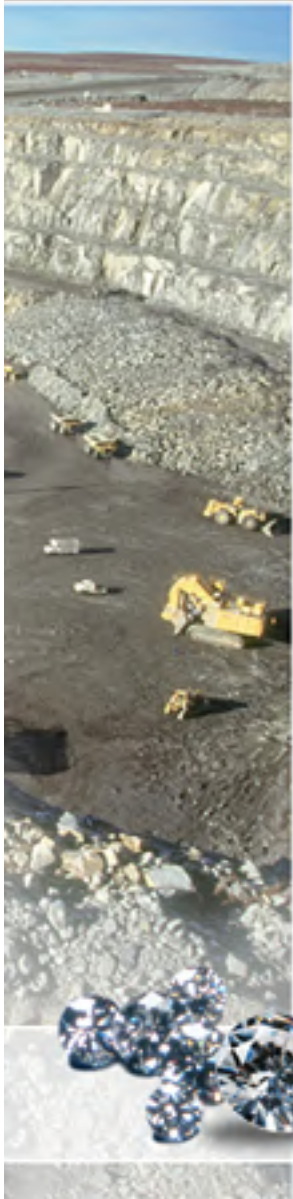
## Value of Mineral Production Northern Canada (Yukon + NWT + Nunavut)

Source: NRCan



The Mining Association of Canada  
L'Association minière du Canada

# Northern Diamond Production





# Canada's Diamond Mines



- 1991 - Diamonds first discovered in NWT (Fipke, Blusson)
- 1998 - Ekati Mine – BHP Billiton Diamonds
- 2003 - Diavik Mine – Rio Tinto; Harry Winston Diamonds Joint Venture
- 2006 – Jericho Mine – Tahera Diamond Corp, Nunavut (closed 2008)
- 2007 – Snap Lake Mine – De Beers enters Canadian production
- 2008 – Victor Mine – Northern Ontario, De Beers #2
- 2014 – Gahcho Kue, NWT – De Beers #3
- 2013 – Renard, Quebec – Stornoway Diamonds, Soquem



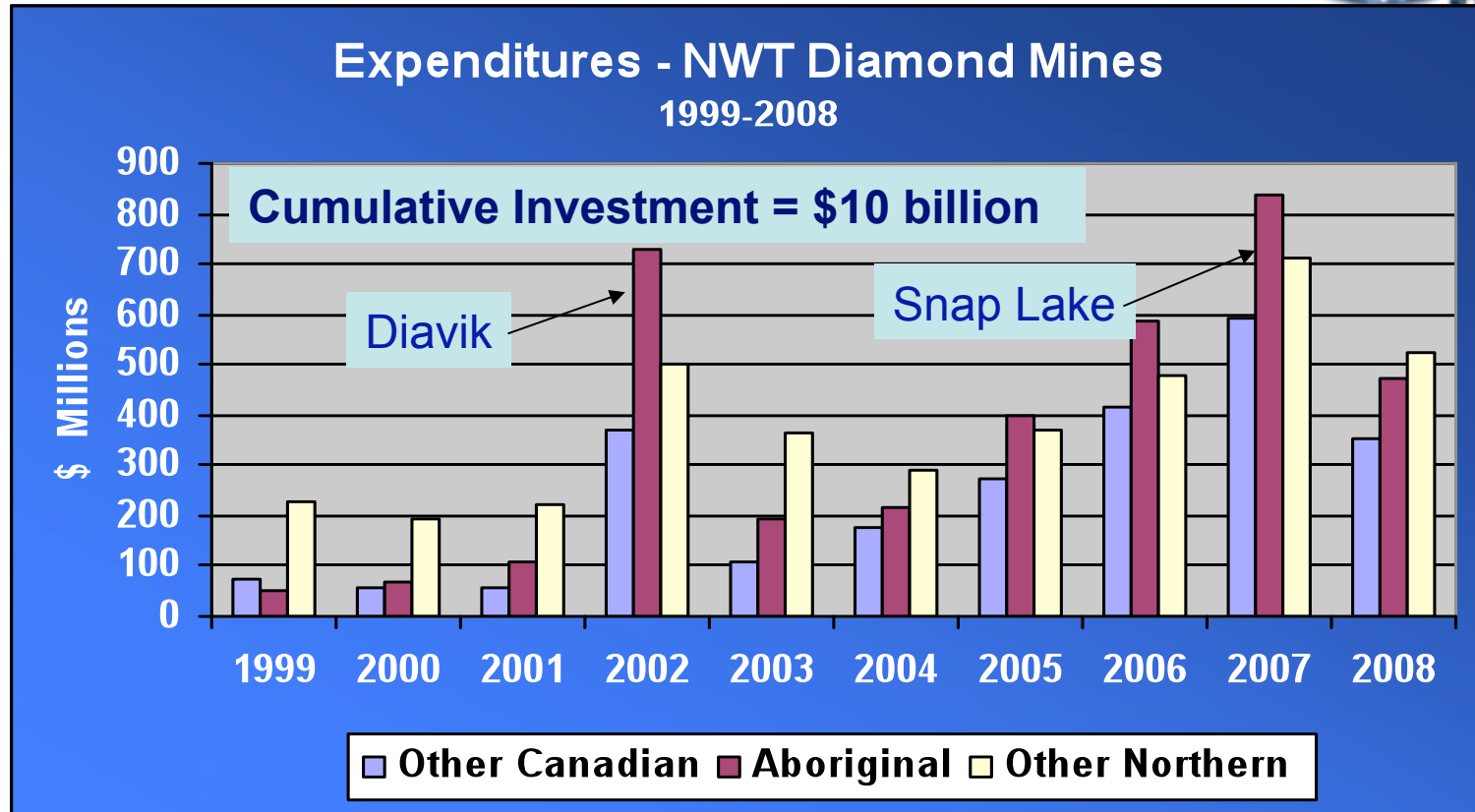
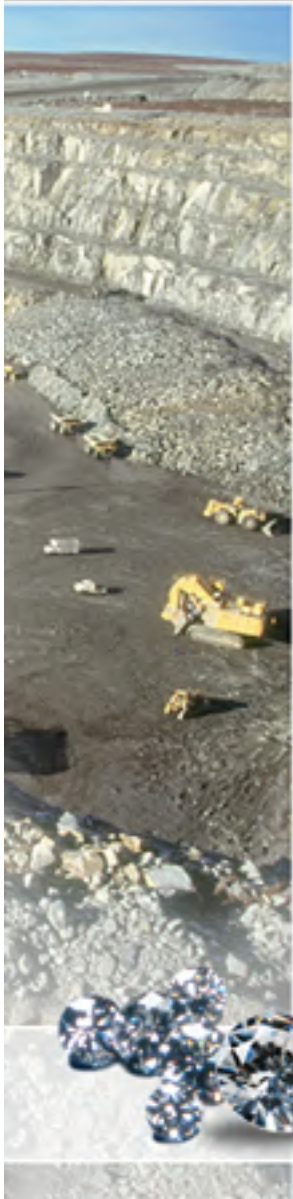
# Benefits to NWT



- Investment
  - Capital & Operating Expenditures
- Employment
  - Total, Northern, Aboriginal
- Procurement & Partnerships
- Training, Education & Social Advancement

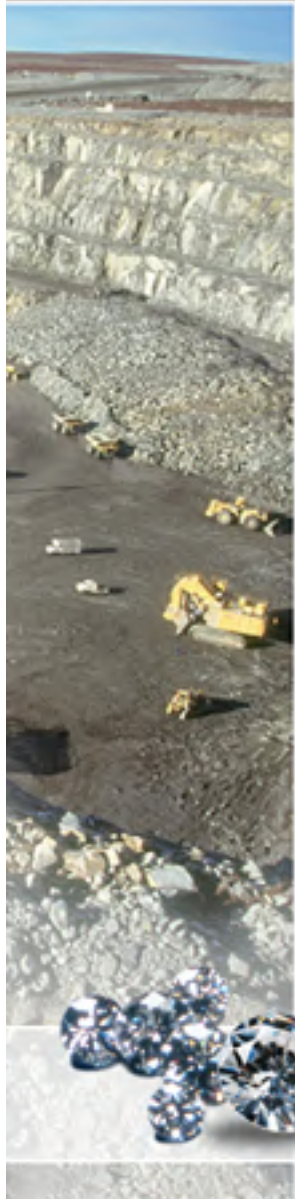


# Capital and Operating Investment

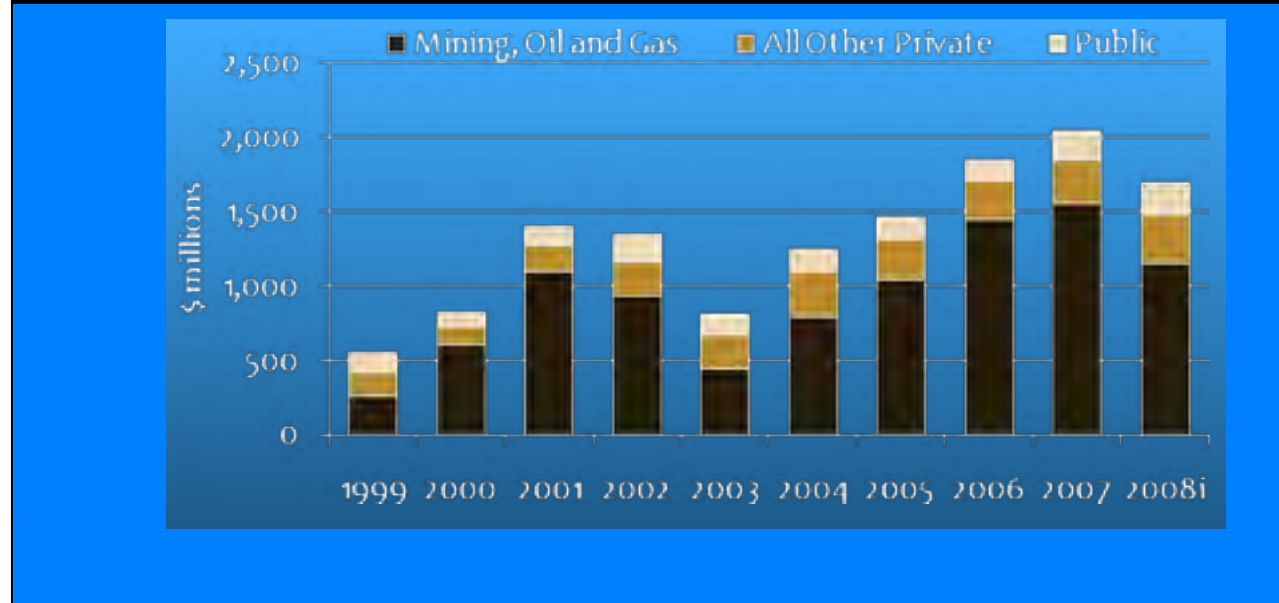


➤ Capital and operating spending by Diamond mines has totaled ~\$10 Billion, including \$6.8 Billion on northern and Aboriginal businesses (capital investment alone = \$3.2 billion)

# Investment – NWT Total



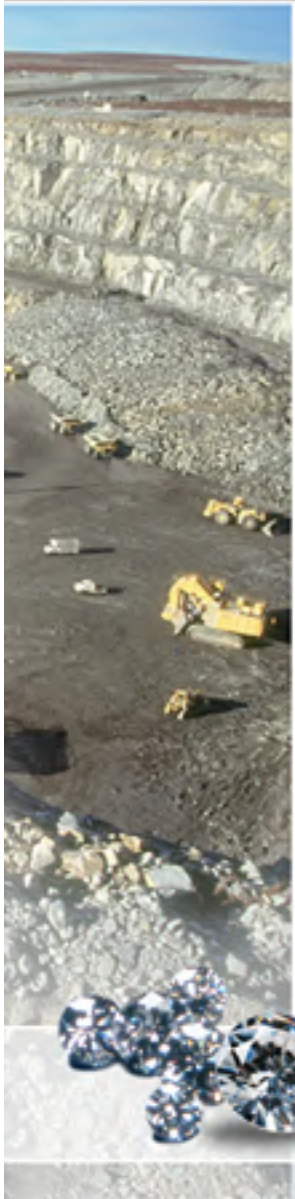
Public and Private Capital Investment in the NWT, 1999 to 2008



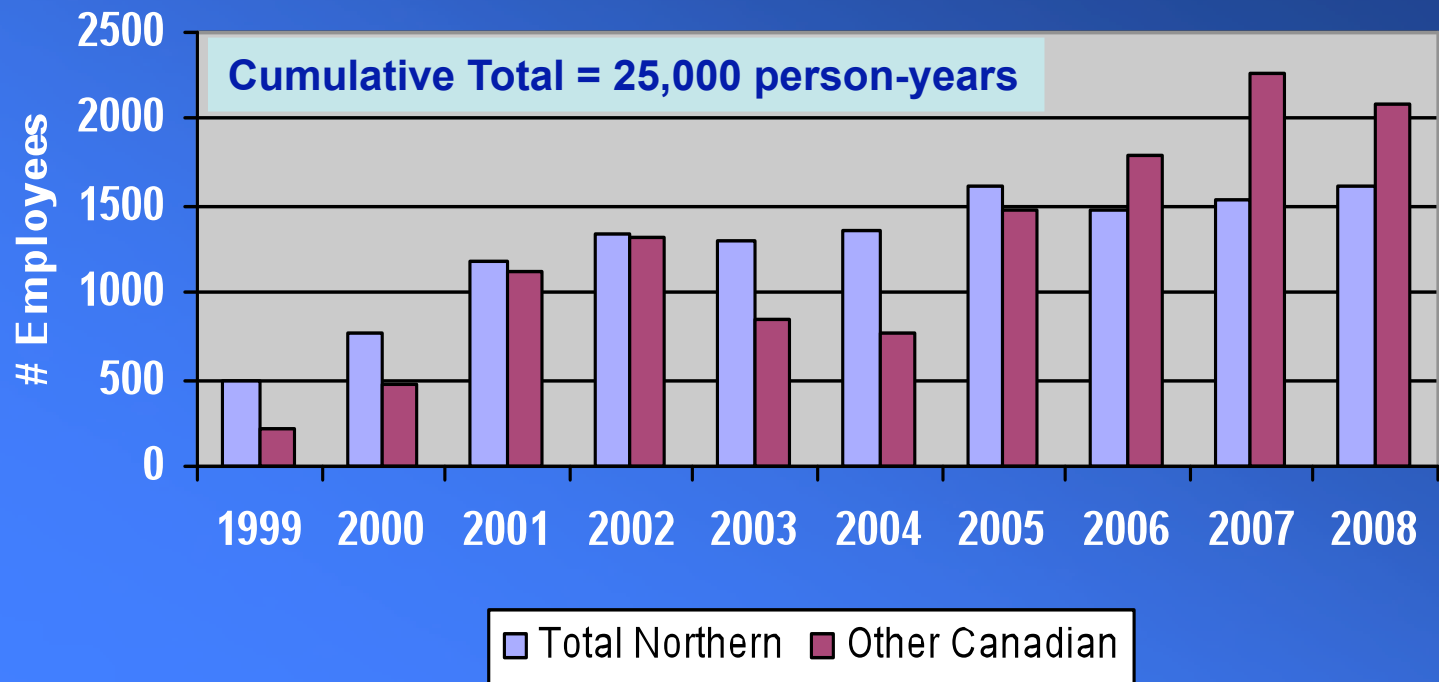
Source: Statistics Canada, Table 029-0005 Public and Private Investment Intentions

- Resource investment in the NWT has averaged more than 75% of total capital investment in the Territory.

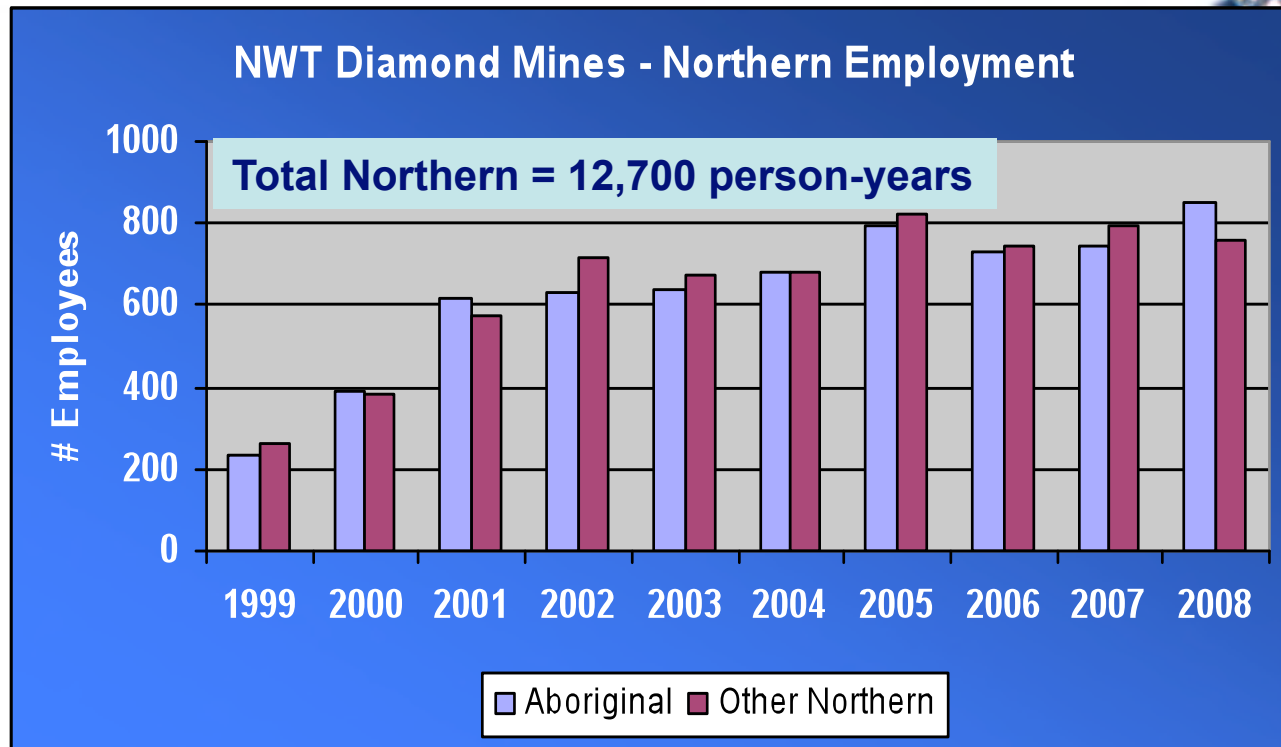
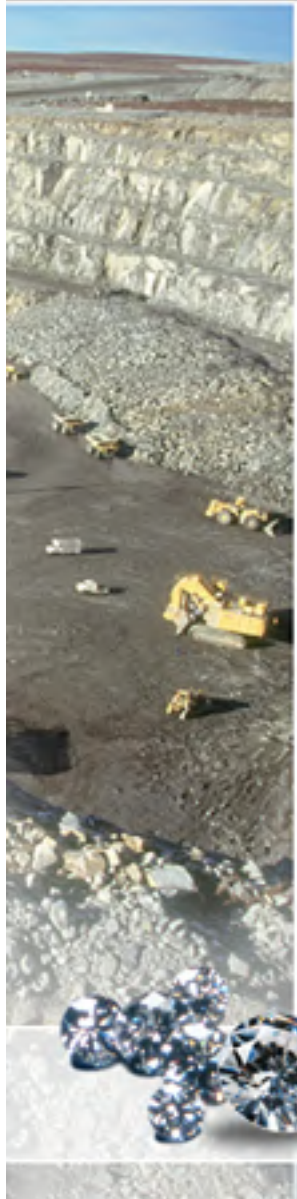
# Employment – NWT Diamond Mines



## Total Employment - NWT Diamond Mines 1999-2008



# Northern Employment NWT Diamond Mines



- **1997 – 2008 the NWT Diamond Mines increased Aboriginal employment to more than 800 people (2008)**
- **Between 1984 and 2007 employment of Aboriginal People in the NWT increased from 37% to 55%**

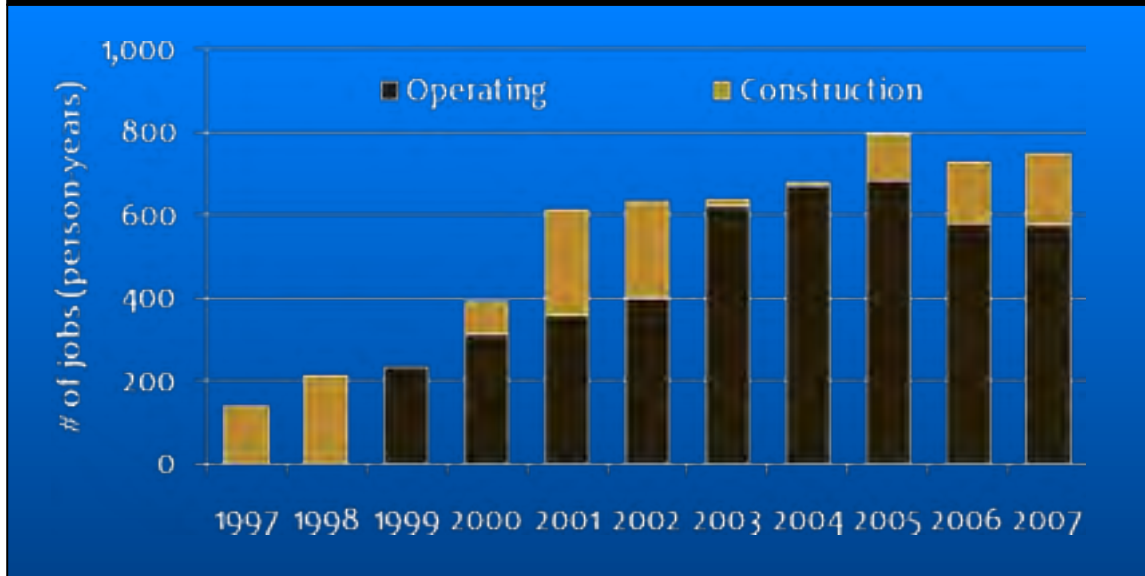


The Mining Association of Canada  
L'Association minière du Canada

# Aboriginal Employment



Aboriginal Employment at the NWT Diamond Mines, 1997 to 2007

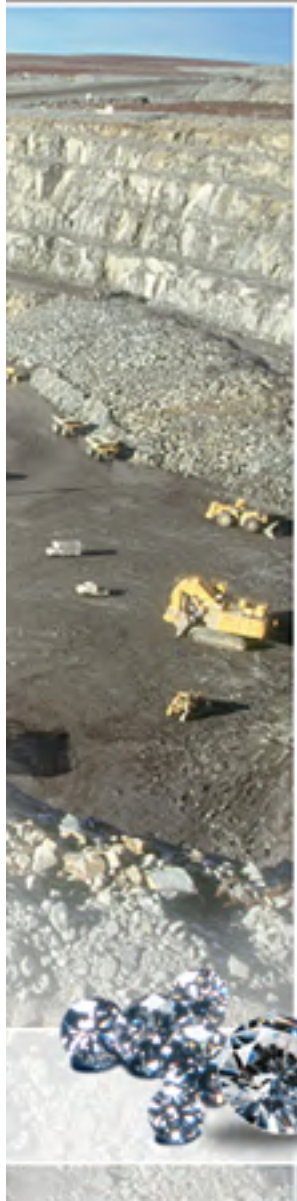
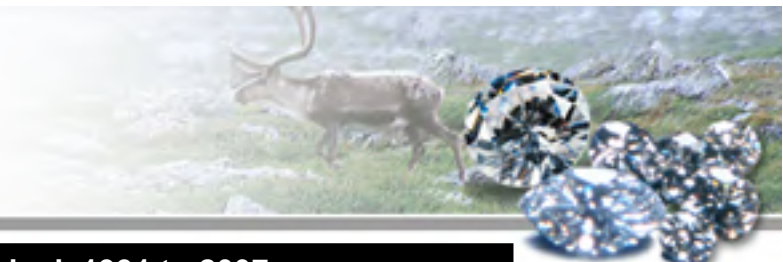


Source: Ekati, Diavik and Snap Lake SEMA Reports



The Mining Association of Canada  
L'Association minière du Canada

# Economic Growth (GDP)



Gross Domestic Product at Basic Prices, nominal, 1991 to 2007



Source: Statistics Canada, Table 384-0001 Provincial and Territorial Economic Accounts

- Since 1991 the NWT Territorial GDP has tripled from \$1.6 Billion to 4.5 Billion.

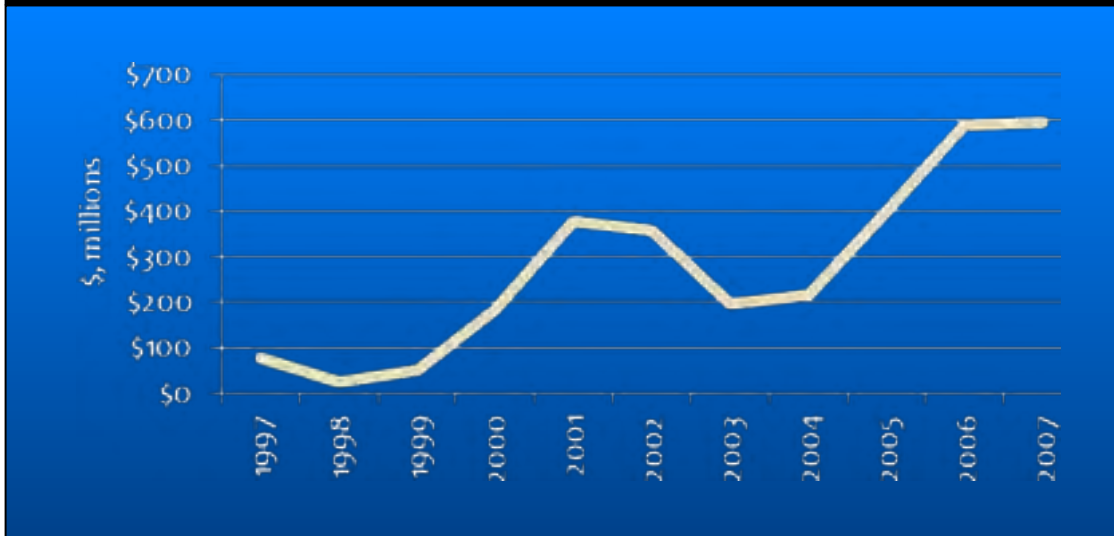


The Mining Association of Canada  
L'Association minière du Canada



# Procurement

Aboriginal Business Revenues from NWT Diamond Mines, nominal, 1991 to 2007



Source: Statistics Canada, Table 384-0001 *Provincial and Territorial Economic Accounts*

- Revenues for Aboriginal Businesses have grown to about \$600 million



The Mining Association of Canada  
L'Association minière du Canada

# Business Partnerships

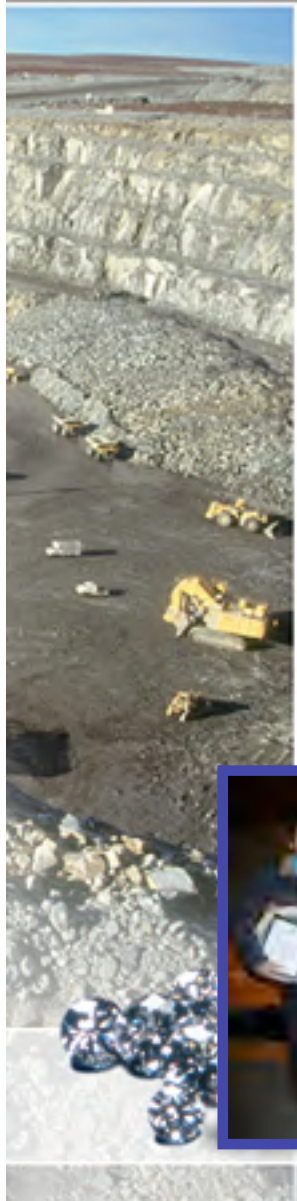
## 26 Aboriginal companies providing goods and services to NWT mines

- Ekati Services
- I&D Management Services Ltd.
- Tli Cho Logistics
- Tli Cho Landtran
- Tli Cho Cement
- Tli Cho Air
- Denesoline Western Explosives
- Deton' Cho Pure Elements
- Bowa Whee Catering
- Deton' Cho Hazco Environmental Services
- Metcon
- Tli Cho Explosives
- Kete Whii Procon
- Deton' Cho Mining Supplies
- Deton' Cho ADG
- Deton' Cho Logistics
- Sodexho Alliance
- Exploration Medical Services
- Deton' Cho/RTL
- SecureCheck
- Kitikmeot Cementation
- Lac De Gras Constructors
- North Slave Logistics
- Nuna Logistics
- Nishi Khon / SNC Lavelin Inc.



# Education and Training

## Workplace and Post-Secondary Programs



- Scholarship Programs (college, university)
- Northern Student Education Initiatives
- Apprenticeship Trades Training
- Workplace Learning Programs
- Community Based Training
- Aboriginal Leadership Development
- Aboriginal Employment Partnerships
- Aboriginal Underground Training
- Books in Homes
- NWT Mine Training Society



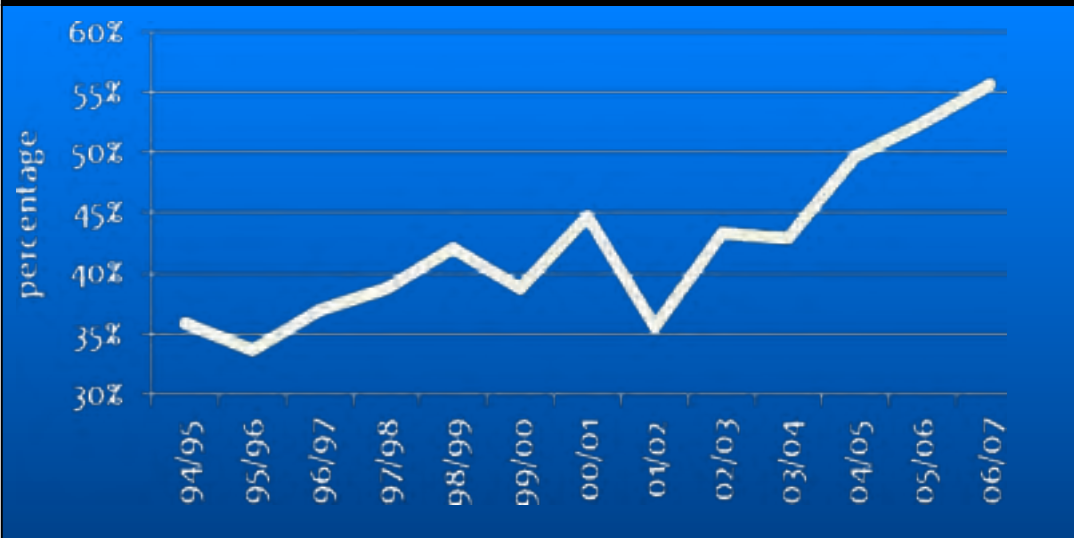
Courtesy of Diavik



L'Association miniere du Canada

# Education Advancement

Graduates as a % of 18 year olds, NWT, 1994-95 to 2006-07



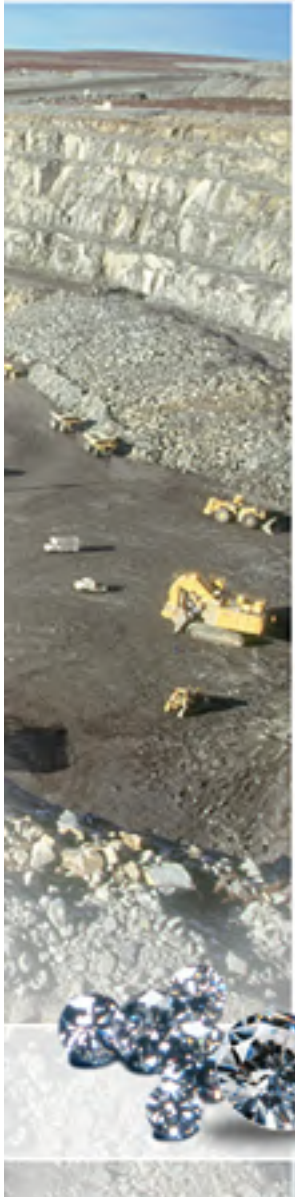
Source: NWT Bureau of Statistics *Socio-Economic Scan 2008*, GNWT Dept. of Education, Culture and Employment

- **Between 1994 – 2007 the NWT Secondary School Graduation Rate rose from 36% to 56%**

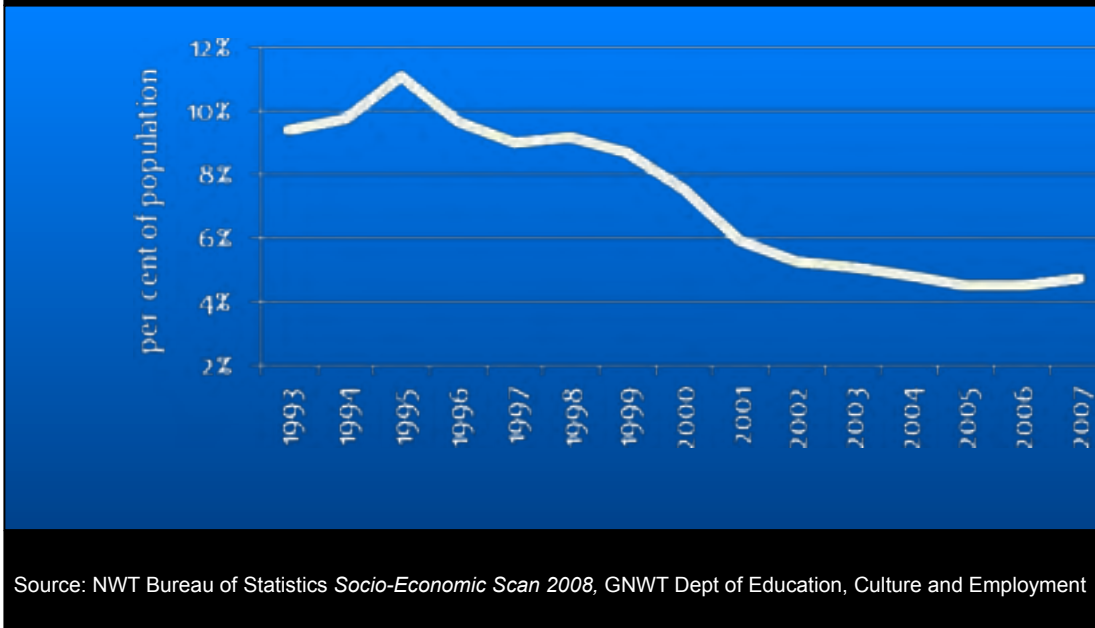


The Mining Association of Canada  
L'Association minière du Canada

# Social Advancement



Population Receiving Income Support, 1993 to 2007



- **50% reduction in the proportion of the NWT population receiving government income support since 1995**

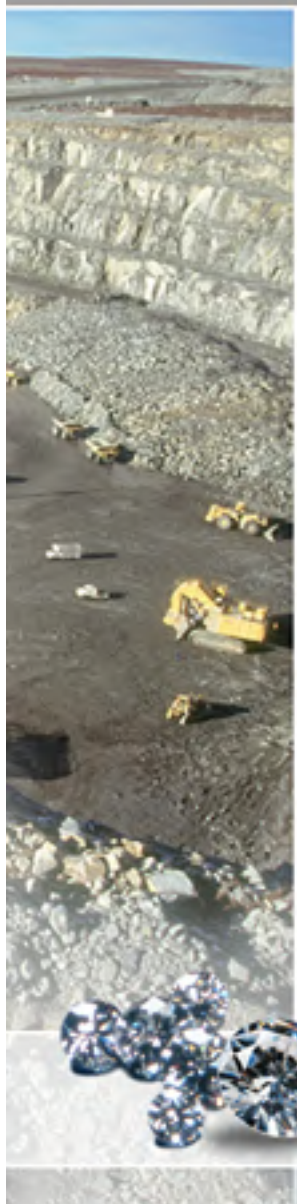
# Accomplishments



## The Diamond Industry has been a boon to the Economic and Social Advancement of the NWT

- The Economy has grown in Productivity, Wealth and Social Benefits
- Governments have benefited through:
  - High employment levels
  - Higher tax revenues
  - Lower reliance on Federal-Territorial Social Transfers
  - Reduced dependence on Social Services
  - Corporate support for education and community development
  - Collective effort to maximize benefits across a wider social and economic cross-section

# Implications for Nunavut



**So...What does this  
mean for  
Nunavut?**



The Mining Association of Canada  
L'Association minière du Canada

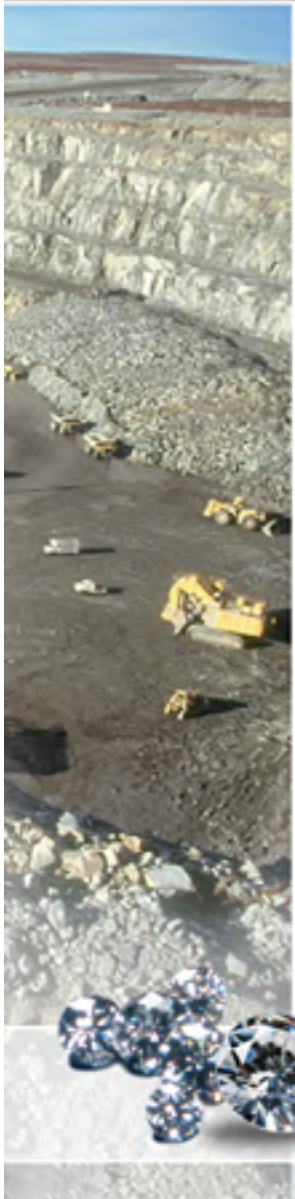
# (Some of) Nunavut's "Future" Mines





# Nunavut's "Future" Mines

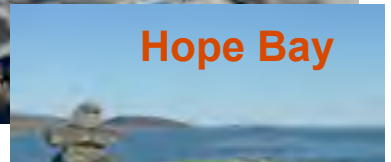
Next 10-15 years



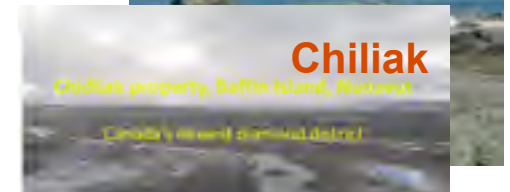
- **Meadowbank\*** (Agnico-Eagle)
  - \*in production 2010
  - 9 yr life; excellent potential
- **Hope Bay** (Newmont)
  - Longer term schedule
  - 'HB belt' => larger operation
- **Chidliak** (Peregrine)
  - New diamond district
  - Multiple Kb development
- **Meliadine** (Agnico-Eagle)
  - AEM #2,
  - to follow Meadowbank?
- **Mary River** (Baffinland)
  - Multi-generational mine life
  - Huge expansion potential



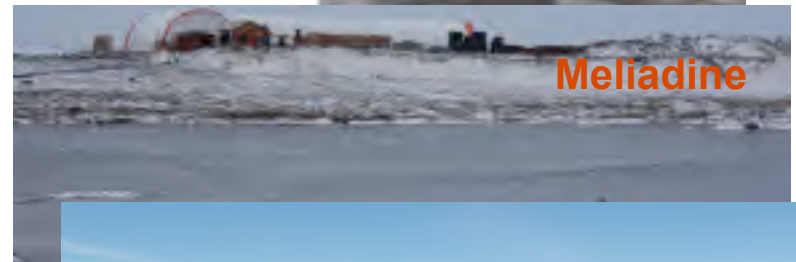
Meadowbank Mine



Hope Bay



Chidliak



Meliadine



Mary River

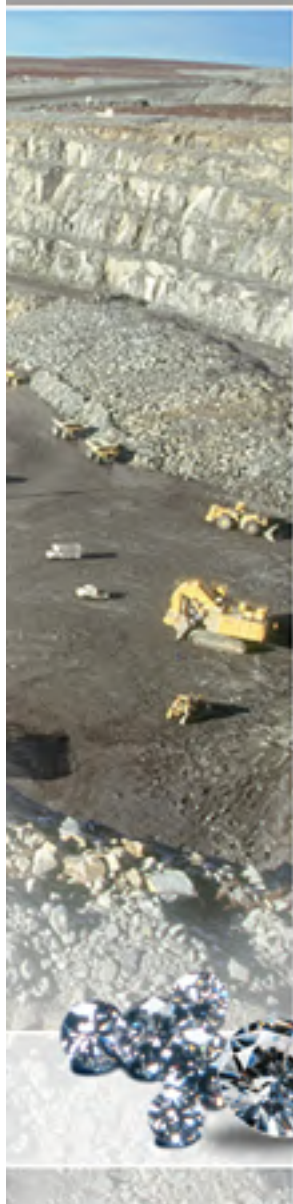
# Implications for Future Investment

Short – Medium Term 10-15 years



*(Note: This is totally optimistic “Arm-Waving”)*

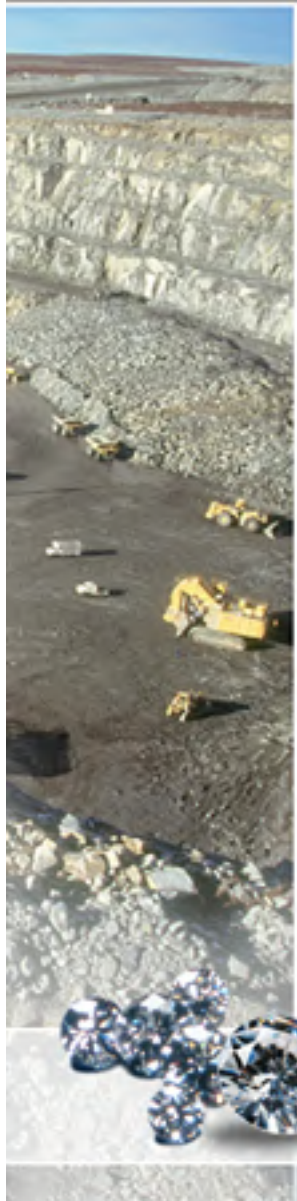
	Capex (\$Bn)	Employees
<b>Meadowbank</b>	<b>0.8</b>	<b>450</b>
<u>10-15 years:</u>		
<b>Hope Bay</b>	<b>0.8</b>	<b>500</b>
<b>Chidliak</b>	<b>0.7</b>	<b>400</b>
<b>Meliadine</b>	<b>0.7</b>	<b>400</b>
<b>Mary River</b>	<b><u>4.0</u></b>	<b><u>450</u></b>
	<b>\$7.0Bn</b>	<b>2,200</b>



The Mining Association of Canada  
L'Association minière du Canada

# Transportation Infrastructure

Fundamental to future development

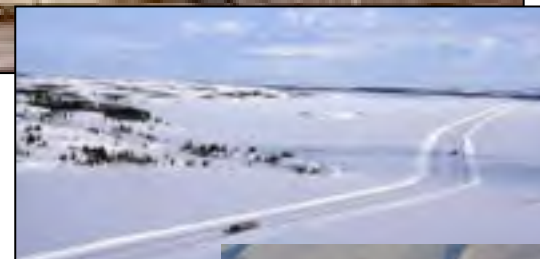
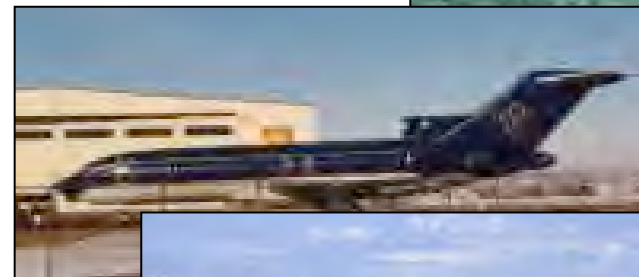


➤ Cat trains and barging in the 1930s to 1960

➤ Aircraft – fly in innovation

➤ Modern ice road – life line to diamond mines

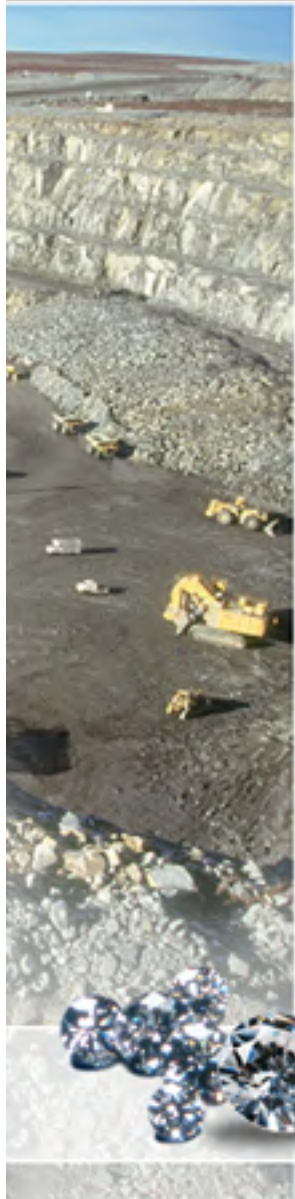
➤ Arctic Shipping – proven expertise in Canada's arctic



Association minière du Canada

# Bathurst Inlet Port and Road

A “must do” for the future of Nunavut



“If you build it,  
they will come”

...*Field of Dreams*

- At least 6 gold & base metal deposits waiting to be developed:
  - Hackett
  - George Lake
  - Gondor
  - Goose Lake
  - Hood
  - Izok



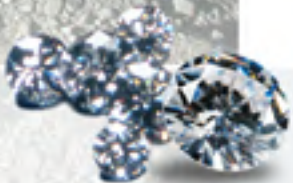
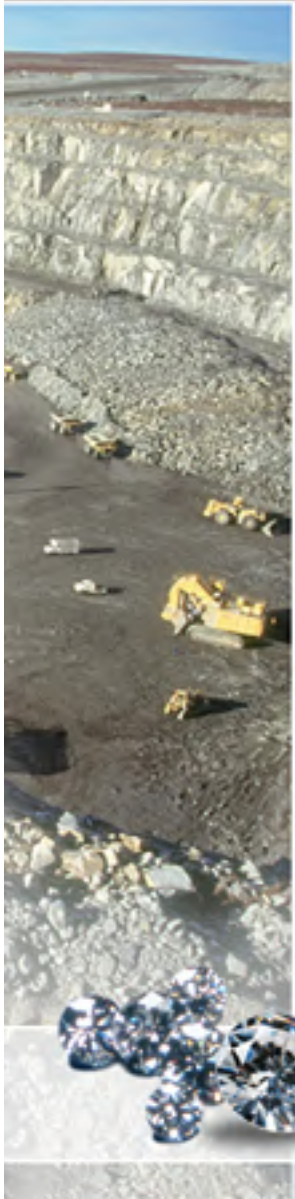
# More Future Investment

Longer Term 15-25 years



*(Note: Even more totally optimistic “Arm-Waving”)*

	<u>\$Bn</u>	<u>Employees</u>
<b>Ferguson Lake</b>	<b>0.7</b>	<b>400</b>
<b>Ulu</b>	<b>0.8</b>	<b>400</b>
<u>If BIPAR:</u>		
<b>Hackett River</b>	<b>0.8</b>	<b>400</b>
<b>Izok</b>	<b><u>1.0</u></b>	<b><u>400</u></b>
	<b>\$3.3Bn</b>	<b>1,600</b>



The Mining Association of Canada  
L'Association minière du Canada

# Potential Future Investment



## Short – Medium – Long Term

	Investment (\$Bn)	Employment
Short-Medium term	\$7.0Bn	2,200
Longer term	<u>3.3</u>	<u>1,600</u>
<b>Total potential investment</b>	<b>\$10.3 Bn</b>	<b>3,800</b>

(Does not include operating expenditures)

Potential to bring:

- **New business & procurement partnerships**
- **Skills training**
- **Enhanced economic performance**
- **Contributions to education and social advancement**

# Conclusions

## NWT Diamond Industry

- Contributes >40% of Territorial GDP
- Diamond Industry committed to sustainable development through “*Towards Sustainable Mining*”
  - Unprecedented capital investment
  - High employment and skills training
  - Advancements in business development
  - Contributions to social advancement
- **Similar opportunities are available to Nunavut**
  - Potential for major capital investment
  - Employment and skills training
  - Business partnerships
  - Economic and community development

# Thanks

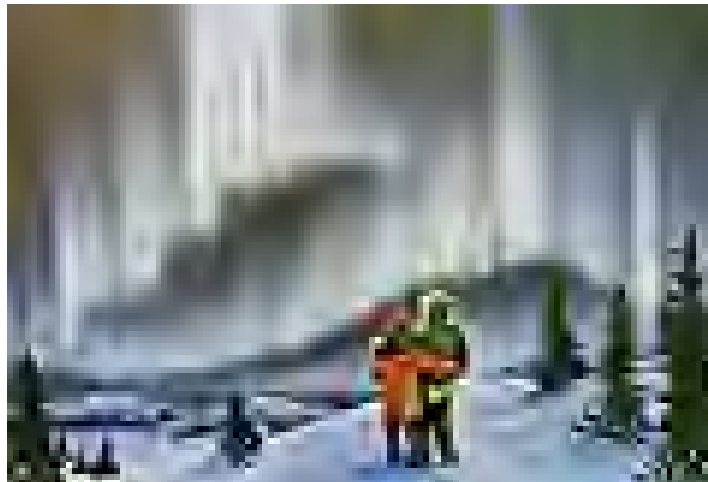


**Thank You!**

**Rick Meyers**

**The Mining Association of Canada**

[RMeyers@mining.ca](mailto:RMeyers@mining.ca)



The Mining Association of Canada  
L'Association minière du Canada