

NWT Mining: Where we're at / where we are going

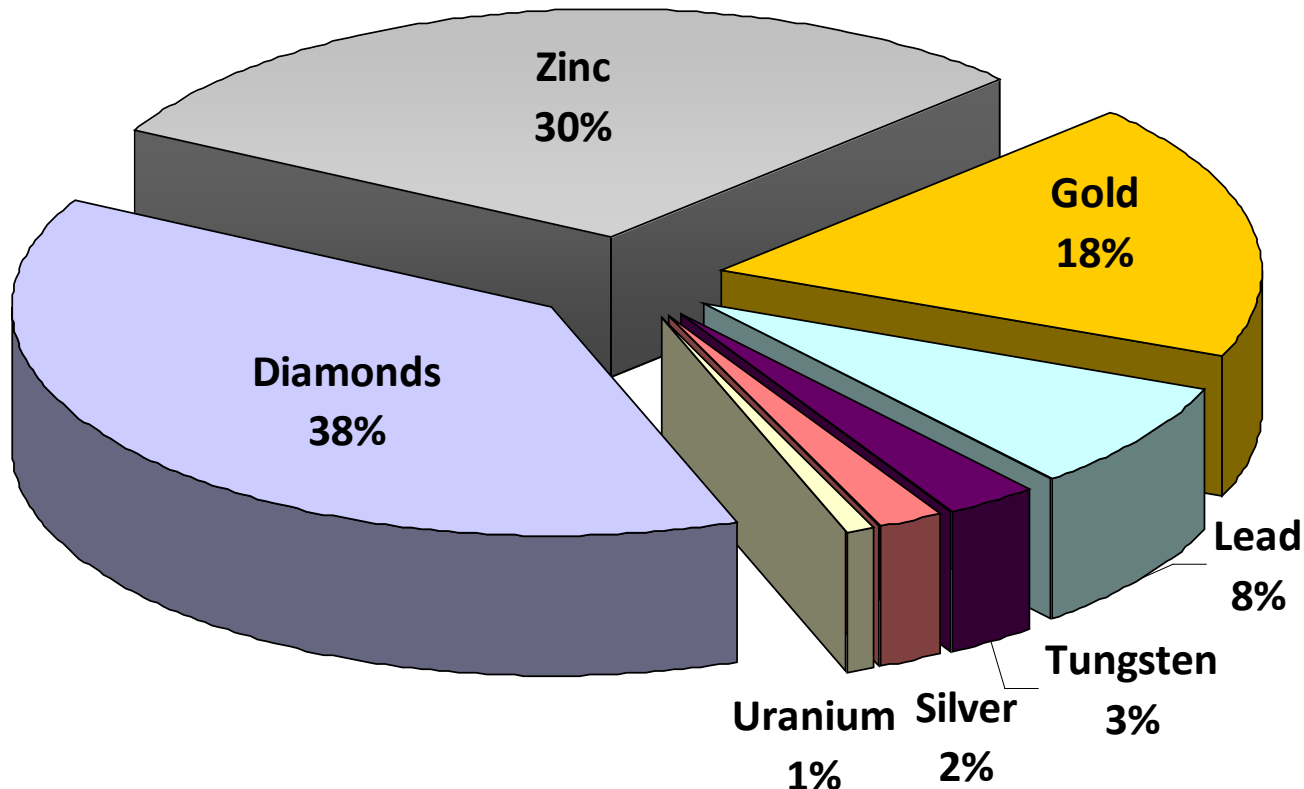
Hay River Chamber of Commerce Annual General Meeting
Tom Hoefer: September 26, 2014

Key Messages

- Mining has been good for us
- We have opportunities before us
- But we have challenges
- Why we must take action to keep mining strong
- We are on the right path

Historical mineral production

– Over C\$60 billion since 1932 –



Current & Past Producing Mines: Ekati • Diavik • Snap Lake • Meadowbank • Con • Giant • Lupin • Polaris • Nanisivik • Pine Point • Cantung • Discovery • Rankin Nickel • Rayrock • Outpost Island • Supercrest • Eldorado • Ruth • Terra • Norex • Silver Bay • Colomac • Tundra • Camlaren • Contact Lake • Ptarmigan • Tom • Mon • Cullaton Lake • Salmita • Hope Bay • Negus • Thompson-Lundmark • Rich • El Bonanza • Rycon • Bullmoose

Mining has contributed to Infrastructure

- Highways, eg, to Yellowknife, Pine Point & Ft. Resolution
- Railway (to Hay River & Pine Point)
- All 3 NWT hydro-electric facilities
- Microwave communications
- Ports (at Nanisivik and Polaris)



Our mines contribute innovative technology, too

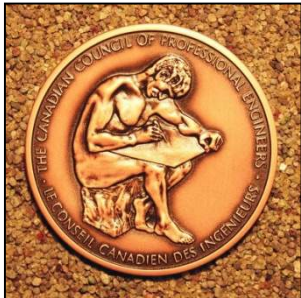
- High efficiency diesel power
- Innovative wind energy
- Dikes
- Ice roads



Heat recovery on diesel powerplants



Diavik's wind turbines

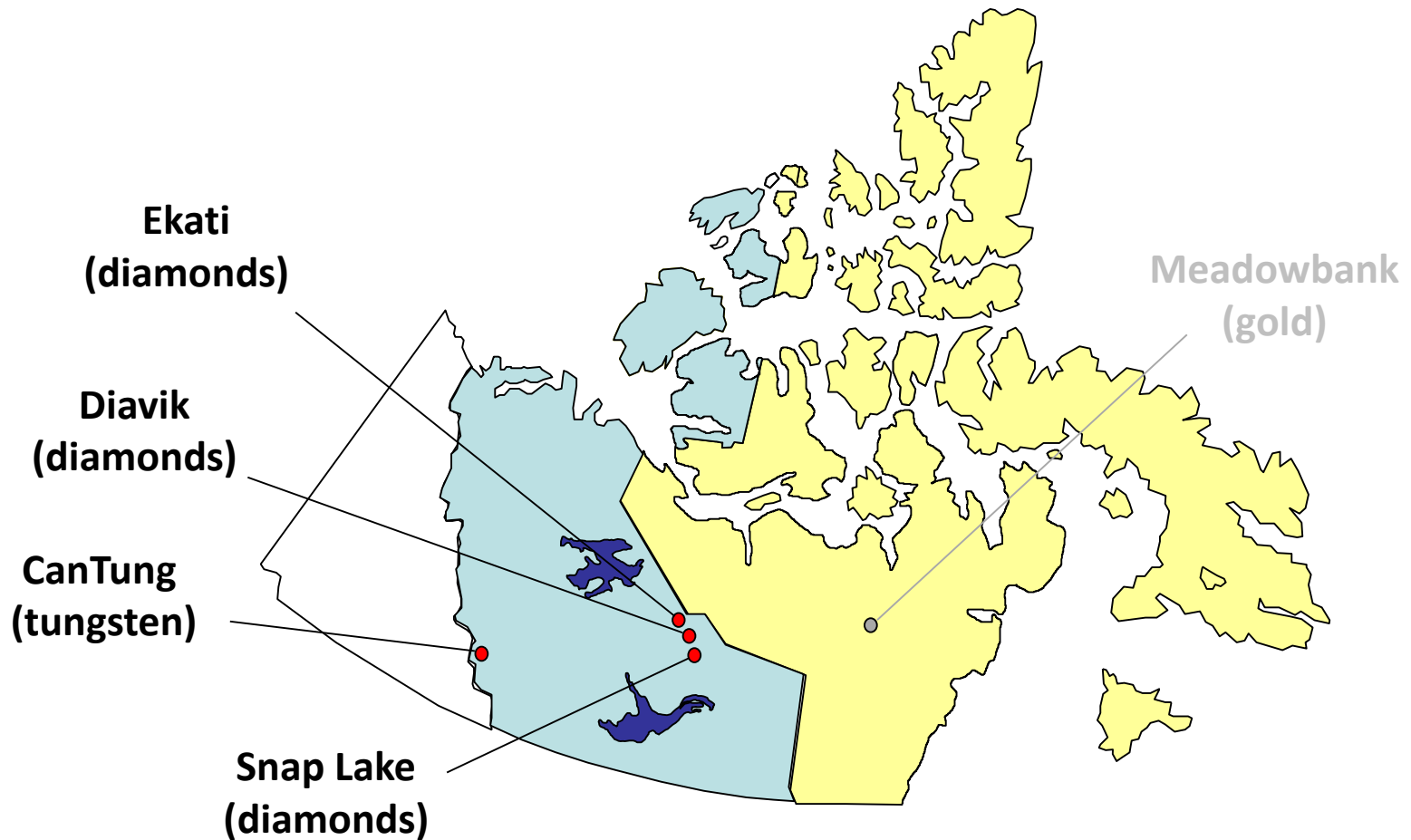


National award winning Diavik dikes

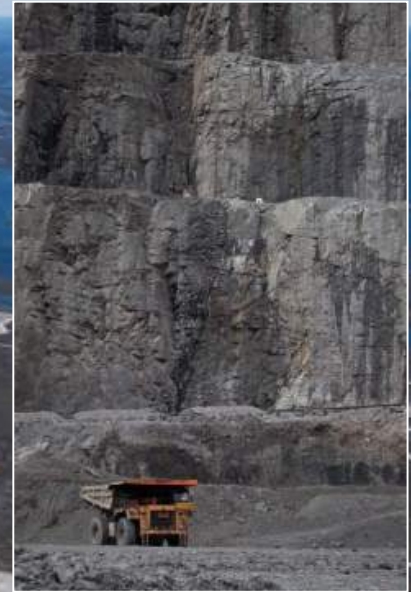


Engineered ice road "highways"

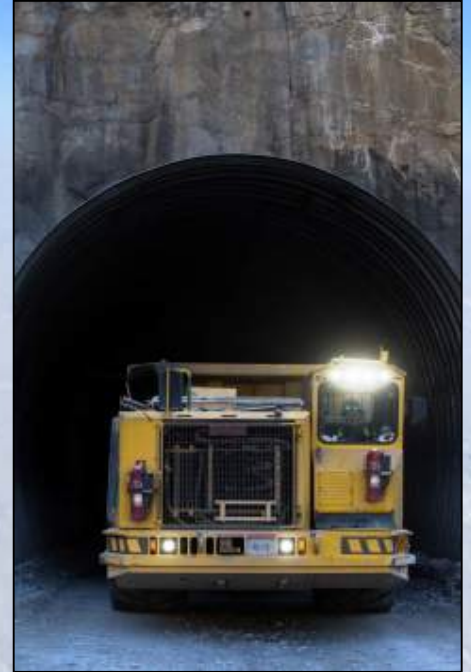
Current NWT production from 4 mines



Ekati – Canada's first and largest diamond mine



Diavik – Canada's largest producer of diamonds



RioTinto



Snap Lake – our first all underground diamond mine



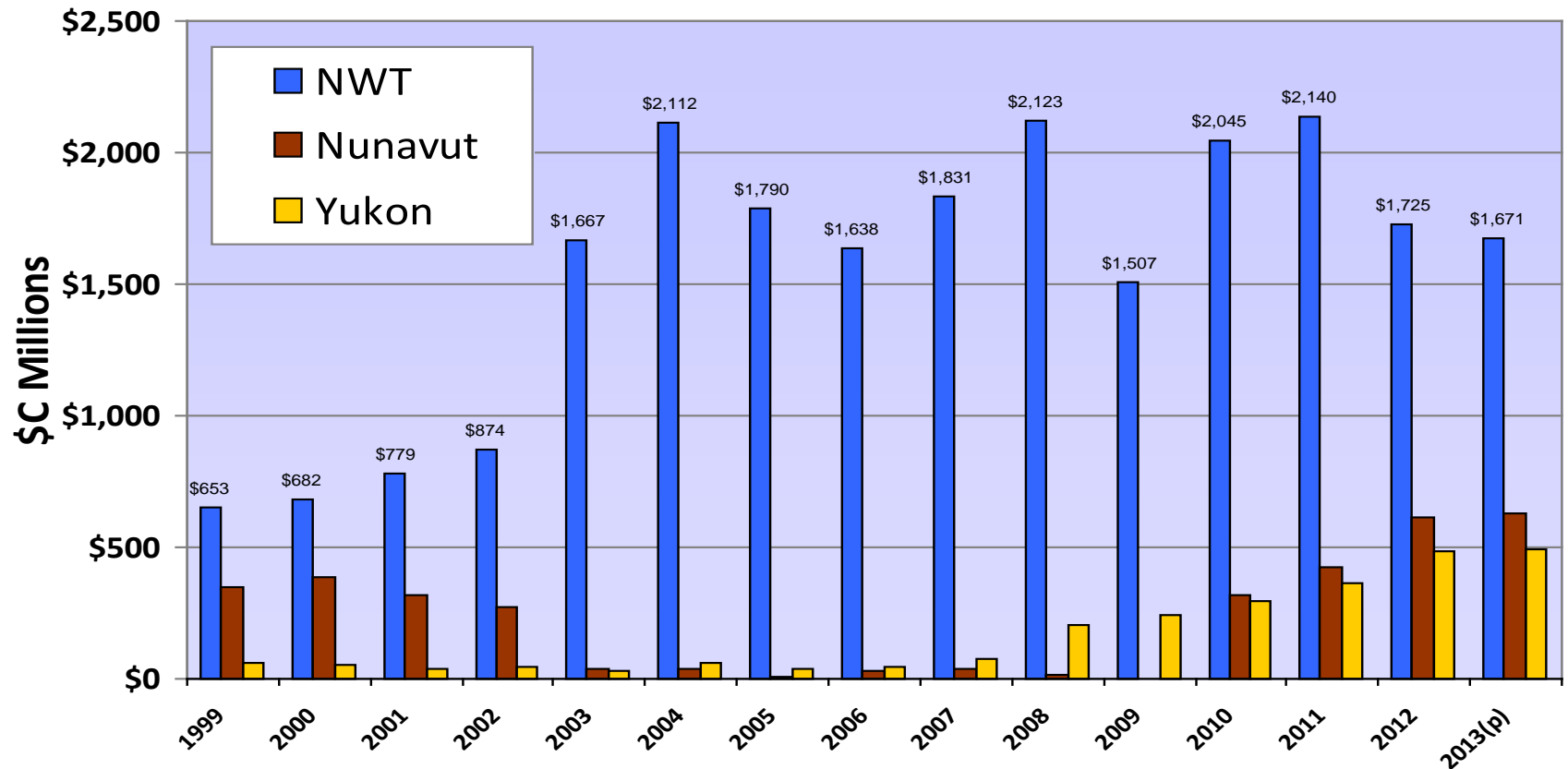
DE BEERS



**Cantung mine – the Western World's largest producer
of tungsten concentrate**

Our mines create significant value

NWT, Nunavut and Yukon Mining Production



Natural Resources Canada – March 2014

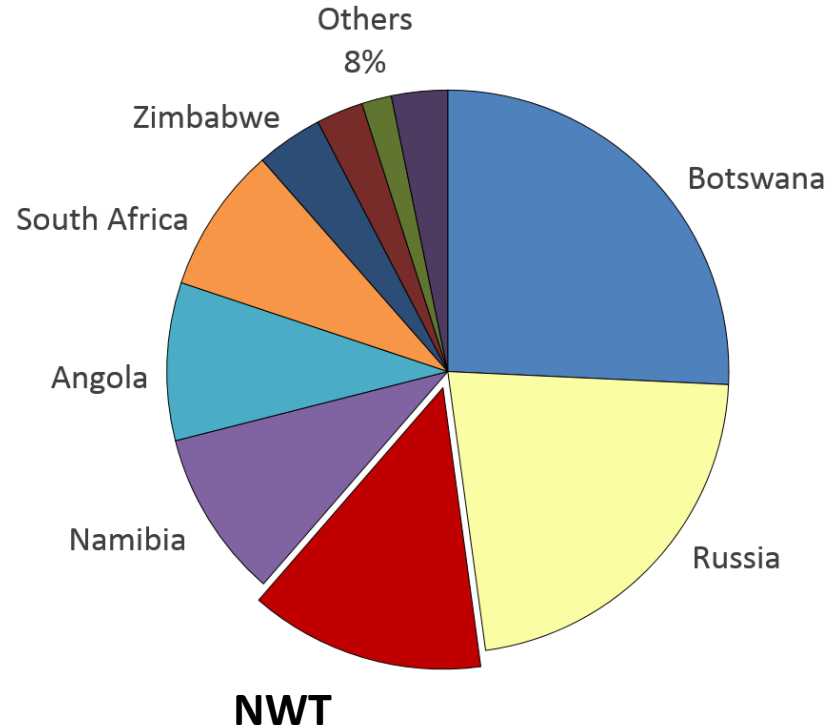


- Diamonds are the most significant contributor with lesser tungsten & copper

Diamonds still make NWT a world leader

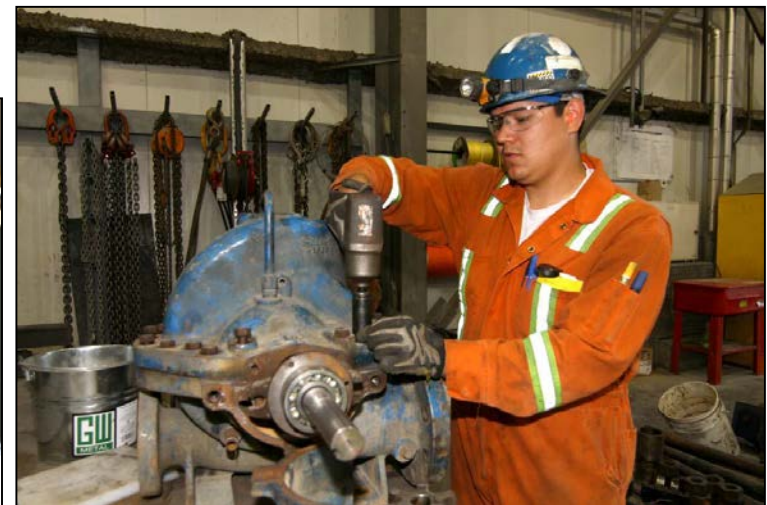
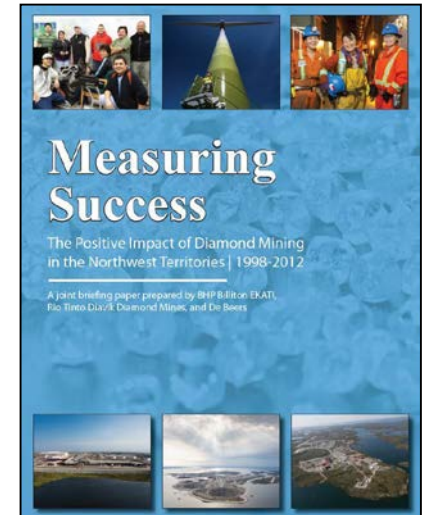
2013 Diamond Production Value (\$US)

- The Northwest Territories by itself is the world's 3rd most valuable diamond producer



Our mines are creating “people success”

- Over 20,000 person years of new jobs
 - 1,500 northern jobs, half Aboriginal
- Aided by significant training investment
- \$100 million plus to communities in IBA payments, scholarships, donations



Training Critical to Job Success

Under the aegis of four agreements with the federal government, the Mine Training Society had pre-determined targets for their accountability measureables.

	ASEP 1 – Sept 2004 to Mar 31 2009		ASEP 2 – Apr 2009 to Mar 2012		Silver Lining (SPF) July 2012 to March 2014		Mining the Future (SPF) April 2012 to Mar 2015		Total
	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved	Achieved
Assessed	1500	900	835	1002	300	271	460	544	2717
Trained/ Interventions	1100	632	437	725	255	266	300	451	2047
Employed	380	422	288	315	70	116	270	164*	1017

* The Mining the Future project is mid-way through its term. The target of 270 is to be achieved by March 31, 2015. Data on the Mining the Future project is current to June 30th, 2014.



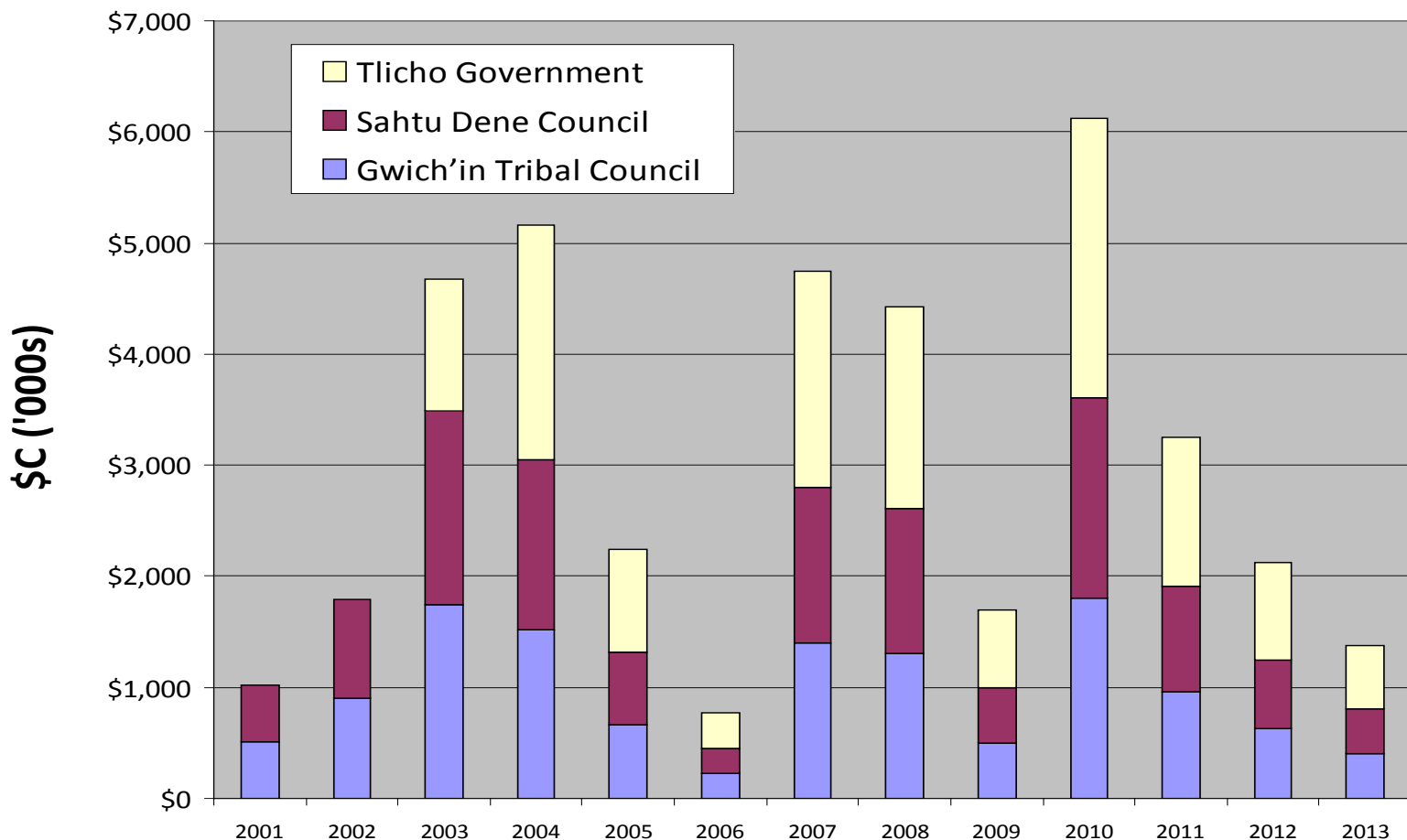
We mine to create business success

- \$10 billion in northern mining business – 72% of total spend
 - \$4.5 billion with Aboriginal businesses

- Many new Aboriginal mining contractors in past 15 years

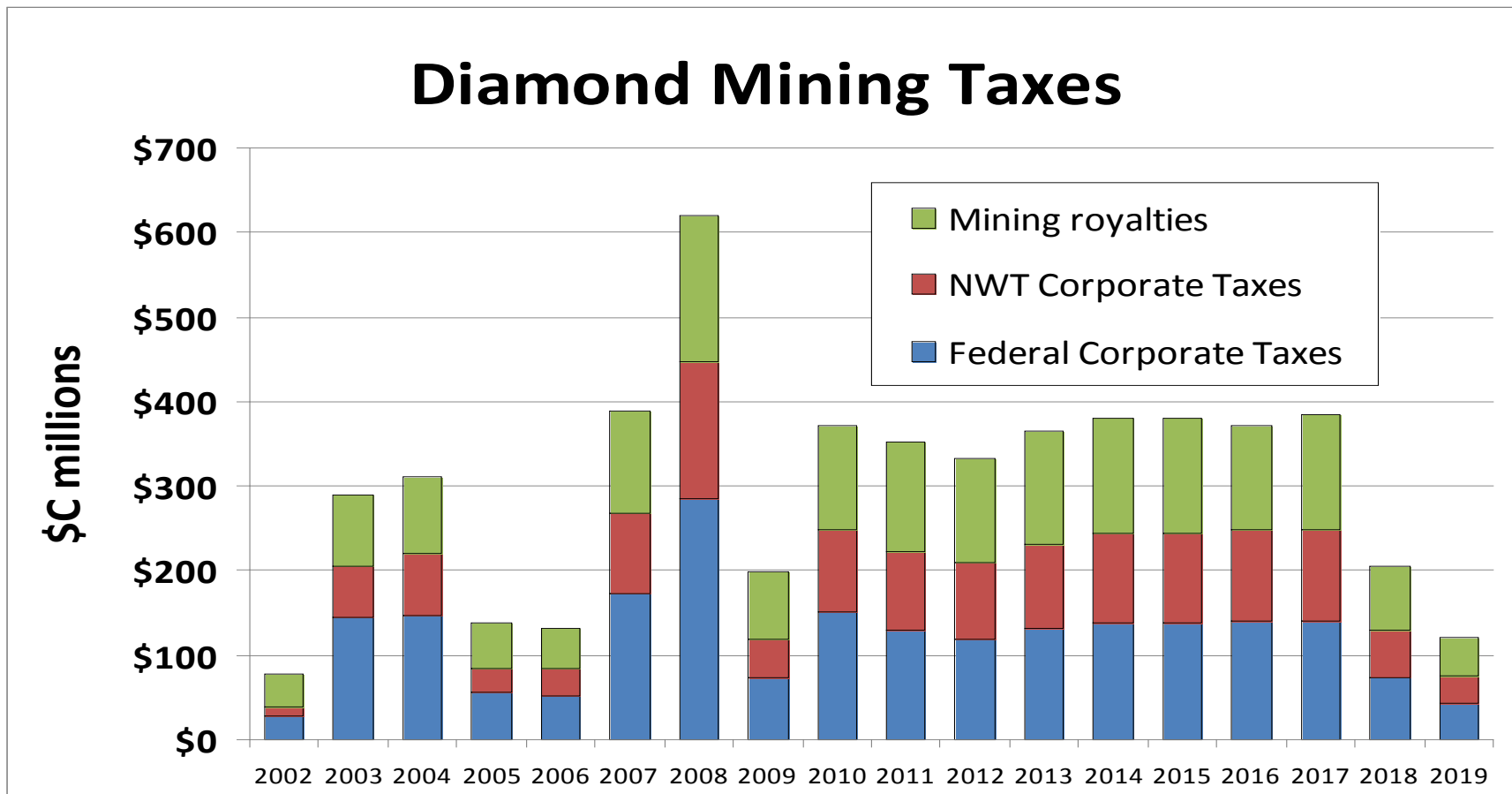
- | | | |
|---------------------------------|--|--|
| • Tli Cho Logistics | • Det'on Cho Earth Energy | • Akaitcho Helicopters |
| • Tli Cho Landtran | • Det'on Cho DNX | • Dene-Emco Ltd. |
| • Tli Cho Cement | • Bouwa Whee | • Denesoline/Aboriginal Engineering Ltd. |
| • Tli Cho Air | • Det'on Cho Foraco | • Denesoline/Air Tindi Joint Venture |
| • Tli Cho Road Constructors | • Det'on Cho Hazco | • Denesoline/Arcan Construction |
| • Denesoline Western Explosives | • Det'on Cho Nahanni Construction | • Denesoline/De Beers Labour Contract |
| • Metcon | • Det'on Cho New North | • Denesoline/Discovery Mining Services |
| • Tli Cho Orica Explosives | • Det'on Cho NUNA | • Denesoline/Deton Cho/Procon |
| • Kete Whii Ltd. | • Det'on Cho Pure Earth Elements Environmental Solutions | • Denesoline/Deton Cho/Ledcor |
| • Kete Whii Procon | • Det'on Cho Scarlet Security | • Denesoline/Dyno Nobel |
| • Sodexo Alliance | • Det'on Cho Stantec | • Denesoline/ESS Compass |
| • Exploration Medical Services | • Det'on Cho Training and Conference Centre | • Denesoline/McCaw Drilling and Blasting |
| • Kitikmeot Cementation | • Det'on Cho Logistics | • Denesoline/Nuna Logistics |
| • Lac De Gras Constructors | • Det'on Cho Medic North | • Denesoline/Tli Cho Logistics |
| • Nishi Khon SNC Lavalin Inc. | • Det'on Cho Mining Supplies | • Lutsel K'e Air Services |
| • North Slave Logistics | • DICAN / ADG | • A.T.B. Construction |
| • Nuna Logistics | • Kete Whii / Ledcor | • Trinity Helicopters |
| • SecureCheck | • Kete Whii / Procon | |
| • Lac De Gras Constructors | | |
| • Nishi Khon / SNC Lavalin Inc. | | |
| • Ekati Services | | |
| • I&D Management Services Ltd. | | |

Royalties are shared with Aboriginal groups



- Over \$39 million in diamond resource royalties have been shared with settled NWT Aboriginal claimants.
- **More mining royalties will be shared with devolution.**

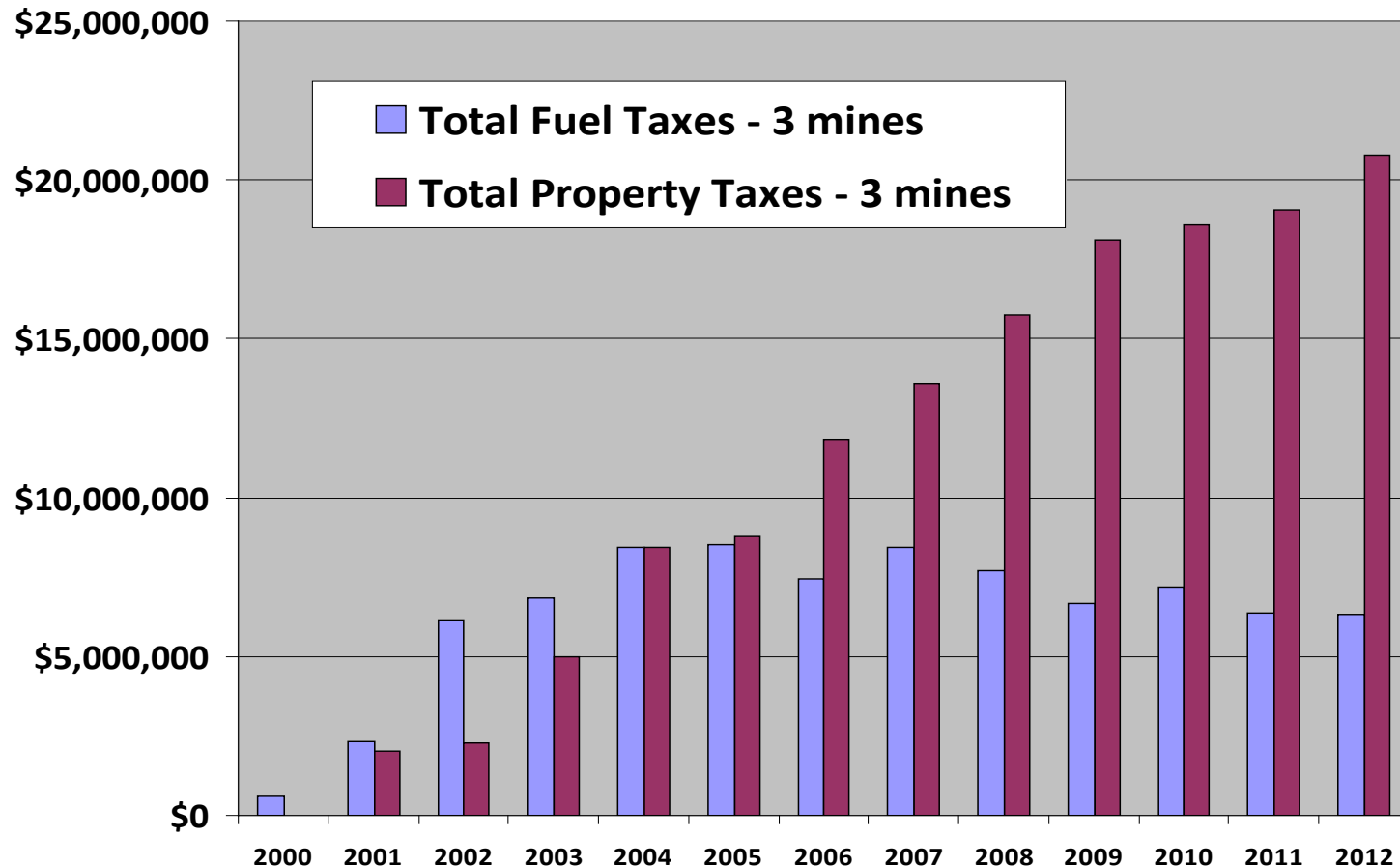
Our mines pay significant taxes



•Source: GNWT – ITI Economic Model

- **AND THAT’S NOT ALL!**

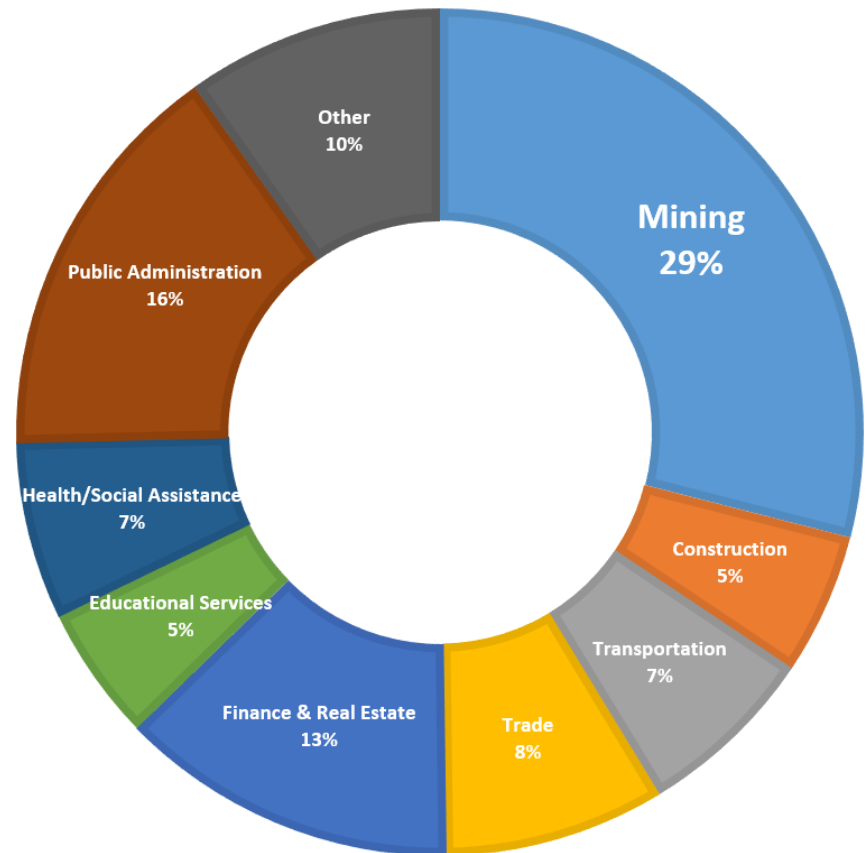
Diamond mines pay fuel and property taxes too!



- \$144 million in property taxes paid to 2012
- \$83 million in fuel taxes
- Expect double that to be paid by the end of mine lives

Mining largest private contributor to GDP

- Mining (includes Oil & Gas) is the largest private sector direct contributor to the NWT Economy
- and...
- Mining and exploration contribute even more through other sectors of the economy



Source: NWT Economic Outlook 2014-2015

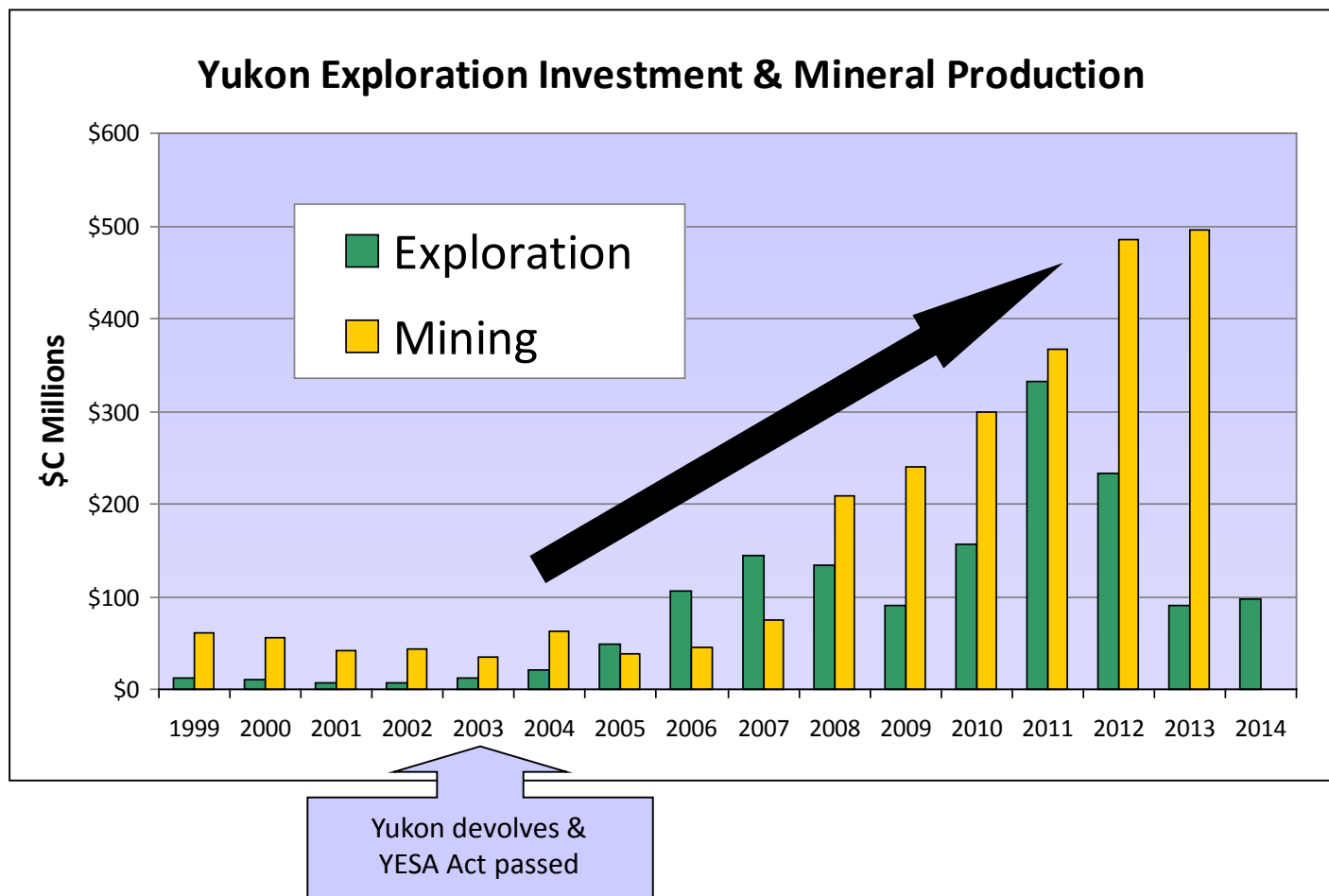
Mining is important and after Devolution more mining will be needed

- Devolution means more independence and increased self-reliance
- We are now more responsible for our future
- We can generate our own wealth & improvements
- We have the tools
 - a new regulatory environment
 - robust financials
 - tremendous resource potential
- Mining is an important economic force

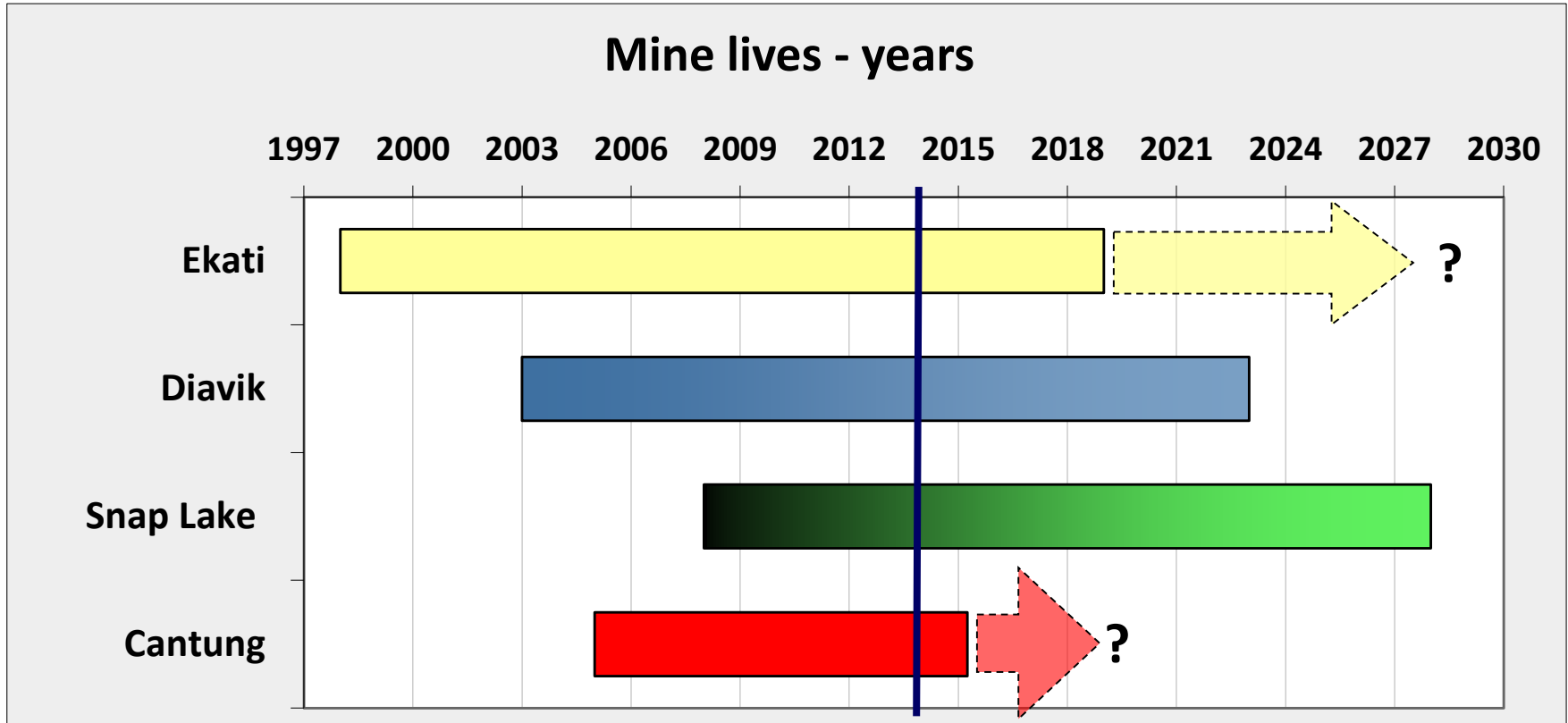
ALL
GROWN
UP

Witness the Yukon after Devolution

- Yukon investment and production increased
- No accident – resource development pays the bills



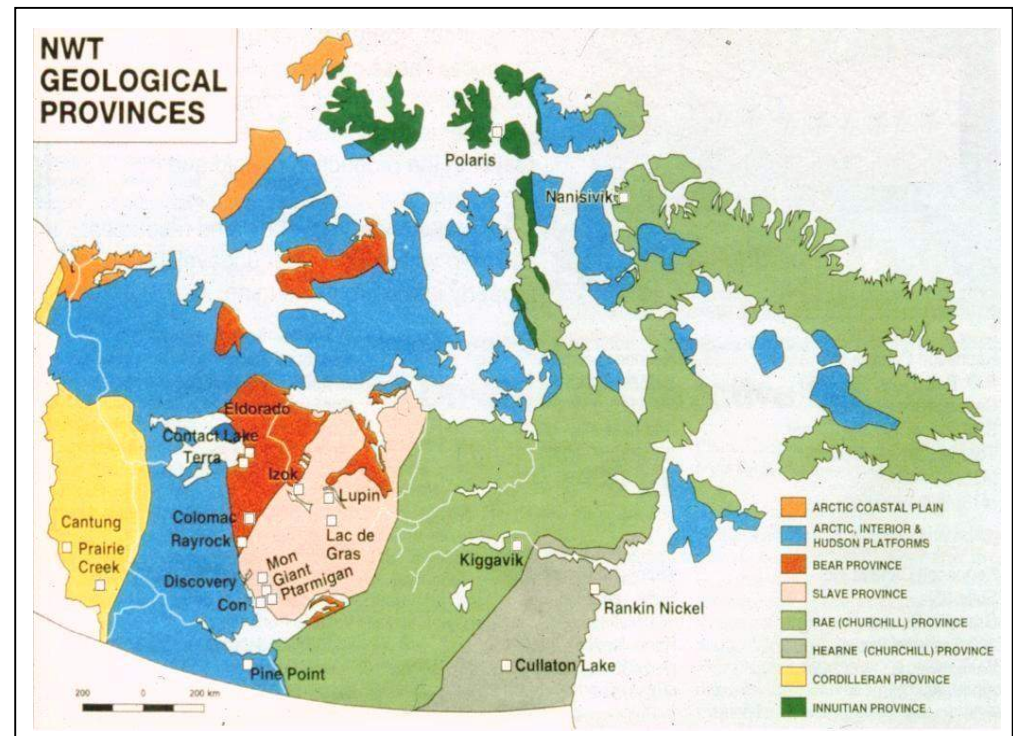
But mines don't last forever



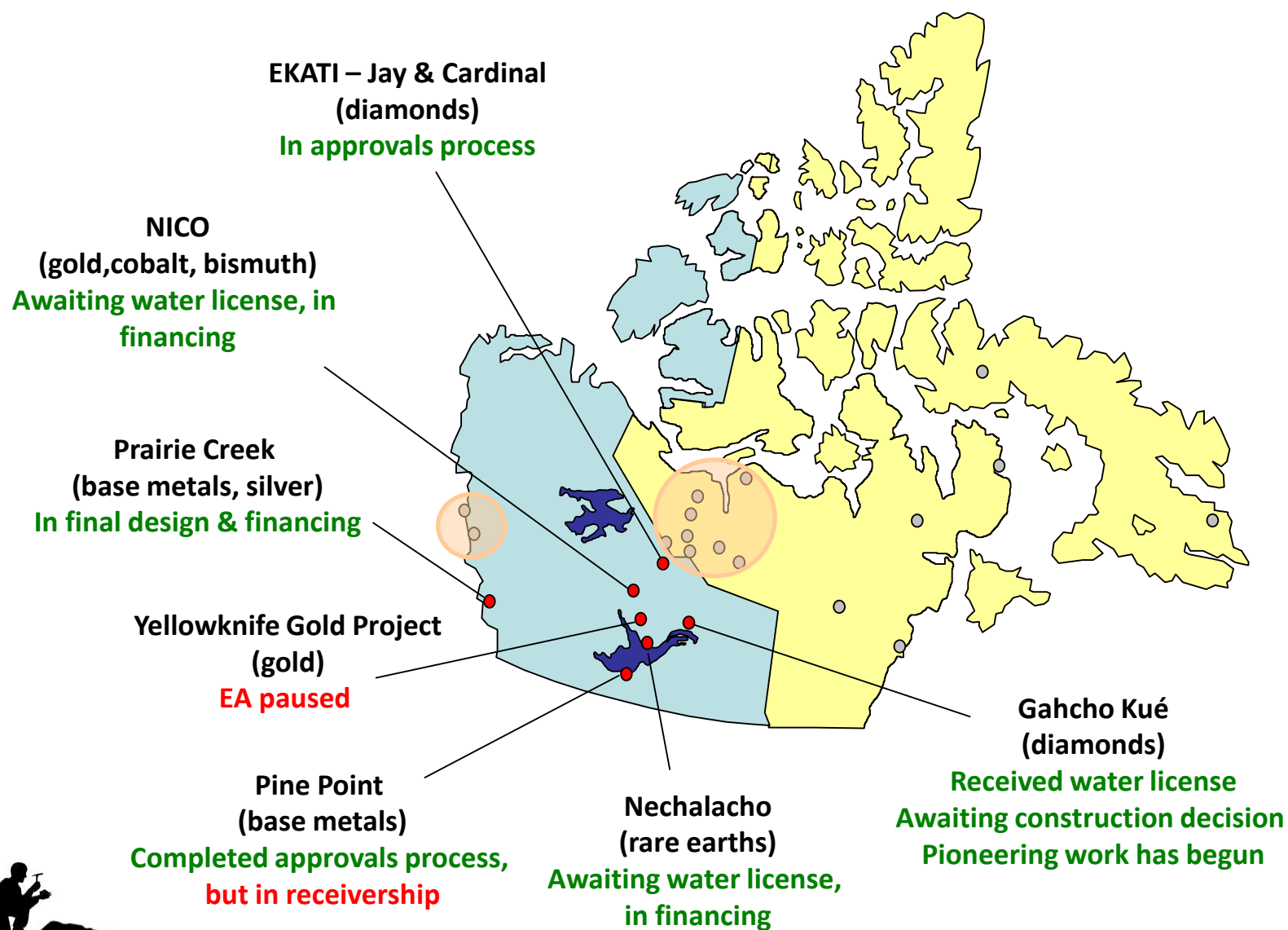
- New mines take time to find
- We need to be looking for and developing new opportunities to sustain mining benefits

Do we still have mining opportunity? YES!

- Tremendous untapped mineral potential
- 8 geological provinces
- Diverse mineralogy
 - Gold, silver, diamonds, lead, zinc, uranium, tungsten, rare earths, cobalt, bismuth, nickel, copper, etc.
- Under-mapped & under-explored equals opportunity



We have mining opportunities before us



What new opportunity looks like – Gahcho Kué

- Pioneering site work has begun
 - 770 truckloads over 2014 ice road to prepare
 - Water license approved September 24
- Robust economics
 - Capital costs – \$859 m / Annual operating costs – \$218 m
 - 2-years construction – workforce 700
 - 12 years of operations – workforce 400
 - First production on schedule for Q3 2016



Gahcho Kué Mine Job & Skill Requirements

Gahcho Kué Planned Positions by Skill Category

Position	# of Positions (Operations Phase)	Category	Position	# of Positions (Operations Phase)	Category	Position	# of Positions (Operations Phase)	Category
Mining & Maintenance Manager	1	Management	Technical Services Manager	1	Management	Security Supervisors	2	Skilled
Mine Coordinators	2	Skilled	IT - Communications Specialists	2	Skilled	Security Personnel	16	Semi-Skilled
Mining Team Leaders	4	Skilled	Senior Mine Engineer 4x3	1	Professional	Materials Superintendent	1	Skilled
D&B Team Leaders	2	Skilled	Long Term & Business Planner	1	Professional	Purchasing Coordinators	2	Skilled
Administrative Assistant	5	Semi-Skilled	Planning Engineers	2	Professional	Contracts Coordinator	1	Skilled
Shovel Operators	8	Semi-Skilled	Drill & Blast Engineer	2	Professional	Camp/Travel Administrative Assistant	2	Semi-Skilled
793 Truck Drivers	28	Semi-Skilled	Surveyors	2	Skilled	Logistics Operators	4	Semi-Skilled
777 Truck Drivers	8	Semi-Skilled	Mine Technicians	2	Skilled	Logistics Personnel	2	Semi-Skilled
Excavator Operator	4	Semi-Skilled	Geologist/Geotechnician	2	Skilled	Warehouse Personnel	4	Semi-Skilled
FEL Loader Operators	8	Semi-Skilled	Process Plant Manager	1	Management	HR and Training Superintendent	1	Skilled
Track Dozer Operators	12	Semi-Skilled	Process Plant Coordinator	2	Skilled	HR Coordinator	2	Semi-Skilled
Grader/RTD Operators	4	Semi-Skilled	Senior Metallurgist	1	Professional	Mine Ops HE Trainers	2	Skilled
Drillers	10	Semi-Skilled	Metallurgists	2	Professional	Process Plant Trainers	2	Skilled
Blasters	4	Semi-Skilled	Process Plant Team Leaders	4	Skilled	Training Coordinators	2	Skilled
Blast Helpers	4	Unskilled	Operators	20	Semi-Skilled	Mine Accountants	1	Skilled
Mine Maintenance Coordinator	2	Skilled	Control Room Operators	4	Semi-Skilled	Supervisor/Plant	2	Skilled
Maintenance Planners	2	Skilled	Pump-Tailings Operators	6	Semi-Skilled	Truck Operators	6	Semi-Skilled
Fuel/Lube Truck Operators	4	Semi-Skilled	Sorters	2	Semi-Skilled	Supervisor/Plant	2	Skilled
Maintenance Team Leaders	2	Skilled	Assay-Samplers	4	Semi-Skilled	Truck Operators	6	Semi-Skilled
HE Mechanics	10	Skilled	Maintenance Coordinator	2	Skilled	Mobile Equip. Maintenance	4	Skilled
Electrical-Hydraulic Technicians	4	Skilled	Maintenance & Reliability Planner	2	Skilled	Tire Supplier	1	Skilled
Welders	8	Skilled	Maintenance Personnel 2x2	16	Unskilled	Light Vehicle Maintenance	2	Skilled
Services Team Leaders	2	Skilled	General Manager	1	Management	Medical Contractor	2	Skilled
Crane	2	Semi-Skilled	SHE Manager	1	Management	Camp & Catering Manager	2	Management
Crusher Operators	4	Semi-Skilled	S & H Superintendent	1	Skilled	Cleaning Personnel	12	Unskilled
Excavator Operators	2	Semi-Skilled	Environmental & Permitting Superintendent	1	Skilled	Kitchen Personnel	14	Semi-Skilled
Truck/Bus Drivers 2x2	2	Unskilled	Environment Technicians	4	Skilled	*Offsite Labour"	12	Semi-Skilled
Equipment Operators	4	Semi-Skilled	Permitting Coordinator	2	Skilled	TOTAL	372*	
Electricians 2x2	2	Skilled	S&H Coordinators	4	Skilled	*This total does not include apprentices.		
Camp Maintenance Personnel	8	Skilled	Risk Analyst	1	Skilled			
Labourers	4	Unskilled	Security Manager	1	Management			

Job details: Gahcho Kué Human Resource Strategy



http://www.reviewboard.ca/upload/project_document/EIR0607-001_Gahcho_Kue_Human_Resource_Strategy.PDF

Support new mines, yes ... but help sustain what you already have too, ie, EKATI

- EKATI is an economic anchor of the economy
 - 10% of the NWT's GDP
 - Approximately 1,400 workers
 - Approval of JAY pipe could extend mine life by 10-20 years



Frankly, we need more projects

Mining Project Name (Operator)	Commodity	Expected Jobs
NICO (Fortune Minerals)	Gold, Copper, Cobalt, Bismuth	150
Nechalacho (Avalon Rare Metals)	Rare Earth Metals	286
Prairie Creek (Canadian Zinc)	Silver, Zinc, Lead, Copper	220
Gahcho Kué (De Beers, Mtn. Province)	Diamonds	400
		TOTAL JOBS
		~ 1,056
EKATI Mine (closes in 2019)	Diamonds	TOTAL JOBS
		± 1,400

- IF our 4 leading projects become mines, they are not enough to displace the loss of EKATI which employs ~ 1,400 workers
- **Sustaining EKATI beyond 2019 will be important**

But we face Market problems

- Market price uncertainty, eg, diamonds & gold
- Junior investment capital crisis – lose 500?
- Big corporations retrenching

Gold price fell \$500 from Oct 2012 – Sept 2014

Rio Tinto CEO Tom Albanese fired over \$14bn debacle



WEATHERING THE STORM

Responding to the Capital Crisis in the mineral exploration industry

Presentation to IGWG Finance & Taxation Committee
March 6, 2013
Prospectors & Developers Association of Canada

Why are the Canadian Resource Juniors in this Mess? Cyclical Issues that may change with time

- Institutional investors no longer believe in the super-cycle and have withdrawn, leaving a vacuum no longer occupied by retail investors.
- Retail investors have not had a chance to recover from the Bre-X Betrayal by participating extensively in a similar scale but real discovery play under the new 43-101 reporting regime. All discovery exploration plays are lottery tickets and the glass is stuck on half empty.
- Retail investors shy away from resource feasibility demonstration plays because they lack the valuation skill-set and are reluctant to deal with geopolitical and macroeconomic issues.
- Companies with ounces in the ground or gold production no longer serve as a proxy for gold and are instead valued on the basis of cash flow.
- The juniors have been hijacked by pundits pushing an apocalyptic gold bug narrative that is useless to gold mines, encourages the purchase of bullion or ETF gold, and discourages gambling on fundamental outcomes such as new discoveries or the mine feasibility of a deposit.



News this week: Canadian miners struggle ...

THE GLOBE AND MAIL



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Canadian miners struggle amid oversupply, price collapse

RACHELLE YOUNGLAI · MINING REPORTER

The Globe and Mail

Published Tuesday, Sep. 23 2014, 7:23 PM EDT

Last updated Wednesday, Sep. 24 2014, 11:20 AM EDT

The mining industry is flooded. Years of expensive expansions have left the market awash with iron ore, metallurgical coal and copper.

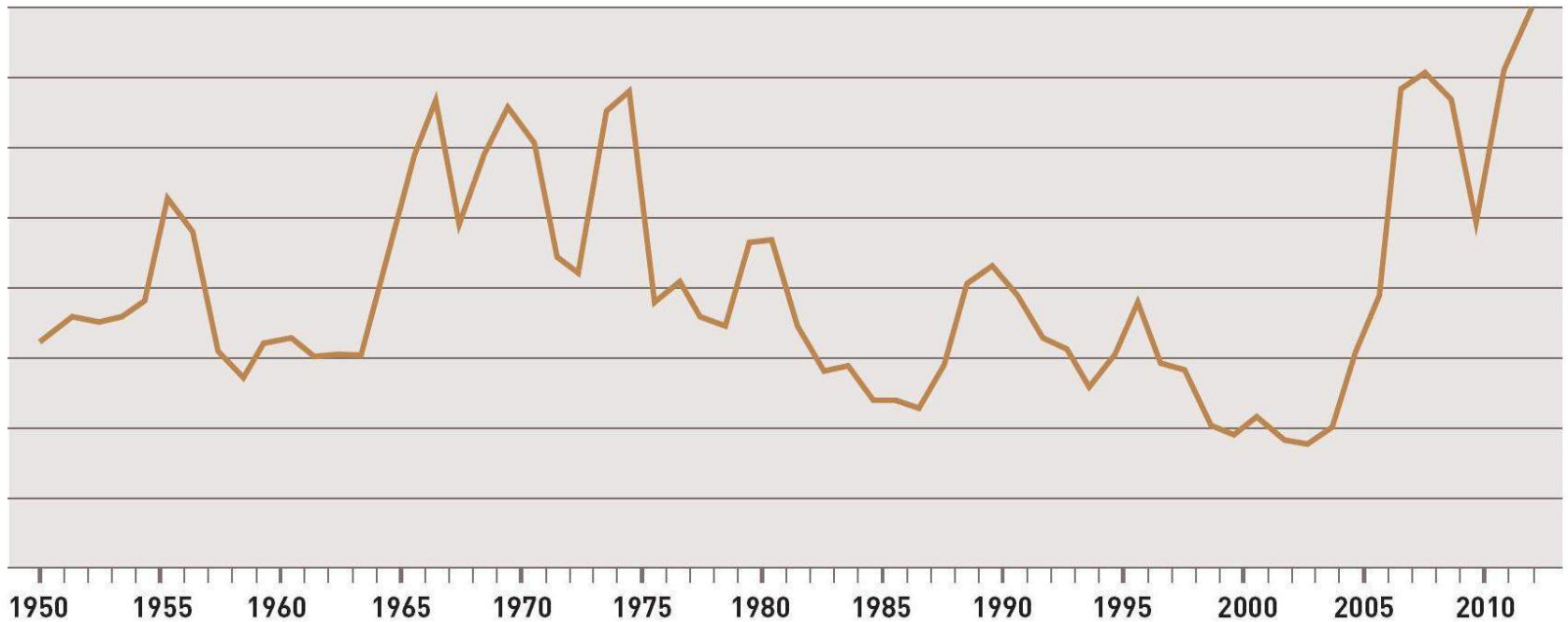
For more than a decade, China's growing economy fuelled the bull market in commodities. Mining companies spent billions on acquisitions and new projects around the world, adding waves of new supply to keep the country's steel mills and factories humming.

MORE RELATED TO THIS STORY

- **Premarket:** China slowdown worries hit world stocks, commodities
- Equity markets ignoring the red flag from commodities
- **VOX** The bullish case for gold prices? Add me to the skeptics

We can't change the market, but ...

One reality of the market place that we know



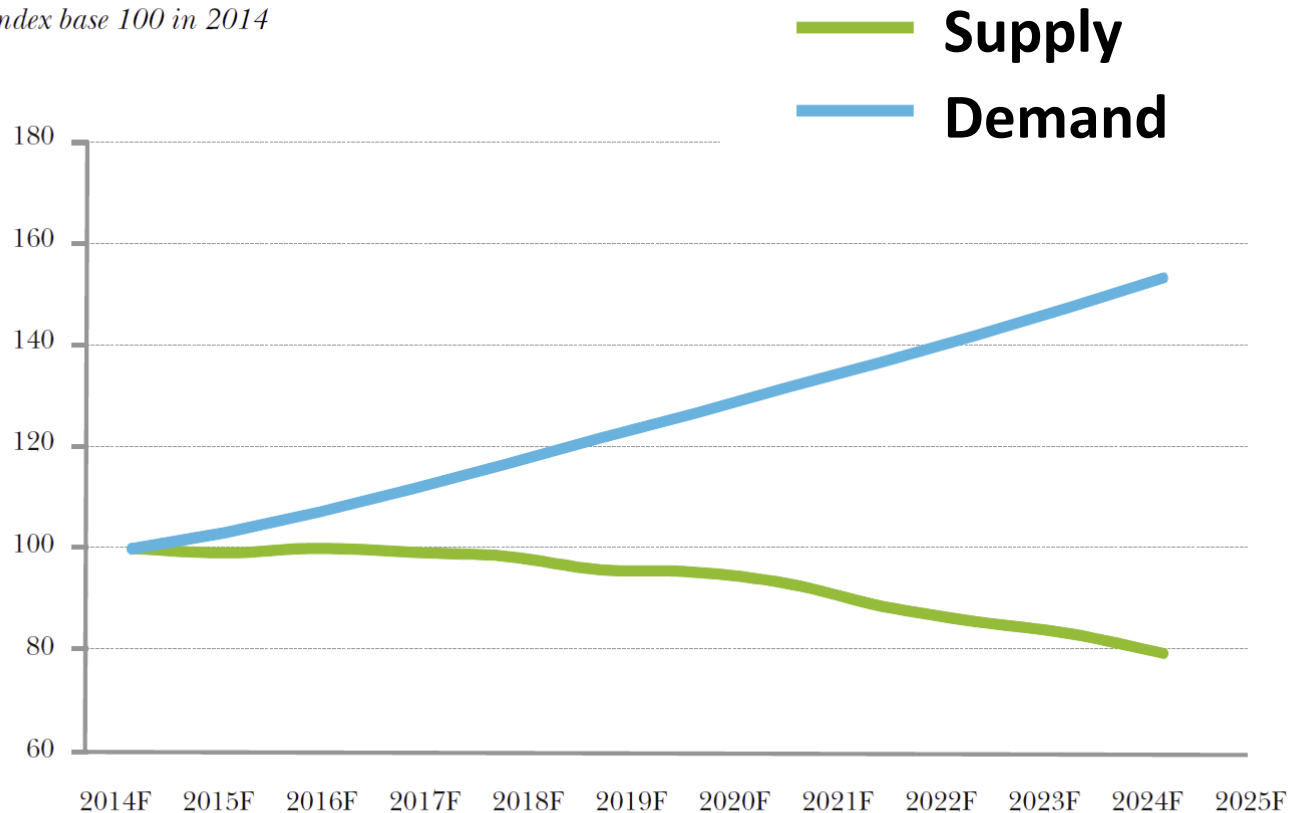
“This too shall pass!”

History tells us that the markets will improve again.

Some optimism with Diamonds

FIG. 2: SUPPLY AND DEMAND CURVE BASED ON 'DIAMONDS ARE FOREVER' SCENARIO

Index base 100 in 2014



Source: De Beers analysis, McKinsey & Company, 'Perspectives on the Diamond Industry', September 2014

- “DIAMONDS ARE FOREVER” means optimistic demand and active marketing

More optimism: decreasing zinc, lead supply

Several zinc and lead mines are expected to close as reserves become depleted

- Capacity closures by 2017:
 - Zinc: 1.9Mt
 - Lead: 0.5Mt
- New projects by 2017:
 - Zinc: 800kt
 - Lead: 150kt

CZN is one of a few remaining junior zinc companies

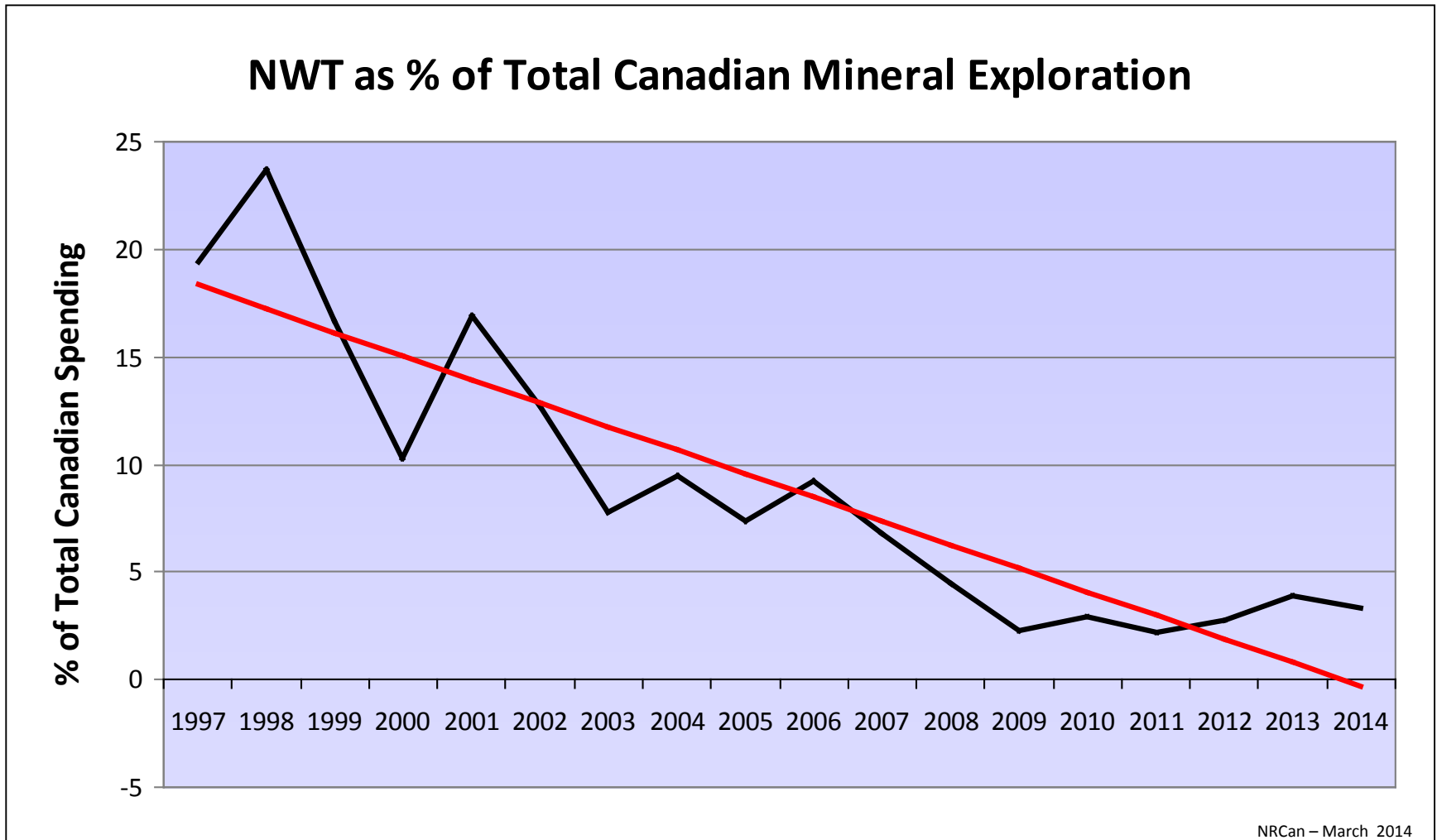
- Significant high grade reserve
- Stable mining jurisdiction
- Established infrastructure



Avalon example: Nechalacho REE project

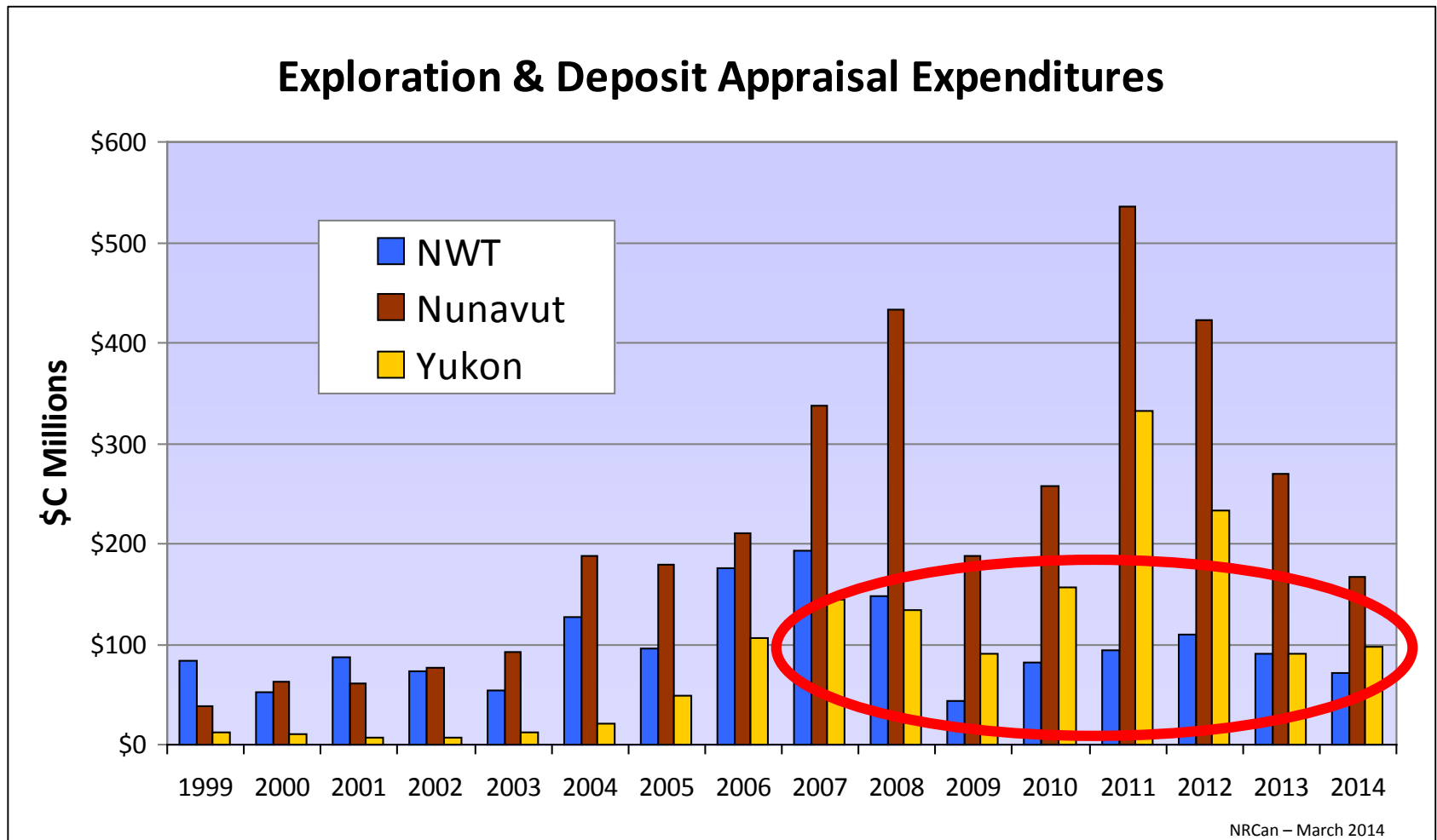
- Still a strong project with more heavy REEs than competitors
- Project development well ahead of competition
- EA approved; regulatory (permitting) process nearing completion
- Feasibility study being updated with new hydromet process
- Hay River would be the location of the transload facility for shipping concentrate south to the hydromet plant by rail and/or road.
- Main challenge is financing and securing firm off-take commitments that bankers can rely on to provide project financing.
- With lower prices, there is no sense of urgency among end-users of REE to enter into off-take agreements to support new project development. Yet, everyone realizes that there will be another supply crisis before long.
- Unfortunately, there is no certainty as to when new REE development projects like Nechalacho will be able to attract project financing.

But another wrinkle ... NWT attractiveness



- Our share of total exploration has been in decline for some time.
- **We need strong, renewed efforts to bring investment back**

Mining growth requires healthy exploration



- NWT Investment uncertainty has chased away \$ millions in investment, jobs & business.
- Upside is that we are in the same soup as everyone else!

This problem is closer to home



- And therefore, so is the solution

**While we can't change the marketplace,
we can change ourselves**



***By enabling investment,
we'll be ready when the market rises again!***

So, what are we doing to re-establish investment?

- We are being strategic
 - NWT Mineral Strategy
 - NWT Economic Opportunities Strategy
 - NWT Energy Strategy
- Improving regulations: NWTSRBA, MVRMA
- (Hopefully) providing landlord stability: NWT Devolution
- Facilitating projects:
 - CanNor-NPMO, Kwe Beh, GNWT Pathfinder
- Building capacity: education, training, business
- Investing in geoscience
- Advancing Land Use Plans
 - Tlicho, Sahtu, Dehcho

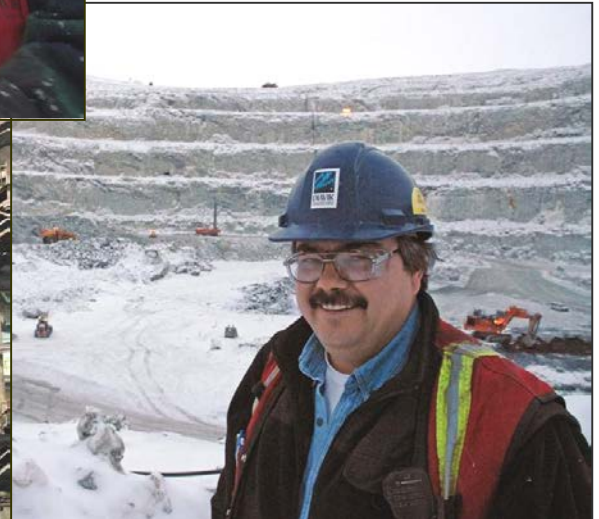
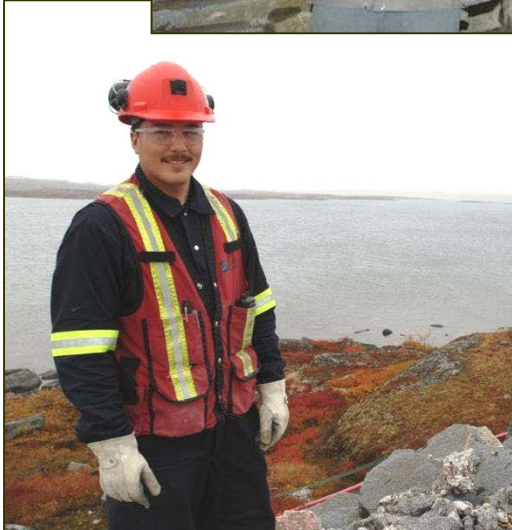
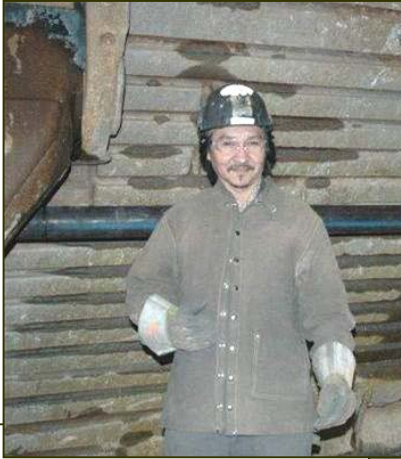
We are on the right path



Conclusion

- Mining has been good for us
- We have opportunities and challenges before us
- We are taking actions
- And we are on the right path

Why it matters



Courtesy Diavik Diamond Mines Inc.