

**Back River Site Tour** 

TSX BTO
NYSE AMERICAN BTG
NSX B2G

PROJECT PRESENTATION
SEPTEMBER 26, 2023

**ACQUIRE** 

**DISCOVER** 

**FINANCE** 

**BUILD** 

**OPERATE** 



### NUNAVUT: GOLD MINE OF OPPORTUNITY



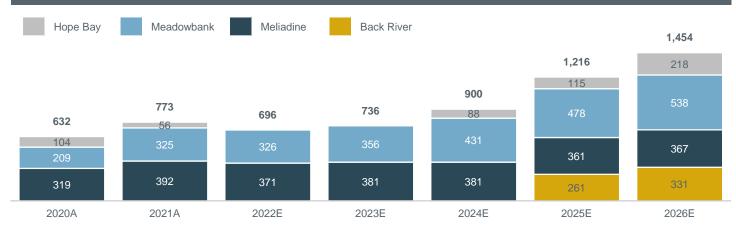
#### A Tier-1 Mining Jurisdiction

- Nunavut is fuelled by the gold mining industry, accounting for 51% of the territory's overall GDP growth<sup>1</sup>
- Current levels of gold production expected to more than double by 2026E
- Sizeable gold deposits with strong exploration and resource growth potential
- Hosts Canada's second largest greenstone belt
- > A clear legal framework for mining claims and transparent permitting process
- Agnico Eagle owns all three operating gold mines in Nunavut and acquired Hope Bay, which is currently on care & maintenance, in 2021

### **Select Northern Canada Mining Operations**



### Nunavut Gold Production History & Outlook (koz)<sup>1</sup>



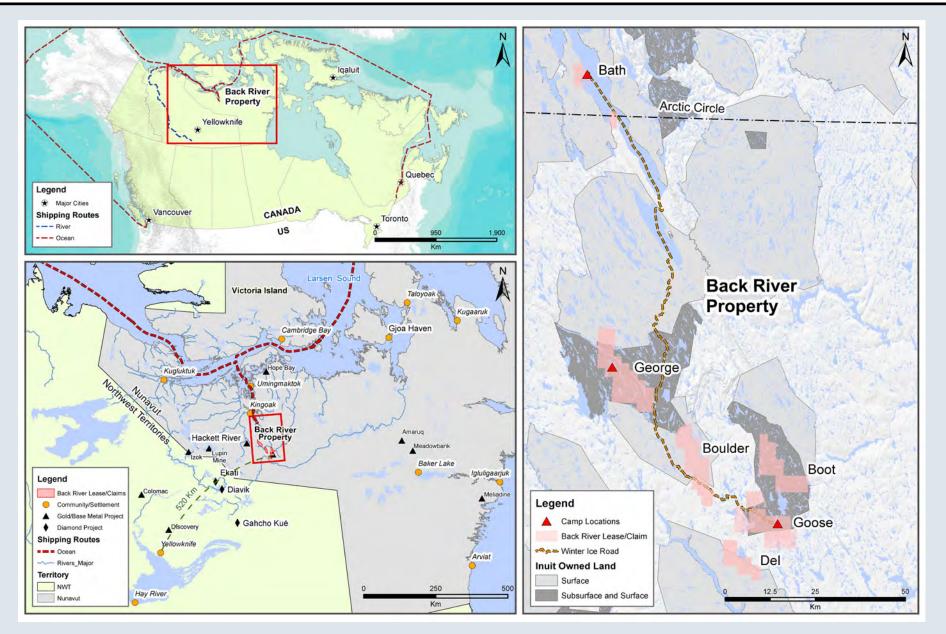
Source: Corporate disclosure; S&P Global Market Intelligence; Statistics Canada; Street research.

<sup>1.</sup> Statistics Canada 2022 Gross domestic product (GDP) at basic prices, by industry, provinces and territories.

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# BACK RIVER GOLD DISTRICT



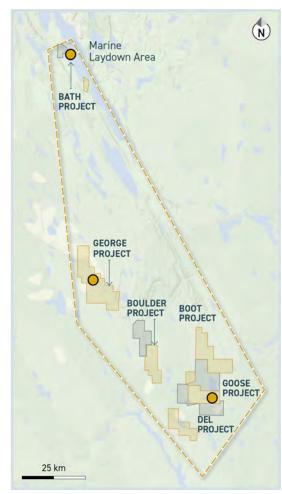


### BACK RIVER GOLD DISTRICT MAP



- GOOSE (229 km² license)
  - > Hosts 6 gold deposits permitted for mining
  - M&I Mineral Resource<sup>1</sup> of 26.3 Mt at 6.02 g/t for
     5.1 Moz of gold
  - Inferred Mineral Resource<sup>1</sup> of 8.4 Mt at 6.64 g/t for 1.80 Moz gold
- ◆ **GEORGE** (166 km² license)
  - > ~50 km northwest of Goose, consists of over 20 km of iron formation
  - M&I Mineral Resource<sup>1</sup> of 7.14 Mt at 5.34 g/t for
     1.23 Moz of gold
  - Inferred Mineral Resource<sup>1</sup> of 5.37 Mt at 6.12 g/t for 1.06 Moz gold
- **BOOT** (100 km² license)
  - Hosts multiple mineralized structures intersecting iron formation
- **DEL** (58 km² license)
  - > Hosts mineralized quartz vein structures in sediments
- ◆ BOULDER (113 km² license)
  - > South extension of George mineralized iron formation



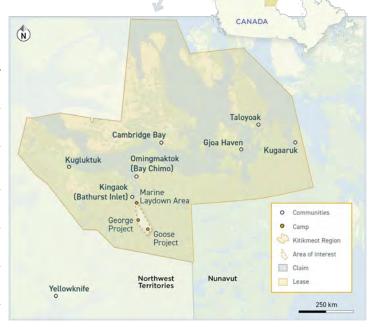


# BACK RIVER GOLD DISTRICT OVERVIEW



#### **GOOSE PROJECT** Nunavut, Canada

Туре	Open Pit / Underground	
B2Gold Ownership	100%	
Processing Throughput (design) <sup>1</sup>	1.5 Mtpa (4,000 tpd)	
Mineral Reserve Grade	5.97 g/t Au <sup>1</sup>	
Gold Recovery (estimate) <sup>1</sup>	~93.0%	
Gold Production (estimate)	+300koz / year over first 5 years	





= B2Gold permit



### Q1 2025

**Estimated First Gold Production** 



2009

Sabina Acquired 100% Interest



2012

Began Permitting Process



2018

Completion of Permitting



Land Package



2021

Feasibility Study Competed



2023

**B2Gold Acquired** Sabina

# GOOSE PROJECT TIMELINE





**Updated Feasibility Study (UFS)** 

**B2Gold Acquisition** Re-baseline & execution

June 2015

March 2021

April 2023



**3KFS Feasibility** Study

March 2022



**4Ktpd Update** Class II Estimate



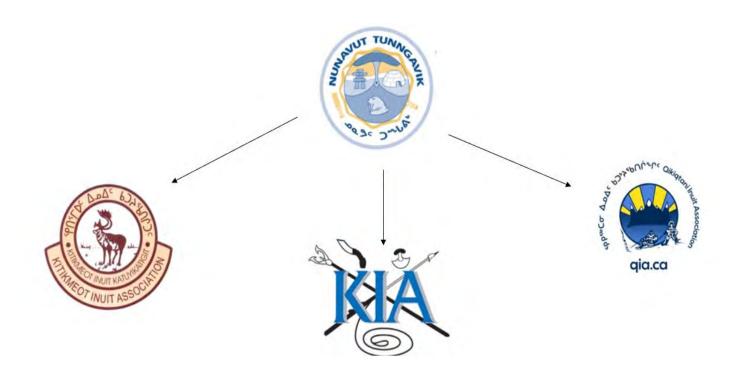




### INUIT IMPACT & BENEFITS AGREEMENTS OVERVIEW



- Nunavut Agreement created the largest settled land claim agreement in Canadian history
- This agreement was signed by Inuit of Nunavut and the Government of Canada
- Agreement established certain rights and guarantees for Inuit, including the requirement that before a major Project proceeds an "Impact Benefit Agreement"
- Impact Benefit Agreements require project Proponents to negotiate with Designated Inuit Organizations to maximize project benefits while minimizing impacts



### INUIT IMPACT BENEFIT AGREEMENT

# BZGOLD

#### **Growth Cornerstone**

- Signed the Framework Agreement with the Kitikmeot Inuit Association in April 2018
- 20-year term
- ♦ 1% Net Smelter Royalty
- Equivalent to 2.5 million B2Gold shares alignment as a shareholder



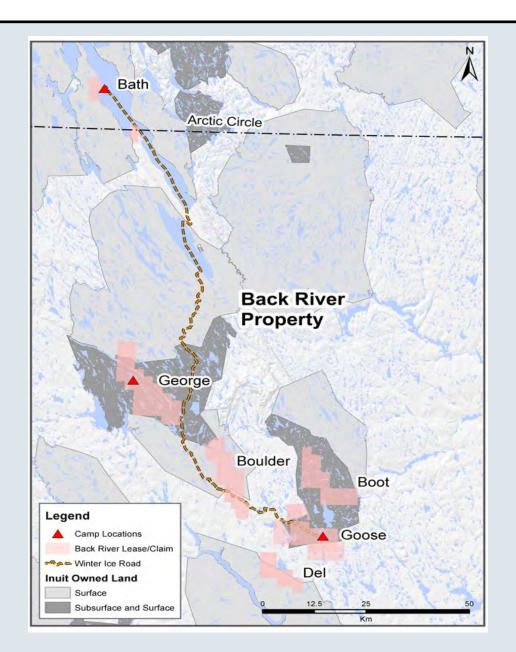


- Other definitive agreements
- Inuit employment targets
- Inuit training expectations
- Contracting Opportunities for Kitikmeot businesses
- \$4 million cash payment towards Regional Wealth Creation - A new initiative for creating long term benefits to the region and jobs outside of the mining industry



# MAP OF LOGISTICS





### MARINE LANDING AREA



- Located on Bathurst Inlet
- Approx. 70 person camp
- 3000ft. Gravel airstrip + heliport
- Diesel fuel storage
- Over 65,000m<sup>2</sup> of outdoor storage area
- Sealift landing area (August through September)
  - > 2023 sealift currently underway
- Barges and ships utilized
- Expected shipping volume for 2023: 70,000 metres<sup>3</sup>
   of dry cargo and 24 million liters of arctic grade diesel
   fuel
  - > 10,000m³ of freight is yet to be received, but on schedule
  - All diesel fuel has been received



### WINTER ICE ROAD



- 163 km long between Marine Landing Area and Goose Project Site
- Construction begins mid-December 2023
- Road opening anticipated early February 2024
- Road closing second half April 2024
- Over 800 loads transported in 2023
  - Construction equipment and Overhead cranes
  - > Camp units
  - > Containers and mobile mining equipment
- 2024 season will deliver remaining items required for a 2025 start-up and operations
- The winter ice road construction contractor has been selected and awarded; project kick-off is being scheduled for first half of October
- Execution strategy for 2024 includes starting construction from the middle and working outwards in each direction, which should enable the ice road to be completed earlier than in previous seasons







### GOOSE PROJECT CONSTRUCTION TIMELINE



On Track for Mill Completion and First Gold Production in Q1 2025

2022 & EARLIER 2023 2024 Q1 2025











- 163 km road completed and fully functional
- Operates between February April; fully dedicated to Back River Gold District Development



- 2022 sealift completed with ~12,500 Mt of dry goods received
- ~10 million litres of diesel fuel offloaded

### Infrastructure and Early Works

- Procurement is nearly complete
- Two 10 million litre fuel tanks constructed at Port and Goose
- Pre-stripping commenced at Echo Open Pit



- > Full construction began in 2023
- Continue pre-stripping of Echo pit with waste / ore stockpiling
- Concrete / steel works have started in Summer 2023, with focus on building envelopes, frames, and concrete
- Balance of installation, implementation, commissioning to be completed in 2024

### Infrastructure (2023)

- Winter ice road forward camp and road base improvement program in progress
- Construction of Water Management Facility
- Complete accommodation facilities

#### Scheduled Deliveries

- Mar Apr 2023: Winter Ice Road deliveries (COMPLETED)
- Aug 2023: First Herc program (related to accelerated program)
- Aug Oct 2023: Second Sealift (ONGOING)
- Oct 2023: Second Herc program (related to accelerated program)
- > Feb Apr 2024: Second Winter Ice Road deliveries

ETED IN PROGRESS >



### GOOSE PROJECT UPDATES



#### Winter Ice Road

- > More than doubled the transport units in advance of 2024 ice road
- > Next ice road to open at the start of February 2024

### Marine Laydown Area

- > Fuel tank containment area enlarged to facilitate additional storage
- > Re-organized marine laydown area to maximize space for 2023 sealift unload

### Accommodation Complex

- > Phase 1 accommodation opened July 2023 including sleeping quarters and kitchen
- > Phase 2 accommodation for operations to complete July 2024

#### Concrete & Rebar

- > Concrete batch plant is operational; 6 concrete mix trucks total
- > Fully automated rebar cutting and bending machine operational
- > First concrete pour completed July 2023

#### Structural Steel

- > Over 2,000,000 kg of structural steel at site (truck shop, power building, process plant)
- > ~500,000 kg of plate steel at site (diesel tank, leach tanks)



# GOOSE PROJECT UPDATES





### Construction at the Goose Project Site is Progressing on Schedule







Goose Project Site Area - September 2023

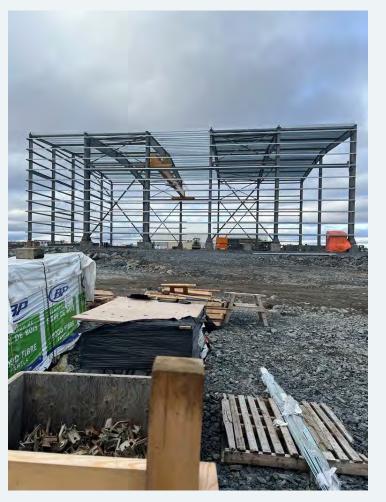
# GOOSE PROJECT UPDATES





## Mill and Truck Shop Structural Steel Progress – September 2023



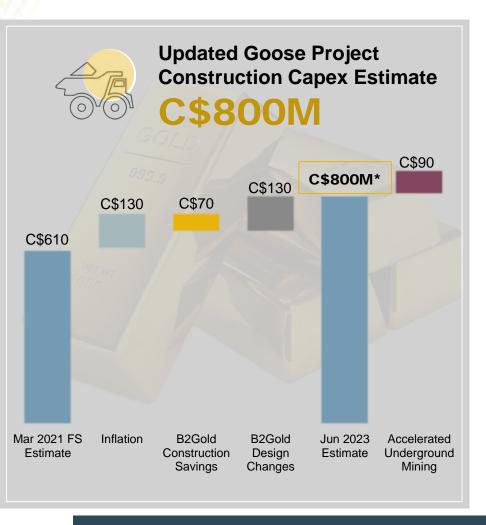




## GOOSE PROJECT - CONSTRUCTION CAPITAL ESTIMATE



Construction capital estimate updated for B2Gold optimizations and industry inflation



MAR 2021 FEASIBILITY STUDY INITIAL CAPEX
C\$610 MILLION

INFLATION

**+C\$130 MILLION** 

- Inflation of ~20% from 2021 to 2023

B2GOLD OWNER CONSTRUCTION TEAM

**C\$70 MILLION SAVINGS** 

- Results in a mill with higher availability and lower sustaining capital requirements

- B2GOLD DESIGN CHANGES
  - **+C\$130 MILLION**

- Emulsion explosives plant
- Mining support fleet
- Improved on-site assay lab
- Additional fuel tanks to support expansions
- ACCELERATED UNDERGROUND MINING

C\$90 MILLION

- Mining of Umwelt crown pillar
- Long-hole stoping mining method
- Increased gold production over first five years

\* Approximately C\$530 million total cash spent on the project to date (by B2Gold and Sabina)



# BACK RIVER: 2021 UFS HIGHLIGHTS



### 2021 UFS Summary Results

· · ·					
Assumptions					
Gold Price	(US\$/oz)	\$1,600			
Discount Rate	(%)	5%			
Project Parameters					
Total Ore Mined	(Mt)	18.7			
Mill Throughput	(tpd)	4,000			
Mine Life	(years)	15			
LOM Avg. Grade	(g/t Au)	6			
LOM Avg. Recovery	(%)	93.40%			
Total Production	(Moz Au)	3.35			
LOM Avg. Annual Production	(koz Au)	223			
Operating Costs					
OP Mining Cost	(C\$/t processed)	\$18.97			
UG Mining Cost	(C\$/t processed)	\$38.22			
Processing Cost	(C\$/t processed)	\$37.06			
Site and Offsite Services	(C\$/t processed)	\$24.04			
G&A Cost	(C\$/t processed)	\$22.21			
<b>Total Operating Cost</b>	(C\$/t processed)	\$140.50			
LOM Avg. Cash Cost	(US\$/oz Au)	\$679			
LOM Avg. AISC	(US\$/oz Au)	\$775			
Capital Costs					
Initial Capital	(C\$M)	\$610			
Sustaining Capital	(C\$M)	\$419			
After-Tax NPV (C\$M)	(C\$M)	\$1,126			
After-Tax IRR (%)	(%)	27.7%			

### **After-Tax NPV & IRR Sensitivity Analysis**

NPV 5% (\$M) IRR (%)		Au Price (US\$/oz)				
		US\$1,000	US\$1,300	US\$1,600	US\$1,900	US\$2,200
	0.95	\$(379)	\$178	\$601	\$1,005	\$1,407
		(6.8)%	9.3%	18.4%	25.7%	32.2%
	0.90	\$(263)	\$283	\$721	\$1,146	\$1,570
		(2.4)%	11.7%	20.7%	28.1%	34.6%
	0.85	\$(132)	\$397	\$854	\$1,304	\$1,752
		1.6%	14.2%	23.1%	30.6%	37.2%
	0.80	\$2	523	1,005	1,481	1,958
C\$ to US\$		5.1%	16.8%	25.7%	33.3%	40%
US\$	0.76	\$93	\$625	\$1,126	\$1,626	\$2,125
		7.3%	18.8%	27.7%	35.4%	42.2%
	0.70	\$261	821	1,367	1,912	2,455
		11.2%	22.5%	31.6%	39.4%	46.4%
	0.65	\$408	\$1,004	\$1,590	\$2,176	\$2,760
		14.4%	25.7%	34.9%	42.9%	50%
	0.60	\$576	\$1,215	\$1,851	\$2,484	\$3,117
	0.00	17.9%	29.2%	38.6%	46.8%	53.9%

### MINING METHODS

Open Pit & Underground

# BZGOLD

#### **OPEN PIT**

- 4 pits total Echo, Umwelt, Llama and Goose
- Process tailings are deposited in exhausted pits
- Reclaim water will typically be one pit behind tailings deposition
- Additional mining equipment arriving on the 2023 sealift
- Mining development progressing at the Echo open pit, which will be mined out prior to process plant commissioning in order to provide tailings storage capacity





#### **UNDERGROUND**

- Underground mining scheduled to mine and backfill the full Umwelt pillar earlier in the mine life than prior mine plans
  - Expected to contribute over 150,000 ounces of gold production to the life of mine plan
- Underground development is currently less than 500 meters away from commencing ore production at the Umwelt pillar
- Operations and development mining will remain within permafrost for another 2 years

### MINING UPDATE

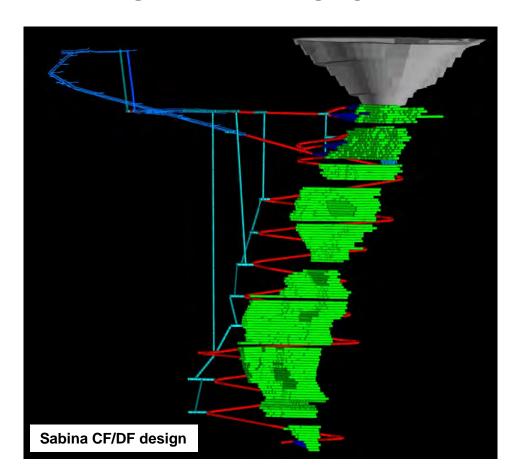


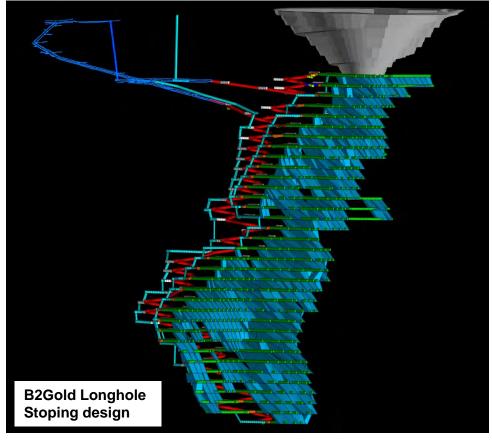
- When B2Gold acquired the project it was noted that the Emergency Response Team does not meet standards and we have (in conjunction with WSCC) stopped Underground and Open Pit operations to ensure safe production
  - > This stop work is part of the existing mine plan and will allow us to safely produce gold on the original timeline in Q1 2025
- ERT teams are under development and all necessary rescue equipment has been purchased and is on site
  - > We plan on returning to scheduled production in October 2023



# MINE ENGINEERING OPTIMIZATION







- ♦ Umwelt Underground is the largest and most important component of the Goose mine plan
  - > Mine Method changed to Longhole Stoping from Cut and Fill / Drift and Fill to increase productivity and lower underground mining cost, with the added benefit of increased Resource utilization
- Open Pit mine planning is also being optimized with more efficient designs and mine plans, resulting in higher tonne/year mining rates with the same equipment

### MINE ENGINEERING OPTIMIZATION



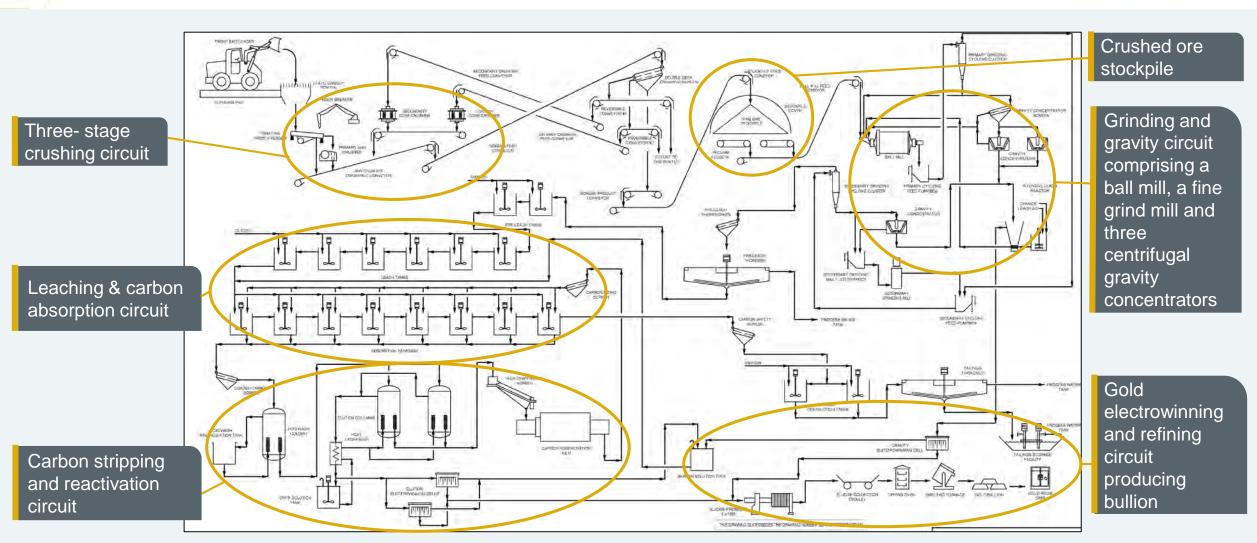
### Underground Fleet and Infrastructure Upgrades

- > The planned production equipment fleet has been upsized to 51t trucks and 17t loaders from the prior fleet which was based on 30t trucks
- > Dual control jumbos can be used for both ground support and face drilling for more flexible and productive operations
- > Longhole drill rigs are expected to be on site summer of 2024 to commence ore production in H2 2024
- ◆ The ventilation system has been improved with an added fresh air raise and altered internal raises to reduce blast clearance times and allow for simultaneous operation of multiple headings and stopes with the larger production fleet



# MILL PROCESS FLOW DIAGRAM





### EXPERIENCED OPERATORS IN THE ARCTIC



B2Gold team successfully advanced Kupol from exploration to construction while at Bema Gold





2002	> Bema announces agreement to acquire interest in Kupol property
2003	> Invests ~US\$36M in Kupol property
2004	> Releases Kupol Preliminary Economic Assessment
2005	> Releases Kupol Feasibility Study
2006	> Kinross to acquire Bema (Bema team to complete the construction of Kupol)
2007	> Production remains on schedule for 2008; Kinross acquisition of Bema closes
2008	> Kinross announces first production from Kupol

In addition to Kupol, Bema brought the Julietta mine (Eastern Russia) to production in 2001

Location:	Average Temperature:	Low Temperature:	Accessibility:	Days of Snow Cover:	Average Depth of Snow Cover:
Northeastern Russia	-13ºC	-58°C	Helicopter or Plane <sup>1</sup>	237 Days Per Year	38-45cm

### POTENTIAL TO HARNESS RENEWABLE ENERGY



Opportunity to utilize wind energy to reduce diesel dependence and lower carbon emissions



#### **DIAVIK (RIO TINTO)**

Diamond mine with operating wind farm in Yellow Knife:

- > Comprised of 4 x 2.3 MW turbines constructed in 2012 with a 9.2 MW capacity
- > ~17 GWh annual production, covering ~10% of the mines power
- > Developed with no government funding
- > Reduced diesel consumption by 10% and carbon footprint by 6%



RAGLAN (GLENCORE)

Glencore signed a 20-year power purchase agreement with TUGLIQ Energy for Raglan mine in Northern Quebec:

- Commissioned in 2014
- > 6 MW wind power capacity with three energy storage technologies
- > ~4.4M litres (~10% of mine total) of fuel savings per year → estimated savings of > C\$40M over 20-year expected turbine life
- Awarded C\$7.8M from ecoEII (Government of Canada)



#### **HOPE BAY (AGNICO)**

Agnico signed a memorandum of understanding with TUGLIQ & Higiniq Energy towards developing a wind-based power project at the Nunavut mine:

- > Offsets carbon footprint with ~60% of Agnico's emissions currently coming from Nunavut
- > Previous TMAC study recommended a hybrid project with installed wind capacity ranging from 2 MW to 4.7 MW at Hope Bay

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