

MEETING NOTE

NAME OF ORGANIZATION: Goldcorp
DATE/TIME OF MEETING: September 26, 2017
LOCATION OF MEETING: TBC

PURPOSE: To discuss the Century Project at Goldcorp's Porcupine operation in Timmins, Ontario.

ATTENDEES: **Minister of Energy**
Glenn Thibeault

Goldcorp

John Mulally, Director Government Relations and Energy (TBC)
Brent Bergeron, Executive Vice-President Corporate Affairs and Sustainability (TBC)
Marc Lauzier, General Manager, Porcupine Gold Mine (TBC)

LAST MEETING: March 5, 2017 (TBC)

Goldcorp intends to brief the Minister on their Century Project at the Dome mine in Timmins. The company will be providing an overview of the project and related challenges, as well as some options on potential paths forward.

ANTICIPATED AGENDA ITEMS (OR 'AGENDA' IF WE HAVE RECEIVED ONE):

1. Electricity Prices for Large Industrial Consumers
2. Impact of Cap and Trade

NOTES ON AGENDA ITEMS:

1. Electricity Prices for Large Industrial Consumers

- The Century Project's large open pit mine would be very energy intensive. Goldcorp wishes to assess costs of using electricity versus diesel at such a site in the context of increasing electricity prices.

Suggested Response:

- **We recognize the importance of electricity prices for the mining sector in Ontario. Maintaining competitiveness with respect to energy costs is a top government priority.**
- **As part of Ontario's Fair Hydro Plan, the Ontario Electricity Support Program (OESP) and the Rural or Remote Rate Protection (RRRP) program are now funded from provincial revenues instead of by electricity consumers. This lowers electricity costs for industrial customers, such as Goldcorp, who previously funded a portion of these programs.**
- **In addition, there are a number of existing initiatives available to business consumers to help them manage their electricity costs:**
 - **Industrial Conservation Initiative (ICI);**
 - **Industrial Accelerator Program (IAP);**
 - **Northern Industrial Electricity Rate (NIER); and**
 - **Demand Response initiatives.**
- **We intend to remove the Debt Retirement Charge (DRC) for commercial, industrial and other non-residential electricity users on April 1, 2018, nine months earlier than previously planned.**
- **The government has also taken significant steps to make Ontario's business tax system more competitive and create the conditions for long-term economic growth.**

Background:

Industrial Conservation Initiative (ICI)

- Due to its very large size, Goldcorp's sites qualify and participate in ICI. Under ICI, these consumers are charged Global Adjustment (GA) on the basis of their share of the total system demand during the highest five peak hours of the year. While savings vary, ICI participants pay, on average 33% lower electricity costs than if they did not participate.

Industrial Accelerator Program (IAP)

- The IAP assists eligible transmission-connected companies to fast track capital investment in major energy conservation projects. The program provides financial incentives to encourage investment in innovative process changes and equipment retrofits to reduce electricity consumption on the provincial system and to help companies become more competitive by positively impacting their bottom line.

Northern Industrial Electricity Rate Program (NIERP)

- Provides \$20 megawatt per hour (MWh) rebate for qualifying large northern industrial consumers, including mines such as Goldcorp. The province committed to extending the program beyond March 31, 2016.

Ontario's Fair Hydro Plan

- On March, 2, 2017, the government announced Ontario's Fair Hydro Plan which includes shifting the cost of the Rural or Remote Rate Protection Program (RRRP) and Ontario Electricity Support Program (OESP) from the rate-base to the tax-base. This benefits all ratepayers including large industrial ratepayers. Note: Large industrials receive a benefit of approximately \$3/MWh.

2. Impact of Cap and Trade

- Goldcorp may raise concerns on the impact of cap and trade on future mining operations as it considers whether to use electricity or diesel in the context of the Century Project.
- In its LTEP submission, Goldcorp suggested that companies who engage in significant fuel switching be rewarded with a lower electricity price via the introduction of a government program.
- Also in its LTEP submission, Goldcorp was concerned about a lack of certainty regarding cap and trade's impact on the electricity sector post-2020 (i.e., after the first compliance period ends).

Suggested Response:

- **Ontario has been taking strong climate-positive actions for years, such as successfully eliminating coal as a source of electricity generation and developing a long-term energy plan that focuses on a safe, clean, reliable and affordable energy future.**
- **The elimination of coal-fired generation represents a 30 Mt reduction in greenhouse gas (GHG) emissions since 2003. Ontario's electricity sector is now over 90% emissions-free based on the 2016 generation mix.**
- **As a result of these efforts, Ontario's electricity system is in a strong position as we move forward with implementing the province's cap and trade program.**

- **I appreciate Goldcorp's suggestions regarding programs that could incent significant fuel switching from fossil fuels to electricity. Cap and trade proceeds will be used to support programs aimed at reducing greenhouse gas emissions and energy consumption.**
- **The Ministry of the Environment and Climate Change (MOECC) continues to implement its Climate Change Action Plan, which outlines how cap and trade auction proceeds are to be used in first compliance period of cap and trade.**
- **Government will outline its plan for fighting climate change post-2020 in the next CCAP, which will be developed as we approach 2020.**

Background:

- A preliminary assessment from MOECC revealed that most mines in Ontario report emissions between 10,000 and 25,000 tonnes of CO₂e per year, and there are a few that emit over 25,000 tonnes CO₂e per year. As such, emissions from the majority of Ontario mines will either be included in the cost of natural gas provided by the utility or if the mine is a voluntary participant, they will be responsible for their own emissions.
- On June 8, 2016, Ontario released its five-year Climate Change Action Plan (CCAP) designed to help Ontario take steps to transition to a low-carbon economy. No announcement has been made regarding specific programs that would reward industrial consumers that engage in fuel switching.

KEY FACTS:

- Goldcorp is a Canadian company headquartered in Vancouver and is a major gold producer with projects in North and South America.
- According to Goldcorp, energy represents about 12% of their total production cost in Ontario.
- Between Red Lake Gold Mines (RLGM), Porcupine Gold Mines (PGM) and Musselwhite Mine (MWM), Goldcorp consumes ~ 600,000 MWh per year and paid more than \$50 M for electricity in 2015 (average rate ~\$85/MWh though one of the facilities paid \$40/MWh).
- Goldcorp's development pipeline includes 2 projects in Ontario, a deep mine at Borden Lake (160km West of Timmins) and an open pit project adjacent to its existing opencast site at Timmins. Both sites could be operational in 2019 if exploratory drilling is successful.

- In total, Global Adjustment represents 50% of Goldcorp Ontario's electricity cost or roughly \$25 M per year. All three sites participate in ICI.
- Between 2013 and 2015, Goldcorp's Musselwhite mine reduced GHG emissions by 20,000 tCO₂e / year and energy consumption by 100,000 MWh/year through conservation and phasing out diesel generation.
- All three sites take advantage of the NIER program which reduces the cost of electricity by \$20/MWh though it does go above its allocation so not every MWh consumed receives the rebate.
- All three sites employ an energy manager through the IESO's IAP.

APPENDIX:

1. Electricity Prices for large industrial consumers

Century Project (Timmins open pit mine project)

- Goldcorp noted that ICI is not good for facilities that must run 24/7 to remain competitive and recommend NIER to be expanded to cover all its existing industrial operations.
- If in 2022, NIER is fully subscribed and electricity consumers pay the full price for carbon, Goldcorp suggest the price of electricity will be significant deterrent to the Century Project.
- Goldcorp favours the introduction of an Industrial Electricity Incentive (IEI) type program. The Industrial Electricity Incentive (IEI) offers reduced electricity rates for companies starting or expanding operations in Ontario. IESO awarded 22 contracts to energy-intensive companies across the province through the program.

Industrial Electricity Incentive (IEI) Program:

- IEI assists in the management of demand by encouraging increased production and expansion.
- Qualified participants in identified energy-intensive sectors receive reduced electricity rates for incremental consumption over a specified term.
- IEI was originally offered in three streams through a competitive IESO procurement process. There are a total of 22 successful participants: 7 in Stream 2 and 15 in Stream 3.
- There are currently no plans for another stream of the IEI program.

Industrial Conservation Initiative (ICI)

- ICI encourages Ontario's largest consumers to reduce consumption during peak periods to save on average one-third on their electricity bills.
- By reducing the province's peak demand, ICI has the added benefit of reducing cost pressures on electricity prices by deferring the need to build peaking generation.
- Under ICI, consumers are charged Global Adjustment on the basis of their share of the total system demand during the highest five peak hours of the year.

Industrial Accelerator Program (IAP)

- The Industrial Accelerator Program (IAP) assists eligible transmission-connected customers to fast-track capital investment of up to \$10 million for major energy-efficiency projects, equipment retrofits, process changes and new construction.
- Eligible participants can receive funding of up to 70% for major energy-saving projects, including process and system changes, retrofits and new construction.
- Most of Goldcorp's Ontario facilities are transmission connected facilities and would be eligible to participate in IAP. Any distribution connected facilities would be eligible to participate in the *saveONenergy* for Business program, which includes incentive offerings similar to IAP.

Northern Industrial Electricity Rate Program (NIERP)

- Provides \$20 megawatt per hour (MWh) rebate for qualifying large northern industrial consumers, including mines such as Goldcorp.
- The province committed to extending the program beyond March 31, 2016.

Demand Response (DR)

- DR provides payments to businesses and industry to shift consumption at times when the electricity system is stressed.
- The IESO has transitioned DR from a program approach to a market approach.
 - Annual DR auctions replace the practice of multi-year contracting for DR. Under the former OPA, DR resources were procured through the DR3 program for typically 5 year contract periods.
 - The IESO held its first DR auction in December 2015, procuring ~390 MW were procured for the summer commitment period (May 2016 to October 2016) and ~400 MW for the winter commitment period (November 2016 to April 2017).
- In addition to the DR auction process, IESO is also undertaking pilot programs to test new capabilities for DR in the energy market and its ability to meet system needs.

2. Cap and Trade – Background

General

- On May 18, 2016, Ontario passed the Climate Change Mitigation and Low-Carbon Economy Act, 2016 and on May 19, 2016, Ontario posted its final cap and trade regulation (O. Reg. 144/16) and guideline.
- In certain circumstances, some consumers will not have the carbon cost passed on to them by the fuel distributor, if their emissions associated from fuel combustion are already captured under cap and trade (e.g., in the case of “Large Final Emitters”, discussed further below) or they are voluntary participants.
- Large final emitters (LFE), mandatory participants under cap and trade, are defined as emitting at least 25,000 tonnes of CO₂e (carbon dioxide equivalent) per year or more.
- Voluntary participants are facilities who emit between 10,000 and 25,000 tonnes of CO₂e per year and who choose to participate directly in the program.
- Under the cap and trade regulation/guideline, MOECC will apply a formula-based approach to determine the quantity of allowances that an eligible large final emitter (LFE) will receive free of charge.
- All covered facilities (i.e., those whose emissions exceed the opt-in threshold of 10kt) are eligible for free allowances during the first compliance period of cap and trade.
- LFEs are responsible for purchasing allowances to cover the emissions above their free allocation amount.

Electricity and Natural Gas Impacts

- Emissions from electricity generation are subject to a carbon price through the cost of fuel. Natural gas-fired electricity generators are expected to pass on the cost of carbon through increased offers into the wholesale electricity market.