

Stakeholders

The Mining Game

stake·hold·er

a person with an interest or concern in something, especially a business.

Mining companies have many stakeholders. They must answer to investors, governments, communities, and employees as well as a wide range of special interest groups.

These stakeholders often have different priorities and objectives.

It is within this environment that miners must negotiate. If successful, they fulfill the expectations of their agreements as well as remaining profitable. Sometimes however, achieving both is a challenge. For example, how do you fulfill employment guarantees when operational costs dictate reducing your workforce?

What would you do?

In this game, players take on the role of mining companies as they face challenges based on real-world scenarios. What kinds of decisions will they make, and why? How will their company be viewed by their peers?

The game concludes with a discussion on what standards mining companies should be held to as well as our roles in mining as the question shifts from 'What would you do?' to 'What will you do?'.

INTRODUCTION

Humanity has a close relationship with mining. Humans have been mining for as long as we have existed. It could be said it is in our blood. Mining and our societies have also evolved together. Mining defines us as much as we define mining.

So what kind of society are we, and what kind of miners are we? This is the premise of Stakeholders: The Mining Game.

SOME BACKGROUND: BRITISH COLUMBIA & THE BRITANNIA STORY

Mining has shaped British Columbia's history. Consider the gold rushes. Tens of thousands of prospectors came to the mainland of what would become British Columbia. The colonial government, to protect its authority over the land and its resources established the first prospector's laws as well as invested in building infrastructure to control access to the gold fields. The opening of the interior as a result of the Caribou Gold Rush led to prospecting for other resources and the establishment of large mines which further fuelled our economic development.

These mines also played an important role in the shaping of our labour laws, with one of the more fundamental battles being for the eight hour work day.

It is on this foundation that Britannia began.

The Britannia Mine is both common and unique. It is common in the sense that over the course of the first half of the 1900s, mining was driven on scale and efficiency. Britannia excelled at both. What made it unique was timing.

First, the demand for copper (and other minerals) that was a result of the industrial revolution drove the need to mine alternative sources – alternative in both the mineral mined and the lower concentration of the mineral in the deposit. In order to mine these sources successfully, new technology was needed to separate the mineral from the waste rock. That technology is froth flotation. Britannia was the first mine in our province to use this technology in a production environment. It later developed its own version of this technology, called the Britannia Deep Cell. This is only one example of how Britannia pioneered mining in the province. It can be argued that this pioneering spirit played an important role in the development of Vancouver as a global hub for mining.

The second instance where timing made Britannia unique was in its closure. When the Mine closed in 1974, our province's environmental laws were new and everyone was still working to answer the question of what was needed to meet the new requirements. This led to Anaconda (the mine owner at the time) working with government to establish what was needed. By 1979 Anaconda had met all the agreed upon requirements and the Mine represented successful mine closure for its day.

What followed however left Britannia with anything but a good reputation environmentally. The company that assumed control of the Mine's lands and the Mine in 1980 was not capable of maintaining the environmental remediation system built following the closure. This led to two decades of fighting between the landowner and the provincial government over who was responsible. With the introduction of a 'polluter pays' law in

1997 however, the groundwork was set for the restoration of the Mine site. What followed were the installation of a water treatment plant, which opened in 2005, and the restoration of the local creeks.

Environmentally, Britannia went from operating with essentially no regulations to meeting our first regulations. Post-closure, Britannia was at the centre of social change – one that saw attitudes shift towards a growing concern for the environment.

Today, mining in our province strives to be sustainable and environmentally responsible. This is a reflection of our social values.

But what about the rest of the world?

THINK GLOBAL

BC and Canada have worked to make mining more sustainable, but what about the rest of the world? In particular, what about the developing world?

The truth is that the developing world is the frontier of mining and it is a world that is now experiencing what North America has a history of – environmental laws are still being developed, regulation of mining is weak, prospectors and independent miners are extracting mineral resources without any concern for the impacts, and land rights are still being fought over.

It is within this world that Canadian and other multinational mining companies are now operating.

In the game, players act as Canadian mining companies operating in the developing world. Each company will be given real world scenarios and asked what approach they take to address the issues.

At the end of game play, teams will assess their own companies as well as the other teams.

This leads into a discussion on what types of principles mining companies should employ, and what role each and every one of us plays in seeing this happen.

BEGIN THE CONVERSATION (WITH EXAMPLE DEPOSIT):

The game introduction should provide the bridge from your student’s current knowledge on mining to the understanding that mining impacts different people and groups in different ways – that it is more than the act of extracting a resource from the ground.

Example dialogue:

‘What is mining? Is there more to it than digging a resource from the ground?’

What impact could a mine have on the environment? What if the mining company needs to cut down a forest to mine for the mineral resources? Is the forest more valuable than the resources beneath it? Some may argue yes, some may argue no. What is lost vs. what is gained from mining? Is it possible to satisfy both those that want to preserve the environment and those that wish to mine it?

What impact could a mine have on indigenous peoples? What if the mining company needs to relocate a village to access the mineral resources? Should a mining company be able to do this if the village opposes it?

What impact could a mine have on local communities? Mines create jobs. Will those jobs go to local people? Will an influx of new workers for the mine cause the cost of living in the local communities to rise?

What impact could a mine have on governments? Mines pay royalties to governments on what they mine. Royalties provide some of the assessed value of the resource directly to governments. Mines also generate employment, both directly in mining and in jobs that support mining, such as equipment suppliers and transportation. Could a mine negatively impact a government?’

Environmentalists, indigenous peoples & local communities, and governments are all what we call stakeholders in mining. A stakeholder is a person or group that has an interest in the outcome. An environmentalist may wish to see a mine not start or ensure the land is restored afterwards, for example.

What about the people investing in the mine? Are they stakeholders? Yes, they are. They have a financial interest in the mine.

How do you imagine mining companies manage to keep all these different stakeholders satisfied?

How would you do it?

That is what we are going to explore as you take on the role of a mining company.

I am going to break you into five groups. Each group will be a different mining company, but you will face the same types of challenges. The first thing you will need to do is decide which one of two potential new mines you want to start. In deciding which mine to start, consider what values you want your company to uphold. What are your priorities, for example quick profits or lower environmental impact? You will notice on your mine site decision sheet, when I hand them out, each mine site has different levels of support from your different stakeholders.

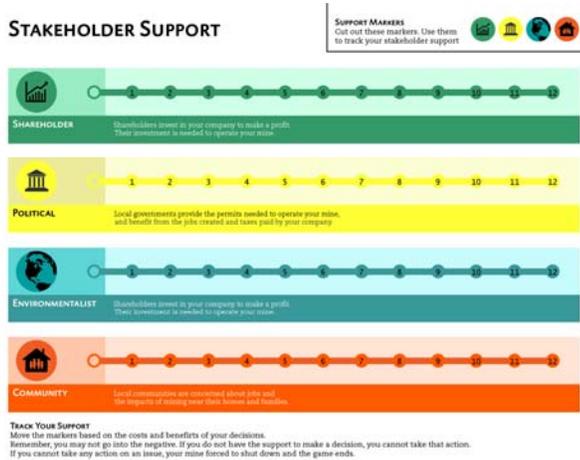
AgriCorp
Extracting resources to feed the world

AgriCorp is a global company whose main ore is potash - a mineral used in fertilizers - and a strong economy has given them the chance to expand operations. The Polotsky deposit is appealing but is partially located underneath a town; and there are possible safety concerns with digging below where people live. The Petra deposit is more conservative with good support from all groups. Which will you choose?

Stability	OR	Risk
Petra Deposit, Jordan, Middle East Size: 3 million tonnes of potash Lifespan: 20 years		Polotsky Deposit, Belarus, Eastern Europe Size: 2 million tonnes of potash Lifespan: 35 years
✓ Good support from all groups increases your chances of operating without disruption.		✓ You have support from the Belarusian government who want to see more mining develop in their country.
✗ High levels of regulation will make the mine more expensive to operate than Polotsky.		✗ Locals are against operations since it would mean mining a deposit underneath their town.
Project Support 4 3 3 2		Project Support 5 4 1 2

Mine Site Decision Card

Once you reach an agreement on which mine you wish to start, place the markers for each stakeholder group's support level on your support card as indicated on the mine decision sheet.



Stakeholder Support Card

For example, if your new mine had an environmentalist support level of two, you would place your environmentalist support token on two for Environmentalist.

Once you have completed this step, you are ready to run your mine.

To run your mine, everyone takes turns drawing a card from the deck and reading it to the group. The person who draws the card is responsible for the group reaching a decision. Once a decision is agreed upon, the person who drew the card adjusts the stakeholder support markers as indicated.

There are two types of cards in your play deck – Decision cards and Global Factors cards. Decision cards present a problem your mine is facing and two or more ways you can address it. How you address it comes down to your values as well as the costs for each decision. The costs are important to consider, because low support can limit your options on future decisions. Global factors cards present potential benefits and costs to your mine based on factors outside your control, for example less demand for what you mine.

There are three rules to follow while playing the game. They are:

1. You can go to zero support, but you cannot go into the negative. If you do not have enough support to take an action, than you cannot take that action.
2. If you reach a point where you cannot take any action on a card, your mine has been forced to close due to lack of support and the game ends.
3. If all game cards are played, you have mined out all the resources from your deposit and ceased mining operations.

The maximum stakeholder support obtainable is twelve.

Break class into five teams and distribute the game packs.

Each game pack consists of the following items:

1. Mining location decision card
2. Support Card – used to track stakeholder support
3. Game Deck consisting of decision and global factors cards

Allow each team to play through to the end of their deck, or until a prescribed stop time. Once play is completed proceed to the discussion below.

AT THE END OF GAME PLAY

'Is there a winner?' This is a question you may encounter.

What defines 'winner'? Is it the most profit? Is it the most political support? Is it a balance? Engage your students in exploring what it means to win, and if there can be only one winner. You may also choose to have each group give a brief presentation on their mine, their challenges, and their decisions. From these presentations, have the class vote on which company performed the best, or won, in their view. Use the differing opinions as a foundation for the discussion that follows.

THE DISCUSSION

Use questions to guide your students through identifying what they believe to be important aspects of mining. Act as a facilitator – keep the discussion going in the desired direction but remain impartial. Provide questions to stimulate thought. Create scenarios your class can relate to if needed.

From the game:

1. Did you have any tough decisions to make?
2. Did you do anything that went against your company values? Did you do anything that might be considered unethical?
3. All of the mines and the playing cards are based on real situations that mining companies face every day. Were you surprised by any of the situations you were faced with?
4. Do any of these situations happen here in Canada? (eg. aboriginal rights, protesters blocking operation...)

In the real world:

1. Human rights – should mining companies uphold them?
2. Sustainability – what does that mean to you when it comes to mining?
3. Should we strive to reduce our environmental impact?
4. Should we be aiming to have high standards globally?
5. Is mining the best use of the land?
6. Should mining companies be involved in reducing the demand for mined materials?
7. What do you expect of mining companies?

ONE STEP FURTHER

1. To take the discussion further, take a look at 'Mining: Tomorrow and Beyond' in the Museum's Educator Resources.
2. Engage your class in discovery of more real-world scenarios. Have your students research issues facing mining or a particular mine and create a card to add to our game deck. Have your class submit your cards to us for inclusion in the extended version of the game (available on our website).