

Congo Violence, Lundin Mining and the Global Cobalt Supply

Jurisdiction is a key risk in a mining operation. In any survey of “the best” mining jurisdictions, those that are economically stable, have predictable fair laws, have an impartial justice system and operate under a democratically elected government, are preferred over those jurisdictions that are politically or economically unstable.

The Fraser Institute’s 2015 Survey of Mining puts Western Australia in first place globally, from fourth in 2014, followed by Saskatchewan, Nevada, Ireland (up 10 spots from the year before), Finland, Alaska, Northern Territory, Quebec, Utah, and South Australia.

All are stable jurisdictions with no military coups, no abrupt change in tax regimes or mining law, established legal systems, and an emphasis on human rights.

The worst ten: four provinces in Argentina, Venezuela, Honduras, Greece, Solomon Islands, Guinea (Conakry) and Kenya.

One country threatening to sink to the bottom 10 is the Democratic Republic of the Congo. From the BBC’s website:

DR Congo is a vast country with immense economic resources and, until recently, has been at the centre of what some observers call “Africa’s world war”, with widespread civilian suffering the result. The war claimed an up to six million lives, either as a direct result of fighting or because of disease and malnutrition.

Life expectancy for men in the DRC is only 47 years. For women, the country has been called “the rape capital of the world”.

Even after intervention by the United Nations and international aid, the civil war continues. A devastating image comes from the website for World Without Genocide:

Today, most of the fighting is taking place in North and South Kivu, on the DRC/Rwanda border. Some fighting is political, resulting from unrest caused by Hutu refugees from the Rwandan genocide now living in DRC, while other fighting results from an international demand for natural resources. DRC has large quantities of gold, copper, diamonds, and coltan (a mineral used in cell phones), which many parties desire to control for monetary reasons. However, money from the sales of these resources has not reached average citizens. Currently the education, healthcare, legal, and road systems are in shambles.

An internet news search on "Congo conflict" yields grim headlines involving death, child labour, starvation, global politics, military action, civil war and inevitably, depressingly, suffering for the average humans stuck in harm's way.

It's about to get worse. Yesterday, a Democratic Republic of Congo opposition leader called for the imposition of international sanctions against security officials responsible for the deaths of persons protesting against President Joseph Kabila. Protesters and local police are both under assault with more than 50 dead in the last week.

The opposition says that President Kabila is delaying an election to hold onto power longer. President Kabila denies that and says he is doing what is best for the DRC.

Air France has recognized the dangers inherent in travel to the Congo. This week the airline canceled four scheduled flights, blaming the deteriorating local security situation for the cancellations. The ruination of the Congo continues.

This is too complex an issue for a writer tucked away safely

in North America to even venture an opinion on. What we can look at, though, is the impact this continuing conflict will have on the mining industry, and in particular, the global cobalt supply.

In 2012, the Tenke Fungurume Mine in the Congo produced 157,671 metric tons of refined copper and 11,669 t of contained cobalt in hydroxide. In 2013, sales volumes were expected to be 186,000 t of refined copper and 13,600 t of contained cobalt (from the US Geologic Service).

Lundin Mining Corp. is a well-respected diversified miner with global operations. Lundin owns 24% of Tenke, while Freeport-McMoRan Inc. holds 56% and Congo's state miner Gecamines owns the rest. Freeport agreed in May to sell its Tenke stake to China Molybdenum for USD\$2.65 billion. Lundin has a right to match any bids for Tenke. Lundin has three options: it can pay the USD\$2.65B to Freeport for Freeport's share, it can decide to sell its stake or simply allow the China Moly sale to proceed.

Balancing the Congo's high jurisdictional risk against the potential economic return, Lundin's board of directors must be scrambling to find a viable ethical solution for the shareholders. The company has a history of making good decisions so the public disclosure to be made on this one, whatever way it goes, will be informative reading.

The impact of the violence on cobalt? The DRC has about 45% of the world's cobalt reserves (US Geologic Service) and in 2012 produced 55% of the world's production (EarthMagazine). Any restriction on the flow of cobalt out of the country will impact pricing.

Those restrictions are almost inevitable. From Amnesty International to Enough Project to individual celebrities like Julianne Moore, Ryan Gosling and Iman calling for the imposition of sanctions and/or an ethical supply chain, there

is little doubt that the ongoing violence will ultimately result in less cobalt in the global supply.

That supply chain is already fragile. Cobalt production in the DRC is estimated to have fallen by over 20% in Q1, 2016 in reaction to falling copper prices.

(For a comparison of how scarce the supply of cobalt really is, consider that Chile on its own produced 5.7 million metric tonnes of copper in 2015. *Global* production of cobalt was roughly 100,000 tonnes in 2014, with estimates ranging from about 94,000 to 114,000.)

On the demand side, recognize that since cobalt is a major component in many lithium ion batteries, such as those used by Tesla and other EV manufacturers, demand has increased and will continue to increase. If you like lithium, you have to love cobalt.

Cobalt pricing has driven upwards from a 52 week low of USD\$9.85 per pound in February, 2016, to its current price of USD\$12.25, a 24% increase over 7 months. Whether Lundin elects to stay in the DRC or sell, the ongoing violence in this jurisdiction will continue to negatively affect the global supply, which will in our opinion continue to push pricing upwards.