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Conflict Minerals and the Eastern Congo: Implications for Investors

Prepared for:
The Glasswaters Foundation

Prepared by:
Noushin Khushrushahi, Research Analyst, SHARE

1. INTRODUCTION

Over the past decade, the issue of "conflict minerals" has received considerable international attention from civil society groups, aid agencies, the United Nations, activists and the media for its alleged role in fuelling the ongoing bloodshed in the Democratic Republic of Congo (DRC). Despite a peace agreement in 2003, the situation in the country's eastern provinces remains dire, with an estimated 45,000 Congolese dying every month as a consequence of conflict[1]. Media reports describe how vulnerable people are subject to violence by armed groups[2] fighting to control mineral deposits; these deposits are eventually sold to multinational corporations and used to make electronic gadgets like mobile phones, laptops and iPods - items that have become indispensible to global consumers. Consequently, businesses, investors, and everyday consumers of household electronics all face allegations of complicity in the production, trade and consumption of minerals believed to sustain mass murder, slave labour, extrajudicial killings, illegal arms trade, and systematic rape.

Since 2001, local and international civil society organizations have campaigned against conflict minerals[3]. Many of these campaigns focus on breaking mineral-conflict links by developing robust certification initiatives that distinguish between minerals acquired through legitimate mining and those acquired by armed groups whose profiteering fuels the fighting. This briefing paper offers investors an overview of the key issues related to the trade in conflict minerals, including conflict minerals-related risks and engagement recommendations for investors seeking to manage these risks in their portfolios.

2. BACKGROUND

"Conflict minerals" are minerals produced in or transported through conflict areas, most notably in eastern DRC, and are subjected to illicit taxation, theft, bribes, and/or illegal smuggling by armed groups that control the region[4]. According to the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) ("Dodd-Frank Act"), "conflict minerals" refer to:

> columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivatives; or any other mineral or its derivatives determined by the [US] Secretary of State to be financing conflict in the [DRC] or an adjoining country[5]

These minerals are more commonly referred to as the "3TG" or "3 Ts + Gold", denoting tin, tantalum, tungsten and gold. See Appendix 2 for a detailed description of each of these minerals including their principal uses and an overview of each mineral's global processing centers.

Although the causes of the ongoing conflict in the Congo are complex and beyond the scope of this brief, two key considerations help put into perspective for investors the role of minerals in the recent history of the eastern DRC (see Appendix 1):

1. Conflict in the eastern DRC precedes the trade in conflict minerals and breaking the links between the mineral trade and armed groups alone is unlikely to bring a sustained end to the violence; and
2. While the mineral trade may not be the root cause of the conflict, its current role in funding much of the fighting is well established.

The social and human consequences of the continued conflict are well documented. To summarize:

> Generating levels of suffering unparalleled in any recent war, [the Congo wars of the 1990s] caused, directly and indirectly, the highest toll of any conflict since World War II. An estimated one thousand civilians die every day, mostly due to malnutrition and diseases that could easily be prevented if the Congo's already weak economic and social structures had not collapsed during the conflict. The wars also traumatized the population of the contested eastern provinces: 81% had to flee their homes, more than half experienced the violent death of family members or friends, more than a third were abducted for at least a week, and 16% were subject to sexual violence, usually repeatedly. The atrocities that armed groups committed against the civilian population were so heinous that the Congo became a symbol for horror, even compared to Darfur and Yugoslavia. The wars also involved up to fourteen foreign armies; they destabilized such a large part of the African continent that US Secretary of State Susan Rice called them the first African World War[6].

Attempts to stop the trade in conflict minerals have also created negative social consequences. Mining and mineral trade has become the single leading provider of local employment and state revenue, despite its links to protracted violence in the eastern provinces. The demise of agriculture in the region coupled with a lack of economic alternatives has led Congolese men and boys to mining as a source of income. According to recent estimates, there are approximately 750,000 to 2 million artisanal miners in the DRC and the number of people, including miners and their families, who are dependent on the trade could be as high as 10 million individuals (16% of the Congolese population)[7]. In the United States, the Dodd-Frank Act included a provision for corporate reporting on use of minerals involved in the conflict mineral trade. Although this provision has not come into force, there has already been a reduced demand for minerals that are easily traced to the eastern DRC. Artisanal miners in the eastern provinces are receiving lower prices for minerals as a consequence, and armed groups have also modified their practices, leading to the creation of new illegal parallel markets[8].

In addition to the extensive social costs, there are important environmental impacts as a result of the continued conflict in the DRC. Weak governance capacity has led to mining in areas where it is not permitted under law. The national park system in the DRC has been particularly affected. Civilians have fled into national parks to hide from armed groups engaged in the plunder and looting of villages. Artisanal miners, who are dependent on mining and selling minerals as a source of daily income, have also moved into parks to exploit their resources. Such exploitation is not limited to mining but ranges from logging, hunting, fishing and clearing the land for agriculture, some of which is organized by armed groups. Consequently, environmental impacts include, but are not limited to, hunting animals for food, ivory and other body parts, pollution of streams by silt for the artisanal washing process, reduced population of invertebrates and fish stocks, reduced photosynthesis in aquatic plants due to the silting process, and erosion, including landslides of unprotected ground during rains[9].

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3. CONFLICT MINERALS IN THE SUPPLY CHAIN

The process of bringing conflict minerals to the consumer market involves multiple actors and includes the extraction, transport, handling, trading, refining and smelting, manufacturing and retail sale of the end product. In this context, the term "supply chain" refers to the system of all the activities, organisations, actors, technology, information, resources and services involved in moving the mineral from the extraction site downstream to its incorporation in the final product for end consumers[10]. This section describes the major elements of the conflict minerals supply chain and identifies key considerations for investors at each stage.

3.1 Extraction of Ores at Mine Sites

According to a mapping exercise by the International Peace Information Service in 2010, armed rebel groups controlled 12 of the 13 major mines in the eastern DRC, and the DRC army, motivated by opportunities for personal enrichment largely controlled approximately 200 smaller mines in the region[11]. The vast control that each of these armed groups has over artisanal mines is an indication of how widespread the mineral-conflict links are in the eastern provinces. It also demonstrates how legitimate mining by artisanal miners for personal profit may become intertwined with "illegal mining" through the payments of fees or taxes to government and/or rebel groups across the region.
Key considerations at the extraction stage:

- Unsafe working conditions: Miners must often dig pits up to 6 metres deep using hand tools such as picks, crowbars and shovels. Explosive or high-pressure hoses are used to loosen the rock substrate beneath the soil. Most workers have little safety protection, if any[12];
- Use of child and forced labour: In some instances, use of forced labour in the mines has been documented. For example, at the Numbi coltan mine in South Kivu in 2001, the occupying Rwandan army brought an estimated 1500 prisoners from Rwanda to mine coltan in return for reduced sentences and minimal subsidies.[13] Also, child labour is common. Many children turn to mining over education or other paid working alternatives such as agricultural work.
- Low payment for minerals: Artisanal miners are far removed from the open markets that determine the price of tin, tungsten, tantalum and gold. These miners are often subject to arbitrary or inadequate payment from trading houses that purchase these minerals. Miners have no alternative but to accept the low pricing of minerals and mineral powder they are selling;
- Vulnerability of artisanal miners to illegal taxation: Artisanal and small-scale miners have no mineral rights under current laws, but are permitted to mine if they pay a fee to the state. Since 2008, the government has zoned areas in North Kivu solely for exploitation by artisanal miners. However, these miners continue to experience extortion when transporting minerals between checkpoints;
- Challenges to defining legitimate and legal mining: Since government-backed forces are often implicated in the violence, basing mineral-conflict links on rebel militia groups alone fails to address the full scope of the problem.

3.2 Transport

From the mines, the minerals are usually transported to trading towns. Once transported, the minerals usually change hands repeatedly between different buyers until they are finally sorted by trading houses.

Key considerations at the transport stage include:

- Poor documentation of mineral sources: Minerals are purchased and re-purchased by various buyers at different stages of mineral transportation. Written documentation only begins once minerals are ready to be sent to the two major trading cities, Bukavu and Goma, for export, often failing to account for the custody chain of the minerals from the mine to the trading houses[14];
- Lack of transparency and accountability for unregistered trading houses: Only roughly ten per cent of the major trading houses are registered with the mineral trading association in the eastern DRC. This leaves much room for unregistered trading houses to remain unaccountable for tracing their mineral sources and documenting their various buyers. There are few incentives for these trading houses to be transparent about their mineral sourcing and purchasing, adding to the lack of accountability and transparency at this stage of the supply chain.

3.3 Export

Export companies (*comptoirs)* purchase minerals from trading houses in Bukavu or Goma to sell to foreign buyers and are required to register with the Congolese government. As of 2010, Sabour reports that there are 17 registered exporters based in Bukavu and 24 based in Goma, most of which are paid in advance for their minerals by international metal traders from Malaysia, Belgium and other countries[15]. Once minerals arrive in Goma or Bukavu at the export company, authorities from the Division of Mines register the shipment in the name of the registered trading house. The Centre d'Evaluation, d'Expertise et de Certification (CEEC) registers transactions between licensed trading houses and export companies and provides a voucher (*bon d'achat*) to the exporter. The CEEC also issues an export certificate for each consignment (weight 23-55 tonnes) shipped. Other government agencies then need to sign the certificate[16].
Key considerations at the trade and export stage include:

Poor documentation of mineral sources*:* The export certificate does not name the individual buyers involved in supplying the minerals to the registered trading houses or where the minerals were purchased or mined. The absence of formal records beginning at the local trading stage makes it challenging for registered exporters to differentiate the source of the minerals they export. Furthermore, since some unregistered export companies may receive minerals from unlicensed trading houses, these transactions may not be reported to the CEEC or the Division of Mines.

3.4 Transit countries

Consignments of 3Ts from eastern DRC are transported by road through Burundi, Rwanda, and Uganda to the Kenyan port of Mombasa and the Tanzanian port of Dar es Salaam. They are then shipped to importing or processing companies in Asia or Europe. Although there are few estimates for the amount of gold smuggled from the eastern DRC, anecdotal evidence suggests that the majority of domestic gold transactions and exports go unrecorded, with evidence of gold smuggling focusing on South Kivu, Ituri district and northern North Kivu[17].
Key considerations at the transit stage include:

- Challenges of traceability into transit countries: Exporting companies in Nord-Kivu principally obtain cassiterite from the FARDC-controlled mine at Bisie, which is estimated to provide 70 per cent of the cassiterite traded in Goma. An increasing share of cassiterite comes into Goma by road, and not by plane, making government control of minerals entering Goma more difficult. This may lead to increased illegal exports to nearby countries, which may then register minerals being *exported* from Rwanda, for example, as minerals being *sourced* from Rwanda. Authorities in Burundi and Rwanda have little incentive to prevent the smuggling of Congolese minerals onto their territories, as they can levy export duties upon these minerals. As a result, companies may fail in their supply chain due diligence by assuming these minerals are being sourced from adjoining countries and are, consequently, likely conflict-free;

- Diversification of gold smuggling: Since gold has a higher value by weight, it is more profitable to smuggle in smaller quantities[18]. Gold is mostly smuggled to Kampala, Uganda or Bujumbura, Burundi. In addition to exports by established export houses; individual Congolese traders buy gold at local trading markets and smuggle gold onto international flights to destinations such as Dubai and Guangzhou. As such, it seems that the gold sector has diversified insofar as more export houses are exporting less gold officially and more individual traders are able to connect to overseas[19].

3.5 Refining and Smelting

The number of tin, tantalum and tungsten processors in the world with the capacity to refine the materials is limited. For tantalum, the key global processing centres are Germany, China, Japan, Thailand, Kazakhstan and the United States. For tin and tungsten, major smelting locations include Thailand and China.

Key considerations at the refining and smelting stage include:

- Poor documentation and reporting: A key challenge for traceability is when processors choose to mix consignments and do not inform the downstream manufacturer that it has done so. Once the mineral ore is refined into metal, distinguishing its source is no longer possible. As a result, in order for minerals to be traced back to their source, it is critical that refiners document their consignments and inform manufacturers of any mixing or errors[20];
- Difficulties in accounting for gold: Gold is easier to refine than the 3Ts and is often smelted into metal earlier in the supply chain. Since the gold is mixed together with other metal commodities in a variety of forms, including ore, concentrates, powder and alloys, it can be more difficult to trace[21].

3.6 Manufacturing and Retail Sale

Companies then purchase the refined metals for use in the manufacture of tantalum capacitors, circuit boards, and electronic equipment. By the time items containing conflict minerals are sold to consumers, minerals may have been mixed at so many different points in the supply chain that it becomes extremely challenging to determine the exact origin of the minerals in question[22]. Furthermore, since gold serves as a store of value in the international financial system, there are additional layers of complexity when attempting to regulate the trade and consumption of gold[23].

Key considerations at the manufacturing and retail sales stage include:

- Challenges to corporate supply chain due diligence: Companies that acquire alloys for the manufacture of electronic equipment face a number of challenges in trying to ensure that their supply chains are conflict-free. These challenges begin from the time these minerals are mined, traded, transported, and exported to smelters. Poor documentation, the mixing of various metals at the smelting stage and the constant recycling of 3TG metals exacerbate the ability of companies to verify their supply chains;

- Lack of trustworthy and recognized certification schemes: While various efforts are being made to regulate trade in conflict minerals (see Section 4), no certification systems available for consumers completely ensure that they are buying from companies with conflict-free supply chains.

4. CURRENT EFFORTS TO REGULATE TRADE IN CONFLICT MINERALS

Corporate due diligence is the prominent focus of most initiatives related to addressing conflict minerals in the supply chain. Due diligence can help companies ensure that they observe international and domestic laws and address actual or potential risks in order to prevent or mitigate adverse impacts associated with their activities and sourcing decisions. Recent international regulatory efforts focus on improving transparency by requiring companies to disclose whether or not they source conflict minerals from the DRC and if they do, to disclose their due diligence efforts on the source and chain of custody of these conflict minerals. Several initiatives aim at helping companies implement due diligence including certification schemes, multi-stakeholder and industry initiatives aimed at good practice in the supply chain as well as third party verification schemes for compliance with environmental, human rights and social standards for mining companies.

4.1 Recent international legislative measures against conflict minerals

In July 2010, the US Senate passed the Dodd-Frank Act, a legislative response to the 2008 global financial crisis. Under Section 1502 of the Act, companies will be required to disclose whether or not conflict minerals are a part of their products or processes and, if so, whether these conflict minerals originated in the DRC or nine adjoining countries. The law aims to dissuade companies from sourcing minerals from mines under the control of armed groups[24]. While it does not specify penalties for non-compliant issuers, a provision allows "punitive measures" to be taken against individuals or entities whose commercial activities support armed groups and human rights violations[25].

The legislation will affect companies in a wide range of sectors as well as companies domiciled in other countries, such as Canada, that are SEC filers[26]. Based on a review of Standard Industrial Classification codes, the SEC estimates that more than 5500 companies will need to make disclosures under the new law. Of those 5500 issuers who may potentially be using conflict minerals, approximately 1200 may currently source some or all of these minerals from the DRC and adjoining countries and will need to prepare and file a Conflict Minerals Report[27]. The US Securities and Exchange Commission will implement this provision of the Dodd-Frank Act following the publication of rules, which has been delayed until potentially the end of June 2012[28].

After passage of the Dodd-Frank Act, pressure from international NGOs to address the conflict minerals issue increased in other major jurisdictions. In June 2011, 33 EU parliamentarians filed a resolution calling on the European Commission to develop a legal initiative similar to the Dodd-Frank Act.[29] To date, no new legislation has been passed in the EU. In Canada, a private member's bill brought forward in September 2010 died on the Order Papers at the end of the 40th Parliament in March 2011 and it has not been reintroduced in the new Parliament[30].

4.2 Recent legislative measures by the DRC government

On September 11, 2010, the Congolese Ministry of Mines announced President Joseph Kabila's decision to suspend all exploitation and export of minerals from the provinces of North Kivu, South Kivu and Maniema in an attempt to end the illegal exploitation of natural resources in the eastern provinces. The suspension ended in March 2011.

The ban had several negative consequences in the months following the announcement. Anecdotal evidence points to members of the Congolese military taking advantage of the climate of insecurity and confusion to set up and control illegal mining operations; artisanal miners and mineral buyers were increasingly forced to conclude unofficial financial agreements with army officers and members of the mining police in order to get access to the mines, and living standards in the Kivu region were devastated as the ban resulted in a decline in the availability of hard currency.

Together with the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), the Congolese government has also sought to set up five minerals trading centres in the eastern provinces whereby both miners and traders are able to do business without interference of armed groups. The goal is to have state agents exert control and levy taxes. Traders, in turn, can make sure they receive the appropriate paperwork; minerals can be appropriately labeled and miners can profit from a competitive market environment to negotiate better prices. According to a recent report, rules put in place by the government have created hardship, requiring some traders to travel extra distances to authorized centres. In areas where trade routes are not policed, the risk that legitimately-mined ore may be illegally seized by armed groups en route to trading centres is great. Companies buying such minerals will receive minerals labelled as “conflict free” from these centres. To be successful, more centres must be built in locations convenient to trade routes and MONUSCO must maintain the necessary conflict-free trade routes[31].

4.3 Certification Schemes

The following certification schemes are relevant in the context of conflict minerals in the DRC:

The International Tin Research Institute’s (ITRI) Tin Supply Chain Initiative: In response to increasing criticism from international NGOs and the UN Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo, the UK-based ITRI, which represents tin miners and tin smelting companies, established a supply chain due diligence mechanism for tin originating from the eastern DRC. The scheme, entitled the ITRI Tin Supply Chain Initiative (iTSCi), was piloted in two phases. The first phase began in 2009 and focused on improving transparency of the tin supply chain by using a *bag-and-tag* method between the export companies and foreign smelters. It also requires issuing export documents and a certificate, which records a physical description of the material. The iTSCi also identifies the mine of origin and transport route via the intermediate buyer-supplier. The second phase of the project seeks to improve traceability from the mine to the buying houses by working closely with Congolese institutions such as the provincial mining division. In June 2010, the ITRI signed an agreement with the Congolese Ministry of Mines, selecting Bisie in North Kivu and Nyabibwe in South Kivu as mine sites for the initial trials. The scheme was suspended in September 2010 when the Congolese government banned mining in the Eastern DRC. The ITRI has indicated that it intends to restart the project in the future. The iTSCi traceability project has agreed to work with the German Budesanstalt fur Geowissenschaften und Rohstoffe (see below), a certified trading chain initiative, aimed at recording the certification of the origin of minerals, especially tantalum.

The Bundesanstalt für Geowissenschaften und Rohstoffe (BGR): Since 2008, the BGR, known as the German Federal Institute for Geosciences and Natural Resources in English, has piloted a mineral certification system specifically tailored to the artisanal and small-scale mining sectors in Rwanda and the DRC. This certification system, known as "Certified Trading Chains" (CTCs), follows a bottom-up supply chain due diligence approach, beginning at individual artisanal mining operations and subsequently involving local to regional-scale mineral concentrate traders and processors. It is based on independent third-party audits and includes on-the-ground assessments of artisanal mining conditions, transparency, mineral origin, and mineral traceability. The CTC system, therefore, allows mineral producers and their downstream clients to demonstrate responsible supply chain management when sourcing minerals from conflict-affected or high-risk areas. In this manner, the CTC system aims to deter divestment from the DRC by offering a more sustainable solution for companies to verify their supply chains[32]. The CTC approach has been piloted in Rwanda since early 2009, together with the Rwanda Geology and Mines Authority. It has also been piloted in the South Kivu Province of the eastern DRC with several departments of the Congolese Ministry of Mines since late 2009. The pilot period is expected to end in 2012[33]. If properly implemented, the BGR's system can render the artisanal mining industry more transparent and accountable; it can also foster long-term sustainability at the national and regional levels by its inclusion of capacity-building components for involved government sector institutions.

The Electronic Industry Citizenship Coalition (EICC)/ Global e-Sustainability Initiative (GeSI) Extractives Workgroup: The EICC is a coalition of more than 60 of the world's largest Information and Communication Technology (ICT) companies joined together to improve working and environmental conditions in the global electronics supply chains. The GeSI brings together leading ICT companies as well as NGOs committed to improving the sustainability performance of the sector, and informs the public of its members' voluntary actions to improve sustainability and promote sustainable development. In 2008, the EICC and GeSI joined forces to form the EICC/GeSI Extractives Workgroup to improve conditions in the electronics supply chain and enable companies to source conflict-free minerals from the DRC. The workgroup is using a two-pronged approach to improve the transparency and traceability of mineral sourcing: first, it is supporting the above-described International Tin Research Institute's (ITRI) Tin Supply Chain Initiative scheme by tracing minerals from the mine to the smelter

Box 1. Applying lessons learned from the Kimberley Process Certification Scheme[i]

What is it?

The Kimberley Process Certification Scheme ("Kimberley Process") is an international multi-stakeholder process, originally designed to certify conflict-free diamonds. The Process was established in 2003 to discuss ways to prevent diamonds from conflict zones from entering the global diamond supply chain.

Where has the Process succeeded?

The Kimberley Process successfully formalized the trade of in rough diamonds by creating an incentive for producers to declare their diamonds in order to obtain certificates, which in turn facilitate export. As a result of greater taxes being recuperated by governments, there have been improvements in local labour and environmental conditions.

Where has the process failed, and what lessons can be applied to the trade in conflict minerals?

Some experts have argued that the Kimberley Process has implicitly sanctioned the smuggling of conflict diamonds. For example, after reports emerged that countless individuals were massacred at the Marange diamond mines in Zimbabwe, these diamonds were simply rerouted into Mozambique and exported as that country's diamonds. Additionally, the Scheme relies on a peer-review mechanism every three years whereby the peer review missions visit member countries at the member countries' will. Any recommendations that come out are often ignored, without any strong and effective mechanism to enforce compliance. Further, because the 'chair' rotates annually, there is no chain of accountability beyond procedural functioning. Finally, because members make decisions by consensus, any peer review team that finds evidence of non-compliance and recommends a country for expulsion, may be vetoed by one member and consequently block an initiative from going forward.

through an in-region *bag-and-tag* scheme. Second, through its Conflict-Free Smelter Program, it is identifying and validating conflict-free smelters from which suppliers may source minerals. This Program is a multi-stakeholder assessment process aimed at determining if smelters or refiners are sourcing conflict-free minerals, and audits on several tantalum smelters were completed in 2010[34]. Currently, a growing list of smelters/refiners that are compliant with the conflict-free assessment protocol is available online for free[35]. Companies may ask their direct suppliers to source from these refineries as part of their supply chain due diligence.

In August 2011, the Workgroup also announced the launch of the Conflict Minerals Reporting Template Tool and Dashboard. The template is designed to provide companies with a common and easy-to-use tool to facilitate the recording of information between each level of the supply chain. It also includes questions regarding a company's conflict-free policy, its engagement with direct suppliers, and a list of the smelters used by the company and its suppliers. The template enables data analysis, and supports the preparation of consolidated information from multiple suppliers, which, in turn, can provide investors and customers with an aggregated document of smelter information.

4.4 Government and Multi-stakeholder supply chain initiatives

The conflict in the DRC has led to several important governmental and multi-stakeholder initiatives and to the application of exiting broader initiatives to the conflict minerals problem.

OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas[36]: The OECD Guidance for Responsible Supply Chains was developed by a multi-stakeholder group of governments, industry, Congolese representatives and civil society organizations as a mechanism for companies using minerals from eastern DRC and neighbouring countries. The Guidance was approved in December 2010 and provides a set of standards for adherence by all actors in the mineral supply chain. The Guidance recommends how upstream companies should respond when confronted with risks of "direct or indirect support" to conflict. The OECD is currently coordinating a pilot implementation phase of the OECD Guidance with more than 85 companies and industry associations across the 3T supply chain, including large multinationals like Siemens, Boeing, Ford Motor Company, Hewlett-Packard, and Panasonic.

Extractive Industries Transparency Initiative (EITI): Launched in 2002, the EITI was created to address the concern that citizens in many countries are unable to ensure that revenues paid to governments by extractive industries (energy, mining) were used for their benefit. It brings together governments, companies, investors and civil society organizations to establish benchmarks relating to the transparency of information about the commercial arrangements used to extract oil, gas, and minerals. It also enables independent verification and certification of the management of revenue from natural resources. In 2010, the DRC was a candidate for validation. The DRC has up until March 1, 2013 to submit a final validation report to the EITI Board for acceptance into the EITI[37].

The International Conference on the Great Lakes Region (ICGLR): Launched in November 2004, the ICGLR began with the discussion of eleven heads of state and government of the Great Lakes region about how conflicts in the region could be put to an end. In 2006, the ICGLR launched the *Regional Initiative against Illegal Exploitation of Natural Resources* and in 2010, the ICGLR's steering committee of the initiative gathered in Burundi to discuss further ways in which the mineral trade in the region can be conflict-free. The main components of this scheme are mineral tracking, the establishment of a regional database, the organization of regular third party audits and the nomination of an overall auditor-general. The ICGLR works closely with the above-mentioned OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and is an initiative strongly supported by the Nobel Peace-Prize nominated Partnership Africa Canada[38].

Public-Private Alliance for Responsible Minerals Trade: The Public-Private Alliance for Responsible Minerals Trade (PPA) is a joint initiative between governments, companies, and civil society to support supply chain solutions to conflict minerals challenges in the DRC and the Great Lakes Region of Central Africa. The PPA was launched as a joint effort with U.S. State Department, the U.S. Agency for International Development, non-governmental organizations, and companies/industry organizations to address conflict minerals concerns while delivering solutions that benefit those involved in responsible minerals trade in the Great Lakes Region.

4.5 Third party verification

Initiative for Responsible Mining Assurance[39]: Launched in 2006, the Assurance Initiative is supported by several mining corporations, jewellery retailers, trade associations and non-profit environmental organizations. The Initiative is focused on enabling retailers, such as jewellers; to claim that their products are sourced from minerals produced in mines meeting best practice environmental and social standards. Investors can consequently look to the initiative as a source of information and verification, much like the Kimberley Process.

5. CONFLICT MINERALS-RELATED RISKS

The ongoing conflict in the DRC brings a number of risks for publicly-traded companies and their global suppliers across a range of industrial sectors including information and communications technology, automotive, jewelry and heavy manufacturing. These risks, as well as the growing demand from international governments and civil society for company transparency regarding the use of conflict minerals, have important implications for investors.

Table 1: Risk Profile of Conflict Minerals for Up-Stream Companies

TYPE OF RISK	DESCRIPTION
Reputational Risks	Companies that use 3TG minerals in their products or processes face reputational risks as a result of growing government and civil society focus on company transparency and due diligence regarding the use of conflict minerals in their supply chains. While most campaigning focuses on international companies with significant market share, smaller companies in these sectors are also at risk if they fail to account for their sourcing networks or fail to keep themselves informed of responsible supply chain practices put forward by industry associations.
Supply Chain Risks	Companies that use the 3TG minerals in their products or processes face supply chain risks – specifically disruption of supply – as a result of sourcing these minerals from conflict zones. Supply chain disruptions may also emerge as a result of new regulatory requirements requiring companies to report on whether or not the conflict minerals it uses originated in the DRC or an adjoining country. Such reporting requirements (as proposed by the SEC) coupled with on-going conflict and civil society campaigns may dissuade companies from purchasing any minerals from the DRC leading to short-term supply constraints as companies identify more stable sources of these minerals leading to delays in the supply chain and potential price increases.
Regulatory Risks	Current legislative initiatives will require companies to disclose information on their sourcing practices including the steps they are taking to ensure that conflict minerals do not enter their supply chain. Compliance with such regulations could increase operational costs and non-compliance could lead to penalties, fines and reputational damage.

By investing in mining companies that have operations in the DRC and in companies that use conflict minerals in their products or processes, investors also face significant reputational and legal risks if they are seen as providing capital to companies that may be complicit in abuses committed by either government or rebel forces. Investors may also face financial losses because of the impact of reputational damage on company value or as a result of civil litigation.

6. COMPANY RISK MANAGEMENT STRATEGIES

In response to recent regulatory initiatives and on-going civil society campaigns, several companies have taken some initial steps to incorporate due diligence into their sourcing practices by engaging with their direct suppliers and participating in multi-stakeholder initiatives to improve supply chain transparency and facilitate the certification of conflict-free products. Despite these initial responses however, very few companies have successfully devised a comprehensive response to the conflict minerals issue that incorporates a supply chain policy, management system, disclosure and transparency as well as participation in industry and multi-stakeholder initiatives.

6.1 Company Best Practices

Corporate risk management in the mineral supply chain will require more sophisticated mapping, management, and reporting on the emerging concerns related to conflict minerals. Due diligence in this area will enable companies to deliver conflict-free products to customers with confidence in their source and manufacture, better anticipate and respond to regulatory trends, foster proactive risk management, and deliver more sustainable and responsible supply chains that will enhance corporate value and shareholder returns.

Supply Chain Policies

A written supply chain policy is an important means by which companies express their commitment to responsible supply chains. Developing and integrating corporate policy on the use of conflict-minerals is an essential first step in managing risks in raw material sourcing. To be effective, this policy should reflect the following considerations:

1. Explicitly state that the company will not purchase products or components that generate revenue for armed groups[40] implicated in the illegal control of mine sites, illegal taxing or extortion of money or minerals or the illegal taxing and extortion of intermediaries, export companies, or international traders;
2. Commit to monitoring supply chains down to the smelter[41] in high-risk or conflict-affected areas;
3. Suspend or discontinue engagement with upstream suppliers where the company identifies a reasonable risk that they are sourcing from, or linked to, any party committing serious abuse, gross human rights violations, or violations of international humanitarian law;
4. Comply with the OECD recommendations regarding bribery and fraudulent misrepresentation of the origin of minerals[42];
5. Support efforts and take steps to effectively eliminate money-laundering connected to mineral extraction, trade, handling, transport or export;
6. Disclose the payment of all taxes, fees, and royalties in accordance with the EITI principles; and
7. Engage with suppliers, central or local governmental authorities, international organizations, civil society, and affected third parties as appropriate to improve and track company performance[43].

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Supply Chain Management and Due Diligence
Companies should ensure that they implement a clear and comprehensive due diligence management process in order to identify the factual circumstances involved in the extraction, transport handling, trading, processing, smelting, refining and manufacturing of products containing minerals from the DRC and adjoining countries. Best practices include the following:

1. Board level commitment to conflict-free mineral sourcing[44];
2. Designation of a senior staff member with the necessary competence, knowledge and experience to oversee the supply chain due diligence process;
3. Develop a risk assessment and management strategy across the company's global supply chains, including a detailed mapping of which of the company's products and components contain tin, tungsten, tantalum and gold;
4. Contractually obligate suppliers and partners to provide verified conflict-free parts or materials;
5. Provide resources to support the operation and monitoring of these processes, including supporting suppliers to invest in improved conditions and routines for monitoring whether they have exercised appropriate due diligence in ensuring that materials from the DRC are certified as conflict-free;
6. Use the Conflict-Free Smelter Program to identify the mineral smelters/refiners in their supply chains;
7. Conduct internal and third-party audits to assess whether suppliers have carried out all appropriate elements for conflict-free due diligence in compliance with corporate supply chain policy;
8. Work with the smelter/refinery and contribute to finding ways to build capacity, mitigate risk and improve due diligence performance;
9. Have in place a whistleblower policy that protects employees from retaliation for disclosing information about activities that may be in violation of a law and/or of a corporate policy related to conflict minerals; and
10. Tie executive compensation to the successful implementation of a conflict-free minerals sourcing policy.

Supply Chain Reporting and Transparency
Companies should report annually on their supply chain responsibility and disclose relevant findings and actions related to minerals. Best practices include the following:

1. Report on compliance with the company's supply chain due diligence policy with an explanation of the management structure responsible for supply chain management, including who in the company is directly responsible;
2. Describe the resources in place to review and manage risks to maintaining a conflict-free supply chain;
3. Describe steps taken to identify smelters/refiners in the supply chain and assess their due diligence practices;
4. Publish a list of smelters used by the suppliers to the company;
5. Report on the number of audits conducted over the reporting period, including auditor competencies, type and frequency of non-compliance, and follow-up actions; and
6. Report on efforts to improve supplier performance, including investment in resources and education related to conflict minerals, and provision of tools.

Industry and Multi-stakeholder Initiatives

Involvement in industry and multi-stakeholder initiatives, such as the EICC/GeSI Extractives Workgroup, the Public Private Alliance for Responsible Minerals Trade, and the OECD Due Diligence Workgroups, will better ensure creditability and sustainability in certification and audit processes as they relate to conflict minerals. A recent report determined that top corporate performers on the issue of conflict minerals are members of the EICC/GeSI workgroup and proactively engage stakeholders in order to promote conflict-free smelter programs, due diligence processes and transparency in an effort to encourage responsible sourcing in and from the DRC[45].

6.2 Current Company Practices

Table 2 provides an overview of current responses by major international and Canadian companies in the telecommunications, electronic and heavy manufacturing sectors.

Table 2: Company Responses to Conflict Minerals-Related Risks

COMPANY	POSITION STATEMENT	SUPPLY CHAIN ENGAGEMENT	EICC/GESI	PPA FOR RESPONSIBLE MINERALS TRADE
Telecommunications Companies				
Vodafone	√	√	√	√
Verizon	-	-	√	√
Sprint	√	√	√	√
AT&T	√	-	√	√
Deutsche Telekom	√	√		
Rogers Communications	×	-	×	×
TELUS Corporation	√	-	×	×
Shaw Communications	×	-	×	×
BCE Inc. (Bell Canada)	√	-	×	×
Electronics Companies				
Nokia	√	√	√	√
Panasonic	√	√	√	√
Hewlett Packard	√	√	√	√
Dell	√	√	√	√
Motorola	√	√	√	√
Apple Inc.	√	-	√	
Intel	√	√	√	√
Research in Motion	√	-	√	√
Gennum Corporation	×	×	×	×
Heavy Manufacturing				
Bombardier	×	×	n/a	n/a

√ Information Available - Limited Disclosure × Information Unavailable Publically

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7. A ROLE FOR INVESTORS

In efforts to mitigate risk and to safeguard against complicity in human rights abuses and the on-going conflict in the DRC, investors are starting to respond by engaging with companies, policy makers and other stakeholders to address the challenges related to sourcing conflict minerals in the DRC. In March 2010, a coalition of investors with assets of USD $198 billion issued an investor statement calling on companies to acknowledge and address the issue of conflict minerals in their global supply chains[46]. The statement acknowledged that "the disclosure and sourcing policies and practices by companies throughout their entire supply chains is essential to allow investors to evaluate the social, environmental and moral impacts associated with a company and to inform investors' decision-making practices"[47].

In Canada, a coalition of 17 investors and investment service providers put forward a letter to the Government of Canada demanding improved disclosure in the extractive industries in accordance with the EITI[48]. By supporting this initiative, investors are able to provide added clout for efforts aimed at bringing out greater transparency regarding the payment of taxes and royalties by resource extraction companies in the DRC as well as encouraging the DRC to report on its expenditure of revenue back into the country. Such initiatives facilitate collaborative engagement and have the benefit of addressing the issue of conflict minerals in both direct and indirect ways.

As Table 2 above indicates, Canadian companies are lagging behind their international counterparts in taking steps to manage conflict-related risks in their supply chains. This gap presents important opportunities for investors to engage with these companies to ensure that they are implementing best practice in due diligence and supply chain transparency. The following outlines three areas where investors can take action: corporate engagement, investor and multi-stakeholder collaboration and public policy engagement.

7.1 Corporate Engagement

To manage the risks associated with conflict minerals, investors should take the following steps as part of a comprehensive corporate engagement strategy:

1. Survey holdings to identify companies in their portfolio that are exposed to conflict minerals-related risks;
2. Research and assess company policies and practices related to conflict minerals against competitors and against the best practices outlined above;
3. Encourage companies to issue public statements on the issue of conflict minerals, committing themselves to take reasonable efforts to exclude conflict minerals from their supply chains. Such statements should outline due diligence processes and mechanisms, and efforts to develop responsible mineral supply chains, and engagements with suppliers and other stakeholders about mitigating supply chain risk;
4. Urge companies to develop robust supplier procurement policies in alignment with international standards on corporate due diligence. In particular, investors should encourage companies to keep informed about the BGR process aimed at ensuring conflict-free supply chains without divesting from the Congo and become involved in the EICC/GeSI Extractives Workgroup;
5. Request that companies demonstrate efforts to use the Conflict-Free Smelter Program, Template and Dashboard. These tools allow investors to assess whether the company has attempted to strengthen its mineral supply chain and due diligence mechanisms as they relate to conflict minerals;

6. Demand company disclosure of mineral procurement policies and third-party audits of the mineral supply chain. Investors may engage companies on their knowledge and use of the OECD Due Diligence Guidance for Responsible Mineral Sourcing and their willingness to support the iTSCi;
7. Request that companies disclose the results of supply chain risk assessments as well as the names of suppliers, smelters and refineries;
8. Request information on whether companies are providing training to mineral suppliers and smelters about sourcing conflict minerals and relevant company policies; and
9. Encourage companies to develop robust policies against bribery and corruption, especially as it may relate to transit countries.

7.2 Investor and Multi-Stakeholder Collaboration

In addition to the above corporate engagement options, investors can also work collaboratively to ensure the success of efforts aimed at conflict-free supply chains by:

1. Working with industry associations, NGOs, and other stakeholders to support various multi-lateral strategies to address the conflict in the DRC; and
2. Joining existing investor coalitions in an effort to leverage collective influence when engaging companies. For example, the United Nations Principles for Responsible Investment enables investor signatories to participate in collaborative engagements with companies.

7.3 Public Policy Engagement

Finally, investors can engage with policy makers to support regulatory environments that are conducive to greater disclosure and transparency of conflict minerals in supply chains by:

1. Signing on to, or initiating investor statements regarding conflict minerals from the DRC that are respectful of local Congolese concerns; and
2. Supporting a regulatory environment in Canada that requires companies to disclose their use of conflict minerals as well as the measures they are taking to trace the origin of the minerals and exercise due diligence on the source.

8. CONCLUSIONS

In summary, while the issues around the conflict mineral trade are complex, investors have the opportunity to engage companies in implementing responsible supply chains and to support multi-stakeholder efforts and policy initiatives that aim to foster an environment of much-needed peace and stability in the DRC. Initiatives aimed at certifying conflict-free mineral sources, such as the BGR and the Conflict Free Smelting Program, although still in their infancy, have the potential to benefit local mining communities in the DRC while directing hefty profits away from armed groups. In this manner, such efforts can help companies avoid complicity in the Congo as well as associated supply chain, regulatory, and reputational risks.

APPENDIX 1: THE RISE TO PROMINENCE OF CONFLICT MINERALS IN THE CONGO

According to Michael Nest, scholar on governance and development issues, "the violence and conflict that has engulfed the eastern DRC over the past two decades has come in five waves that overlap but are conceptually distinct"[49].

Early 1990s - Conflict over citizenship, economic opportunities, and ethnic competition: In 1972, President Mobutu Sese Seko sought to build support and win allies in the eastern provinces of the country, formerly known as Zaire, by giving full citizenship rights to Congolese of Rwandan descent. These individuals, who were a demographic majority in many areas and who were previously restricted to being traders and tenant farmers, were now able to buy land and become senior public officials.
However, in the early 1990s, opponents increasingly challenged President Mobutu's grip on power; he also lost significant financial support from the United States following the end of the Cold War. In 1991, and in order to fortify his weakening power, President Mobutu annulled citizenship for most Banyamulenge[50] and Banyarwanda[51] who were unable to trace their ancestry in the DRC to 1885, the year in which the Congo became the property of King Leopold II of Belgium. Low-level communal violence erupted over ownership and access to agricultural land between communities whose citizenship was revoked and those Congolese who retained citizenship and had previously resented Mobutu's perceived favouritism towards the Banyamulenge and Banyarwanda.

Corresponding need for armed groups' self-reliance: During this period, competing armed groups, many of whom were previously funded by Cold War patrons, lost their financial backing and sought alternative ways to fund their fighting. Given the vast array of natural resources the DRC and the weakening enforcement of mineral property rights due to conflict, the exploitation of minerals soon became an attractive source of militia funding.

1994 - The after-effects of the Rwandan genocide: Between April and July 1994 in Rwanda more than 800,000 ethnic Tutsis and moderate Hutus were exterminated in a genocide orchestrated by the Interahamwe, an extremist organization of Rwandan Hutus[52]. The genocide was finally brought to an end by the military campaign of the Rwandan Patriotic Front, an organization of expatriate Rwandan Tutsis in Uganda. As a result of the Rwandan Patriotic Front's advancing forces, over 2 million Rwandans flooded into eastern DRC, including members of the Interahamwe, officials from the Hutu Power organization who masterminded the genocide, and ordinary Rwandans who feared retaliation from Tutsis. The influx of refugees heightened existing tensions between the Banyamulenge and Banyarwanda and the autochthones who saw the camps as another example of Rwandan "invasion". Furthermore, Banyamulenge and Banyarwanda communities felt threatened by the armed Rwandan groups and were attacked. These communities reacted by seeking and receiving weapons and training from the Rwandan Patriotic Front. The outcome of "low-level violence and tension over land escalated into systemic violence between communities along ethnic and citizenship lines[53]."

*Corresponding rise of global demand for consumer electronics***:** In the 1990s, demand for consumer electronic devices such as mobile phones, gaming platforms, and ultra-light laptops surged, as did the demand for tantalum base products required for their manufacture. When some producers locked much of the world's tantalum production into long-term contracts, others faced the risk of losing market share. As demand rose strongly and the supply became constrained, prices soared. Speculators and other traders tried to get their hands on tantalite available outside long-term contracts. At the time, the largest source of tantalite on the open market was coltan from the DRC[54].

1996-1997 - The First Congo War: President Mobutu's government and military forces were unable to control Hutu Power and Interahamwe forces, which used the refugee camps in the eastern Congo as outposts to reorganize and launch attacks back into Rwanda. In 1997, the then Tutsi-controlled Rwandan government – worried that the Hutus might return – supported Congolese rebel Laurent Kabila in his successful quest to take control of the eastern provinces. Foreign mining companies also support the Alliance des Forces Démocratique pour la Liberation du Congo-Zaire ("the Alliance") headed by Kabila, who signed agreements granting vast tracts of land to these companies. The Alliance, in turn, used revenue from selling these mineral rights that it did not yet own to fund its military campaign. Kabila marched on to Kinshasa, massacring Hutu refugees as he went. When he reached Kinshasa, he deposed Mobutu and re-renamed the country from Zaire to the Democratic Republic of the Congo. Both major and junior mining companies that had previously avoided investing in the country in order to minimize reputational risks began investigating opportunities for exploration, mining, and joint ventures under the new regime.

Armed groups' focus on the mineral trade: The exploitation of minerals became an increasingly important source of militia funding during this time for two key reasons: first, the country's vast mineral wealth provided militia groups with the opportunity to extract and profit from artisanal mineral trade without excessive investments. Second, the generic nature of minerals and other primary commodities make it difficult to trace their origin, and therefore particularly advantageous to armed and non-state groups in weak governance zones. Employing economic networks established during the First Congo War, minerals traders and military officials were perfectly placed to funnel minerals out of the country.

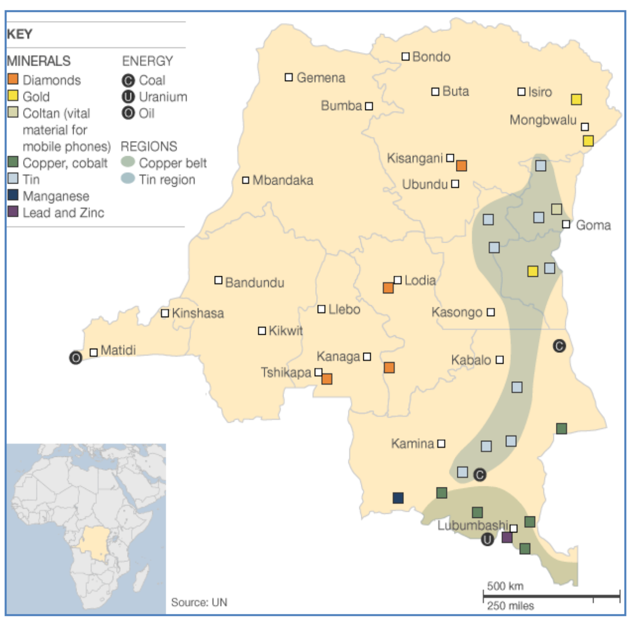
1998-2003 - **The Second Congo War:** A year after taking power, Kabila alienated neighbouring Rwanda and Uganda as well as donor countries and the United Nations. His refusal to cooperate with Rwanda in arresting members of Hutu Power and the Interahamwe prompted Rwanda, together with Uganda, to invade the eastern DRC in support of forces opposing Kabila. In response, Angola, Namibia and Zimbabwe came to Kabila's defence, leading to a regional war. A stalemate ensued, followed by a peace deal in 2003 and the division of the DRC into two roughly equal halves. The eastern half was controlled by three main militia groups: the Mouvement pour la Libération du Congo (MLC) and the Rassemblement Congolais pour la Décmoratie-Mouvement de Libération (RCD-ML), both backed by the Ugandan army, and the Rassemblement Congolais pour la Démocratie-Goma (RCD-Goma), backed by the Rwandan army. Government forces, backed by the Zimbabwean and Angolan militaries, controlled the western half. In 2001, Laurent Kabila was assassinated and eventually replaced by his son, Joseph, who was elected president in 2006.

Rise to prominence of the 3TG: While political and strategic objectives were important at the start of the Congo wars, economic interests became a major reason foreign forces continued fighting. Their control of mines, forests, borders and trade routes all created opportunities for profit making. Furthermore, the DRC government rewarded the Zimbabwean and Angolan governments for their support by granting mining rights to firms owned by these governments or their political elites; they also permitted joint ventures between these firms and DRC state-owned companies. Some rebel groups that were formed during this period, referred to as "Mai Mai" militias, opportunistically cooperated with anti-government forces especially in order to exploit natural resources, including coltan. While the DRC is rich in many minerals, tantalum, tin, tungsten, and gold, in particular, played a unique role. When found near the surface, or in alluvial deposits, as they sometimes are in the eastern DRC, they can be profitably mined by individuals using basic methods. Labour-intensive artisanal mining methods require little capital and infrastructure. Armed groups were easily able to control artisanal production of minerals like the 3TG. Furthermore, trading patterns and the lack of proper infrastructure, created an environment in which armed groups can illegally tax and profit from the production and trading of conflict minerals.

2006 to present: Despite the withdrawal of the Ugandan and Rwandan armies, the return of the DRC army following the peace agreement, and the presence of the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUC), of the situation in the eastern DRC has been described as "unremitting clashes between various armed groups and militias, frequent massacres of civilians, massive population displacements, and appalling human rights violations, including widespread sexual violence, persisted in the provinces of North Kivu, South Kivu, North Katanga, and in the Oriental Province's Ituri district."[55]

In 2007 and 2008, a conflict previously confined to a small area of North Kivu escalated into large-scale fighting, prompting more than 500,000 to flee their homes. Only intense diplomatic intervention and a forceful inter-position by UN peacekeepers prevented the Congo from sliding back into a full-scale national and regional war. Since late 2009, the situation has deteriorated further, especially the Kivus and Oriental Province, which remain under constant combat. According to recent ethnographic research by African scholar Séverine Autesserre, more than 80% of the inhabitants of these places consider their living conditions to be the same as or worse than during the wars[56]. The continued negative impact of the violence has led the UN to describe the situation in the eastern DRC as "one of the worst humanitarian crises in the world"[57].

Figure 1: Mineral wealth and control in the DRC



Sources: BBC News. (2011, Nov. 21). "Failed State: Can DR Congo Recover?" [*http://www.bbc.co.uk/news/world-africa-15775445*](http://www.bbc.co.uk/news/world-africa-15775445).

Armed groups continue profiting from conflict minerals: In 2001, the United Nations (UN) Security Council Panel of Experts articulated concerns about the illegal exploitation of natural resources in the DRC and the role of the mineral trade in fuelling the conflict. Subsequent reports continue to identify several private trading, brokerage, banking and transportation firms as having participated in and profited from conflict minerals[58]. The export value of the 3Ts (excluding gold) was estimated at $137million in 2008, with armed groups receiving approximately $118 million for cassiterite, $12 million from coltan, and $7.3 million from tungsten[59]. Estimates for the illegal smuggling of gold range from $310 million (excluding Nord-Kivu and Maniema provinces where some gold extraction takes place) to the seemingly high estimates of $1.24 billion annually[60]. Armed groups' earnings from gold alone range from an estimated $44 million to $88 million each year[61].

On November 28 2011, the DRC held a democratic election. The results of the election were announced on December 6, 2011 with Joseph Kabila being declared the winner with 48.9% or 8.8 million of 16.1 million votes cast. Opposition leader, Etienne Tshisekedi, has stated that he refuses to accept the results, which show that he received 32% or 5.8 million votes.

International observers have said that the vote was flawed but have not gone as far as to call it fraudulent, since the irregularities across the nation were not enough to change the outcome. Ban Ki-Moon and the French Foreign Ministry have both called for Kabila and Tshisekedi to deal with their contestation through legal channels.

The election results will have important implications for the mineral trade and licensing. International groups have criticized Joseph Kabila for his failure to ensure the safety and security of Congolese citizens and stop the ongoing violence, and his silence over enforcing mineral property rights. He has also been criticized for selling mining licenses at below market value to firms associated with friends or close counterparts[62].

APPENDIX 2: OVERVIEW OF CONFLICT MINERALS[63]

MINERAL	DESCRIPTION	USES	GLOBAL PRODUCERS
Columbite-tantalite	▪ Mixture of two mineral ores ▪ Common abbreviation is coltan in eastern DRC ▪ Tantalum is the metal extracted from tantalite-bearing ores	▪ Electronic capacitors and components, including mobile phones, computers, mp3 players, videogame consoles, and digital cameras ▪ Carbide tools, aerospace, automotive, energy generation, and medical devises industries (in the form of alloys) ▪ Medical devices, including orthopaedic impacts, heart pacemakers, and hearing aids ▪ Lenses with high refractive indices for spectacles and ink jet printers	▪ Australia, Brazil, Canada, China and Mozambique were the leading producers of tantalum mineral concentrates in 2009; ▪ The DRC contains approximately 9% of the world's tantalum, a relatively minor amount compared to the rest of the world – far from the oft quoted figure of 80%.
Cassiterite	▪ Metal ore commonly used to produce tin	▪ Tin plating, then fabricated to produce "tin" cans ▪ Electrical applications ▪ Construction, transportation ▪ Solders for joining pipes and other industrial applications	▪ China is the world's leading tin producer from mine and smelter sources but experienced sporadic difficulty in obtaining feedstock for its smelters in 2010; ▪ Other leading tin resources are in western Africa, predominantly in the DRC, as well s Australia, Indonesia, Bolivia, Brazil, and Russia.
Wolframite	▪ Metal ore commonly used to produce tungsten	▪ Tungsten carbide (mix of carbon and tungsten) used to make cutting tools and wear-resistant tools for metalworking, drilling for oil and gas, mining and construction ▪ Filaments in light bulbs ▪ Electronics, turbine engines for jet aircraft and energy generation ▪ Alloys used for armaments, heat sinks, radiation shielding, weights and counterweights, wear-resistant parts and coatings	▪ World tungsten supply is dominated by Chinese production and exports; ▪ China is also the largest consumer of tungsten in the world; ▪ Canada, Kazakhstan, Russia and the United States also have significant tungsten resources; ▪ Industry has increased monitoring of research on the impact of tungsten on human health and the environment
Gold	▪ Rare metal ore found in pure form and obtained as a by-product of other mining operations	▪ Jewellery ▪ Electronic equipment, communications and aerospace equipment ▪ Commercial electroplating, ▪ Alloys used in restorative dentistry and electric wiring	▪ Significant price increase in 2011; ▪ Investors seeking a safe-haven in the global economic slowdown have increased gold-related investments.

ENDNOTES

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[2] In this context, "armed groups" refer to groups identified as "perpetrators of serious human rights abuses in the annual Country Reports or Human Rights Practices" and who either "physically control mines or force labor of civilian to mine, transport, or sell conflict minerals," "tax, extort, or control any part of trade routes for conflict minerals, including the entire trade route from a Conflict Zone Mine to the point of export from the [DRC] or an adjoining country; or "tax, extort, or control trading facilities, in whole or in part, including the point of export from the [DRC] or an adjoining country." See United States Securities and Exchange Commission (SEC). (2010). D*odd-Frank Wall Street Reform and Consumer Protection Act* of 2010, p. 843. Full text available online at: http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf. For Section 1502 on Conflict Minerals, see pp. 838-843.
[3] A variety of campaigns have been spearheaded by international NGOs including "RAISE Hope for Congo," a campaign by the *Enough Project* aimed at ending the ongoing conflict in eastern Congo, international awareness-raising campaigns about conflict minerals by the UK-based *Global Witness,* the "Breaking the Silence" educational initiative organized by *Friends of the Congo,* a Washington-DC based non profit, and the "They're calling on you" campaign by *The Jane Goodall Institute* on the ecological consequences of coltan mining.
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[6] Autesserre, 2010, p. 2.
[7] Nest, 2011, p. 37.
[8] Pöyhönen, P. et al, 2010
[9] Nest, 2011, p. 45-49.
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[11] Sabour, 2010, p. 7
[12] Javafilms Documentary. (2008). *Blood Coltan.*
[13] Nest, 2011, 41.
[14] De Koning, 2011, p. 8.
[15] Ibid.
[16] De Koning, 2011, p. 9.
[17] De Koning, 2011, p. 10-14.
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[19] Swedish, 9-12.
[20] Nest, 2011, p. 63; see also Ibid.
[21] Raj, 2011, p. 1031.
[22] Sabour, 2010, p. 8-9.
[23] Raj, 2011, p. 1031-1032.
[24] Ernst & Young. (2011). Conflict Minerals: Dodd-Frank Section 1502 and proposed SEC rule. Available online at: http://www.ey.com/Publication/vwLUAssets/Conflict_minerals_Dodd-Frank_Act_Section_1502/$FILE/Conflict_minerals_Dodd-Frank_Act_Section_1502.pdf;
[25] Nest, 2011, p. 122-125.
[26] The conflict minerals disclosure requirements will apply to companies that are "Foreign Private Issuers" in addition to U.S. firms. This includes companies with 50% or more of its outstanding voting securities held of record by U.S. residents and any one of the following: a majority of its officers and directors are citizens or residents of the United States, more than 50% of its assets are located in the United States, or its business is principally administered in the United States. For more information, see: http://www.osler.com/NewsResources/Details.aspx?id=3036.
[27] Ernst & Young, 2011, p. 3.

[28] Hamilton, J. (2012, March 6). "SEC conflict mineral rule may miss deadline by more than a year." Avaialble online at: http://www.bloomberg.com/news/2012-03-06/sec-conflict-mineral-rule-may-miss-deadline-by-more-than-a-year.html

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[41] Pöyhönen, P., et al., p. 43.

[42] "We will not offer, promise, give or demand any bribes, and will resist the solicitation of bribes to conceal or disguise the origin of minerals, to misrepresent taxes, fees and royalties paid to governments for the purposes of mineral extraction, trade, handling, transport and export" (OECD Convention on Combating Bribery of Foreign Public Officials in Internatonal Business Transactions (1997) and the United Nations Convention Against Corruption (2004), cited in *Recommendation of the Council on Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-afected and High-risk areas,* May, 2011.

[43] For recommendations 3-7, see "Annex II – Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High-Risk Areas," *OECD Due Diligence Guidance for responsible supply chains of minerals from conflict-affected and high-risk areas*, p. 12-15.

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[47] See http://www.sec.gov/comments/df-title-xv/specialized-disclosures/specializeddisclosures-54b.pdf

[48] Investor Letter available from: http://www.share.ca/files/Canadian_Investor_Statement_on_Transparency_in_the_Extractive_Industries.pdf

[49] Nest, 2011, p. 71.

[50] Banyamulenge ("those from Mulenge") refer to ethnic Tutsi Rwandans in the eastern province of South Kivu, close to the Burundi-Congo-Rwanda border. Their ambiguous political and social position has been a point of continued contention in the provinces.

[51] Banyarwanda ("those from Rwanda") refers to Hutus, Tutsis and Batwahs who live in present-day DRC. Many Banyarwanda came to the area before colonization, while some have settled in the country at different stages in the DRC's modern history. Banyarwanda communities have mostly settled in the eastern provinces of North and South Kivu.

[52] For more information on the causes of the Rwandan genocide and the failures of international intervention, see Power, S. (2002). *A Problem from Hell: America and the age of genocide.* New York: Basic Books. For a first-hand account of the genocide, see Dallaire, R. (2003). *Shake Hands with the Devil: The failure of Humanity in Rwanda.* Toronto: Random House books. See also, Frontline. (2004). *Ghosts of Rwanda – Documentary.* Available online in parts at: http://www.youtube.com/user/assaultivebear#p/u/126/xON22c7pZ6c. Viewer discretion is advised.

[53] Nest, 2011, p. 73.

[54] Nest, 2011, p. 12-15.

[55] Autesserre, 2010, p. 4.

[56] Autesserre, 2010, p. 4-5.

[57] The Enough Project. (n.d.). "Roots of the crisis – Congo". Available online at: http://www.enoughproject.org/conflict_areas/eastern_congo/roots-crisis

[58] There have been several UN reports highlighting the mineral-conflict link in the DRC, beginning in April 2001 (report no. 357), which was critical of Rwanda and Uganda; November 2001 (report no. 1072), which was critical of Zimbabwe; January 2997 (report no. 40) which is the first time the UN called for sanctions based on activities deemed illegal under DRC law; December 2008 (report no. 773)and November 2009 (report no. 603), with information on armed groups active in 2008. As summarised in Nest, 2011, p. 111-112.

[59] De Koning, R. (2011). "Conflict minerals in the Democratic Republic of Congo: Aligning trade and security interventions." *Stockholm International Peace Institute Policy Paper 27.* Available online at: http://books.sipri.org/files/PP/SIPRIPP27.pdf; See also Prendergast, J. and Atema, N. (2009). "Eastern Congo: An action plan to end the world's deadliest war." *The Enough Project.* Available online at: http://www.enoughproject.org/publications/eastern-congo-action-plan-end-worlds-deadliest-war

[60] De Koning, 2011, p. 10-11.

[61] See Raj, 2011.

[62] The Economist (2011, Nov. 26). "Congo's election: That sinking feeling." Available online at: http://www.economist.com/node/21540303

[63] Summarized from the following sources: Carlin, Jr., J. (2011). "2009 Minerals Yearbook – Tin." US Geological Survey (USGS). Available online at : http://minerals.usgs.gov/minerals/pubs/commodity/tungsten/myb1-2009-tungs.pdf; George, M. (2011). "2009 Minerals Yearbook. – Gold." USGS. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/gold/myb1-2009-gold.pdf; Nest, 2011; Papp, J. (2011)."2009 Minerals Yearbook - Niobium (Columbium) and Tantalum." USGS Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/niobium/myb1-2009-niobi.pdf; Shedd, K. (2011). "2009 Minerals Yearbook – Tungsten." USGS. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/tungsten/myb1-2009-tungs.pdf; Yager, T. (2009). "The Mineral Industry of Congo (Kinshasa)". USGS. Available online at: http://minerals.usgs.gov/minerals/pubs/country/2009/myb3-2009-cg.pdf;