

# Special Report on Consumer Electronics: The Human Toll Behind the Minerals

## Introduction

With the sale of cell phones, laptops, tablets and other consumer electronics booming, the Technology Industry has faced increased scrutiny over the sourcing of minerals that are used in electronic products. In terms of volume, aluminum, iron, copper, nickel and zinc are among the major metals used in consumer electronics, while numerous other metals such as gold, cobalt, gallium, tin, tantalum, tungsten, beryllium, indium, platinum, palladium and rare earths are also essential in the manufacture of these products.

Metals mining activities worldwide have been directly linked to violence, grave human rights abuses, and many developing countries rich in mineral resources have been torn apart by brutal conflict as a result of their natural wealth. Certain studies have suggested that 40 percent of all intrastate conflicts in the last 60 years have been linked to natural resources. Human rights groups have repeatedly drawn attention to the Democratic Republic of Congo (DRC) in particular, where minerals have spurred regional conflict by helping finance various domestic and international armed groups.

Hundreds of components used in consumer electronics are being mined in developing countries that pose high risks of human rights abuses, environmental damage and labor issues. RepRisk has identified numerous news articles, which have linked mining activities to violent repression by police and armed forces, forced displacements, overuse of water and other basic necessities, environmental degradation, child labor, as well as poor and dangerous working conditions.

The following report highlights the fact that, to date, the consumer electronics industry has failed to sufficiently address these severe issues. Due to the complexity of global supply chains and limited traceability, companies cannot guarantee that their products are free from minerals extracted under problematic conditions.

## Minerals and Armed Conflict in Congo

In recent years, the DRC has attracted major attention from global media as well as from human rights groups. Rich in coltan, gold, cassiterite and wolframite, the country has witnessed fierce fighting over the resources. The term “conflict minerals” was coined to describe certain minerals mined in areas of armed conflict and where human rights abuses are prevalent, that have helped finance the Congolese National Army and armed rebel groups like the Democratic Forces for the Liberation of Rwanda (FDLR) and the National Congress for the Defense of the People (CNDP). It is believed that more than five million people were killed during the Second Congo War (1998 – 2003), in which minerals played a crucial role.

Major brands like Apple, BlackBerry, Compaq, Dell, Ericsson, Hewlett-Packard, Hitachi, IBM, Intel, Kenwood, LG, Microsoft, Motorola (now part of Google), Nintendo, Nokia, Panasonic, Pioneer, Samsung, Sharp, Siemens and Sony have all been linked to the illegal trade and exploitation of minerals in Congo. The companies have been accused of complicity in grave human rights abuses including mass killings, rape, kidnapping and recruitment of child soldiers as a means to control local mines. In addition, Congolese mining projects have been criticized over forced and child labor, forced displacements, local pollution and unsafe working conditions.



Even today, minerals are being smuggled outside the country, with local warlords terrorizing communities to control the country's mineral-rich regions and to share in the profits earned by large mining companies.

Conflict minerals from the DRC are being laundered into the global supply chain of consumer electronics through exporting houses outside the DRC, which then sell the minerals to large, international smelting firms.

While various mining firms have long faced accusations of complicity in human rights violations and war crimes in Congo, the following reflects a more recent list.

AngloGold Ashanti and Randgold have been accused of participating in a recent gold rush that is fuelling renewed conflict in the provinces of North and South Kivu and Orientale in the DRC.

A 2012 report by Swedwatch and Diakonia also criticized Mineral Invest International for human rights violations, corruption, and dangerous working conditions at its gold mining operations in eastern Congo-Kinshasa. The company has allegedly employed soldiers from a former rebel unit that were implicated in the ethnic cleansing of minorities and other war crimes.

Huaying Trading and TTT Mining have been suspended by the DRC government after evidence gathered by the UN Group of Experts on DRC revealed that the companies' purchases funded armed groups and criminal organizations within the Congolese army. The companies are suspected of not having the due diligence capabilities to appropriately monitor their supply chains.

In addition to mining firms, numerous companies have been criticized for trading or refining minerals originating from the DRC.

While some electronics companies are making progress in attempting to eliminate conflict minerals from their supply chains, many are not. In 2012, the Enough Project ranked companies based on their progress in tracing, auditing, and certifying their minerals, awarding the highest scores to Intel, HP, Sandisk, and Philips, average scores to IBM, Sony, LG, Samsung, Toshiba, and Lenovo, and the lowest scores to Sharp, HTC, Nikon, and Canon.



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A briefing paper titled “Conflict Due Diligence by European Companies,” which included Advanced Digital Broadcast, Archos, Armour Group, B&C Speakers, Bang & Olufsen, Barco Electronic, Dantax, JSJS Designs, Lexibook, Loewe, Lynn, Neotion, RCF Group and others, concluded that ten percent or less of all EU-listed consumer electronics companies address the issue of minerals linked to armed conflict and human rights abuses in the Democratic Republic of Congo. The companies fail to apply due diligence in line with international standards, despite sourcing significant quantities of minerals from Congo. In contrast, most American and European companies with dual listings in the US, where companies are required by the Dodd Frank Wall Street Reform and Consumer Protection Act to ensure that violent groups are not benefiting from the trade of minerals, have taken significant steps to address the issue.

Apart from the DRC, mining activities have impacted communities in a vast number of locations. The following reflects a selection of projects that have been linked to consumer electronics.

### **Colombia**

Samsung, Apple, Hewlett-Packard, AU Optronics and other companies have been criticized for indirectly sourcing from the Tiger Hill tungsten mine in Colombia, which is controlled by the Revolutionary Armed Forces of Colombia (FARC). FARC has allegedly used the revenues to finance the armed conflict with the Colombian government that is believed to have killed 257,000 people and displaced 3.7 million. The mine is allegedly illegal due to its location within a forest reserve and an Indian reservation. A formal investigation into companies that could be sourcing from Tiger Hill was opened by the Colombian National Prosecutor in May 2013.

### **Ghana and Mali**

A 2013 report by DanWatch entitled “Child Mined Gold in Your Gadgets?” highlights the toll of unregulated gold mining in Ghana and Mali, an issue that remains largely unaddressed by major electronics companies including Samsung, Apple, BlackBerry, Nokia, HTC, HP, Acer, Lenovo, Asus and Dell and has received little attention in comparison to conflict minerals. With gold being a key component in consumer electronics, the boom in gadgets has caused the electronics sector to source more than six percent of the global gold consumption. Small-scale mining, however, has not necessarily benefited from the increased demand and miners continue to work under harsh and dangerous conditions. In West Africa, children as young as five have been found to work in small-scale gold mines, where they are faced with the same risk of fatal accidents, injuries, and mercury poisoning as adult miners. Many of the children have been victims of human trafficking and debt bondage and remain trapped in a vicious cycle of lack of education and poverty. Up to 40,000 children are believed to work in Malian gold mines, while the worldwide number is estimated at 1.5 million. Because the gold is mixed with output from other small-scale mines worldwide, companies cannot guarantee that their products are free from human rights abuses and child labor.

AngloGold Ashanti has also been criticized over the reported use of cyanide at Ghanaian gold mines that have supplied to Apple, Foxconn, HP and Dell. The highly toxic substance has allegedly contaminated precious groundwater and farmland, forcing people to relocate.

### **Indonesia**

A 2012, Friends of the Earth (FOE) report entitled “Mining for Smartphones: the True Cost of Tin” has shown that Samsung and Foxconn are supplying Apple with tin from Bangka Island, Indonesia, which is mined in a way that devastates forests, destroys farmlands, chokes coral reefs and impoverishes many communities. Tin is a key component in phones and other electronic products, and the Indonesian islands of Bangka and Belitung produce close to one third of the world’s tin supply. Tin mining on land has allegedly caused irreversible damage to landscapes and farmland and has polluted vital drinking water sources.

Silt and sludge from seabed mining, on the other hand, has muddied the seawaters around Bangka, damaging mangrove forests and killing 60-70 percent of its coral reefs. Endangered species like sea turtles have also been threatened due the loss of nesting sites and food sources. In addition, critics have reported a great number of work injuries and fatalities, claiming that on average one worker has been killed every week since 2011. Electronics companies source the tin via middle companies like Timah, Koba Tin, Shenmao and Chernan.



## Copper

Rio Tinto and Freeport Indonesia, a subsidiary of Freeport McMoran Copper and Gold, have been strongly criticized for the negative social and environmental impacts caused by the Grasberg mine in Papua, Indonesia. The mining operations reportedly have affected the indigenous Amungme and Kamoro people and the surrounding environment, including the adjacent Lorenz National Park, a UNESCO World Heritage site. It has been estimated that the Grasberg mine will produce more than six billion tons of waste rock, with acid rock drainage from the mine allegedly being fed into local river systems. The companies operating the mine have also been accused of making illegal payments to local Indonesian military and security forces to keep local opposition at bay. In the past, the military has been accused of violently suppressing peaceful protesters on behalf of the companies, and it has been alleged that several prominent activists have been murdered.

## Rare Earths

Rare earths is the name given to 17 chemical elements, which are actually plentiful but seldom found in concentrations that are extractable in an economically feasible manner. Their use has also been the target of criticism. In China, rare earth mining is said to have caused vast environmental damage, including pollution, soil erosion and decline in crop output. Australian mining firm Lynas has faced repeated criticism over its Advanced Materials Plant in Kuantan, Malaysia, which eventually went into operation in 2013. Critics believe that the plant will release millions of tons of radioactive wastewater into the South China Sea over the next ten years, impacting the fragile marine ecosystem. The process of refining reportedly also requires vast amounts of water and energy and poses a significant occupational risk because of radioactive elements that occur alongside rare earths.



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RepRisk Special Reports are compiled using information from the RepRisk database, which consists of negative incidents, criticism and controversies related to projects and companies’ environmental, social and governance (ESG) performance. The RepRisk database currently contains criticism on more than 39,000 private and publicly listed companies. RepRisk analysts monitor the issues related to ESG risk across a broad shareholder and other stakeholder audience of NGOs, academics, media, politicians, regulators and communities. Once the negative news has been identified with advanced search algorithms and analyzed for its novelty, relevance and severity, risk analysts enter an original summary into the database and link it to the companies and projects in question. No article is entered twice unless it has been escalated to a more influential source, contains a significant development, or has not appeared for the past 6 weeks. This helps to ensure the balanced and objective rating and weighting of the negative news, and thus the company’s quantitative measure of risk exposure, the RepRisk Index (RRI). The RRI measures the risk to a company’s reputation, not its actual reputation in general. RepRisk objectively monitors the level of criticism to which a company is exposed. All data is collected and processed through a strictly rule-based methodology. Controversial issues covered include breaches of national or international legislation, controversial products and services, environmental footprint and climate change, human rights and community relations, labor conditions and employee relations as well as fraud, anti-competitive behavior tax evasion and corruption. In particular, all principles of the UN Global Compact are addressed.

## ABOUT REPRISK

RepRisk is the leading provider of business intelligence on ESG risks. It systematically collects and analyzes negative incidents, criticism, and controversies related to companies and projects worldwide. It does so on a daily basis and in 13 languages from thousands of public sources including international and local media, government sites, non-governmental organizations (NGOs), newsletters, social media and blogs. The RepRisk database currently includes information on over 39,000 companies, 9,000 projects, 6,000 NGOs and 5,000 governmental bodies. These numbers are continuously growing as relevant ESG information is added. The use of RepRisk business intelligence allows companies and financial institutions to proactively assess ESG issues that may present financial, reputational and compliance risks. For more information about RepRisk, please visit our website: [www.reprisk.com](http://www.reprisk.com).



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