About this electronics sector sheet

In a series of three electronics sector sheets, three high-risk phases in the electronics supply chain are discussed: metal mining, the manual production in low-wage countries, and the disposal of electronic products (‘e-waste’). This sheet is devoted to the metal mining phase.

The electronics sector as a whole is characterised by long and global supply chains with high levels of outsourcing. These sector sheets aim to provide information to socially responsible investors about the environmental and social risks present in these supply chains. The series is an additional tool to support their engagement with electronics companies.

The electronics sector sheets are produced by SOMO, the Netherlands-based Centre for Research on Multinational Corporations. SOMO aims to improve social and environmental conditions in the electronics sector. Among other activities, SOMO is involved in the makeITfair and Procure IT Fair projects, and hosts the worldwide GoodElectronics network.

Supply chain responsibility

Brand name companies, also known as Original Equipment Manufacturers (OEMs), influence their supply chains to a great extent, as they control the design of their products and decide what materials and which suppliers to use. Supply chain responsibility is the idea that a company's Corporate Social Responsibility (CSR) extends beyond its own business activities. Key elements of supply chain responsibility are: identification of social and environmental problems throughout the entire supply chain; the use of influence to control and mitigate these risks; transparency towards stakeholders (including socially responsible investors), allowing them to evaluate the CSR efforts of the company.

With regards to metal mining, a sustainable approach would entail that electronics companies minimise the use of newly mined metals and maximise assurance that mining is performed in the most sustainable manner. In practice, this can be expressed in sustainable design of new products, optimal use of recycling possibilities, mapping out the origin of metals up to the mines, and determined efforts to reduce the social and environmental problems that occur during the mining of metals.

Issues

Over 30 metals are used in electronics products on a regular basis. These include cobalt, coltan, tin and platinum group metals. All of these metals are mined all over the world. The mining causes various issues:

- In the eastern provinces of the Democratic Republic of the Congo (DRC) a civil war has been going on for more than ten years. The mining provides rebel groups with income to finance their arms. The conflict metals include tin and coltan.
- In the DRC and Zambia there is both large-scale and artisanal mining of cobalt, a mineral used in rechargeable batteries. The makeITfair project estimates that around 50,000 children are working in cobalt mines under dangerous conditions.
- In South Africa, the mining of platinum group metals has created strong tensions between communities and large mining companies. Communities were forced to abandon their land without proper consultation or compensation. They were relocated to new villages that lack adequate infrastructure and clean drinking water.
- In Indonesia, on the island of Bangka, the onshore and offshore mining of tin causes massive damage to the environment. This has serious effects on the livelihoods of fishermen. Fish stocks are declining rapidly.
Norms and rules
Some mining issues are covered by internationally accepted norms that also apply to companies. Examples are the Core Conventions of the International Labour Organisation (ILO) and the OECD guidelines for multinational enterprises. For conflict metals, there is no international accepted norm. However, the earlier issue of blood diamonds has created precedence. A law proposal in the United States, the Congo Conflict Minerals Act of 2009, demands transparency from companies on their use of metals originating from the DRC. The ILO considers mining by children one of the worst forms of child labour. It aims to have this kind of child labour abolished by ultimately 2016. For pollution by mining and the rights of communities adjacent to mines there are no widely supported international norms that also apply to companies. There may be some national laws on this issue in mining countries. Regarding the rights of communities, many NGOs support the concept of Free Prior Informed Consent.

Industry efforts
The ongoing trade of conflict metals from the eastern DRC has catapulted a number of electronics companies into action – mostly mobile phone brands, but also some computer brands. Initiatives are being undertaken both at an individual level and through the cooperation of dozens of companies within the Electronic Industry Citizen Coalition (EICC) and the Global e-Sustainability Initiative (GeSI). EICC/GeSI have established a joint working group on the mining of metals. The joint working group commissioned a research project to look into metal use and the sphere of influence of the electronics companies. This research concluded that a number of actions were required and that the companies did have a responsibility. As a follow up, the industry hired a third party to map the supply chain up to the mines. This research is currently ongoing. Another ongoing initiative of EICC/GeSI is the development of a certification scheme for the conflict metal tantalum, a metal obtained from the mining of coltan. A start has also been made by ITRI (an organisation representing the world’s major tin producing companies) for a traceability scheme on the mining of tin in DRC.

The makeITfair project has formulated a list of principles regarding the responsibilities of electronics companies for the mining of metals. Every year, makeITfair asks the largest electronics companies what they have done to map out the origin of metals and to reduce the social and environmental problems taking place during the mining of metals. Based on the responses of the companies, makeITfair distinguishes between “frontrunners”, a “middle of the road” category and “laggards”.

Questions for socially responsible investors
Many electronics companies do not know the origin of the metals they use. Therefore, NGOs encourage the recent efforts by EICC/GeSI and a number of individual companies to map out their supply chain. However, these efforts should be regarded as merely the first steps in applying supply chain responsibility. The next phase is to make greater efforts to reduce the environmental, labour and human rights problems taking place during mining. In this regard, calling a halt to the support of armed conflict through mining should be a priority. Finally, electronics companies can minimise the use of newly mined metals through sustainable design of new products and optimal use of recycling possibilities.

When engaging with electronics companies regarding the mining of metals, the following questions may be raised by SRI investors:
- Has your company mapped out the origin of the metals used in your electronics products?
- Which efforts does your company take to ensure that the purchase of the metals used does not fuel armed conflict?
- What does your company do to reduce the environmental, labour and human rights problems that occur during the mining phase of the supply chain?
- To what extent does your company minimise the use of newly mined metals through sustainable design of new products and optimal use of recycling possibilities?

Links
- www.makeitfair.org (list of principles and company responses: companies tab)
- www.procureitfair.org
- www.eicc.info
- www.gesi.org
- www.somo.nl