Key Social Impacts of Electronics Production In China

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Background
China plays a key role in the electronics industry and produces a significant share of the worldwide output. In 2006, 72 million notebook PCs and 229 million desktop PCs were sold worldwide. China produces 77% of the global output of notebook PCs and 21% of desktop PCs respectively (NBSC, 2006). In 2005, global shipments of CRT televisions were 158 million (Display, 2007) whereas China has produced 79 million units or 50% (NBSC, 2005). Additionally, a large amount of Chinas exports from the electronics industry are components and semi-finished products for final assembling in regional markets, in particular for desktop PCs.

The electronics industry is a major economic driver in China. Manufacturing of information and communication equipment make up 10.2% of the countries industrial output value and 6.3% of the industrial profits (NBSC, 2006). In 2005, the Chinese electronics industry generated a trade surplus of 65.5 billion US$ or 64.2% of the country’s total surplus (WTO, 2006). The export share of notebook PCs and LCD monitors is 94% and 88% respectively, for LCD TVs, mobile phones and CRT monitors an export share higher than 70% is observed.

Undeniably, the electronics industry is highly relevant for the Chinese economy and seems to continue being important in the future. Nevertheless there are an ongoing discussions on the social and environmental sustainability of this sector in China and worldwide. These discussions mainly address labour issues, health and safety and environmental pollution in production, product use and end-of-life treatment. This study shall contribute to objectify the discussion on social sustainability of the Chinese electronics industry by systematically analysing positive and negative social impacts during electronics production and end-of-life treatment in China. Thereby the study shall provide a basis to identify intervention strategies for increasing the overall social performance of electronic products.

Impacts on local environment
Chinese electronics industry has been always criticized of the corresponding pollutions to the local environment. The production of other electronic components is associated with substantial air and water pollution as well as problematic waste materials. According to the results of an LCA for desktop PCs, the emissions of copper, selenium, mercury, fluoranthene and nickel in the production of electronic parts are the most problematic. Since a large portion of industrial sites in China are situated between agricultural lands, it is likely that some of these contaminants do enter the human food chain.

Social and economic opportunities
The large number of new industrial estates - including electronics manufacturing facilities - on the east coast of the People’s Republic of China has led to substantial economic growth and rapidly rising per-capita income in the locality. Since 2003 the electronics industry in China led to a constant increase in the number of jobs. Currently, electronic manufacturing is amongst the three most important Chinese industries from an employment perspective.

Between 2.27 and 6.3 million people are employed in the electronics industry in China.
Contribution to the National Economy

The electronic and information technology industry has not only grown into China’s biggest industry, but has also worked as a multiplier in the country’s economic restructuring.

Vice-Minister of China Information Industry Lu Xinkui

Statistics show that the annual output value of the industry’s electronic and information product manufacturing sector topped one trillion yuan (about 120 billion US dollars) in 2000, when total exports reached 55.1 billion US dollars. The information industry has become a major pillar industry and the top exporter of the country.