**Why does the issue of e-waste continue to be a global challenge despite international efforts to address it?** **What is your perspective representing civil society on this issue and what is its role?**

Olga Speranskaya, HEJSupport Co-Director

**I would like to start with describing our vision on why the issue of e-waste continue to be a challenge.**

**First, there are too many electronic products on the market which quickly become waste because they are not durable, and they are hard to repair.** Some of them are even designed to be single-use like, for example, many cartridges on printers.

**Also, the demand for electronic products is growing not only because people are looking for fancy products. T**o reduce the need of replacement of e-products especially mobile phones by consumers the upgradeability of storage components should be ensured to offer software support and updates for longer. These initiatives will also add to e-waste minimization.

Another issue that should be addressed is the need to minimize and eventually eliminate the use of materials that are hard or impossible to recycle such as, for example, fiberglass in computer monitors or PVC in cables and wires. For example, a major problem in the recycling of PVC is the high levels of toxic additives added to the polymer to achieve certain material quality. As a result, PVC requires separation from other plastics before mechanical recycling. And not all countries have the capacity to recycle such components.

**One more issue that prevents the problem of e-waste to be addressed is the lack of** transparency of information on the toxic content of e-products throughout product life cycle including waste. Broken and obsolete e-devices do not only litter the place. They also contaminate the environment, the food chain and people with thousands of toxic chemicals that leak from e-waste into the air, water and soil. And these chemicals are carcinogens, mutagens, and endocrine disrupting chemicals. Information about their presence in electronic products and in e-waste is not disclosed making workers at manufacturing facilities and waste recyclers vulnerable to exposure.

To address the problem, **transparency, and traceability of information about chemicals of concern in electronics throughout product lifecycle** is important as it will be a step towards preventing the presence of these chemicals in products and in waste and will contribute to a safe and toxic -free circular economy.

It is obvious that **producers should disclose information about toxic chemicals in electronic products, take the responsibilities of recycling them in a proper way and ensure that electronic waste and obsolete electronic products are not** damped in countries where they cannot be recycled safely and where they pollute the environment and people.

Unfortunately, not all organisations give high priority to considering chemical toxicity in the design of electronic products. **Countries regulate these products and e-waste in different ways.** **The lack of generally accepted and harmonised principles for the regulation of hazardous substances in electronics** results in different waste management policies.

There are some regional and national legislations that aim to limit the **use** of certain **hazardous substances** in electronic products and reduce waste-management concerns. However, many low and middle -income countries lack such regulations or their enforcement.

There is the need for helping countries to address the issue, including through putting in place common standards that offer high protection to human health and the environment, and level playing fields. This is very relevant to electronic product manufacturing and to e-waste management because having the correct international standards can help develop sustainable waste management systems.

**In conclusion I may say that** an efficient e-waste management is based on government commitment; regulatory requirements and enforcement; a social orientation towards separate waste collection; and environment and health protection through safe toxic-free product design and transparency of chemical information.

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Regarding **the role of the civil society organisations in addressing the ewaste problem**, I think that our main role is in raising awareness about cases of illegal waste trade that violates the international agreements and the national regulations, as well as about the threat of toxic substances in electronic products and in waste to human health. Some may think that raising awareness is not a complicated work. But in fact, this work includes a lot of research that helps us proof the cases of illegal trade, or the danger of electronic products and waste, and suggest recommendations for the governments, for the manufacturers and for those who deal with waste on how to address the problem.

Sampling of environmental media that we conduct and data that we generate is unique as it is linked to the situation at the community level and provides clear information about exposure of the most vulnerable groups.

For example, important research was carried out by ToxicsLink environmental NGO from India in which they investigated the impacts of recycling practices on soil and water in two areas in the outskirts of Delhi. Both sites discharge their effluents into open lands in the absence of drains. They also dispose of their solid waste in open lands, while most residual matter is disposed by open burning. The report clearly indicates changes in soil quality and water pollution because of the recycling activities being conducted in these areas.

IPEN detected alarmingly high levels of some of the most hazardous chemicals, including dioxins, brominated dioxins, PCBs, PBDE, and short chained chlorinated parafins (SCCPs) in the eggs of chickens collected in areas in Ghana where electronic waste was burned to recover metal. In fact, the levels of brominated dioxins discovered in egg samples in Ghana were the highest ever measured. The results of this research clearly show the contamination of food chain as a consequence of no worker or environment protection within informal recycling and poor controls on the international e-waste trade and poor enforcement of the national regulations.

Our data should be considered as the basis for the work of governments and industry. It should help them take the right decision, invest into innovations, green electronic design, sustainable recycling practices and think twice before considering exporting obsolete electronic products into low-income countries where they will be burnt or will vanish in landfills where the pollution continues. And the work of NGOs helps to take the right decision in the interests of people and the environment.