

ASIA–PACIFIC ANALYSIS: SAFER PATH NEEDED FOR E-WASTE

Instead of limiting imports of electronic waste, the Asia Pacific region should set up a robust recycling system, says *Crispin Maslog*.

Garbage in, garbage out is a phrase to describe what happens when computers find the wrong solution in response to the wrong input data. But when computers and other electronic products have outlived their usefulness, they literally do become rubbish and join an ever-growing mass of e-waste or e-scrap.

It is a growing trend. A market research report published last month said that rapid developments in technology for laptops, tablets and smart phones is encouraging the equally rapid abandonment of old models in Asia, causing a sharp rise in e-waste. The study noted that the constant upgrades are spurring the need for the safe disposal of such waste. [1]

Simply abandoning the millions of obsolete computers, mobile phones and TV sets to decompose, or using unsafe treatment methods such as burning, leaves behind hazardous waste including lead, cadmium and mercury.

The need for safe disposal is a major challenge for both developed and developing countries, and makes e-waste management both a health and an environmental issue.

Developing countries themselves produce e-waste. In South-East Asia and the Pacific, countries such as Thailand and the Philippines are starting to discard significant amounts of e-waste. In parts of Asia, there is a high demand for the precious metals in electronic waste exported from elsewhere in Asia or developed countries, despite recipient countries having little capacity to process it safely.

Extracting valuable materials

This demand began to grow when scrapyards found they could extract valuable materials such as copper, nickel and gold during the recycling process.

The two main destinations for developed nations e-waste are China and India, where entire communities, including children, earn their livelihoods by scavenging metals, glass and plastic from old computers. The Chinese town of Guiyu is perhaps the worlds best known e-waste processing site, employing around 150,000 electronic waste workers.

Underdeveloped South-East Asian countries such as Cambodia, Indonesia, Vietnam and Myanmar have also become digital disposal grounds. Indonesia, for example, imports discarded electronic products from the US and recycles them into raw materials for export to China. The recycling activities are mainly done in East Java and on Batam Island, near Singapore. [2]

Cambodia, on the other hand, takes in electronic throwaways from other developing countries in the region.

Some items are dismantled and sorted by hand to recover e-waste components such as plastics, which contain flame retardants and CFCs (chlorofluorocarbons), and electrical components.

Electrical wires may be burned to recover copper and other metals, releasing cocktails of toxins into the air.

Controlled disposal

The Basel Convention of 1994 aimed to introduce a system for controlling the import, export and disposal of hazardous wastes. A year after its introduction, the convention was amended to specify only a partial ban, proving that it was realistic enough to accept that it could only reduce, not completely ban, such exchanges.

Instead of an unenforceable ban, South-East Asia could be more successful by setting up an alternative, appropriate recycling system that can secure the cooperation of all countries in the region.

In a 2009 paper, Asian e-waste disposal researchers Tahayoshi Shinkuma and Nguyen Thi Minh Huong say: First, China must promote proper domestic recycling activities by providing a subsidy for proper recycling. Second, Japan, as a main Asian exporter of e-waste, should establish a traceability system that ensures e-waste scrap exported from Japan will be recycled at proper recycling facilities abroad. [3]

On a national level, South-East Asian countries should adopt the 3R system: reduce, reuse and recycle. This model has been used to deal with urban waste and is now recommended for handling e-waste. But developing South-East Asian countries are still at an early stage in implementing this system, according to Asian Institute of Technology experts Tenzin Norbu and C.Visvanathan. [4]

An Asian approach

However, beyond single country policies, there is a need for a regional approach that includes colour-coding different types of waste to make them easy to handle; source segregation, such as separating dry and wet or organic waste; and tracking the movement of waste across national borders.

The region could also adopt a strategy to promote locally feasible, formal and proven practices to ensure that e-waste does not end up in landfill or dumpsites. Working with the electronics industry, which has a responsibility to take steps towards safe disposal of its products, is also important.

But policy change is never easy. To help achieve it, governments in the region should harness the power of environmental NGOs in campaigns to promote the safe handling and reduction of e-waste.

Source: <http://www.scidev.net/global/pollution/analysis-blog/asia-pacific-analysis-safer-path-needed-for-e-waste.html>