E-Waste

Definition: "*End-of-life electronic products including computers, printers, photocopy machines, television sets, mobile phones, and toys, which are made of sophisticated blends of plastics, metals, among other materials*" (Orlins & Guan 2016, pg. 71, quoting Wong et al. 2007)

E-Waste Disposal

Lagos, Nigeria

China

"Only 25% of all e-waste is accounted for and recycled safely by official means, the remaining 75% is lost in the illegal e-waste stream" (Orlins et al, 71).

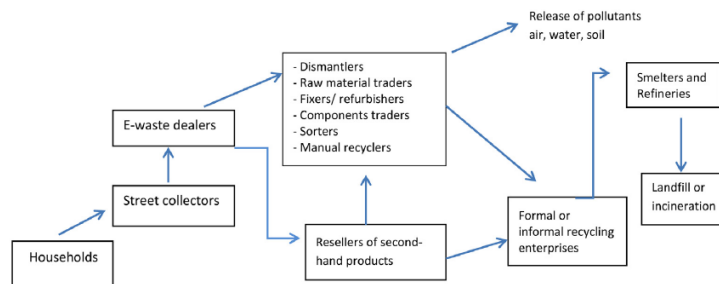# Unsustainable Systems – The Production of E-Waste

Fig. 1. Simplified flow chart of informal waste process in Beijing.
Source: Chi et al., 2011.

Story of Stuff Video Link:
https://www.youtube.com/watch?v=sW_7i6T_H78

While watching, look out for the concepts:
- Unsustainable materials economy
- Designed for the Dump
- Externalities
- Planned Obsolescence

Article Discussion Part 1: Research Methods

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China's toxic informal e-waste recycling: local approaches to a global environmental problem

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ABSTRACT

Electronic waste or e-waste has been an increasingly severe problem over the last decade, and is the fastest growing waste stream in the world. China's inexpensive labour and manufacturing abilities have already made it "the world's factory" and for e-waste recycling it is no exception. Informal workers do the majority of e-waste collection and recycling in cities throughout China. E-waste recycling work provides livelihoods for migrant workers and the urban poor and has formed a well-established shadow economy. The improper dismantling and burning of e-waste for resource recovery exposes workers to toxins and heavy metals, and causes severe air, water, and soil contamination. The illegal global trade of e-waste makes it a transboundary environmental governance problem of local and global scales. This paper investigates informal workers' knowledge of the environmental impacts of e-waste, perceptions of their work and whether they would be receptive to government regulation of recycling work. It finds that informal recyclers interviewed lack environmental awareness of the dangers related to e-waste recycling and are unwilling to be regulated due to fear of losing jobs and profits through regulation. Weak e-waste legislation and social marginalization are also major barriers to protecting e-waste recyclers and the environment. Through a scalar analysis of environmental governance, this paper proposes strengthening the roles of small enterprises and inclusion of Non Governmental Organization (NGOs) and Government Organized NGOS (GONGOs) to work in the informal sector to find safer recycling solutions to fill the large gap between legislation and de facto practices.

1. What Research Methods do the authors use to collect data in the article?

2. Are there any drawbacks to their research methods?

3. What do you think could strengthen this research?

Discussion:

Based on the article & video, discuss the following questions:

• **Why is it difficult to regulate the informal E-Waste market?**

• **Why do people choose to work in the dangerous E-Waste informal sector?**

• **Why do E-Waste workers not want more regulations?**

• **What do you think China and other countries should do to improve the working conditions of E-Waste workers? And help make E-Waste less harmful to the environment?**

• **What do these issues say about Market Response Environmentalism & Neoliberalism more broadly?**
  • **Clearly market principles are at work here, but who is it benefiting?**

• **What would Marx have to say about this? What about Leopold?**