## Grim forecast for e-waste as technology trash to top 65m tons by 2017

More recycling would lessen the danger of the Third World dealing with our electronic junk – and create opportunities for us

(Adapted from) The Independent, 15 December 2013

The soaring international demand for electric and electronic products is fuelling a global rise in ewaste, which is set to reach 65.4 million tons annually by 2017. The grim forecast is from a new study released today, which has mapped more than 180 countries. It reveals that, in only five years, the yearly amount of e-waste will rise 33 per cent from the 49 million tons of used electrical and electronic items generated last year.

Worldwide, the US is the worst offender – with 9.4 million tons of e-waste each year, with some 26,500 tons being sent to poorer countries each year.

Mobile phones form the bulk of the 14 million used electronic products exported, with most used phones destined for Hong Kong, and countries in Latin America and the Caribbean. Old computers are generally sent to Asian countries, while heavy items such as TVs and computer monitors end up in places such as Mexico, Venezuela, Paraguay and China. Another contributor to the global e-waste mountain is China, ranked second in the world after the US. Britain is another major contributor, ranking sixth in the world in terms of the total amount - creating about 1.4 million tons of waste a year. From unwanted flat-screen TVs to mobile phones, from fridges to microwaves, the UK is the worst offender in the EU.

But while governments struggle to deal with the problem, the cost of safely disposing of such materials has resulted in large quantities of e-waste exported to developing countries where it is often simply dumped or broken down for scrap – often by child workers exposed to dangerous fumes from crude attempts to burn off materials.

A Greenpeace spokesperson said: "E-waste is often dumped in countries like Ghana, Nigeria, Pakistan, Vietnam or China, where there are no facilities for effective recycling. Often plastics are burnt to recover copper and other metals, creating highly toxic dioxins." Electronic waste is the fastest-growing waste stream in the UK, according to the Department for Environment, Food and Rural Affairs (Defra). And it represents a massive loss of valuable materials.

Ten million tons of electronic products will be bought in the UK in the next six years alone. This amount will include 20 tons of gold, 400 tons of silver and seven tons of platinumgroup metals – worth some  $\pounds$ 1.5bn.

Every year, people are not only getting rid of perfectly good electronic products, but are also throwing away money by doing so. A quarter of the products taken to waste recycling centres are in working order and could be resold for an estimated £200m each year.

A new report by Wrap (Waste & Resources Action Plan), an independent body created by the Government to promote recycling, reveals that hundreds of thousands of tons of e-waste are being dumped in landfills across the country.

Every year, the average household in the UK spends about £800 on new electrical and electronic goods. This equates to about 1.4 million tons of electrical and electronic goods. A similar amount is thrown away, according to the report. "Nearly 40 per cent goes to landfill and less than 10 per cent is reused, despite the fact that much of it either works

or could be repaired," it states.

The scale of waste is "a missed opportunity for businesses and consumers", says the report.

Changing how we design, make, buy and dispose of electrical and electronic equipment could not only reduce Britain's carbon footprint by up to 15 per cent, but also add £800m to the UK economy, it claims. Dr Liz Goodwin, Wrap chief executive, says: "The amount that we're throwing away is incredible – a sheer waste of precious resources." There are "clear advantages", she adds, "to changing the way electrical and electronic products are made and sold ... keeping the products in use for longer and offsetting the global impact of making new products".

Wrap is now working with a number of leading retailers and manufacturers such as Apple, Electrolux and Samsung to develop a sustainable electricals action plan to be launched next summer. This aims to improve the sustainability of electrical products by developing "industry standard" guidance on design and buying specifications for major household appliances aimed at extending their life. And businesses are being urged to adopt a "trade-in" system for goods that could otherwise be thrown away. Britons have at least £1bn worth of electrical and electronic equipment in their homes that is no longer used.

The market for trading pre-owned equipment could be worth up to £3bn, says Wrap. As well as any "trade-in" value, there's hidden gold, literally, in today's gadgets. "There's more gold in a ton of used mobile phones than there is in a ton of gold ore," says Steve Lee, chief executive at the Chartered Institute of Waste Management. "There has been a 'buy today, bin tomorrow' mentality, but people are starting to recognise that old electronic equipment is either valuable or important – someone else can get some value out of it."

He adds that the "biggest concern" is the potential health impacts on those doing the low-grade recovery overseas. "You can't imagine anyone in Europe smelting circuit boards in a wok, but it happens elsewhere."

Amid mounting concern over the levels of waste, and need to recycle them safely, Britain will be the first EU country to implement strengthened European regulations on Weee next year. The legislation, which comes into effect in the UK from 1 January, will raise the targets for collection, treatment and recycling of waste electrical products.

By 2016, member states will have to collect, treat and recycle 45 per cent of the electronic products placed on the market. The amount Britain currently collects "roughly equates to 35 per cent by weight under the new targets", according to a spokespersonfor the Department for Business. "This means we will have to increase our collection in the next two and a half years from 35 to 45 per cent. We think we will meet this target when we implement the new directive."

1050 words