

CBS SUNDAY MORNING: AT WHAT COST?

TRANSCRIPT

JANE PAULEY: As we begin the busiest time of year for shopping and gift-giving, you may be thinking about a new phone or laptop.

This morning, Seth Doane asks, "At what cost?"

(Begin VT)

SETH DOANE (voiceover): These are not the images we see in the glossy advertisements enticing us to buy a new cell phone, laptop or TV. But they should be part of the picture, because this is where many of our electronics wind up. Strewn in mountains of garbage, across acres of land, with tens of thousands of people sifting through it in places like this, the African nation of Ghana.

We think a lot about where products come from when we buy them, less so about where they go when we're finished. One researcher told us, when we throw things away, well, this is away. It's also home for Mohammed Awal, who supports his mother and four kids by working, despite the risks here in this city of waste in Ghana's capital, Accra.

What happens to your body in doing this work?

MOHAMMED AWAL: If you see my body --

SETH DOANE: You have a cut, a wound, a tear scar.

MOHAMMED AWAL: In here, you see?

SETH DOANE: There's another scar there.

This dangerous, difficult and, yes, dirty work is called "urban mining." It's all about extracting something usable from the world's discarded electronics.

They do it because there's treasure here, recovered, in this cases, by sawing a monitor's circuit board. Incredibly, there's 100 times more gold in a ton of smartphones than a ton of gold ore.

But finding it comes with a real cost. It's hazardous work, and safety equipment is not exactly standard.

Children as young as 10 toil and sometimes live amid this toxic garbage, desperate for a meager payday.

ABDULLAH ILLIAS: We are selling this.

SETH DOANE: You're selling this? This is all copper?

ABDULLAH ILLIAS: Yes.

SETH DOANE: Abdullah Illias endures the sweltering heat to pluck out tiny pieces of copper.

So this is maybe worth \$3?

ABDULLAH ILLIAS: Yes.

SETH DOANE: The U.N. figures we produce around 50 million tons of electronic waste or "e-waste" every year. And this is not what's supposed to happen to it. Only 20 percent is formally recycled. The vast majority winds up in landfills or is dealt with informally.

MUNTAKA CHASANT: These places wouldn't exist without the demand for the materials they extract.

SETH DOANE: Muntaka Chasant has been documenting the lives of those living on the margins. Here what cannot be pried out is often burned to extract minerals.

MUNTAKA CHASANT: One of the ramifications of this is lead exposure among urban poor children.

SETH DOANE: But he urged us to see this place with nuance -- the reality is a murky, polluted gray.

MUNTAKA CHASANT: E-waste provides opportunities for upward social mobility.

SETH DOANE: You're saying you can't just look at this as all bad because this is creating jobs?

MUNTAKA CHASANT: Absolutely.

SETH DOANE: But this is also dangerous, polluting the environment?

MUNTAKA CHASANT: Besides, we've been having this same conversation for more than a decade now, and absolutely nothing has changed.

SETH DOANE: While we've been talking, someone set a fire here. You look at the pollution that goes into the sky --

MUNTAKA CHASANT: Yes.

SETH DOANE: -- behind you.

MUNTAKA CHASANT: Yes. This is what people in Accra have been living with. And just across here is the largest open food market in the city.

ANITA ASAMOAH: When you burn, a lot of chemicals are released, poisonous chemicals.

SETH DOANE: Anita Asamoah is an environmental chemist at Ghana's Atomic Energy Commission. She's not only a scientist.

ANITA ASAMOAH: I'm a mother myself. And I wouldn't want to give poisonous substances to my baby.

SETH DOANE: She'd seen the smoke wafting over homes and market. And food is regularly sold in the open at the dump. So Asamoah wondered whether those toxins were so pervasive that they were even getting into the breast milk of mothers.

What did you find when you examined this breast milk?

ANITA ASAMOAH: PCBs -- these are poisonous substances which can result in death, which can result in diseases like cancers. And infants are even more susceptible to these chemicals.

SETH DOANE: These burdens are the consequence of consumption in a much richer West.

BAS VAN ABEL: What you see here is the result of the very, very short kind of cycles we have in using stuff.

SETH DOANE: You buy something, you use it, you throw it away.

BAS VAN ABEL: And you throw it away.

SETH DOANE: Bas van Abel argues producers need to consider a product's "end of life" when designing it.

BAS VAN ABEL: Right now, we're incentivized to throw away stuff, because it's cheaper to buy a new one than actually have it repaired.

SETH DOANE: Van Abel is a Dutch activist-turned-entrepreneur whose investigations into mining practices led him to start a company called Fairphone. Its aim is to create a more sustainable phone and cut down on scenes like these.

BAS VAN ABEL: Unfortunately, phones and electronics are designed in a way that you can't really reuse components and parts of it. So, what happens is that this whole product, basically, goes into the oven and you burn it and you get the minerals out of it. It's a very stupid process.

SETH DOANE: What do you mean stupid process?

BAS VAN ABEL: Well, it's, you know, it's kind of stupid to put something in an incinerator that puts so much effort into making. Most of the footprint of a phone is in the making of it. So, the best thing is to keep it as long as possible.

It's a biticker than --

SETH DOANE: He showed us his Fairphone, which he likens to Legos, because of its removable, modular parts.

It pops right off.

BAS VAN ABEL: Yours to open, yours to keep.

SETH DOANE: The battery is not glued in, making it simple and inexpensive to recycle or replace. It's the same for the camera lens and screen.

Fairphone, which just launched in the U.S. and sells for up to \$700 a piece, has half a million customers worldwide -- proof of concept, they say. Americans on average upgrade their cell phone every two-and-a-half years. Fairphones are under warranty for five.

BAS VAN ABEL: If you use your phone twice as long, you need to produce only half the amount of phones and you have half the amount of electronic waste. It's a very simple calculation.

SETH DOANE: Imprecise methods of recycling produce more waste, which leeches into the earth here. Pollutants and microplastics run into a nearby river and the ocean. On the beach, we found plastics that were not exactly micro.

MAN #1: All tears our nets.

SETH DOANE: Fishermen told us how their nets tear because now, their catch-of-the-day often includes e-waste.

MAN #2: There are refrigerators. There are laptops. They shouldn't be around the ocean, causes harm.

VINCENT KYERE: It's your waste, so don't just ship your waste to us and tell us that it's second hand and you can use it.

Come inside.

SETH DOANE: Vincent Kyere calls himself the "graduate scrap dealer." He's a PhD who's been studying this dump, and the old one nearby, known as Agbogbloshie, for more than a decade. I think a lot of people will watch us and be upset, but also feel powerless. What can people, consumers a world away do?

VINCENT KYERE: I believe strongly that those who are producing this, when they put these materials on their markets, they are responsible for the end-of-life.

SETH DOANE: We reached out to Apple, the largest mobile phone seller in the U.S. Apple did not make someone available to talk with us for this story.

But Samsung, one of the largest electronics manufacturers in the world, invited us to their store in Palo Alto, California.

Where does the responsibility lie here? In Ghana, we hear it's the producer.

MARK NEWTON (Head of Corporate Sustainability, Samsung U.S.): I think every party in the entire value chain has some responsibility.

SETH DOANE: Mark Newton is the head of corporate sustainability at Samsung U.S. He says every product is designed with the ultimate end-of-life in mind.

This doesn't look like a place that's encouraging me to hold on to my phone longer. It looks like some place that's encouraging me to buy a new phone.

MARK NEWTON: Well, of course, we want to excite you with the newest technology. But what's cool now, we're making our highest-performing products with 20 percent recycled plastics, 20 percent recycled glass, 20 percent recycled metals.

SETH DOANE: In the back of the store, there's the first stage of a recycling operation. Samsung takes back electronics of any brand.

Samsung has recycling centers internationally, in something like 50 countries. But in Africa, the only one is in South Africa. Why not in Ghana? Nigeria? These places where we know the need really exists?

MARK NEWTON: I think that we're really leaning into that now. So we've fairly recently recognized that and made a significant commitment to expand our collection network globally.

SETH DOANE: But this recycling effort is largely self-policed in the United States.

JIM PUCKETT: The U.S., the most wasteful country per capita on Earth, is not part of this very important treaty.

SETH DOANE: America has not ratified an agreement that 191 other countries support.

JIM PUCKETT: Basel Convention is the treaty that was supposed to deal with this phenomenon of hazardous waste suddenly flowing to developing countries. And there is a strong lobby that is happy to have no trade restrictions on waste.

SETH DOANE: Jim Puckett founded the Basel Action Network, a watchdog group which pushes for proper recycling.

JIM PUCKETT: Once the rich countries realized, oh, my god, we got a problem with hazardous waste, the price went up for properly managing it, and so the export trade took off.

SETH DOANE: Sending tons of hazardous waste to the developing world, much of it getting through customs under the guise of being "repairable."

Why Ghana?

VINCENT KYERE: We have issues of compliance and enforcement.

Open the truck.

SETH DOANE: Vincent Kyere now runs a recycling initiative, Mountain Research Institute, at the dump site. This is a small project. But it is one possible solution. They buy cables to incentivize people not to burn them.

There is a real gray area here. These are important jobs. These are livelihoods.

VINCENT KYERE: Should I sit down and not eat, because if I burn, somebody will die? If I don't burn, I will also die. So, it was not a question of, "Why don't you close down the place?" It was rather a question of, "How do you do this better?"

This metal can be reused.

SETH DOANE: Kyere's group is now building a partnership with Fairphone. Bas van Abel started focusing on the problems of mining these materials on the front end, and wound up realizing much more can be done to save what's already been pulled from the Earth.

BAS VAN ABEL: The whole energy transition needs all these minerals that are found in mines. So, the best thing to do is sort of make sure that we can get recycled sources, so that we don't get the minerals only from mines, but actually take it back from the products that we already use.

SETH DOANE: It's all about mining the precious materials we've carelessly cast aside, and managing our garbage with less waste.

(End VT)

Graphics onscreen: Black Friday Sales--

\$9.8 billion spent in U.S.

7.5 percent from last year

Electronics, 152 percent

TVs, 484 percent

Smartwatches, 577 percent

Adobe Analytics