

Watch how the government of Ghana gambling in the life of its own people.

### Inside Ghana's electronic wasteland

*Dangerous practice of burning electronic waste to extract metals could be made safely obsolete.*



Locals refer to the Agbogbloshie scrap yard as "Sodom and Gomorrah" [Chris Stein/Al Jazeera]

By [Chris Stein](#)

<https://youtu.be/yDSWGV3jGek> (Click here)

**Accra, Ghana** - On a piece of charred land near the centre of this sprawling capital city, the detritus of modern technology is put to flame.

Over the past two decades, thousands of people, primarily Ghanaians from the country's impoverished north, have flocked to the Agbogbloshie scrapyards to strip and burn waste from consumer appliances and collect the valuable metals inside. Those who rely on the scrapyards for their livelihood say they have few other ways to make money, even if the fires lit to remove metals such as copper and aluminium from their plastic casings belch cancer-causing smoke.

The place has become a byword for poverty and blight in Accra; locals call it "Sodom and Gomorrah", and the scrapyards' plot is widely regarded as being outside the control of the police.

Now, a local recycling company says it has found a better way to get rid of electronic waste. Armed with a refrigerator-disposing laboratory mounted on the back of a truck, Ghana-based City Waste Recycling is

undertaking an effort to get Agbogbloshie's scrap dealers to turn away from the flames and hand their appliances over to them for safe disposal.

City Waste will pay the scrap dealers based on the weight and composition of the refrigerator, then safely dismantle it and sell the scraps off for reuse. "We don't want to dispose, we want to recycle," Jürgen Meinel, City Waste's founder, told Al Jazeera. Though Meinel says he can recycle most of the electronic waste that is dismantled in Agbogbloshie, he has started by targeting the piles of refrigerators that end up in the scrapyards every day.

A government rebate program started last year has channelled thousands of obsolete fridges containing ozone-depleting CFC gases into Meinel's yard in an unassuming suburb of Accra, where his green truck is parked. There, refrigerators are dismantled in the vehicle-mounted laboratory, without releasing the harmful gas. Nothing is burned or wasted; metals, plastics and gas alike are separated and stored for later export.

#### Africa Investigates - Promo: Ghana Gold

Meinel sees the truck as an alternative to the gritty ways of Agbogbloshie. Every day, workers at the scrapyards haul in unwanted refrigerators on the backs of carts, strip the aluminium and copper by hand and tear the foam insulation from the plastic bodies. The foam is then dragged down a patch of sooty earth called the "copper pot", where young men in shorts and boots ignite circuit boards, computer monitors and piles of cables to get precious metals out.

When it's all over, they dump the carcasses of the refrigerators in the grey filth of nearby Korle Lagoon.

Meinel says this can end. He envisions setting up a network of electronic waste collection points spread around Ghana's regional capitals, and buying a granulator for the people at the scrapyards that could separate copper from plastic without burning it. With the de-gasser mounted on a truck, he can move around the country, draining the CFCs from refrigerators wherever they may be. "We give them an alternative to the burning habits," Meinel says. "We want to make sure the burning stops."

#### **A burning problem**

Mention change in Agbogbloshie, and all you'll get are shrugs. The people there have already seen the doctors come and worriedly take blood samples, the charities hand out masks and gloves that eventually fall apart, the curious researchers and journalists who visit and never come back.

"They cannot help us. Because anytime they talk, it doesn't happen," says Idriss Mohammed Idriss, who breaks down refrigerators at Agbogbloshie. "This is our business, it's our life." Without it, he wouldn't have the \$2.50 per-day that he can afford to spend on food.

For years, Western nations have been kicking down old computers, refrigerators and anything else electronic to west African countries like Ghana for disposal. About 40,000 tonnes of this electronic waste came into the country in 2010, according to [a 2012 study by the Germany-based Oeko-Institut](#).

Some of the used electronics are fixed up and resold to consumers; others are broken when they arrive, and go straight to people such as Idriss and his colleagues in Agbogbloshie. Money from the scrapyards goes to pay school fees and medical bills, or into savings accounts. But the ill health effects of the burning spread much further.

If you recycle an old fridge as you do in Agbogbloshie, it's the same as driving a car 40,000 kilometres around the world.

**Andreas Manheart, Oeko-Institut**

When plastic, foam and whatever else comes into Agbogbloshie is set alight, it releases a melange of poisons, from greenhouse gases to mercury, cadmium and lead. [A 2008 study by Greenpeace](#) found that the concentration of metals such as these in the yard's soot-laden ground is as much as 100 times higher than normal.

[Another 2011 study](#) published in the journal Environment International sampled breast milk from mothers in Accra and found elevated levels of polychlorinated biphenyls, an industrial chemical banned by a 2001 United Nations treaty, and polybrominated diphenyl ethers, a flame retardant, both are deemed to be consequences of Agbogbloshie's smoke wafting across the city of four million residents.

"If you recycle an old fridge as you do in Agbogbloshie, it's the same as driving a car 40,000 kilometres around the world," Andreas Manheart, a researcher at the Oeko-Institut, told Al Jazeera. "If you calculate it in CO2 equivalent... it's a huge global impact."

But Seidu Mohammed, who disassembles refrigerators all day a few steps away from an unassuming grey mosque, told Al Jazeera there was no other way to make money here. "We know it's not good," he says, holding up bristles of valuable copper from the inside of a refrigerator's motor. "We have to open it, no matter what. We have no option."

**A better way?**

City Waste's proposal would give Agbogbloshie's scrap dealers an alternative. Meinel has thus far collected 4,000 fridges, stacking them high on his small plot of land and employing a team of dismantlers, some former Agbogbloshie workers themselves, to tear them apart. While the project initially wanted to give rebates for 50,000 refrigerators, Ghana's energy commission only has enough money to pay for 15,000, says Eric Antwi-Adjei, project coordinator for the commission.

Meinel hasn't made any money from the refrigerators' parts yet. City Waste does a brisk business recycling plastic into things like buckets and jars, while Meinel searches for companies to export the leftover metals and plastic.

In a region where electronic waste is widespread - Nigeria and Ivory Coast also have significant e-waste dumping grounds, though none as centralised as Agbogbloshie - Manheart says City Waste's project could be the answer to the e-waste question. "It's a milestone project for the whole African

[continent]," Manheart says. "You don't really have recyclers getting these things done under a couple of years from anywhere [else] in Africa."

But in Agbogbloshie, the scrap dealers aren't waiting for a new way to do their job. "If they got a better way to do this, they will embrace it with both arms," says Bukari Osman, a battery dismantler who assists the scrap dealers' association, the site's de-facto government.

Until then, the burning will continue, said Osman: "I don't have anything otherwise."

**Follow Chris Stein on Twitter: [@ChrisJStein](https://twitter.com/ChrisJStein)**