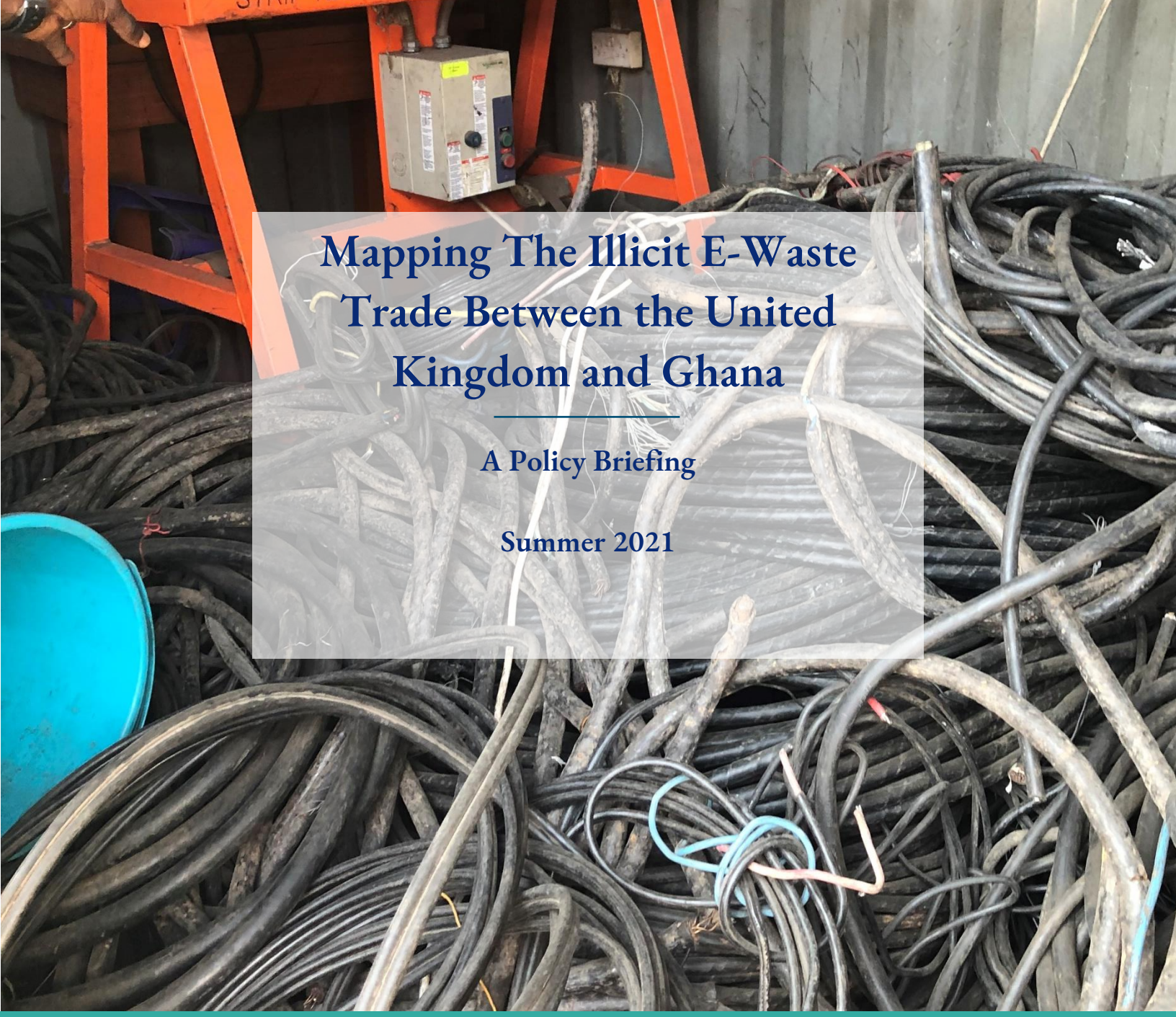

Mapping The Illicit E-Waste Trade Between the United Kingdom and Ghana

A Policy Briefing

Summer 2021

Partnership for Conflict, Crime & Security Research

SAFESEAS

CENTRE FOR MARITIME LAW & SECURITY
Pioneering Maritime Governance in Africa

Foreword

Electrical and Electronic Equipment (EEE) is a significant part of modern, everyday life. There are numerous benefits to the use of EEE, but the disposal of it comes with challenges. Developing countries, such as Ghana, are heavily impacted by the waste produced from EEE consumption and use as they serve as the primary destination of e-waste.

Mapping transnational e-waste flows is important for several reasons. It allows for a deeper understanding of the roles different actors play in the e-waste industry, aids in developing environmental policies, and contributes to more accurate monitoring of transboundary movements of EEE and e-waste as well as the associated networks and financial flows. Ghana is committed to combatting the health and environmental consequences of e-waste, and international collaboration is vital to this process.

This report focuses on the e-waste trade between Ghana and the UK. Among other things, it highlights the disproportionate socio-economic and environmental impact of e-waste on Ghana and also importantly the global inequalities depicted by the flows of e-waste which underscore the increasing divide between global north and south. This research was conducted with the assistance of multiple agencies and individuals in Europe and West Africa who participated through interviews and surveys.

The Partnership for Conflict, Crime & Security Research, Safe Seas Network, and the Centre for Maritime Law and Security Africa (CEMLAWS Africa) have worked together to produce this report that sheds light on the current e-waste trade between the UK and Ghana and will inform future e-waste research. The research was led by Ms Kanchelli Iddrisu who did an excellent job in bringing a good understanding of the Ghana-UK e-waste flows.

Dr Kamal-Deen Ali
Executive Director of CEMLAWS

Research Findings

The rising global population, globalisation and digitisation have resulted in growing flows of e-waste to developing countries. The development of a digital era comes with consequences that have serious environmental and health effects. The use of Electrical and Electronic Equipment (EEE) has accelerated at unprecedented levels worldwide, with Ghana experiencing a rise in demand for EEE as well. Most EEE in Ghana is imported from countries in Europe, the USA, and Asia, with the UK being a major exporter of not only EEE, but e-waste to Ghana.

E-waste is the fastest rising waste stream. The presence of hazardous materials in e-waste makes it difficult and expensive to treat safely. Legislation tackling the issue of e-waste has improved, but enforcement of regulations is still lacking in developing countries, which are most burdened by e-waste exports. In countries such as Ghana, e-waste is often recycled using dangerous methods such as burning and by workers using basic tools without protective equipment. These unsafe practices, where valuable materials found in e-waste are usually scavenged for profit, constitute 'informal recycling' processes.

Throughout our research, themes of poverty, unemployment, exploitation and the structure of the trade were identified through mapping the sites along the e-waste trade route between the UK and Ghana.

The key drivers of the e-waste trade between the UK and Ghana were identified in this report through interviews and surveys. On the drivers of this trade, the following points are worth noting:

- The e-waste trade is mainly profit-driven, with recyclers wanting lower recycling costs. Additionally, consumers in Ghana gain access to second-hand electronic goods in order to help bridge the 'digital divide'.
- Poverty is the underlying factor of the unregulated e-waste trade, and there are not enough interventions acknowledging and addressing this.
- Most of the e-waste workers involved in informal, unregulated recycling operations are from the North of Ghana, yet there are limited interventions in those regions to create local job opportunities and create awareness of the consequences of informal e-waste recycling.
- The short lifespan of EEE arose as a main driver of the trade, although this answer was the least popular among the research participants.

The findings of this report identified a cyclical movement of both new and used electronics, that ultimately end up as e-waste. This cycle of e-waste shows how each stage in the production, consumption, movement, and disposal of e-waste is connected. Our research found that:

- E-waste is usually smuggled into Ghana as 'personal belongings'.
- The domestic consumption of imported new and used electronics in Ghana is a major source of e-waste, with this site of e-waste generation being overlooked in much of the existing literature.
- Most interviewees described the structure of the trade as 'loosely organised' or coordinated.
- The structure of the e-waste trade is dynamic, exhibiting short periods of organisation and lacking traditional hierarchical structures.

- The cycle of EEE showed that the existence of huge amounts of precious materials in e-waste found in Ghana may be exploited as Ghana does not have the specialised recycling capacity to benefit from the discovery of valuable substances in e-waste through reuse.
- There may be large quantities of private data on discarded computer hard drives that could potentially be exploited by cyber-criminals. We did not find evidence of this in our research interviews but an e-waste worker who participated in this study suggested this was a possibility.

The e-waste crimes have been categorised as 'serious organised crimes' (SOC) in numerous reports, globally. In this report, it was noted that it is essential to clarify whether illicit flows of e-waste can be classified as SOC since this aids in determining the resources necessary to combat the trade. The research findings suggest that:

- E-waste trade is nuanced. It is challenging to separate legal actors and activities from illegal or illicit ones.
- The question of whether illicit e-waste operations can be categorised as SOC requires more research. Traditional models of SOC may be challenged here, with novel organisational structures providing a collaborative approach to crime, as opposed to a strictly hierarchical one.
- There needs to be a deeper understanding of the risks, harms, and consequences of these activities, in order to determine the resources that should be allocated to fighting this trade.
- It is possible, but not demonstrated, that the e-waste trade could provide a logistical network which could facilitate other criminal activities such as money-laundering, and the trafficking of arms, narcotics, and other contraband.
- Opportunities for organised criminality and corruption are likely to increase if, as is anticipated, e-waste trade becomes more organised and coordinated.
- Ghanaian institutions are more likely to frame the challenge of stopping e-waste trade as Ghana's responsibility; the UK and international organisations regard this as an issue that needs to be addressed before e-waste reaches Ghana, by the exporting country.
- The UK has never had a repatriation of illegal shipments of e-waste from Ghana, although there is evidence illegal shipments of e-waste move from the UK to Ghana

In conclusion, there is a significant amount of effort and collaboration between agencies - both international and within Ghana - to combat the e-waste trade, but several factors undermine these efforts. Second-hand EEE provides more affordable access to technology, which is important for Ghana as one of the fastest developing countries in Africa, but the impact of this cannot be ignored. While there are several laws and regulations to aid in targeting the impact of the manufacture of EEE, enforcement procedures need to be strengthened and coordinated.

Our findings show that the e-waste trade is complex, with descriptions and solutions addressing it needing to be as dynamic and flexible as the trade itself.

The e-waste industry shows opportunities for development and creativity, as well as makes clear the global inequities in technology and wealth that exist today. The recommendations below are applicable to policy makers, agencies and organisations, researchers and other actors actively involved in the e-waste trade.

Recommendations for Policymakers and Organisations:

Our research has led to the following recommendations for policy makers and both international and national organisations who aim to target the e-waste trade, intended to counter harms arising from the trade in e-waste between the UK and Ghana and to deepen our understanding of the issues:

1. Ghana should decentralise institutions linked to reducing e-waste flows, with a stronger focus on regions in the North of Ghana, namely the Upper West, Upper East, North East, Savannah and Northern regions.
2. Digitisation of data should be improved across institutions to increase access to e-waste statistics.
3. Increased data sharing and collaboration between institutions is recommended.
4. Ghana has signed the Bamako Convention, but has not yet ratified it; Ghana should do this to strengthen collaboration with other West African countries.
5. Enforcement agencies and prosecutors should be more aware of the crimes that are concealed or made possible due to the logistical network that the e-waste trade provides.
6. The return of shipments of e-waste back to the UK should be facilitated.
7. UK manufacturers and consumers should be made more aware of their role in this trade.

Recommendations for Researchers:

This research hopes to inspire more research on the e-waste trade. There are several areas of this trade that deserve more attention:

1. More research is needed on the effectiveness of current e-waste initiatives.
2. Further research is needed on current or potential levels of criminality associated with e-waste trade in Ghana.
3. More research on cybersecurity risks linked to e-waste is necessary.
4. Proceeds of crime and asset recovery linked will need to be researched in depth.

Organisations:

The Safe Seas Network:

Based at the universities of Bristol (UK) and Copenhagen (Denmark), SafeSeas is a network of researchers who investigate maritime security. Our focus is on issues of security at sea, ocean governance and 'blue crimes'. SafeSeas produces original research, commentary and guidance for policy makers and practitioners on security governance, capacity building and regional cooperation in the maritime environment. You can learn more on the SafeSeas website at www.safeseas.net.

The Centre for Maritime Law and Security Africa:

The Centre for Maritime Law and Security Africa (CEMLAWS Africa), established in Ghana in 2014, is an independent, non-governmental organisation that seeks to promote ocean governance and maritime security in Africa. CEMLAWS Africa combines research expertise, policy understanding and practical insight in delivering responses to maritime issues. The organisation conducts research, provides policy advice and capacity building, and partners with stakeholders at all levels to enhancing maritime governance in the continent.

The Partnership for Conflict, Crime & Security Research:

The Partnership for Conflict, Crime and Security Research (PaCCS) was established by Research Councils UK (now UK Research and Innovation, UKRI) in 2008 as the Global Uncertainties Programme with an aim of delivering high quality, cutting edge research to help improve our understanding of current and future global security challenges. PaCCS presently focuses on the core areas of conflict, cybersecurity, and trans-national organised crime. Our team works to support research, to build connections amongst our research community, and to explore the results of UKRI-funded research projects in our core areas, with the aim of facilitating knowledge translation and research impact. PaCCS has supported collaboration by bringing together researchers from across disciplines to work together on innovative research projects. By creating opportunities for knowledge exchange between government, industry, and the third sector, activities funded under PaCCS continue to deliver impact beyond the academic community.

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This policy briefing was authored by Kanchelli Iddrisu, a University of Cambridge doctoral candidate assigned by the Partnership of Conflict, Crime & Security Research (PaCCS) to work with the Centre for Maritime Law and Security Africa (CEMLAWS) and the Safe Seas Network. This policy briefing has been edited and designed by PaCCS Communications Officer Kate McNeil. Photographs in this policy briefing have been provided by Kanchelli Iddrisu.

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