





ECOFRIDGES E-WASTE MANAGEMENT IN GHANA AND RECOMMENDATIONS FOR AN INTEGRATED FINANCIAL MECHANISM

ECOWAS Refrigerators and Air Conditioners Initiative (ECOFRIDGES) is a project with UN Environment's United for Efficiency (U4E) initiative to accelerate the transition to energy-efficient and climate-friendly cooling solutions.

This document summarizes regulations on electronic waste (e-waste) in Ghana and presents options for coordinated efforts between Government and ECOFRIDGES to enforce specific aspects of the regulations.

E-WASTE REGULATIONS

In recent times Ghana has become a major destination for waste electrical and electronic equipment (WEEE) from other developed countries. The Ghana E-waste Country Assessment (SBC, 2011)¹ emphasized the

 SBC, U., 2011. E-waste Assessment - (Secretariat of the Basel Convention). Available at: <u>http://www.basel.int/Portals/4/ Basel%20Convention/docs/eWaste/E-wasteAssessmentGhana.</u> pdf severity of the issue and estimated that up to 70% of all electrical and electronic (EE) equipment imports are second-hand products, and that 10-20% of those are broken and sent directly to the informal recycling sector. The report recommended, among other measures, the development of a proper legal framework for EE equipment importation. In 2016, the Environmental Protection Agency (EPA) finally achieved the passage of:

- The Hazardous and Electronic Waste Control and Management Act (Act 917) (GoG, 2016); and
- The Legislative Instrument on Hazardous and Electronic Waste Control and Management Regulations (LI 2250).

Because formulation, development and passage of bills always involves a lengthy process, a **sustained effort from dedicated organizations is required.** A summary of the transformative events towards more inclusive and sustainable e-waste management in Ghana is shown below.

 2000: Danish parliament raised alarm on Ghana being the dumping ground for Europe's E-Waste. This led to a discourse on CFC/GHGs, ban of second-hand fridges, and POPs became an issue. 2003-4: ICT policy and its impact on E-waste in the country developed. Introduction of new technologies with old ones becoming obsolete or discarded.
•Awareness of dumping on Ivory Coast territorial waters •CEPS started collection of data on importation of electronic products
 2013: an international report ranked the top 50 polluted countries with Agbogbloshie in Accra placed sixth in the ranking 2014: MESTI, EPA, GRATIS Foundation and National Youth Employment set up a first ever pilot recycling project 2014: GIZ started activities in E-waste management after documentary and news reports on E-waste. German Minister for Environment visited Agbogbloshie.
 •2016: "Hazardous and Electronic Waste Control and Management Act 917 (2016)" and Ll2250 passed. A feasibility study was carried out on E-waste management. • 2017: Agreement was signed for commencement of E-waste management project in Ghana with GIZ and integrated E-waste management system launched. • 2018: Technical guidelines on e-waste management handed over to EPA, and SGS initiated the Eco-levy
 Pilot incentive payment system and construction of E-waste centre started Guidelines on end-of-life vehicles developed

Source: "The E-waste Management System in Ghana through the Transformative Innovation Policy Lens" - by Chux Daniels - www.tipconsortium.net/the-e-waste-management-system-in-ghana-through-the-transformative-innovation-policy-lens.

The Hazardous and Electronic Waste Control and Management Act provides for the control, management and disposal of hazardous waste, electrical and electronic waste and related products. It includes a schedule that designates the categories of waste to be controlled, as well as a list of wastes with specific elements such as arsenic, zinc, cadmium, etc. The Act notably prohibits the transportation, sale, purchase, as well as import and export, of hazardous wastes or other waste as classified in the schedule; it also provides definitions on what used equipment is. The Act also specifies the establishment of an Electrical and Electronic Waste Management Fund (EEWMF) whose objective is to finance the management of EE waste and reduce the negative impact of EE waste on human health and environment.



The Act is complemented by the **Legislative Instrument on Hazardous and Electronic Waste Control and Management Regulations** which set multiple objectives, among which are the regulation of the classification, control and management of waste or the requirements for the disposal of waste. The regulation also provides a comprehensive list of electric and electronic items which will attract a levy, and their prescribed levy. It also spells out the appropriate and relevant regulations guiding the classification and implementation of the Act (GoG, 2016).

IMPLEMENTATION STATUS AND CONSTRAINTS

In 2012, Ghana implemented the project **"Promoting Energy Efficiency Appliances and Transformation** of the Refrigerating Appliances Market in Ghana"²

which involved a refrigerator rebate scheme where beneficiaries had to turn-in their functional refrigerating appliances in exchange for a discount to purchase a new energy-efficient one. The project worked with two local companies. This arrangement alone enabled the proper disposal of over 10,000 refrigerators which would otherwise go to landfill. This was one of the first programmatic approaches to formalize e-waste management in Ghana.

In 2019, Government began the collection of the Eco-Levy. Importers are required to pay the levy through custom excise duty to the EEWMF before they can proceed to clear their goods. The EPA has also indicated that they are taking steps to initiate the establishment of an e-waste treatment facility under a Public-Private Partnership (PPP) since no such facility exists in Ghana. Whilst Government officials have given indication that work on the project will start in 2020, no specific starting date for the project has been announced.



² More information on this project can be found in U4E's case study "Lessons learned from Ghana's experience in Energy Efficiency Interventions"

Importantly, development partners such as GIZ and the Swiss State Secretariat for Economic Affairs (SECO) have played a major role by supporting the implementation of the regulations. In this respect, companies active in e-waste and/or car waste collection and recycling are now required to obtain various permits and documents in order to operate. All such businesses must conduct an environmental impact assessment (EIA) for the EPA before starting operation. Nonetheless, there is still a need for further work to implement all the objectives of the regulations.



So far, several e-waste companies have already been given the necessary permits to operate. For example, the City Waste Management Company is designated as a Tier 4 e-waste treatment facility. An NGO, Caritas, is a Tier 1 facility and is active in the collection of WEEE³.

ECOFRIDGES is developing a financial mechanism to increase the patronage of energy-efficient and climate-friendly cooling appliances through an onwage deduction scheme for public sector workers and selected private sector employees. Beneficiaries of the scheme will be expected to turn-in their existing old and inefficient refrigerators and air conditioners for recycling, though there is also a provision for first-time buyers of such products. While Act 917 and its proposed regulations seem adequate for the current circumstances, most of the supporting programmes are yet to commence. The project will therefore initiate an e-waste treatment process that will provide an opportunity for the EPA to activate some of the regulatory measures through several collaborations and partnerships.

KEY TAKEAWAYS

Regulations

The Environmental Protection Agency (EPA) initiated efforts to develop legislation on hazardous and electronic waste as far back as 2011 but it was not until 2016 that EPA achieved the passage of the Hazardous and Electronic Waste Control and Management Act (Act 917) (GoG, 2016) and the Legislative Instrument on Hazardous and Electronic Waste Control and Management Regulations (LI 2250). While the main objective of the Act is to provide for the control, management and disposal of hazardous waste, the Legislative Instrument spells out the appropriate and relevant regulations guiding the classification and implementation of the Act.

Because formulation, development and passage of bills is always a lengthy process, a sustained effort from dedicated organizations is required.

Implementation Status and Constraints

Ghana's approach towards the development of an e-waste management strategy has been deliberate and provided the underlining regulatory basis. Development partners such as GIZ and SECO have also played a significant role by supporting the implementation of the regulations. However, there is a need for further work to implement all the objectives of the regulations in order to reduce the harmful effects of WEEE on human health and environment. Key among these are the operationalization of the EEWMF and the establishment of the Government-supported e-waste treatment facility.

³ https://www.caritas-ghana.org/index.php/ewaste-campaign/