

# **Urban Population Growth and Increased Electronic Consumption: An Assessment of Electronic Waste Management System in Lagos, Nigeria.**

## **Background**

The electronic industry currently accounts for the world's largest and fastest growing manufacturing industry. The revolution in information and communication technology (ICT) coupled with rapid population increase and reduced life span of electrical products has led to an expanding stream of waste electrical and electronic equipment (WEE). Electronic waste (e-waste) comprises of waste electronics and electrical goods that are not fit for their originally intended use or have reached their end of life. The United Nations estimate that, collectively, the world generates 20 to 50 million tons of e-waste every year.

Nigeria's e-waste generation is by far the highest in all West African countries. The e-waste volume in Nigeria has been estimated at 130,000 metric tons with about 90,000 metric tons kept in-homes and in various business premises ready for disposal (Andreas Manhart et al, 2011). Lagos is the most populous conurbation in Nigeria and the second most populous city in Africa presently harbouring an estimated 21 million people. The city's sprawling electronics markets spread across the state represents over 40% of the total electrical and electronics markets in Nigeria and consequently e-waste as well. The thrust of these waste are burnt or dumped in landfills without proper disposal mechanisms. The implications of improper management of these wastes are dire on human health and the environment. The study therefore aimed at mapping the current chain of e-waste management in Lagos.

## **Methodology**

The study was conducted in August 2014 and employed qualitative methodology through in-depth interviews (IDI) and Key Informant Interviews (KII). Four groups of stakeholders were identified for the study;

- The sellers of electronic and related waste (Alaba Market, Ikeja Computer Village) who provided information on imported electrical and electronic equipment (EEE) and how they manage the waste from it.
- The scrap sellers at dump sites. They were asked on mode of operation and who patronizes them. This information was helpful in tracing the final destination of e-waste in the city.
- Private organization: Lagos State Environmental Protection Agency (LASEPA) in 2010 contacted Maintenance System Consultant to start the evacuation of e-waste. They formed another group of stakeholders interviewed.
- Regulatory agency mainly Lagos State Environmental Protection Agency (LASEPA) in order to track progress in e-waste management in the state.

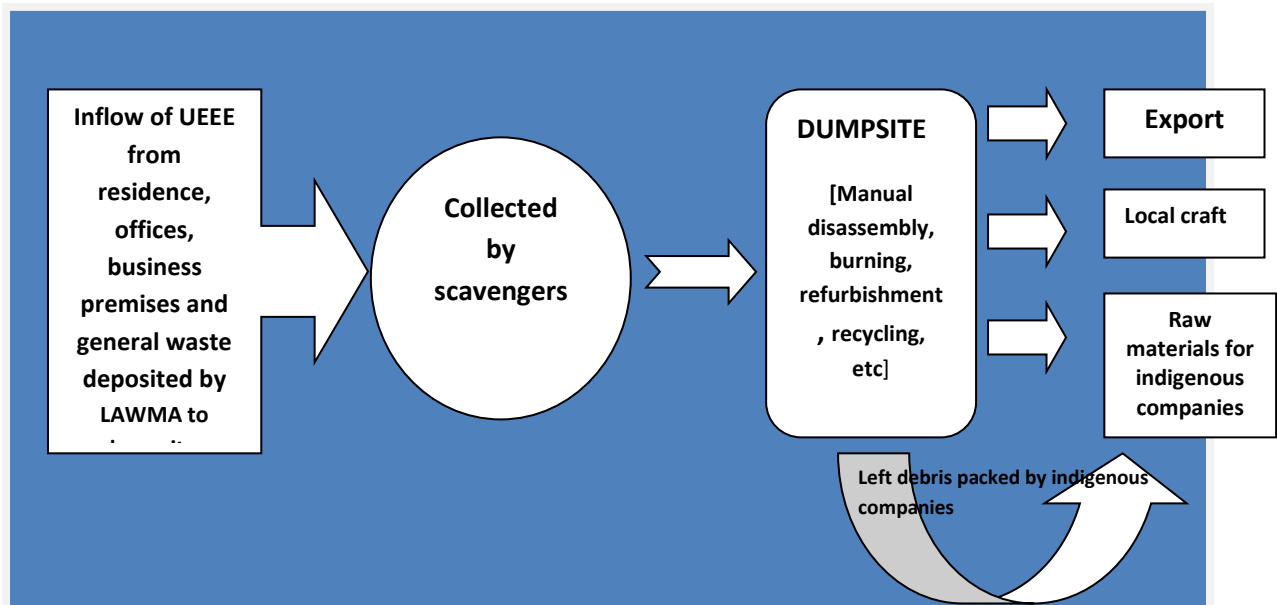
The findings from these stakeholders served as basis for the assessment of e-waste management in the state. The analysis was done through a thematic content analysis.

## Results and Discussion

### Summary of findings

- The bulk of activities around e-waste management in Lagos is handled by the informal sector.
- Some of the valuable metals found inside e-waste are exported out of the country while others are used as raw materials by indigenous companies and local craft makers.
- There is currently no data on e-waste generation and management.
- Most of the activities of the informal managers of e-waste are harmful to the environment and also poses serious risk to human health.
- There is still low awareness among the populace on the dangers of inefficient management of e-waste.
- There is no policy that directly guides e-waste management in the state presently.
- The government has been the major driver of formal management of e-waste in Lagos through its State Environmental Protection Agency (LASEPA).
- Formal e-waste management by Lagos state government is currently being done through a Public-Private Partnership.
- Maintenance System Consultant (MSC) is the only approved private partner in management of e-waste in the state.
- The activities of MSC so far have been minimal relative to the prospects for efficient management.
- The Lagos State government through its Environmental Protection Agency (LASEPA) is currently drafting a policy on e-waste management in the state which is expected to give a framework on e-waste management when it is passed to law.
- LASEPA has also created the e-waste unit which has the mandate of creating a database for e-waste management in the state, managing the flow of e-waste, training informal collectors and other stakeholders along the value chain as well as sensitize the public on best practices.
- Funding remains one of the key challenges to efficient management of e-waste across the various strata on the chain.

## Management Chain of e-waste in Lagos (Informal sector)



## Challenges of E-waste Management in Lagos State (Case Studies)

### **CASE TWO**

#### Stakeholder Type:

Private organization involved in e-waste

#### Respondent's Post:

CEO, Greenmatics

#### Central Issue:

**CHALLENGES OF DOING BUSINESS IN NIGERIA**

**CHALLENGES OF E-WASTE MANAGEMENT**

*The CEO of Greenmatic, Mr Joseph Adesigbin was interviewed on the organization's current effort at e-waste management. He highlighted some of challenges of operating a business in Nigeria particularly one that involves sustainability. He also discussed some of the challenges of managing e-waste in the state as well as prospects for e-waste management. He explained that doing business particularly on sustainability can be quite challenging in Nigeria because of the low awareness among the populace.*

*According to him, funding has been the major challenge at efficient management of e-waste. He noted that despite several attempts at getting government to support their initiative towards e-waste management, nothing has been done. He also explained that efforts at collaborating with private organizations have been abortive as Nigerians do like doing businesses alone. In his words, 'look around, there are no regulation warning organizations to take care of their e-waste. In the West there are renewable obligations. Each company is expected to write the GRI. Government also gives grants to help companies'. He further explained that investors are also wary of investing because the returns take about four to five years, besides material recovery requires the use of acid and water to melt the components of e-waste with high technology'. He reiterated his position that the organization has decided to embark on public sensitization while seeking foreign organizations to work with.*

### **CASE THREE**

Stakeholder Type:  
STATE GOVERNMENT

Respondent's Post:  
Top LASEPA Staff

Central Issue:  
**POLICY  
IMPLEMENTATION  
AND CHALLENGES**

*This case interview took place at LASEPA office around the Secretariat complex of the State where CPPA case writers engaged with a top staff of the agency that we call Mr Olayinka. The discussion asked questions on regulations guiding e-waste management as well as the government effort at e-waste management.*

*Mr Olayinka reiterated some of the previous efforts of the government. He also gave hint on the latest development. According to him 'Lagos state is currently writing a policy on e-waste management, it will give the framework and modalities of managing e-waste in the state. It is presently at the inter-ministerial phase after that we will call a stakeholders meeting before the policy is passed into law. We have started compiling data on inflow and outflow of e-waste in our routine visit to companies, we are also doing sensitizations.*

*On the challenges, he said: 'funding has been a major challenge, it is a new thing and government is not willing to release fund. Besides, the populace doesn't know much about e-waste, so we will be doing sensitizations and*

### **Discussion and Policy Recommendations**

Though current effort at formal management of e-waste has been minimal in the state, interactions with various stakeholders on the value chain indicates that the state is close to efficient management of its e-waste. All effort towards efficient e-waste management currently awaits the policy on e-waste management. It is believed that the policy will address the important issues as well as create space for advocacy and mass awareness needed for people to comply. It is also believed that more private partners will get involved which has huge potentials in driving the economy, creation of jobs and promoting environmental sustainability. Here are few policy recommendations:

**Stakeholders Engagement in Policy Design and Implementation:** Though the state government is currently drafting a policy on sound management system of e-waste, interviews from the stakeholders revealed that most of them were not involved in the policy design. The success of this initiative will depend on total inclusiveness of all the stakeholders involved in the management chain.

**Integration of E-waste Policy with ICT Policy:** Most developed countries have policies that mandate companies to 'take back' EEE that has passed their end of life use. Though most of our EEE in Nigeria are imported, companies operating in Nigeria should be mandated to follow best practices such as the 'take back' policy, GRI reporting and CSR.

**Willpower:** The effort so far has been minimal. To achieve efficient management of e-waste in Lagos, government has to show serious commitment to the cause.