

# ***E-waste: experience and findings from the Basel Convention***

**WSIS Forum 2012**  
**E-waste: Challenges, Solutions and Benefits**  
***16 May 2012, Geneva, Switzerland***

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## **Electrical and Electronic Waste (e-waste) under the Basel Convention**

- E-waste as hazardous (A1180) or non-hazardous (B1110)
- Nairobi Declaration on E-waste (2006)
- Technical guidelines on transboundary movements of e-waste (draft)
- Mobile Phone Partnership Initiative (MPPI)
- Partnership for Action on Computing Equipment (PACE)
- Capacity-building activities in Asia and Africa

# E-waste Africa programme

## BASEL CONVENTION Where are WE<sup>ee</sup> in Africa?

FINDINGS FROM THE BASEL CONVENTION  
E-WASTE AFRICA PROGRAMME

ADVANCE  
VERSION

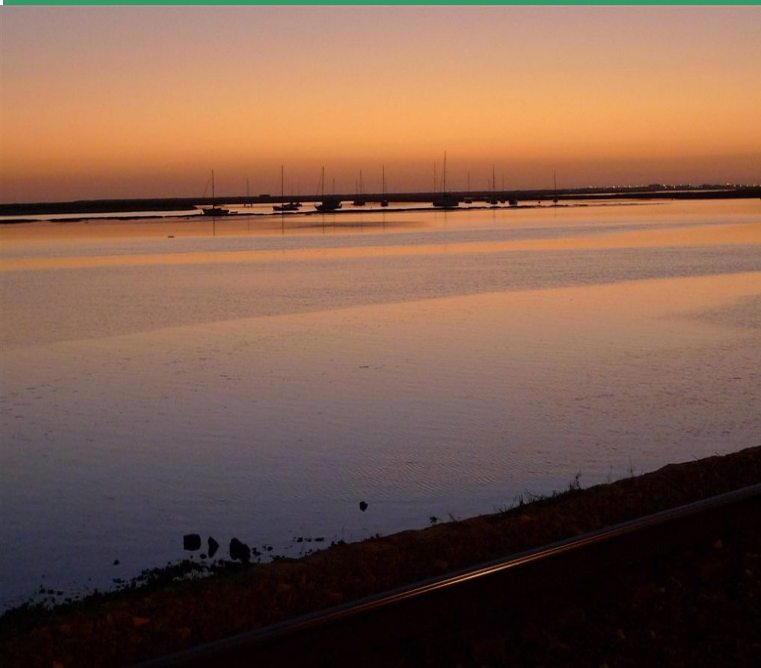


- **Timeframe**  
November 2008 to June 2012
- **Overall coordination**  
Secretariat of the Basel Convention
- **Partners**  
BCCC-Nigeria, BCRC-Senegal, and BCRC-Egypt, IMPEL, EMPA and the Öko-Institut

**Countries involved:**  
**Benin, Cote d'Ivoire,**  
**Egypt, Ghana, Liberia,**  
**Nigeria, and Tunisia**



# Project goal and components



## Goal:

Enhance **environmental governance** for e-waste in selected African countries

- I. A study on **flows of used EEE and e-waste** imported into Benin, Côte d'Ivoire, Ghana, Liberia and Nigeria, from European countries
- II. National **assessments** and national environmentally sound management **plans**
- III. A **socio-economic study** on the e-waste sector in Nigeria and a feasibility study of **international cooperation** between African SMEs and European recycling companies
- IV. Enforcement programme in Benin, Egypt, Ghana, Nigeria and Tunisia to **prevent illegal transboundary movements** of e-waste

# Trends of EEE imports, use, and e-waste generation in West Africa



- Use of EEE in Africa is low but growing at a **staggering pace**
- **West Africa** serves as the **major trading route** of used EEE into Africa
- In 2009 up to 70 % of all imports were **used EEE** and 30% of which were **non-functional**
- In 2010 between **50-85 % of e-waste was domestically generated** which needs to be managed



## Quantitative data for EEE in Benin, Cote d'Ivoire, Ghana, Liberia and Nigeria related to imports, installed base and e-waste generated

Country	Imports of EEE		EEE in use		Tones/year
	tonnes/ year	thereof used EEE	tonnes	Kg/inhabit ant	
<b>Benin</b>	16,000	30%	55,000	6.32	9,700
<b>Cote d'Ivoire</b>	25,000	48%	100,000	4.8	15,000
<b>Ghana</b>	215,000	70%	984,000	41	179,000
<b>Liberia</b>	3,500	10%	17,000	4.6	N/A
<b>Nigeria</b>	1,200,000	35-70%	6,800,000	44	1,100,000

# Impacts of recycling practices on human health, the environment and climate change



- Major environmental and human health impacts result from **dismantling, material recovery and final disposal**
- Impacts during **collection, refurbishment and repair** of EEE are less significant
- **Cable burning** is a major source of dioxin emissions
- Current recycling practices **focus on recovery** of steel, aluminum and copper and quite **inefficient** for other metals
- Primary production of metals has a significant impact on **climate change**





# Socio-economic aspects of the e-waste sector in Ghana and Nigeria



- **Well-organized repair and refurbishing sectors** which operates partly under formal conditions
- **Collection and recycling** done mostly by informal sector
- **Daily revenues** in the informal collection and recycling: US\$ 0.22-US\$ 9.50 and in the refurbishment sector: US\$ 2.20 and US\$ 22
- Considerable **potential** for improvement in the field of ICT recycling



# Flows of EEE and e-waste between Europe and West Africa and enforcement of Basel provisions



- **Pathways** of used EEE from the formal to the informal sector
- **Brokers and traders** are key players
- Ports of Amsterdam and Antwerp were used as examples of **gateways** for used EEE.

- Several challenges related to the **enforcement** of Basel provisions (e.g. clear distinction between used EEE and e-waste)
- **Coordination** at the national level
- International **cooperation** between regulatory and enforcement authorities

# E-waste Africa Forum, Nairobi, Kenya

14-16 March 2012

- **Organized by the Secretariat of the Basel Convention and UNEP, with support from the Government of Kenya, and private sector companies including Dell, HP, Nokia and Philips**
- **180 participants from 35 countries**
- **Adopted Call for Action on E-waste in Africa**



# Policy & legislation



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**Thank you for your attention !**

**For more information**

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