PRESENTS:

A practical perspective to e-waste recycling in East Africa
The size of the problem

109,000 tons of e-waste in East Africa (TZ, KE, UG, RW)

26,000 ton in Tanzania

In 2018, the amount of e-waste generated in Tanzania will be more than the weight of all the elephants in the Serengeti

**STeP initiative**
e-waste is a problem...
2018: 8,000 tons

2019: 11,000 tons

2020: 14,000 tons

60% in Urban Areas

50% Recoverable i.e 8000 tons

Grows 33% every year

26,000 tons in Tanzania

*Source: STeP initiative

... that keeps getting worse...
environmentally responsible and easy recycling solutions for technology distributors and users in East Africa
...phenix is Easy. Green. Safe.

- Simple doorstep collection
- All the permits provided
- Simple per kilogram price structure
- Guaranteed environmental and health and safety standards
- No sorting required

Value Proposition
The Network

Working partnerships including regional influencers and international technical experts

current and future
The Model

Fraction Sales to Specialized Recyclers (Intl)

Fraction Sales to local/regional industries

Repair and Refurbishment

B2B Collection of Components

Street collection of Components

Partnership collection Components

Mixed e-waste components

Mixed fractions

Dismantling Centre (Arusha, TZ)
Practical Challenges

Systems vs. Volume vs. Weight
Transboundary Collections
Perception of Value of components
When one system, is not just one system

New: 1 system sold
Technical vs. Commercial Lifespan

How long till disposal?

- **0 - 6 months**
  - **1 New System**

- **6 - 12 months**
  - **Charging Cables**

- **1 - 3 years**
  - **LED Lights**

- **3+ years**
  - **LED Lights**
## How much is it worth?

### Component Details

<table>
<thead>
<tr>
<th>Component</th>
<th>Approx Value (USD) per kg</th>
<th>Weight (kg)</th>
<th>Approx. Total Value (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic Casing</td>
<td>0,07</td>
<td>0,15</td>
<td>0,01</td>
</tr>
<tr>
<td>Lithium Battery</td>
<td>- 1,50 USD</td>
<td>0,70</td>
<td>-1,05</td>
</tr>
<tr>
<td>PWB</td>
<td>0,25</td>
<td>0,15</td>
<td>0,375</td>
</tr>
<tr>
<td>Dismantling Time</td>
<td>-3 USD/hour</td>
<td>5 mins</td>
<td>-0,26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>1 kg</td>
<td><strong>-1,27 USD</strong></td>
</tr>
</tbody>
</table>

## How much will you pay me for my waste?

- **3 USD/hour** for dismantling time.
- **1,05 USD** for dismantling a lithium battery.
- **0,375 USD** for a PWB.
## Geographical Reach

<table>
<thead>
<tr>
<th>TZ</th>
<th>RW</th>
<th>UG</th>
<th>KE</th>
<th>High HSE standards</th>
<th>Strict stock control to protect brand risk</th>
<th>Regulatory Representation and Advocacy</th>
<th>Commercially Viable business model</th>
</tr>
</thead>
</table>

**phenix Recycling**

|   | X | X | X | X | X | X | X | X | X |

**WEEE CENTRE**

|   | X | X | X | X | X | X | X | X | X |

**Chilambo General Trade Company**

|   | X |

**EPSILON UGANDA LIMITED**

|   | X |

**Rwanda WEEE Centre**

|   | X | X | X | X | X | X | tbc |
Where does your waste go?

*Decision criteria and why asking the right questions is key to your business.*

- Brand risk exposure
- Regulatory Requirements
- Environmental and Safety impacts
- Cost
Thank you for listening

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