E-Waste IndWMP

E-Waste Steering Committee

Comprising: EEE Producers, Refurbishers, Recyclers, NGO's, Industry Associations
Development of the SA E-Waste IndWMP

- E-Waste Steering Committee Reviews Concluded Feb 2015
- SA E-Waste industry data needs to be strengthened
- E-Waste charge cost calculation in progress
- PRO Budget finalization due shortly
More on our work to date

• 29 October 2015 – Consultative Conference with Sector
• Election of Steering Committee & Terms of Reference
• High level response to IWMP draft
• **Sittings**: 13 Nov, 26 Nov, 10 Dec, (20 Jan), 27 Jan, (28 Jan), 16 Feb, 26 Feb
• Reviewed entire document
• Focus issues – clarification
• Proposals for adoption
• More research
• More focussed drafts for inclusion
• Adoption
Principles of the SA E-Waste IndWMP

• The E-Waste IndWMP considers E-Waste as an opportunity to recover valuable materials, to create jobs, and to grow and strengthen the e-waste recycling industry in South Africa.

• The E-Waste IndWMP takes care of all E-Waste categories including non-valuable hazardous material fractions (currently being burned or landfilled) including CRT monitors, CFL lamps and Refrigerator equipment as well as materials and fractions with value.

• Through an Extended Producer Responsibility (EPR) end of life (EOL) mechanism integrated into the E-Waste IndWMP producers acknowledge their responsibility to take care of their products they put on the South African at the end of its life-cycle, this responsibility could include a financial obligation.

• The plan seeks to harness the existing recycling infrastructure and encourages industry growth and job creation through an effective and viable and sustainable structure that operates to international standards and benchmarks.

• The plan recommends a multi-stakeholder approach where all actors in the value chain have an important role to play in the area of action they can specifically control such as government, producers, academia, waste reclaimers/pickers, consumers and the e-waste recycling industry.
Benefits of the E-Waste IndWMP

• The appropriate handling of e-waste can both prevent serious health and environmental damage and also recover valuable materials, especially metals.

• The development of a green industry sector in South Africa to create job opportunities in line with the National Development Plan (NDP) objectives.

• Industry enterprise development, rural and youth skills development, unique home-grown technologies and IP for export to the rest of the African continent.

• Better local utilization of recovered materials through local beneficiation where feasible.

• Maximizing collection and the consolidation of specific E-Waste categories will secure much needed recycling technology investments.

• The development of a green industry sector in South Africa provides opportunities for job creation, for example by integrating the waste picker/reclaimer informal sector.

• Sustainable recycling operations also considerably contribute to reducing greenhouse gas emissions. “Mining” of old phones or old computers to recover the contained metals – if done in an environmentally sound or correct manner – needs only a fraction of energy compared to mining virgin ores in nature.
E-Waste IndWMP Concept

South Africa E-Waste IndWMP

E-Waste Industry

Consumers/End Use/Waste Generator → Collectors/Collection Points → Licensed Recyclers → Local & Global materials market

Regulated E-Waste Industry
- Collection and treatment of all e-waste material
- Producer Obligation Fulfilment
- E-Waste Standards

Development of E-Waste Industry
- Green Jobs and local market beneficiation

E-Waste Product Responsible Organisation (PRO)
- Stakeholders: Producer/Importer, DEA, DTI, Consumer, Academia, Retailer/Collectors, Recycling Functions
- Producer Registration
- Producer Obligation and Fulfilment Calculation
- Recycling Industry Compliance
- E-Waste Management Charge Disbursement
- Assurance/Standards/Certification
- Industry Development

Extended Producer Responsibility

DEA – Waste Management Bureau
E-Waste IndWMP Operating Model

South Africa E-Waste IndWMP

- **EEEProducers**
  - Extended Producer Responsibility
    - PRO operating costs
    - Recycling costs
    - Enterprise Development costs
    - Education and Awareness costs

- **SARS**

- **DEA—Waste Management Bureau**

- **Treasury**

- **Disbursement of funds**

- **E-Waste Product Responsible Organisation (PRO)**
  - Recycling Subsidies
  - Enterprise Development
  - Education and Awareness

- **Recycling Industry**
  - Collection
  - Transport
  - Dismantling/Recycling
  - Material Processing
Where we are now

• At this stage the plan is missing 4 primary elements without which the e-Waste IWMP cannot be definitively concluded. These are:

  • An assessment of the EEE (by weight, units and value) currently entering the SA market, either through importation or local manufacture;

  • An assessment of the recycling costs associated with the e-Waste, particularly problematic, low value and usually hazardous fractions of e-Waste;

  • The formulation and rationale for the proposed e-Waste management levy to be applied to the EEE placed on the South African market (wherever generated); and

  • Confirmation of the resource allocations to be made against the e-Waste resource base created by the e-Waste management levy.
E-waste as a resource!

E-waste becomes a resource

Material Prices

Considered by many as valuable
## Component Part

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<thead>
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<th>Component Part</th>
<th>Price / Unit</th>
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<tr>
<td>PCB</td>
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<tr>
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<td>0.00</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>-R1.90</strong></td>
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## Cost Drivers

- Transport
- Site
- Labour
- Tools & Equipment
- Operations & Admin
- Compliance
- Disposal Costs
A picture translated

Environment
- Landfill (blocks)
- Air
- Soil
- Field
- Rivers
- Fields

Impact
- Sight
- Smell
- Bodies

Value Materials
- Recyclers
- & Scrap Metal Dealers

No & Low Value Materials
- Drop-off Points & Formal Collectors
- Community Enterprise / Emerging Enterprise
- Waste Pickers (40,000)

200+ Materials (Toxic Cocktails)
Personal Reflection

- Multiple interests to be reconciled
  - Producers
  - Recyclers
  - Community Enterprise
  - Environmental Management
- Beneficiation & sustainable economic development
- Markets and managed interventions
- Complex issues in IWMP itself – especially e-Waste (non-homogenous fractions)
- Process, balancing imperatives, deciding content & drafting
- Finding each other – compromise
- Result that is acceptable and workable