TURNING WASTE INTO CHARCOAL BRIQUETTES

Municipal Waste

KCCA TRUCK

Carbonisers

Wine Bags

Deforestation

Presser
Awards for Waste
ANATOMY OF AN ENTREPRENEUR

BRAIN
A pool of ideas

EYES
Looking for investors and opportunities

MOUTH
Communicating the vision

EARS
Listening to customers feedback

STOMACH
Trust your gut

HEART
Full of passion

FEET
Dream high but stick to the ground

LEGGS
Keeps them going in tough time
Briquette making
Challenge

❖ Deforestation has seen Uganda lose 2.0m hectares of forest cover from 1990 to 2015 (NFA)

❖ 80,000 hectares of forests are cleared every year (GIZ)

• Changing weather patterns affecting food security
• 90% of Ugandans use Wood charcoal/firewood as source of energy (GIZ)
• 90% of Agricultural leftovers are currently treated as waste (UNDP, 2005)
• Unemployment level is at 69% in Uganda (UBOS)
MODEL FOR CONVERTING WASTE INTO BRIQUETTES FOR COMMUNITY CONSUMPTION

Source of Waste

Beneficiaries (SMEs, Youth & Women, Consumers)

Municipality
Enterprises
Dump site
Demo Site

Stakeholders (Private Sector, Universities, NGOs & Donors)

Government (Local Gov’t, NEMA & Forestry Sector)
Achievements and Commercial Viability

<table>
<thead>
<tr>
<th>Achievements to-date</th>
<th>Partnerships Created to-date</th>
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<tr>
<td>Trained 800 SMEs in 16 districts</td>
<td>Unicef, World vision, UNDP &amp; Refugee camps</td>
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<td>Developed and tested B2B &amp; B2C Models</td>
<td>European Union(Switch Africa Green)-SAG Project</td>
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<td>Empowered 1,600 trainers and supplied 159 Manual briquette equipment</td>
<td>Youth &amp; Parliamentary Forum on climate change, Military/Police barracks, Schools and Municipality environmental leaderships</td>
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<tr>
<td>Empowered 17,000 Youth and Women</td>
<td>Governmental&amp;Non-Governmental Institutions</td>
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**Commercial Viability**

**Financial Analysis per Medium centre**

- **Total Investment**: 24,000,000 Ugx
- **Monthly Rate of Return**: 4%
- **Payback period**: 9 Months
- **Total Employment**: Direct 5 & Over 450 Indirect jobs
- **Total Production**: 200Kgs per day

**Financial Analysis for Commercial Production**

- **Total Investment**: 130,000,000 Ugx
- **Monthly Rate of Return**: 58%
- **Payback period**: 6 Months
- **Total employment**: 12 in production, 22 Sales Executives and over 2,000 Indirect Jobs
- **Total Production**: 4 tonnes per day
Waste to Wealth; Turning Municipal and Paper waste into Briquettes and Biodegradable Bags
Engagements
DO YOUR BUSINESS WELL TO SUSTAIN THE VALUE CHAIN AND APPLY 4F MODEL

787 Dreamliner structure suppliers
Selected component and system suppliers.

- **Wingtips**
  - KAA (Korea)

- **Fixed & movable leading edge**
  - Spirit (U.S.)

- **Wing**
  - Mitsubishi (Japan)

- **Centre fuselage**
  - Alenia (Italy)

- **Forward fuselage**
  - Spirit (U.S.)
  - Kawasaki (Japan)

- **Centre wing box**
  - Fuji (Japan)

- **Landing gear structure**
  - Messier-Dowty (France)

- **Movable trailing edge**
  - (U.S., Canada, Australia)

- **Horizontal stabilizer**
  - Alenia (Italy)

- **Tail fin**
  - Boeing (U.S.)

- **Rear fuselage**
  - Boeing (U.S.)

- **Wing-to-body fairing**
  - Boeing (U.S.)

- **Passenger entry doors**
  - Latecoere (France)

- **Lithium-ion batteries**
  - GS Yuasa (Japan)

- **Main landing gear wheel well**
  - Kawasaki (Japan)

- **Fixed trailing edge**
  - Kawasaki (Japan)

- **Engine nacelles**
  - Goodrich (U.S.)

- **Engine**
  - Rolls-Royce (U.K.)
  - General Electric (U.S.)

- **Others**
  - Wing/body fairing
  - Boeing (Canada)
  - Cargo access doors
  - Saab (Sweden)
Energy Innovations have shaped the world